

WHEN THE PEOPLE SHOUT NO!

The Friends of the Fraser Valley

and the Five Waves of Petroleum Exploration in the Fraser Valley, British Columbia

1914 – 1994



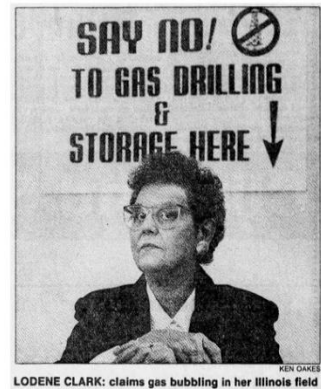
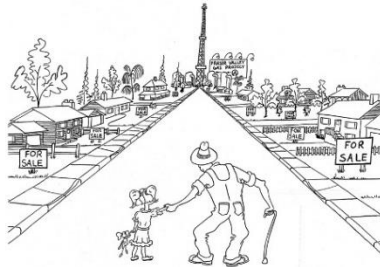
DON'T RISK YOUR HOME
SAY NO
TO GAS DRILLING AND STORAGE
IN THE FRASER VALLEY



BE INFORMED! PROTECT YOUR HOME.

Gas drilling and artificial gas storage in the Fraser Valley threatens your:

- SAFETY
- WATER SUPPLY
- REAL ESTATE
- AIR QUALITY



**Friends of
the Fraser Valley**

Will Koop

August 15, 2022

B.C. Tap Water Alliance

www.bctwa.org

(Revised: August 27, 2022)

WHEN THE PEOPLE SHOUT NO!

The Friends of the Fraser Valley

and the Five Waves of Petroleum Exploration in the Fraser Valley, British Columbia

1914 – 1994

Conceived, researched, written, edited, imagery, produced, and self-funded
Will Koop
August 15, 2022

(Revised on August 27, 2022: punctuation, spelling, omissions, etc.)

© Copyright. All Rights Reserved.

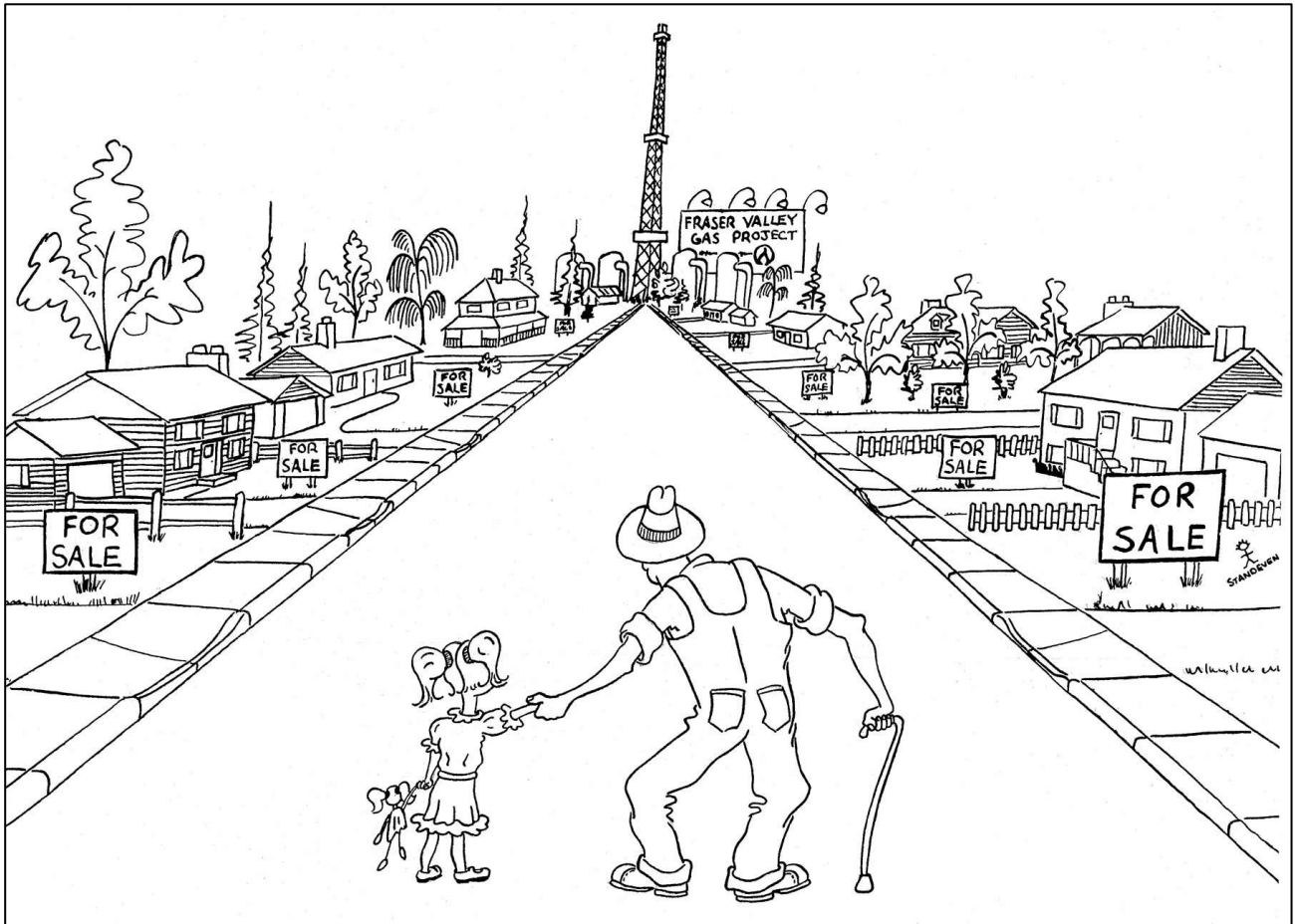
Permission is granted to copy-use images found in this report for non-profit, educational purposes only.

Self-published by William Koop on the B.C. Tap Water Alliance website: www.bctwa.org

Preface and Acknowledgements

When digitizing a box of old newspaper clippings some ten years ago, I stopped to read through a 1990 article about citizens opposing petroleum exploration in the Fraser Valley. I couldn't remember anything about the issue. Neither could colleagues of mine in Vancouver City who followed various natural resource controversies long ago. The subject had caught my eye because of my interest since February 2010 in hydraulic fracturing ('fracking') and groundwater contamination in western Canada and elsewhere (*Stop Fracking British Columbia*, within the website www.bctwa.org). Upstream petroleum development and fracking in British Columbia takes place in the northeast corner of the province, far away from the large population centres. This older controversy, however, had been at my doorstep.

The issue nagged away at me over the years until I got the ball rolling by visiting the Langley Times newspaper office on March 19, 2018. With kind permission to review old newspaper binders and without any understanding of the timelines, my ink-stained fingers stumbled across early accounts from 1981 to 1991. I photographed as much as I could. Back at home I read through the articles. That's about as far as I got, and the matter lay dormant until sometime in early 2020 when I became determined to track down Al Vickers, the former chairman of The Friends of the Fraser Valley. He was surprised that I had found him, an escapee from his past involvements and outspokenness, living now far away from the Lower Mainland, and puzzled as to why anyone would take an interest in a subject thirty years old. Unfortunately, I arrived too late, as Vickers had only a few years prior disposed of all his primary archived files, documents, videotapes, photos, etc.



Undaunted by this loss of records and information, I decided to jump in and to seriously investigate the story by December 2020. I began by interviewing Al Vickers, Margaret Ormston, Glen Breaks and Bruce Standeven (who sent me a copy of his old cartoon, shown above). Many others had already died. I travelled to Breaks' residence, who later sent me a few records, audio and video tapes. Little remained other than personal recollections of a big and serious public battle. I also made calls to the State of Illinois to track down the story of Long Point resident Lodene Clark, a person and subject of intrigue that the Friends of the Fraser Valley brought to the attention of the media and the Anderson Commission in the latter part of 1990.

With little material to examine outside of newspaper collections, I inquired about government records for the 1990-1991 David Anderson Royal Commission on petroleum exploration in the Fraser Valley. The Provincial Archives informed me in early 2021 that it didn't have the records, so I made inquiries with the Ministry of Energy which had overseen the Commission, the information office of which also later stated that those records were nowhere to be found. Baffled and stumped, I then asked the Provincial Archives to take a second look. Turns out, the B.C. Archives had the Commission records. I was informed that the records had remained in an uncatalogued and unexamined state for 27 years, and that the Ministry of Energy transferred the eleven boxes to the Archives in 1994! Curious, I later asked an archivist how many other records were in a similar uncatalogued state. Answer: almost 50,000! I couldn't believe my ears. That is an astounding figure, and a very serious problem for researchers.

I made two, four-day visits to the Archives in June and November 2021, where I digitized and made word-searchable some 10,000 pages, including the nine volumes of Commission Technical Hearing transcripts. I also made copies of the June to July 1990 audio recordings of the Commission's public hearings.

Being the first and only citizen to examine the records since 1991, ahead of me lay a daunting task to unearth and unravel the story. Glen Breaks, now in his retirement, and a key participant with the former Friends of the Fraser Valley, would become my personal guide with whom I would randomly call and ask key questions which he kindly answered.

In early assessment of the information, I decided on a draft subtitle, *The Three Waves*, to best characterize the three historical phases from the late 1970s to the early 1990s on Fraser Valley oil and gas exploration and proposals for underground gas storage. When I discovered a prior exploration wave from 1948 to



1964, causing an unexpected three-months of added research, I then changed my subtitle to *The Four Waves*. That research led to discovering yet another and originating phase from about 1914 to 1924, causing the subtitle to be finally changed to *The Five Waves*.

I discovered that I was not the only one to have characterized oil and gas exploration in the Fraser Valley as “waves.” One staff member with the Ministry of Energy, Mines and

Petroleum Resources in charge of preparing petroleum exploration information and history to the David Anderson Commission had also adopted the term, correctly referring to the “early to late 1950s” as the “second wave.”

I wish to thank Glen and Gina Breaks for their kind help and assistance, and for allowing me to stir and bring up some old, uncomfortable matters and memories. Thanks to Margaret Ormston, Al Vickers, and Bruce Standeven for their recollections.



DON'T RISK YOUR HOME
SAY NO
TO GAS DRILLING AND STORAGE
IN THE FRASER VALLEY

I am grateful to The Friends of the Fraser Valley for their dedication and persistence in fighting ‘the good fight,’ for bravely taking on big petroleum and government, for protecting their families, their homes, their farms, their animals and livestock, their water, their air, and the Fraser Valley.

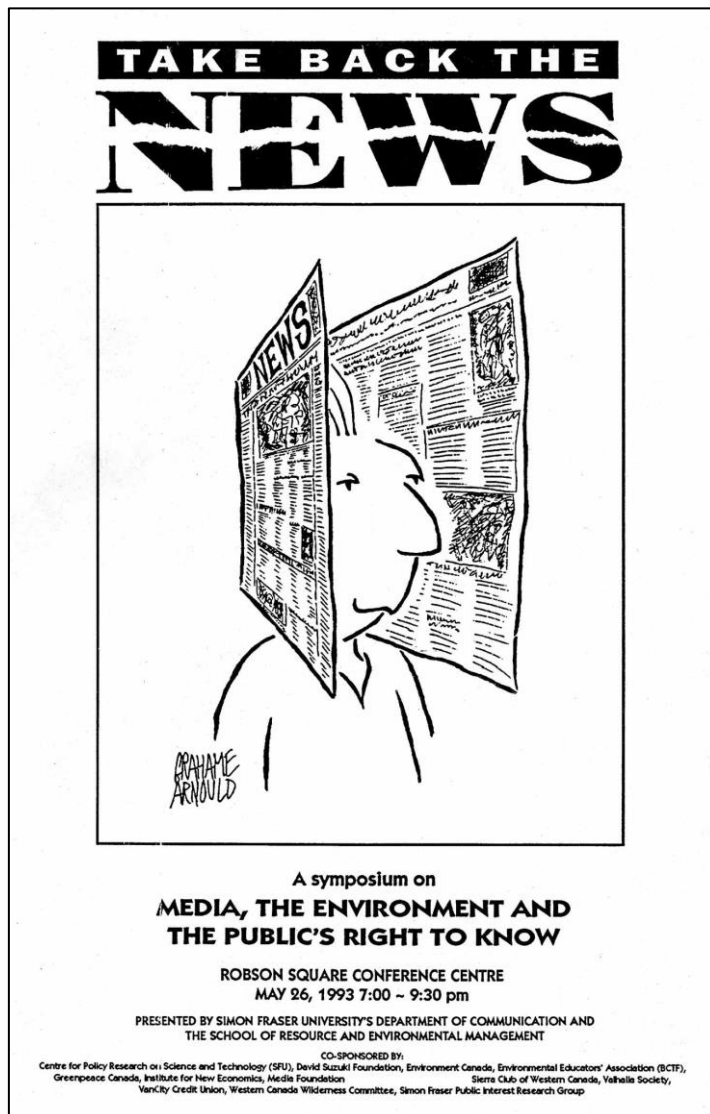
Will Koop,

August 13, 2020.

Dedication to Joyce Nelson

This report on petroleum exploration in the Fraser Valley is dedicated to Joyce Nelson, who recently passed away on January 4, 2022.

I first witnessed Joyce speak at the 1993 *Take Back the News* conference in Vancouver at the former Robson Square Theatre. Just before her presentation, she asked audience participants that all recording equipment be shut off, in case of legal retribution by her named sources. I reluctantly turned off my, then recently purchased, Sony Hi-8 camcorder.



The next time I saw Joyce was at a quarterly meeting of the B.C. Environmental Network in Gibsons in about 1996, where she gave a presentation. She showed us a corporate pamphlet somehow procured on secret plans to make British Columbia a central resource and energy switching station (oil, gas, electricity, fresh water). That riveting presentation

Symposium examines media

Nanaimo Daily News
March 21, 1991

An array of knowledgeable speakers, panelists and workshop leaders are lined up for the fifth annual Dube Symposium this Friday and Saturday.

Each year, the Dube Symposium focuses on Canada's relationship with the Third World.

This year's symposium will focus on the theme of media and development.

It will explore the role and power of dominant media.

Keynote speakers Joyce Nelson and George Watts will kick off the symposium Friday night at the Malaspina College theatre.

Ms. Nelson, taught in the department of film studies at Queens University, before becoming a full-time freelance writer in 1976. She specializes in the politics of the mass media age. Ms. Nelson is the author of four CBC radio documentary series, numerous magazine articles and essays and four books.

Mr. Watts, president of the Nuuchah-Nulth tribal council, for the past 20 years, is an expert in native affairs and has international experience working with other native peoples.

The symposium's 16 workshops will cover topics including taking control of the media, global corporate agendas and media and global environment.



JOYCE NELSON
... media specialist

awakened my perceptions of the bigger global inter-corporate picture, the outlandish designs by some conniving elites to systematically dominate the earth's resource capital, no matter what the cost!

One of her books, *Sultans of Sleaze*, was pivotal in revealing for me the intrigue behind the forest industry complex hiring Burson Marsteller to influence, in part, the Vancouver Sun newspaper editorial board in 1991 following, whilst creating the B.C. Forest Alliance, which, among many other prominent characters, B.C. Liberal leader Gordon Campbell, the former Mayor of Vancouver, and later Premier, became a willing and conniving puppet. The national disgust and public anger of forest corporations' cumulative clearcutting practices, the overcutting pillage and rape of B.C.'s forests, had to be manipulated and managed by a new, comprehensive public relations strategy.

Because of the risky nature of her investigative assessments and critiques in publications, news articles and books of corporate empires and representatives, at some point Joyce had to leave British Columbia to settle elsewhere to find a means of income. Years later I tracked her down in Toronto and then maintained contact by telephone and email.

She was an amazing, important and gifted researcher, an articulate writer, a well-grounded, warm and sincere person with a wonderful voice and an alert and probing mind. I enjoyed our conversations that we shared on the plight of our planet, and about this and that. Joyce is greatly missed.

*Will Koop,
July 23, 2022.*

The following was retrieved from Joyce Nelson's obituary in the Globe and Mail.

JOYCE DOROTHY NELSON. February 24, 1945 - January 4, 2022. Joyce passed away at Michael Garron Hospital in Toronto after a brief illness. She will be greatly missed by siblings and extended family members in the USA, and many friends and colleagues across Canada. Joyce was born in the USA but had lived in Canada for many decades. Joyce was an environmental activist, cultural critic, investigative journalist and poet who produced a volume of work that can be accessed at this link <https://g.co/kgs/k8YUbc>. Joyce was also an accomplished visual artist and a member of the Beach Guild of Fine Art <https://www.beachguildoffineart.com/>. At Joyce's request her body has been donated to medical research. There will not be a memorial at this time, but donations to charities in Ontario supporting refugees or homeless people would be in line with Joyce's wishes. Joyce's brave heart will stay present with us through her work and our memories.

The following was retrieved from Joyce Nelson's website.

Joyce Nelson is an award-winning freelance writer/researcher whose seventh book was published in April 2018. Entitled *Bypassing Dystopia: Hope-filled Challenges to Corporate Rule*, the book can be ordered from [Watershed Sentinel Books](#) now.

Bypassing Dystopia is the sequel to *Beyond Banksters: Resisting the New Feudalism*, which was published in November 2016 and is now in its fourth printing. *Beyond Banksters* can also be ordered from [Watershed Sentinel](#).

Nelson's previous books include: *The Perfect Machine: TV in the Nuclear Age*; *The Colonized Eye: Rethinking the Grierson Legend*; *Sultans of Sleaze: Public Relations & The Media*; *Sign Crimes/Roadkill*:

From Mediascape to Landscape; and *Seeing in the Dark* (poetry). She has written hundreds of articles and essays published in a wide range of magazines, newspapers and websites. Her written work has been anthologized in ten books published in both Canada and the U.S.

Nelson was given an award for her writing by the Vancouver Island Human Rights Society and on three occasions her articles have been selected by Project Censored Canada (now NewsWatch Canada) for their Top Ten “significant but under-reported” stories of the year.

In addition, Nelson has created 23 hours of radio documentary for CBC Ideas, all of which were re-broadcast by popular demand, and she won 2nd Prize for Radio Drama in the CBC Literary Competition. She has also taught at Queen's University and the University of Victoria.

Nelson writes regularly for [The Watershed Sentinel](#), [Counterpunch](#), and other publications. She is also a visual artist and member of the [Beach Guild of Fine Art](#) in Toronto, Canada.

The following was retrieved from the website, [rabble.ca](#)

In memoriam: Joyce Nelson, by [Kim Elliott](#) January 13, 2022

Nelson was a long-time and stellar contributor to [rabble.ca](#) — never more so than over the past year when she turned her attention to the climate emergency, exposing the dangerous liaisons between corporate interests and elements of the green economy.

It is with great sadness that the *[rabble.ca](#)* community mourns the loss of author and *[rabble](#)* contributor, [Joyce Nelson](#), who passed away in hospital following an illness last week in Toronto.

Nelson was the author of seven books and many hundreds of articles and essays published by a variety of magazines and websites—including *The Watershed Sentinel* and the Canadian Centre for Policy Alternatives. Over her more than 30 years as a full-time writer, Nelson's work appeared in at least 25 book-length anthologies published in Canada and the United States. She also created 23 hours of radio documentaries for CBC *Ideas*, all re-broadcast by popular demand. A sought-after speaker, she lectured at locales as diverse as the Banff Centre for the Arts and Harvard University. Joyce taught at Queen's University and the University of Victoria. She was also an artist and fiction writer, as can be gleaned on her [website](#).



Nelson was a long-time and stellar contributor to [rabble.ca](#)—never more so than over the past year when she turned her attention to the climate emergency. Nelson exposed the dangerous liaisons between corporate interests and elements of the green economy, and Canada's role in the world, in pieces on such diverse issues as [Tech workers challenge the giants who employ them](#), [Big Plastic's trashy lawsuit](#), [Canada's ancient forests are being turned into toilet paper](#), and [Sri Lanka shipping disaster and Canadian consumerism](#).

Nelson never shied away from human rights, challenging the media for its reporting on [Gaza in a piece published last spring](#). However, the topics she focused on most were [the environmental impact of military spending](#) and [the risk posed by nuclear reactors](#).

Her final piece, published in November 2021, addressed [the terrible paradox of green energy transition](#), where she warned, “The metals and minerals needed to conduct this transition will result in a drastic increase in environmentally dirty mining. The global energy transition is perhaps more red than green after all.”

For many, Nelson is best known for her book [Beyond Banksters: Resisting the New Feudalism](#). Published in 2016, *Beyond Banksters* has been described by Gordon Laxer as “a hard-hitting, well-researched, fast-paced exposure of the usually hidden world of Canadian and international banks.” Joel Bakan described it as “a powerful and chilling investigation into an emerging global oligarchy of banks and corporations.”

The late journalist [Ed Finn’s review](#) perhaps best summarized Nelson’s style:

“Over the course of my 70-plus years as a journalist, I’ve reviewed hundreds of books, many of them informative and educational. But Joyce Nelson’s *Beyond Banksters*, which I’ve just finished reading, is not only the most enlightening book I’ve ever reviewed, but by far the most challenging. It’s not that it’s difficult to read. Far from it. Joyce is renowned for both the clarity of her prose and for her meticulous research, both of which are on display in this, her latest blockbuster. The challenge it poses to a prospective reviewer is that its succinct 164 pages are jam-packed with vital facts, figures, insights and revelations. So many that it’s impossible to adequately summarize it in a standard book review.”

We encourage everyone to read and share Joyce Nelson’s work. We know her wonderful writing and commentary will continue to be an important part of Canadian critical thinking and writing. Joyce will be greatly missed. Our deepest condolences to her family, friends and community.

Table of Contents

Preface and Acknowledgements	i
Dedication: Joyce Nelson	iv
Table of Contents	viii
Introduction and Summary	1
The First Wave	9
The Second Wave (Part One)	18
The Lulu Island ‘Gusher’	19
Durland and the Surrey Dome Well	21
The Birch Bay Syndicate	23
Van-Tor Oils	24
Schemes that Paved the Way	27
W.C. Mainwaring	29
Mainwaring’s Pieces of the Action	33
Royalite in the Gulf Islands	35
Charter Oil in the Gulf Islands	37
Allenbee in the Fraser Valley	38
Mainwaring in the Applications Line-Up	40
Petroleum Permit Maps	41
The “All-Canadian” B.C. Petroleum Pipelines Push	43
The Mainwaring Modest Mansion	58
The Second Wave (Part Two)	62
Kris Petroleums Ltd.	62
Hazelmere Farmer’s Pool	63
Key Oil & Gas in Abbotsford	64
R.H. Stanfield in Chilliwack	66
Empire Oil: Cooking the Books	71
Richfield Oil’s Entry and Tar Sands Extravaganza	74
The Rise of Van-Tor and Mainwaring’s Hunt for Underground Gas Storage	78
Richfield Oil Enters the Fraser Valley	84
Richfield in Abbotsford	87
Richfield in South Surrey	87
Richfield in Tsawwassen	88
Can-American Petroleums	92
W.C. Mainwaring’s Bold Empire-Building Move	96
1958 Directors of the Peace River Power Development Co. Ltd.	125
Added Directors of the Peace River Power Development Co. Ltd., 1959-1960	133
The Third Wave: B.C. Hydro Gas Group’s South Surrey Underground Gas Storage Project Proposal	137

The Fourth Wave: Fraser Valley Exploration, LNG Proposals, and Deregulation, 1981-1984	157
4-1. Hydro's LNG Proposals: Rejected	168
4-2. The Privatization / Deregulation of B.C.'s Natural Gas	180
4-3. Prelude to the Fifth Wave: Petroleum Exploration on Vancouver Island	201
Shaken and Stirred	202
Give Us Gas	207
British Petroleum's Two Wells	210
 The Fifth Wave: Fraser Valley Petroleum Exploration, the Methane Storage Revival, and the Rise of The Friends of the Fraser Valley	 218
5-1. Enter Dynamic Oil	223
5-2. Enter the Big Players	231
5-3. The Transformation of Inland Natural Gas Company to "B.C. Gas Inc.": The New Giant Player	235
5-4. Seismic Exploration Begins	241
5-5. Provincial Government's 'Consultation' with Third-Order Governments	246
5-6. The October 26, 1989, Bidding Process Results	257
5-7. "Public Consultation"	265
5-8. 'Natural' Gas: The Friendly Energy Source Propaganda	270
5-9. No Foes: Then Came the Friends of the Fraser Valley Margaret and Charles	278 281
5-10. D-Day, March 5, 1990	285
5-11. Out of the Closet and into the Limelight	303
5-12. The Public Inquiry Begins "Who is this Man?" (1962-1975) The Anderson Commission	313 316 327
5-13. The Friends Dig In	339
5-14. The NIMBY (Not in My Back Yard) Sticky Label	343
5-15. The Public Hearing Series: the Tuesday, June 12th Opener	349
5-16. After the First Hearing	372
5-17. Eight of the Nine Public Hearings	375
5-18. July 11, 1990: The Final Public Hearing	382
5-19. The Big Lie about Storage	416
5-20. The Travelling Anderson Commission John Ahern 13 Sites	424 425 430
5-20-1. North America Calgary The Jackson Prairie Visit (June 28-29) The Oregon Mist Tour (July 18-19) Fort St. John Tour (July 20) The Los Angeles, California Tour (July 23-24) The Michigan-Williamsburg-Kalakaska Tour (July 25) The Ontario Tour (July 26-27)	430 430 431 432 433 434 435 437
5-20-2. The Vacation Trip to Europe The Tour de France (August 12 to 17) The Trip to Italy (August 15)	438 439 444

Back to France (August 16 to 17)	446
The Trip to the United Kingdom (August 24)	446
The Shaping of Commissioner Anderson's Bias	451
5-21. The Rzepczynski (Population Proximity) Affair	452
The Friends' Boycott of the Anderson Commission	475
The Commissioner and Counsel Declare War on The Friends	485
5-22. Anderson's and MacAdams' Special Trip to Illinois	494
Missouri	504
Indiana	504
Gas Migration	505
The American Gas Association Paper	509
5-23. The October 22 Hearing	516
The Morning Of	521
The Letter	523
The Witnesses	525
Judgement	528
The Allegations Report	529
5-24. The November 27 Langley High School Meeting	533
Al Vickers	537
Margaret Ormston	544
Lodene Clark	546
Brian Calder	554
Jack Hamilton	557
Charles MacLean	559
5-25. 'Time will Tell ...' Illinois: Forty Years After the AGA Position Paper	561
5-26. The Complaints to The Law Society of B.C.	584
5-27. Anderson's Final Report and Government's Decision to Quash	
Underground Storage	595
5-28. Provocateurs: The Ferndale Jump-Start Consortium.....	610
5-29. The Battle Continues and Finally Ends: 1991 – 1994	615
5-29-1. The Final Year of the Socreds	617
5-29-2. 1992	626
5-29-3. 1993	632
5-29-4. The Final Two Drilling Sites	639
5-29-5. The Final Storage Foray	642

Appendix A: Transcript of Margaret Ormston's July 9, 1990, Oral Presentation at the David Anderson Royal Commission Public Hearing in Chilliwack (Transcribed from a Commission audio tape)	644
--	-----

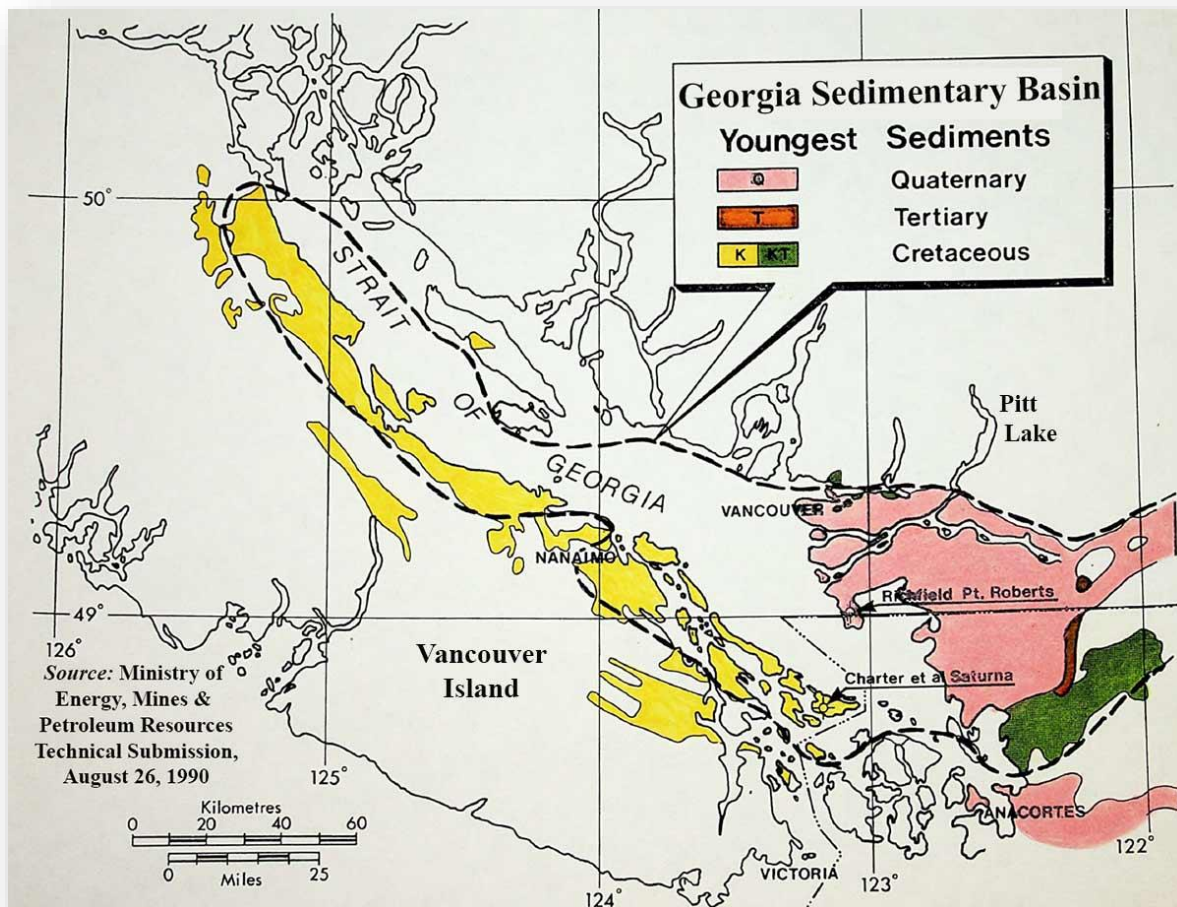
Appendix B: Transcript of Al Vickers' July 9, 1990, Oral Presentation at the David Anderson Royal Commission Public Hearing in Chilliwack (Transcribed from a Commission audio tape)	656
---	-----

Appendix C: Glen Breaks' 'Three of the Thirteen Pages' of Notes Presented to the Anderson Commission	661
---	-----

Appendix D: Gina Breaks’ September 4, 1990, Oral Presentation on Boycotting of the David Anderson Commission (From the Commission’s Technical Proceedings’ Transcripts)	664
Appendix E: Information Lists of Anderson Commission Public Hearings, Preparatory and Technical Meetings	671

Introduction and Summary

Many readers may be surprised to learn that there were oil and gas well operations in British Columbia's Fraser Valley and Lower Mainland areas, within valley-bottom lands from the Town of Chilliwack westward to the municipalities of Metro Vancouver alongside the Strait of Georgia. There were also drilling projects on some Gulf Islands in the southern half of the Georgia Strait and on adjacent lands on eastern Vancouver Island. These programs were licensed through the blessings of the provincial government, in a geologic zone identified as the Georgia Sedimentary Basin.



Terrestrial seismic studies were later conducted from 1977 through to 1989 – technical evaluations for determining and mapping underground geologic structures – which fiercely shook up or vibrated lands in the Fraser Valley and east Vancouver Island by specialized, highly powered diesel trucks.

Almost all these ventures occurred within what this report refers to as “the five waves” of petroleum exploration:

- 1914 to 1924 – Richmond area, Burnaby, Pitt Meadows, Abbotsford
- 1940s to 1964 – Richmond, Delta, Surrey, Abbotsford, Gulf Islands
- 1977 to 1979 – Surrey, Delta, Langley
- 1981 to 1986 – Lower Mainland, Fraser Valley, east Vancouver Island
- 1989 to 1994 – Delta, Langley, and Aldergrove

The five waves occurred within periods of unprecedented industrial expansionism, the transformation of 'undeveloped' lands by networks of entrepreneurial, colonial business empires, the multi-development of inter-connected urban centres within the continent of North America.

Described in Chapter Two, the 1950s was perhaps the most intense period, when gas and oil pipeline connectors were constructed to strategically link up the new industrial realms. And it was within the last three waves that public concerns and opposition became more pronounced in southwestern British Columbia, particularly the final wave, the focus of this report, when citizenry organized and shouted No!

Organizers of: **WESTCOAST TRANSMISSION COMPANY** LIMITED

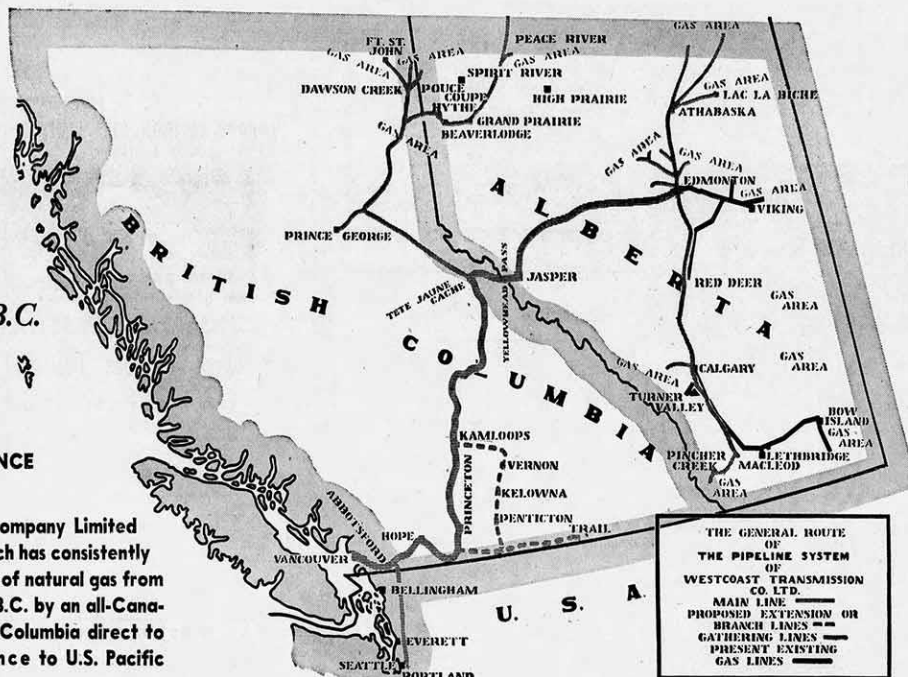
Presently:

- A leading Independent Oil Producer in Alberta
- Developing over 1,000,000 acres in the Peace River District of B.C.
- Planning drilling operations on the B.C. Gulf Islands

It will mean to B.C.

- NEW PAYROLLS
- NEW INDUSTRIES
- NEW ECONOMY
- NEW TOWNS
- DOMESTIC CONVENIENCE

Westcoast Transmission Company Limited is the only organization which has consistently sponsored the transmission of natural gas from Alberta and northeastern B.C. by an all-Canadian route through British Columbia direct to Vancouver, B.C. and thence to U.S. Pacific Coast cities.



Pacific Petroleums Ltd.

A Company committed to the search for and development of oil and natural gas in Western Canada

EXECUTIVE OFFICE
304 Toronto General Trusts Bldg.,
Calgary, Alta.

REGISTERED OFFICE
504 Seymour Street,
Vancouver, B.C.

FIELD OFFICE
9616—101A Avenue,
Edmonton, Alta.

Vancouver Sun, March 28, 1950

In the 1950s, the B.C. Electric Company, a former private sector provincial utility corporation and a subsidiary of the Power Corporation of Canada, sought to find an underground gas storage facility in the Lower Mainland / Fraser Valley. The proposal occurred during the investor-frenzied and speculative petroleum rush in western Canada to harness the spoils from northeast B.C. and northwest Alberta by way of new provincial and federally approved oil and gas pipeline corridors to the metropolitan Lower Mainland and other export market destinations in northwestern United States.

In this rush, B.C. Electric's corporate directors proposed to store methane from Westcoast Transmission Company's new 800-mile natural gas pipeline that was completed in 1957. After years of promotional tests, B.C. Electric's subsidiaries failed to find a functionable underground storage site in both the Fraser Valley and just across the American border within northwest Washington State.

North America's, and the world's, first underground methane storage facility was established in southern Ontario in 1915, a storage method quickly adopted by the petroleum downstream delivery sector in the United States. By 1980, there were some 400 underground storage facilities in the U.S.A., most of which were in the American northeast. The big storage companies, however, encountered problems. Some of the facilities were leaking, because the artificially-induced pressurized gas was making its way back upwards – 'migrating' – through corridor cracks in the underground 'caprock.' This of course created problems for inhabitants on the surface – the migrating gas contaminating drinking water, poisoning agricultural crops, and posing dangerous explosive risks to building structures. Such were the experiences of some.

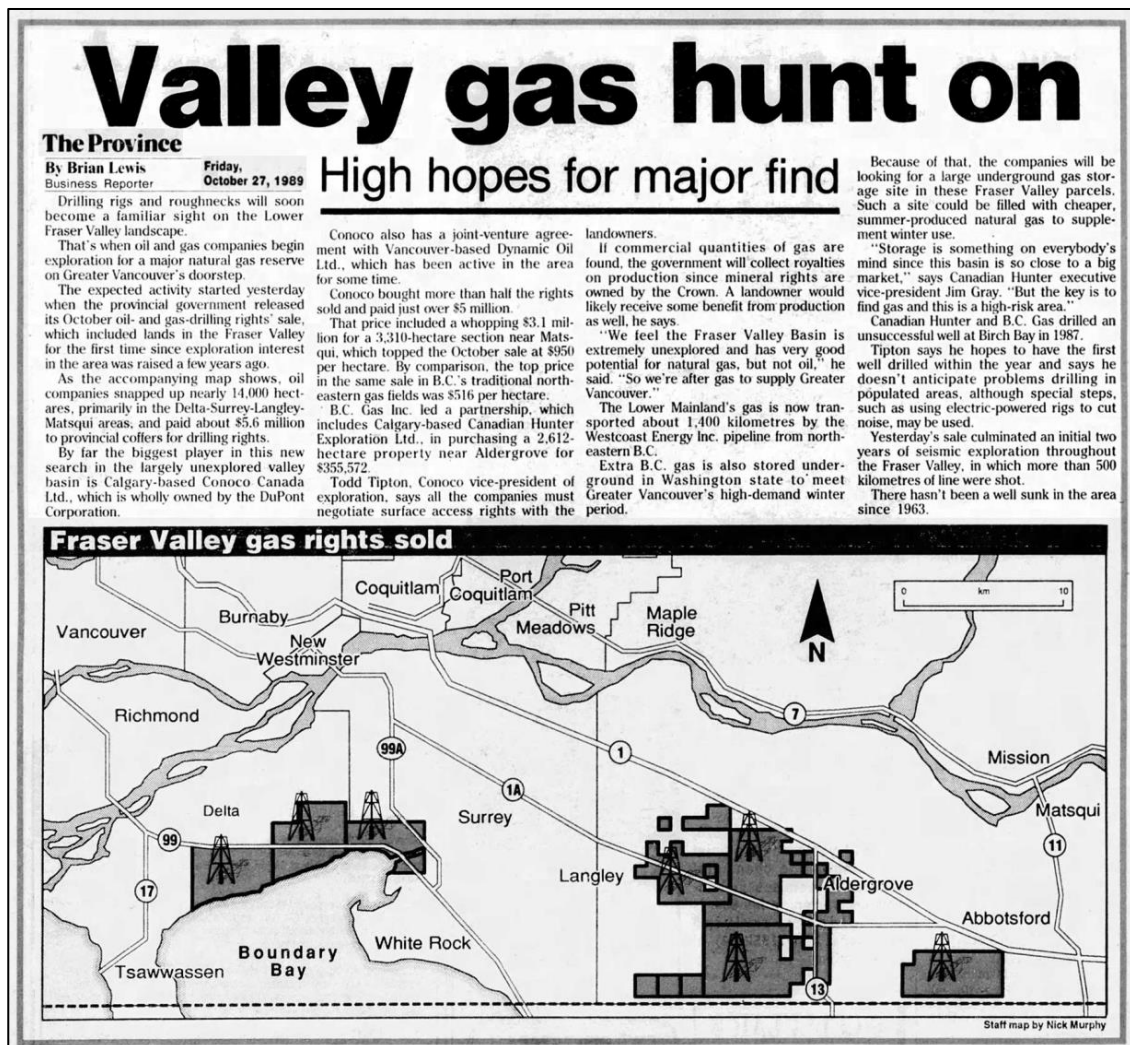
Many of these 'problems' went unreported and were covered up by industry, with most professionals in the storage business simply towing the 'company and industry line.' Some admitted there were problems, and those that did often stated that the risks were worth the trouble. It wasn't until 1993 that an academic, peer-reviewed paper published in the January 11, 1993, edition of the Journal of Petroleum Science and Engineering frankly and reluctantly admitted there were gas migration problems associated with storage developments in proximity to population centres.

In the 1970s, when B.C. Electric's successor, B.C. Hydro and Power Authority (B.C. Hydro), began efforts a second time to locate an underground storage site in the western half of the Fraser Valley, the public corporation now ran into trouble (Chapter 3). Its consultants raised the red flag of groundwater contamination, linking concerns about exploration drilling to gas migration. With a population boom underway in the municipality of Surrey, municipal council opposed both seismic surveys and the proposal in its territory.

After government rejected the underground proposal, B.C. Hydro soon sought an alternative. It proposed to construct a Liquefied Natural Gas (LNG) storage facility at the east end of the Burrard Inlet, just next door to the municipalities of Anmore and Port Moody (Chapter 4). The public and the media quickly raised legitimate concerns about the dangers associated with LNG storage, shutting down Hydro's proposal once again.



By the second half of the 1980s, and with the emergence of new provincial Energy Minister Jack Davis, a big friend of big business, he gifted the Fraser Valley to industry for petroleum exploration and underground gas storage (Chapter 5, 5-1, 5-7). The matter would incite acrimonious public opposition, despite the findings from Dynamic Oil Ltd.'s consulting firm which conducted two sociological profile reports in the municipal regions of Surrey and Langley. Dynamic's consultants advised that although the probability of public revolt was not remote it was not projected to be a significant problem (Chapter 5-7). The opposite occurred, with the birth of The Friends of the Fraser Valley in February 1990 (Chapter 5-9). The Friends, a mix of professional, talented and concerned volunteer citizenry, quickly influenced local municipalities to oppose both drilling and storage. Over time, the organization grew to over 2,000 members.



This public opposition, which originated and quickly grew in the municipalities of Langley and Aldergrove, swayed the two Langley provincial riding politicians who were also Social Credit Party Cabinet members. Premier Bill Vander Zalm's administration then ordered the Ministry of Energy to immediately conduct a Public Inquiry on petroleum exploration in the Fraser Valley. The Friends remained suspicious of government's intentions, stating that its Commission Inquiry was a stalling tactic, merely a formal procedure through which it would nevertheless grant the big nod to petroleum exploration and gas storage.

David Anderson was appointed Commissioner in May 1990 (Chapter 5-12) who was contracted to complete a final report by the end of September 1990. Anderson, a former staff member with Canada's External Affairs department (1962-1967), a former federal Liberal Party Member of Parliament (1968-1972), and former elected head of the B.C. provincial Liberal Party (1972-1975), ran into 'problems,' delaying the release of his final report on February 1, 1991, four long and agonizing months beyond his contracted deadline.

As the Inquiry began, one of the two petroleum industry consortiums, the partners being B.C. Gas Inc., Conoco Canada Ltd., and Dynamic Oil Ltd., adopted the name Fraser Valley Gas Project. The consortium initiated a public relations campaign and opened a 'community' office. A member of that consortium, B.C. Gas Inc., a company formerly called Inland Gas with most of its previous utility operations in B.C.'s Interior, played a central role in pushing for drilling and underground gas storage. B.C. Gas, now with numerous subsidiaries, had recently acquired B.C. Hydro's Gas Division in 1988 (part of the Social Credit government's controversial policy for privatization of public assets), by offering the highest recorded purchase for a public utility in North America.

Glen Breaks, a volunteer core member of The Friends of the Fraser Valley, began researching the technical literature of the petroleum industry. He retrieved information on environmental impacts and repercussions of upstream petroleum development and downstream underground gas storage in the United States. His findings, alongside research findings from other Friends' volunteers, helped to critically challenge the Fraser Valley Gas Project, the Anderson Commission, the B.C. Utilities Commission, and the Ministry of Energy, Mines and Petroleum. The Friends did so relentlessly through newspaper articles and letters to the editor, in television news

Natural gas is a friend of the environment.

All Canadians, including corporations, are far more aware of our fragile environment than ever before. And that's where natural gas can help. It's the cleanest burning fossil fuel known.

Natural gas produces less carbon dioxide than coal or oil and produces fewer emissions into the atmosphere helping to moderate the greenhouse effect.

Many of us depend on natural gas for everyday living. We use it for home heat, hot water, cooking, swimming pools, clothes dryers and automobile fuel. Natural gas is safe, economical and is a natural friend of the environment.

The growing population in the Lower Mainland is creating a need to find local sources of natural gas and storage areas.

By tapping the natural gas potential of the Fraser Valley we can have safe, reliable and economical supplies into the future. And we can enjoy these benefits without harm to the local environment or any adverse effect on our quality of life.

Gas exploration has little environmental impact

Contrary to what you may have heard, drill sites have little environmental impact. The working area and drill rigs are cleared and dismantled within six weeks, and the land is quickly restored to its natural state.

During drilling, underground water quality is protected by advanced pollution control practices...



the same practices which have allowed the drilling of 7,300 oil and gas wells in northeastern B.C. without a single reported instance of water contamination.

Visual impact is minor

In the event that natural gas is discovered, the visual impact on the landscape is negligible. The only surface evidence of the well would be a small shed which covers the capped above-ground pipe. All transmission pipes would be underground and out of sight.

Underground storage safe and proven

Underground storage of natural gas is being successfully practiced at more than 400 sites in Canada and the U.S.A. It's a safe and proven way to ensure natural gas supplies during periods of peak demand. At present, we're partially dependent on supplies stored underground in Washington State... a situation which could result in future shortages for the Lower Mainland.

Visit our Aldergrove* information office

If you have any questions about natural gas drilling or storage, drop in to our Consumer Information Centre at Aldergrove Centre Mall, 3100-272nd Street in Aldergrove. Or phone 856-8144 Monday to Friday.

By ensuring reliable supplies of clean-burning natural gas and using it in our daily lives, we are all helping to preserve B.C.'s environment.

Natural gas is indeed a friend of the environment.

*After May 7th.

The Fraser Valley Gas Project



BC Gas Naturally.



Langley Advance
April 25, 1990

The Fraser Valley Gas Project

Answering the most frequently asked questions about natural gas exploration.

Working with communities is an important part of natural gas exploration. The Fraser Valley Gas Project believes that a better understanding of local and environmental concerns will assist everyone in making the right decisions. The following are the most frequently asked questions about the project.

Q Is gas exploration likely to contaminate groundwater?

A No. To prevent contamination, we use a special double-hulled pipe system with a 100 ft. long outer protective steel casing pipe and a 1,500 ft. long inner pipe through which the drill passes. Both pipes are also separately encased in cement to a depth of 1,500 ft. to ensure that any drilling exploration is completely isolated from exposure to groundwater. This is the same system used in northeastern B.C., where over 7,000 gas wells have been drilled without a single reported case of groundwater contamination. To verify the absence of contamination, all water wells close to Fraser Valley drill sites will be tested before and after drilling.



BC Gas Naturally.



coverage, and with public donations that paid for newspaper advertisements, public demonstrations, public meetings and forums. And they persisted by raising concerns during the Commission's public hearings and technical meetings.

In August 1990, B.C. Gas, its legal firm, and its American consultant, played hardball with Glen Breaks' research information, his reputation, and his engineering American informant (Chapter 5-21). That's when things began to get ugly. Breaks' key findings were based on information linking the dangers of leaking gas from underground storage to proximity of population centres which he weaned from top American reservoir engineering experts and literature. His findings were a direct threat to B.C. Gas's interests, findings that otherwise contradicted the petroleum consortium's repeated assurances to the public.

Breaks' industry informant suddenly recanted, leaving him and The Friends in the lurch. This occurred during the middle of the Commission's Preparatory Technical Sessions (August 13 to 25), and just prior to the Commission's Technical Hearings (August 27 to September 6). On the evening of September 4, two days before the last Technical Hearing, The Friends announced in front of the Commissioner's Hearing assembly, and with the media in tow, that their organization was officially abstaining and boycotting the Commission, a direct result of the consortium leaning on their academic informant.

Commissioner Anderson and Commission counsel Douglas MacAdams were privately furious! Because of the accusation by the Friends, they suspended the Commission Inquiry after the September 6, 1990, Technical Hearing and obtained government approval and funding for a separate quasi-legal sub-Inquiry into Allegations of Witness Tampering, delaying the Commission's responsibilities by two extra months! They declared war on The Friends.

The boycott caught media attention, and shortly thereafter information was published in the newspapers about an American woman in the State of Illinois, Lodene Clark, another of Glen Breaks' research informants,

Received Sept 4
- Glen
JULY 11, 1990

My name is Glen Breaks.

I've been researching natural gas engineering and in particular, the underground storage of natural gas, for several months now. My primary source of information has been a book, published in 1990, entitled "Natural Gas Engineering, Production and Storage" by Dr. Donald Katz and Robert L. Lee. Dr. Katz, who passed away in 1989, was a professor of chemical engineering at the University of Michigan and a retired consulting engineer. He was co-author of 250 papers and several books, and over the years received 17 national honours and awards. He was awarded the National Medal of Science from President Ronald Reagan in 1983. He pioneered many of the techniques and concepts now commonly used in the natural gas storage industry. To discredit Dr. Katz would be to discredit the entire petroleum industry.

In the chapter on monitoring and safety, Dr. Katz tells us that given the expected 30 to 50 year lifetime of a storage facility it is foolhardy, to say as B.C. Gas has repeatedly said, that leakage into the local user's water supply and homes will not occur. He also recommends that a policy of acquisition of surface lands above gas storage zones be followed, in order to reduce and control hazards due to leakage. The consortium at the Jackson Prairie facility are now following this 1990 recommendation.

Dr. Katz gives this advice to anyone currently operating a storage field with residences on it. Any land in the storage area that enters the market through the normal course of events might then be procured, especially if there are any residences near.

He goes on to describe the type of home that should be built above a storage facility, if such an activity is unavoidable. He states "it would be preferable to have the homes on concrete pads without basements, and this new type of construction might well be advised in the gas storage areas."

Inquiry labelled 'whitewash'

Chilliwack
Progress
September 12, 1990

by Al Irwin,
MetroValley News

The commission of inquiry into gas exploration in the Fraser Valley was denounced last week as a "whitewash" by the Friends of the Fraser Valley.

The Friends, a group of valley residents concerned about the impact of exploration proposals by The Fraser Valley Gas Project, walked out of technical hearings of the Commission on Fraser Valley Petroleum Exploration, at Langley Conference Centre, Sept. 4.

Friends member Gina Breaks said her group would boycott further commission hearings because the group is convinced the process is biased in favor of the Gas Project, a consortium of B.C. Gas, Conoco and Dynamic Oil Ltd.

who's farmland, home, groundwater, and outbuildings in Long Point, Illinois, were surrounded by leaking, migrating gas from underground storage, leaking, in fact, since the 1960s (Chapter 5-21, 5-24). This was the same American State that Breaks' expert informant operated in, the same State that The Friends warned the Commission about gas migration and liability issues before David Anderson's July 1990 special tour of underground storage sites in the United States, a State Anderson subsequently failed to visit and make formal inquiries about (Chapter 5-20). Thirty years later, an Illinois television station, WCIA 03, investigated Nicor Gas Company's leaking gas storage facilities (Chapter 5-25).

The air explodes around her home

The air is known to explode on occasion around Lodene Clark's property in Livingston County, Illinois.

Safety hazards, bad water and other concerns prompted the 62-year-old grandmother to fly out to the Fraser Valley late last year to tell residents about her problems with natural gas.

"I'm not an activist. I'm an old farm wife with two years of college. . . I'm willing to tell my story because I know what these gas companies are saying. I know there's another side of the story."

Clark owns a house on top of one of North America's largest underground gas storage areas. The problem is that the gas reservoir leaks.

Clark first noticed the situation soon after storage began more than 20 years ago.

"In 1968, when this field was first going into operation, the well boiled. You could see the water boiling down there like a tea kettle would boil," Clark said in a

telephone interview.

"The well got to be very bad quality water — almost undrinkable. It became so vile you couldn't even wash clothes in it."

Gas began seeping through the ground and conditions got so bad that Clark began battling with the Northern Illinois Gas company. She got little satisfaction.

"They told me it was native gas (coming out of the well) and none of their concern.

"We used to put a vented pipe on it and actually burn it to embarrass the gas company.

But the gas company was difficult to spur into action. Company officials would sympathize with Clark, but

always insisted it was gas native to the area that was seeping out, not gas they were storing, Clark says.

Company officials began digging shallow holes around her property in the 1970s.

By this time gas was leaking so badly that her son

would flip a match in each hole as he went out for his evening jog. He could navigate his way back to the house by the burning holes.

It was proven in 1989 that it was definitely stored gas leaking, but the troubles didn't end there.

"They plugged the holes. Then fissures in the land opened up. The fissures would boil," she says.

Unfortunately for Clark, one of those fissures is under the house where her son now lives.

"Gas coming up and releasing into the surface is not ideal but it's not overly harmful.

But if it collected in a basement it would explode. If you dropped a match down the concrete well it would explode and blow the concrete cap off," Clark says.

That very thing did happen to one of her neighbors, she says.

His pump house got covered with a heavy wet snow one time when he was on vacation. The snow sealed seeping

gas in the building. When he got back from vacation he turned on the taps, which caused the pump to kick in.

The resulting explosion blew the boards off the building and through the windshield of his car, Clark says.

Commissioner David Anderson visited Clark in her home recently as part of his commission of inquiry into gas exploration and storage in the Fraser Valley. But the meeting didn't go well.

"I felt I was able to tell him some of the things that have happened to me. He didn't call me a liar but almost."

Clark wants to settle with the gas company. Among other things, she wants a new farm to replace her 80-acre operation.

Until she gets what she wants, she says the battle will continue.

"The potential for someone being killed is very high," she says.

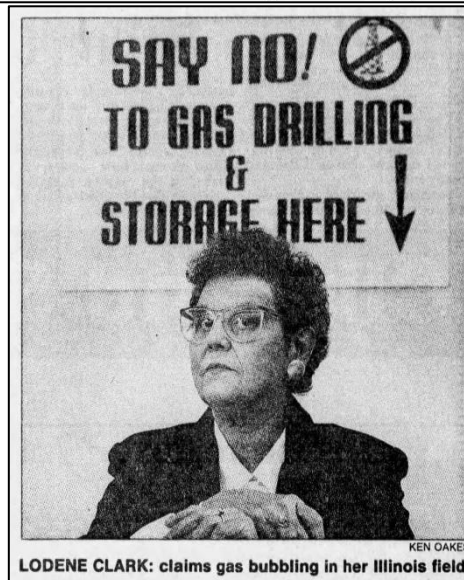
Chilliwick Progress - February 6, 1991

As the focus of Commission attention shifted toward the State of Illinois, Commissioner Anderson and counsel Douglas MacAdams made a special visitation to Illinois just before the Commission's Allegations Hearing on October 22. There, the duo privately met with Glen Break's professional reservoir engineer informant, Walter Rzepczynski (Chapter 5-23), who later sent the Commission a lengthy affidavit.

The Friends refused to participate in the October 22 special Allegations Hearing. At that Hearing, Commissioner Anderson ruled that there was no evidence of 'hanky panky' by anyone from industry, government or the private sector upon the Illinois engineer. Anderson one-sidedly concluded that the Friends had fabricated the information and misled the public. However, the media would remain unconvinced of the Commission's Allegations rulings.

The Commission's harsh and retaliatory Allegations Inquiry rulings failed to deter The Friends. Two things resulted. Glen Breaks filed a complaint with the Law Society of B.C. against Commission counsel Douglas MacAdams, which included a complaint of misconduct involving defamation (Chapter 5-26). Secondly, the Friends organized a large public meeting on November 27, 1990, which over 600 people attended (Chapter 5-24). At the energetic meeting/rally, the Friends denounced the Commission, and Lodene Clark from Illinois, who the Friends invited for the occasion, spoke about her tribulations of leaking gas. Her testimony made the media headlines.

The Commission eventually released its final report On February 1, 1991, in which Commissioner Anderson gave his blessings for exploration drilling and gas storage (Chapter 5-27). Revealed at the end of Chapter 5-20, in sub-section *The Shaping of Commissioner Anderson's Bias*, the Commission's final



LODENE CLARK: claims gas bubbling in her Illinois field

report admitted that Anderson had already made up his mind favoring gas storage prior to the Technical Hearings that began on August 27.

On the very same day, and moments after the Commission's February 1st news release, Energy Minister Jack Davis issued a single sentence news release: "there would be NO DRILLING FOR UNDERGROUND GAS STORAGE in the Fraser Valley." Because of an impending provincial election, compounded by intense public pressure against drilling and storage, government countered Commissioner Anderson's storage recommendation.

In mid-1991, three months before the provincial election, new Social Credit Energy Minister Jack Weisgerber announced his approval of a demonstration exploration drilling site in the municipality of east Delta (Chapter 5-29). The company released the drilling results in early October 1991, two weeks before the provincial election. As was the case with all previous exploration drilling operations in the Lower Mainland and Fraser Valley over the previous eighty years, the petroleum consortium came up 'dry' – no gas, no oil.

Under a new NDP administration, Energy Minister Anne Edwards announced in August 1992 her approval for the drilling of two more exploration sites in the municipalities of Langley and Aldergrove. As The Friends and politicians noted, in 1991, prior to the provincial election, NDP's Premier Mike Harcourt promised the voters "a moratorium on natural gas exploration and storage in the Fraser Valley." The two wells were eventually drilled in 1993, after the consortium made an agreement with a new drilling partner, Stateside Energy Corp. Once again, both results came up dry.

In April 1994, the Ministry of Energy released a discussion paper which included recommendations to rule out future gas storage proposals in the Fraser Valley. The information was summarized in an April 20, 1994, Abbotsford News article, *Gas storage ruled out – 'Friends' gain victory in a long battle*:

Underground storage of natural gas has been permanently ruled out in Langley. The decision was made in a discussion paper on the supply and deliverability of natural gas, prepared by the Ministry of Energy, Mines and Petroleum Resources.

Drilling for gas was vigorously fought by the 2,000 strong Friends of the Fraser Valley group which was formed four years ago. One of the Friends' prime incentives to fight drilling was their contention that the true agenda of a consortium of companies was to store natural gas in the ground, not to drill for it, as they contended, to meet growing demand for the fuel.

That storage was the real itinerary of Conoco Canada, Dynamic Oil and Stateside Energy Ltd. is reinforced by the ministry's paper. The paper noted that the companies drilled three wells in the Lower Mainland, two in Langley. It said: "Although the drilling target was natural gas, it was evident from the drilling results in the Langley area that there was insufficient caprock material to provide an effective storage seal, with the result that this area can not be considered prospective either for natural gas, or by extension, for underground gas storage."

Pat Lawrence, a member of the Friends, called the ruling "the most appropriate and intelligent decision considering all the information we gathered from around the world."

The First Wave:

Newspaper Advertisements and Articles, 1914 – 1922

Because of time constraints, there is no narrative provided on the First Wave of petroleum exploration in the Fraser Valley and Lower Mainland. There may be an update to this report at some point in the future to fill in this gap.

Instead, a few advertisements and newspaper articles were chosen to highlight this period which was dominated by speculators that repeatedly swayed and suckered weak-minded investors on get-rich schemes.

The Province
June 17, 1914

---OIL in the Fraser Valley---

- 9 months ago
- long before the Calgary Oil Fields were heard about
- the Abbotsford Oil & Gas Company had their engineers and geologists examining the Fraser Valley for proper locations to drill for oil.
- on the advice of F. E. G. Berry, M.E.C.E., the well-known petroleum engineer, the company is taking over about 576 acres of petroleum leases, which include the town and suburbs of ABBOTSFORD, and will drill for oil.
- the capitalization of the company is small, \$250,000 divided into 250,000 shares \$1.00 each.
10,000 of these shares are for a limited time offered to the public at par \$1.00.
- the Directorate is composed of well-known substantial business men.
Walter Leek, Vancouver, Consulting Engineer for the British Columbia Government, being President.
John A. McLean, Moose Jaw, Grain Exporter and coal operator—Vice-President.
- every cent derived from sale of shares will be used to drill for oil.
- no promotion or directors' stock can be sold until oil is struck.
Come in and let us tell you about it.

CHARLES S. MEEK & CO.
Stock and Bond Brokers
412-413 Pacific Bldg., Vancouver



WAKE UP! VANCOUVER

THERE IS OIL AT PITT MEADOWS

Don't Sleep, Don't Eat,

**Until You Get a Few Shares of
Pitt Meadows Oil Wells, Ltd.**

Be sure you get your stock in the Company owning the

PATTERSON WELL

THE ONLY WELL DRILLING AT PITT MEADOWS



The Directors of this Company are, perhaps, the best known men in Canada. They are successful in their own business. They have lived among you all their lives. Their honesty has never been questioned. They are the only men who have ever spent a dollar in the development of oil near Vancouver, and they have spent a small fortune of their own money to prove the existence of oil at

**PITT MEADOWS, B. C.,
NEAR VANCOUVER**

HAVE THEY SUCCEEDED? YES!

Read the Expert's opinion and decide for yourself!

This is not a stock selling proposition. These men have secured 1,920 acres of oil land in the very centre of the Oil Belt. They have drilled two wells and have had oil in both. They are offering to the public stock at 50 cents per share. Does that look like a stock selling proposition? Think these facts over carefully. **Think** hard about your opportunity! **Think** what oil will mean to Vancouver! **Think** what it will mean to the holders of the stock!

THINK of Pitt Meadows Oil Wells, Ltd.

THINK of the Patterson Well That is Being Bored.

THINK That the Patterson Well Will Strike Oil.

That is what the experts **THINK**! **THINK** how much you can afford to speculate and then come in and get your subscription of stock before you forget it!

Oil in commercial quantities has not been found in the Patterson well, because the drillings are not deep enough. If oil had been found in commercial quantities you could not buy this stock for

\$100.00 PER SHARE

That is why this stock is a better speculation than Dingman stock ever was, or ever will be, or any other speculation ever offered.

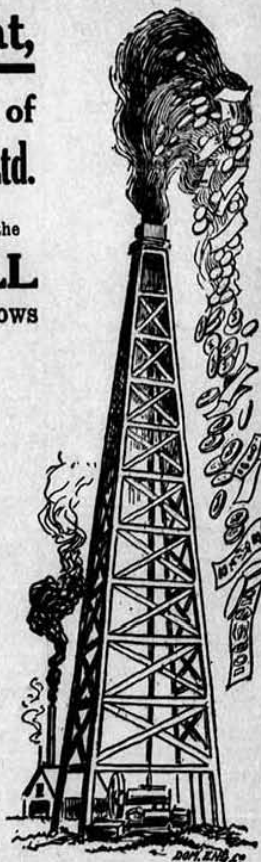
Vancouver Sun, June 11, 1914

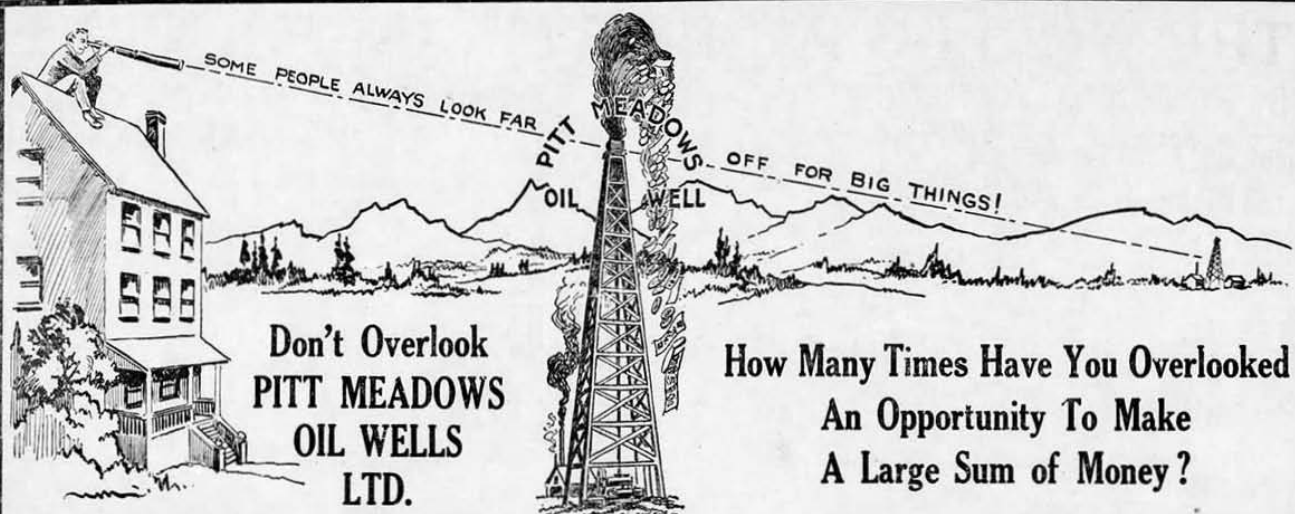
The Dominion Stock & Bond Corp., Ltd.

Winch Building

Vancouver, B. C.

Dominion Building





Don't Overlook
PITT MEADOWS
OIL WELLS
LTD.

How Many Times Have You Overlooked
An Opportunity To Make
A Large Sum of Money?

ARE YOU THE MAN ON THE HOUSE?

If You Are, You Are Overlooking The Best Opportunity Of Your Life

In buying Pitt Meadows Oil Wells, Ltd., you are speculating with the best known and most successful men in Western Canada who have spent nearly sixty thousand dollars of their own money to prove the existence of oil at Pitt Meadows. You are securing stock in a company owning 1920 acres of oil land in the centre of the oil area, and in a company that is now drilling.

STOCK NOW SELLING AT 50 CENTS PER SHARE. THE DRILL IS GOING DOWN
EVERY MINUTE AND ANY MINUTE THIS STOCK MAY INCREASE IN PRICE

Get full particulars from the Selling Agents, or any of their sub agents.

DOMINION STOCK AND BOND CORPORATION, LIMITED

WINCH BUILDING

SELLING AGENTS

VANCOUVER, B. C.

DOMINION BUILDING

Wake Up, Vancouver!—Oil at Pitt Meadows

Read What the Best Posted
and Most Successful Men in
the Country Say About Pitt
Meadows Oil Wells, Limited

The directors of this company are perhaps the best known men in Canada. They are successful in their own business. They have lived among you all their lives. Their honesty has never been questioned. They are the only men who have ever spent a dollar in the development of oil near Vancouver, and they have spent a small fortune of their own money to prove the existence of oil at

Pitt Meadows, B.C., Near
Vancouver.

Have They Succeeded? Yes!

Read the Expert's Opinion and
Decide for Yourself.

Oil in commercial quantities has not been found in the Paterson well because the drillings are not deep enough. If oil had been found in commercial quantities you could not buy this stock for \$100 PER SHARE. That is why this stock is a better speculation than Dingman stock ever was or ever will be, or any other speculation ever offered. Secure your stock from the selling agents:

DOMINION STOCK & BOND CORPORATION, LIMITED

Winch Building and Dominion Building, Vancouver, B. C.—Or Any of the Sub-Agents

R. W. Hachmuth & Co. 557 Granville St., City
C. W. Biggar 254 Granville St., City
J. H. Gowan & Co. 178 Main St., City
A. E. Sharp 117 Hastings St. E., City
R. A. McArthur 425 Homer St., City
Geo. B. Strayhorn 328 Pender St., City

Harry Betts 417 Pender St. W., City
Calgary, Vancouver Oil Exchange, 160 Hastings St.
Thos. Le Meunier 352 Richards St., City
Western Canada Oil Brokerage 120 Hastings St. W., City
A. A. Marshall 8 Hastings St. W., City

S. R. Gould 534-535 Rogers Bldg., City
Rome & Shaw 432 Pender St. W., City
W. L. Bouch 404 & Metropolitan Bldg., City
H. A. Northrop 341 Pender St. W., City
J. T. MacGregor 415 Pender St. W., City
Frank E. Adams 614 Hastings St. W., City

Colonial Financial Corp., Limited, 211 Metropolitan Bldg., City
Robert Mangal 410 Pender St. W., City
Mr. Humeau 104 Main St., City
Commercial Agency 1116 Granville St., City
Moran & Co. 570 Granville St., City

The Coast Star, Squidrate,
Vancouver.
Oct. 11, 1913.

Gentlemen—

I have inspected your well at Pitt Meadows and after a thorough examination of your installation am satisfied that you have built a fine well and that you are now in the business of "drilling" it. It is a well known fact that the business of "drilling" is a very profitable one, and you must have a very heavy gas pressure in your well to cause such an amount of oil to come through practically 1,000 ft. of water, as even in the large flowing wells in California this much of water is sufficient to fill the well, and it will show an increase of either gas or oil.

I am convinced you are in a remarkably safe way of getting a well of sufficient value and possibly a very big one. The surface indications of the country generally in the District of Columbia are as good as those of the Paterson well. In fact, there is no reason why the water cannot be shut off in drilling a well provided it is done at the proper time during the drilling operation.

In my old well, I have seen many large flowing wells producing thousands of barrels per day and did not have the indications of gas and oil that you have in your present well.

Yours very truly,
(Sgd.) R. R. HARRIS.

COPY.
W. JAMES PATTERSON,
C/o Paterson Timber Co.,
Vancouver.
Sept. 15, 1913.

Dear Sir—

In answer to your inquiry as to what I thought of your oil proposition in Pitt Meadows, will say that I think prospects are very good indeed, as the drilling of 214 ft. has brought up to the surface through 1,000 ft. of water more than 100 barrels of oil. If you get from another hole and shut off the water as back-drill you will bring it a well that will be a big paying proposition.

Wishing you success with this enterprise and with kind regards, I remain,

Yours very truly,
(Sgd.) A. T. GILBERT.

This Is Not a Stock Selling
Proposition

These men have secured 1920 acres of oil land in the very centre of the Oil Belt. They have drilled two wells and have had oil in both. They are offering to the public stock at 50c per share. Does that look like a stock selling proposition? Think those facts over carefully. THINK hard about your opportunities. THINK what oil will mean to Vancouver. THINK what it will mean to the holders of this stock.

THINK Pitt Meadows Oil Wells,
Limited

THINK of the Paterson Well That
Is Being Bored

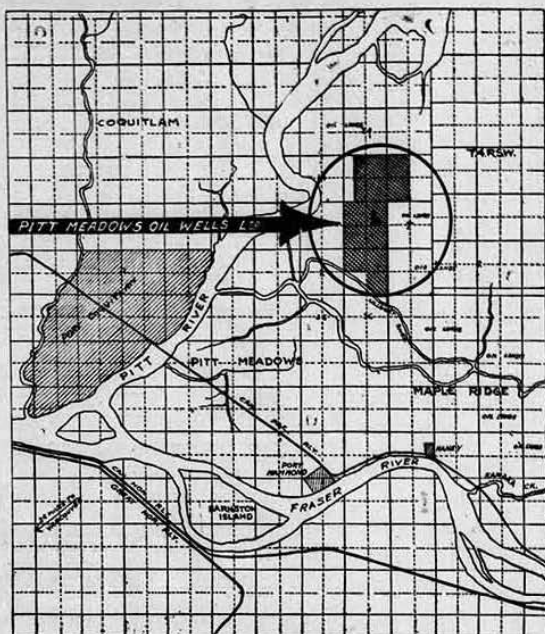
THINK the Paterson Well Will
Strike Oil!

That's what the experts THINK! THINK how much you can afford to speculate and then come in and get your subscription of stock before you forget it!

Wake Up Vancouver

THERE IS

OIL AT PITT MEADOWS



Subscription Now Open

The first stock ever offered for sale in the Pitt Meadows Oil Wells, Ltd., can now be had at 50c per share. When the first allotment has been subscribed no more stock can be had at this office.

Well down 1,170 feet and within short distance of oil-bearing sands struck in first well.

Now is your chance. The Pitt Meadows Oil Field, according to experts, is as good as any in the world.

Some of the best known men in Canada have spent their own money to determine the value of the oil field at Pitt Meadows, with every assurance of securing oil in unlimited quantities.

Gas Is Now Flowing From the Well

This is a British Columbia proposition and one that will do more good to British Columbia than any other. Oil at Pitt Meadows will make Vancouver one of the important cities of the world and increase its population ten-fold.

Don't wait. Get your subscription in at once.

What the Dingman well is to Alberta the Pitt Meadows Oil Wells, Ltd., will be to British Columbia.

Don't wait and pay a higher price for stock in oil companies miles away from the Pitt Meadows Oil Wells, Ltd., the centre of the oil field.

STOCK CAN BE HAD AT SUB AGENTS OFFICES AS FOLLOWS:

E. W. Hacknach & Co.....557 Granville St., City
C. W. Rigby.....334 Granville St., City
H. McKinnon & Co.....748 Main St., City
A. E. Sleep.....117 Hastings St., E., City

R. A. McArthur.....433 Homer St., City
Calgary, Vancouver Oil Exchange.....160 Hastings St., City
Geo. R. Simpson.....338 Pender St., City
Thos. Le Messurier.....623 Richards St., City
Western Canada Oil Brokerage.....126 Hastings St. W., City

A. A. Marshall.....52 Hastings St. W., City
Harry Betz.....417 Pender St. W., City
S. R. Gould.....534-535 Rogers Building, City
Ross & Shaw.....432 Pender Street West
W. H. Benoit.....No. 4 Metropolitan Building

PITT MEADOWS OIL WELLS, LTD., is the Only Company Drilling at Pitt Meadows

SUBSCRIPTIONS CAN BE HAD ONLY AT THE OFFICE OF THE

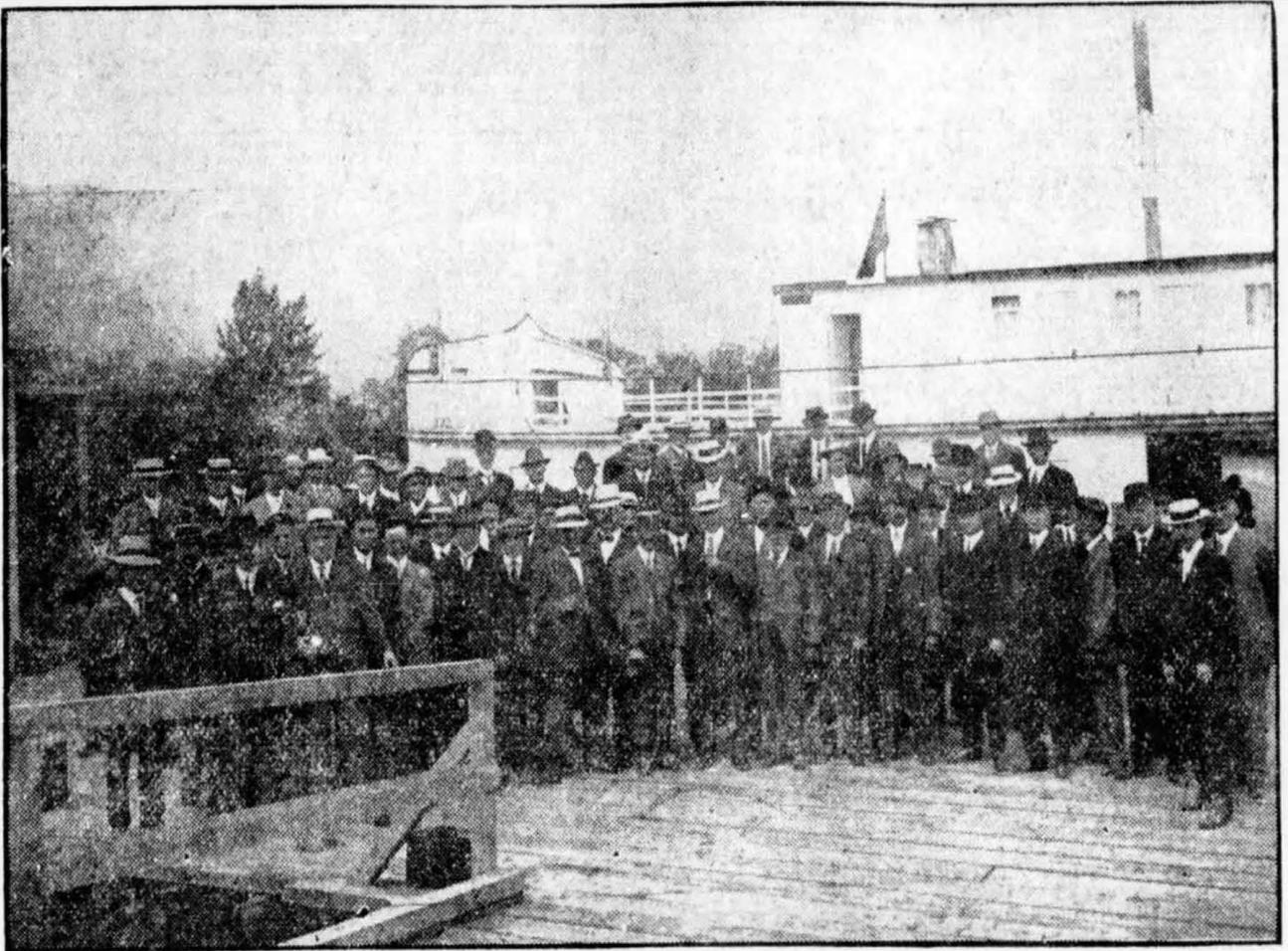
DOMINION STOCK & BOND CORPORATION, LTD.

WINCH BUILDING

VANCOUVER, B. C.

DOMINION BUILDING

Free Excursion
To Pitt Meadows Oil Wells
Tuesday, July 14th
 Leave at 9 a.m. Returning at 5 p.m.
 Transportation and full particulars
DOMINION STOCK & BOND
CORPORATION, LIMITED
WINCH BUILDING, VANCOUVER, B.C.
Vancouver Sun, July 13, 1914



VISITORS ARRIVING AT COMPANY'S WHARF

Scene on the wharf of the Pitt Meadows Oil Wells, Ltd., at the head of Pitt Lake, on arrival of party of prominent Vancouver citizens to inspect oil field on June 16.

Burnaby's Prospective Oil Well Discovered By Man Falling Into Hole

Thomas Hannah Is Original
Discoverer of Oil Seepage
Where Spartan Oil Co. Is
Drilling.

BURNABY—To fall into a hole in the ground and discover a new oil field may yet be the experience of Thomas Hannah, of Kitellano.

A little over a year ago Thomas Hannah was walking near the west end of Burnaby Lake in Burnaby, when he fell through a hole in the peat, and upon reaching firm ground found that his feet and legs were covered with crude oil. J. B. Woodsworth, a mining engineer, was informed of the circumstance. His curiosity being aroused he decided to investigate, and with a pick and shovel he prospected the ground. A little labor and research resulted in very strong evidence of petroleum seepages being found.

Oil in Demand Everywhere.

The mounting prices of crude petroleum and by-products have attracted capitalists to almost every locality in the United States and Canada, where there was the slightest indication that oil might be located. Kansas, Oklahoma, and now Texas, are the latest fields to be developed, and the history of the oil-producing regions in these states reads like a fairy tale. Hundreds of poor men have found themselves wealthy over night, and a general wave of prosperity has swept over the southwestern states as a result of the newly-discovered oil fields.

Capitalists looking for new fields were approached by Mr. Woodsworth,

and the evidence he was able to produce so interested them that they sent experts to examine into the possibilities of Burnaby as an oil-producing district. Among these experts who made a careful and complete field examination of the whole of the district of Burnaby was W. B. Jewell, one of the best known and most reliable oil men in America. He has had experience in practically every important oil producing region on the continent. It was on his recommendation that it was decided to form a company and start drilling operations in D. L. 130.

Down Nearly 1,000 Feet.

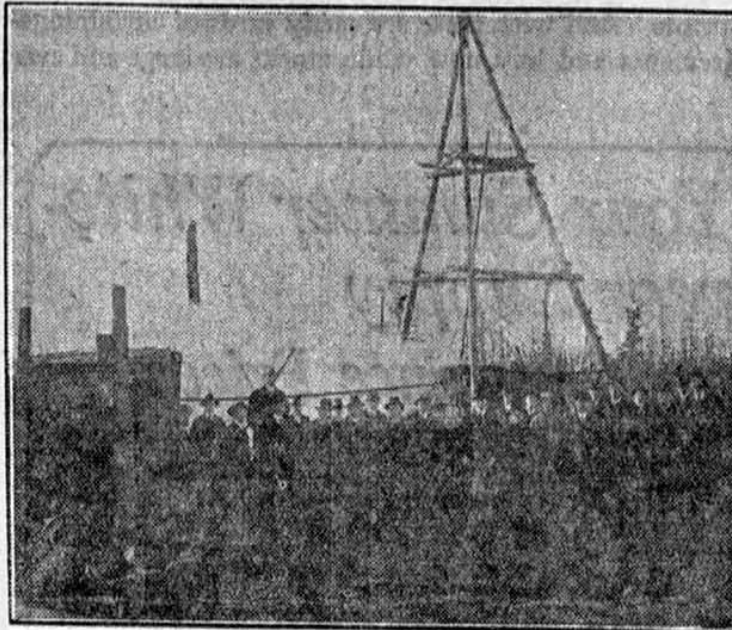
Operations have now been in progress for several months, and the test hole is now down about 1,000 feet. Small pockets of gas have been struck, and oil experts say that this is very good evidence that there is oil, and it may be struck at any time.

For more than 20 years there has been a conviction among geologists and mining men that there exists petroleum and natural gas along the lower mainland, and there have been frequent attempts to locate them. Oil and gas seepages have been found at various points on the Burrard peninsula, but drilling operations have failed to develop either gas or oil commercially.

Previous Indications.

Capt. Alexander, owner of the famous Engineer mine in the Yukon, who was drowned on the ill-fated Princess Sophia, discovered a thin scum of oil on the surface of Burnaby Lake when fishing. He intended investigating in the hope of finding the source of the seepage. The Boer war broke out about this time and he went to South Africa. Upon his return he became interested in mining in the north, and never took the time to further investigate the oil prospect.

Some years ago it became necessary



Drilling rig on D. L. 130, Burnaby, where the Spartan Oil Co. is sinking a test hole.

Vancouver Sun, January 19, 1919

British Columbia's Oil Claims Well Supported By Geological Reports

Vancouver Sun
September 5, 1920

Agree That Commercial Quantities Will Be Found

Discovery Made Near Burnaby Lake Three Years Ago

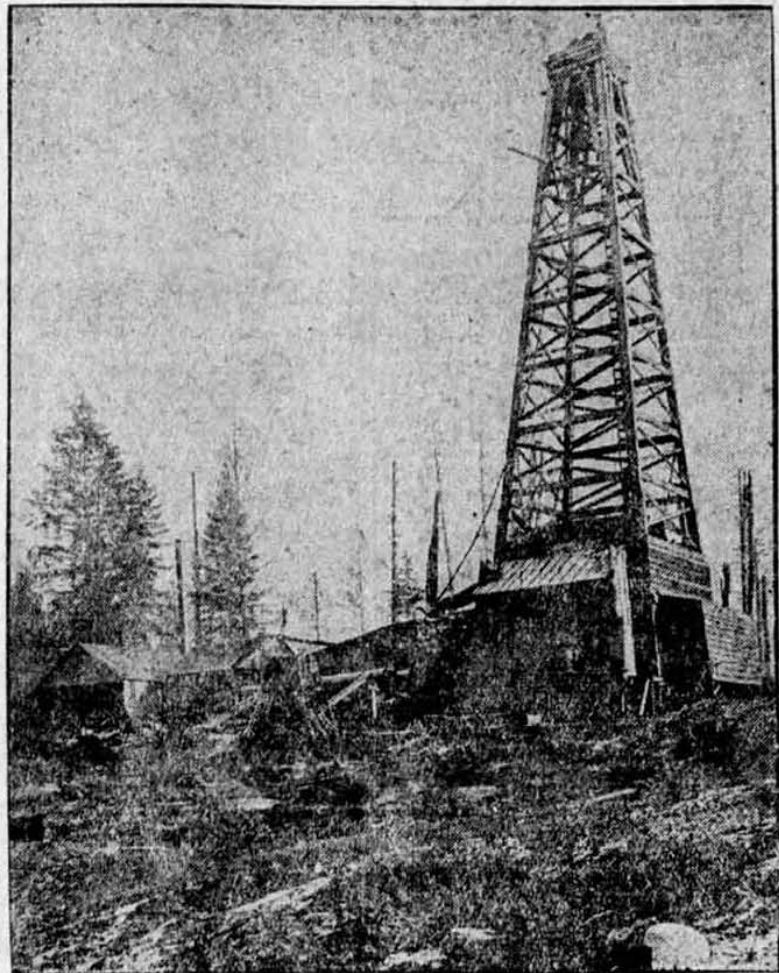
Spartan Company Following Leads in Hastings Townsite

Being desirous of giving as much encouragement as possible to those companies which are legitimately striving to prove the existence of a commercial oil field on the lower mainland of British Columbia, The Sun has decided to review on successive Sundays the results so far achieved by each of the several concerns now actually drilling.

In presenting these facts to its readers The Sun does not wish to be understood as advising them in any way in the matter of investments or speculations in oil stocks. We are not in the oil business and are solely guided by a desire to add to the public's information concerning a quest which, if successful, would prove one of the greatest single achievements ever to occur in the history of British Columbia.—Editor.

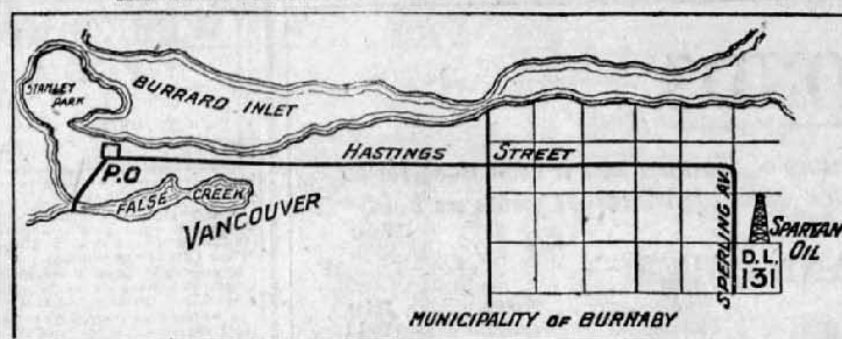
IS THERE oil in British Columbia? Consult the geological reports and the records of oil prospectors. They undoubtedly agree that oil in commercial quantities exists somewhere in the stratas of sands and shales which distinguish formations of the lower mainland of the province.

Many people are inclined to regard the oil situation in British Columbia



DERRICK at the Spartan well showing modern equipment of construction under way.

MAP SHOWS LOCATION OF WELL ON SPARTAN PROPERTY



The Prospects of Oil in Fraser Valley

By E. A. HAGGEN, M.E.

EVERY BUSINESS AND PROFESSIONAL MAN SHOULD READ THIS REPORT

And What of Vancouver?

Few Citizens Realize the Probable Overwhelming Results That Will Reward a Handful of Unfiring Local Men

The Officers, Directors and Shareholders of the Boundary Bay Company are to be congratulated upon having secured the services of Mr. E. A. Haggen, M.E., in preparing a report not only upon their holdings, and operations as a drilling company, but also upon the Fraser Valley as a prospective oil field.

It is the most thorough and comprehensive report that has so far been made, and the Directors of the Boundary Bay Company deserve the thanks of all those interested in this local field, as well as the public generally, who have not as yet become interested in a financial way, for using the columns of The Daily World, in order to give it wide publicity.

A perusal of the report cannot but convince the most skeptical that Vancouver is upon the eve of a greater prosperity than has been, and that the faith and hopes of a few men, who through all sorts of obstacles, have never turned back from the work they had undertaken, are about to be realized.

Every reader of The World should study this report carefully. It is not written in a dry or uninteresting way, but rather as a story, which holds one's attention to the last word.

Boundary Bay's third well will undoubtedly be historic, as the turning point in the development of the Lower Mainland of B. C., and its effect upon this city will be instantaneous, like the magician's wand, it will in an instant transform the city from one dragging its financial anchor, to one whose progress is swift and sure.

The Directors of the Boundary Bay Company, under advice of Dr. J. H. Milburn, have suspended operations, until a new drill stem, now on the way, arrives. They have also, in order to be prepared in case of an emergency, ordered the largest gate valve made. This valve weighs 1400 lbs., can stand a pressure of 1200 lbs. to the square inch of oil or gas. This of itself shows what Mr. Milburn thinks of the recent gas showings. With his twenty-eight years' experience in drilling in various fields, he is competent to read Nature's signs, and in so doing he sees the possibilities of a gusher well with depth.

If his anticipations are realized, think to what height Boundary Bay's would rise, with its holdings of 2500 acres. The price of these shares would make today's prices look like a mole hill compared to a mountain. Among the knockers, scoffers and sellers of shares on calls there "will be weeping and gnashing of teeth," while the man or woman who ventured will rejoice.

And What of Vancouver?

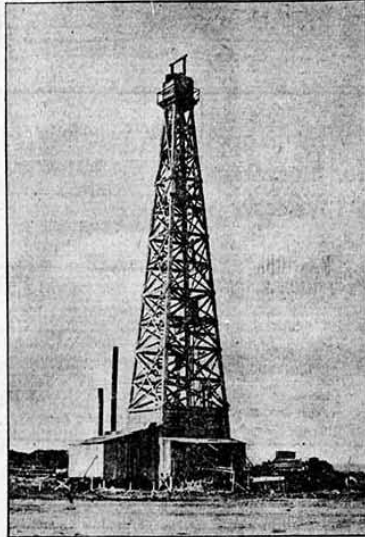
Why, Vancouver will double its population inside two years. There would be no unemployment; manufacturing would spring up in a night; oil tankers would fill our harbors; new oil refineries would be established; while the money made in oil would be put into the development of others of our natural resources, and Vancouver more than ever would be the magic city of the world.

Have you who are about to read this report upon the Boundary Bay Company taken any financial interest in the company? If not, you

pursuit of and the prospecting for oil in the Fraser Valley is a legitimate business, when carried out as has been done by the Directors of the Boundary Bay Oil Co., Ltd.

They have given their shareholders a run for their money and have justified to date the confidence placed in them.

WHAT MORE CAN WE SAY?



BOUNDARY BAY'S 110-FOOT DERRICK

Report of Boundary Bay Oil Company Ltd.

Non-Personal Liability

TO WHOM IT MAY CONCERN:—

The Boundary Bay Oil Company, Limited, was organized in 1918 with a Capital of \$500,000 in shares of 10c. The purpose of the promoters was to test the Boundary Bay section of the Fraser River Delta as to the possibility of producing oil or gas.

The writer was requested to examine the field, and advise whether the geological features of the area warranted the undertaking. In order to obtain information as to the stratigraphic and structural geology, an examination was made of oil or gas from surface indications, an examination was made of the adjacent portion of the State of Washington immediately south of the International Boundary, the Gulf Islands, Burrard Inlet, and the Fraser River Delta. From the information so obtained, a favorable opinion was formed as to the possibility of the development of an oil or gas-producing field.

In 1920 the capitalization of the Company was increased to \$1,000,000 to provide the further finance required in view of the loss by accident of the first two wells drilled by the Company.

LOCATION

The holdings of the Boundary Bay Oil Company, Limited, comprise about 2500 acres located at Boundary Bay, on the eastern shore of the Gulf of Georgia, and about 14 miles southeast of the City of Vancouver, province of British Columbia. Boundary Bay is the former outlet to the sea of the main channel of the Fraser River, one of the largest rivers on the continent of North America.

TITLE

The Company's title is in the nature of leases covering the oil and gas rights from the Provincial Government, each comprising a square mile, or four square miles in all, as delineated on the plan accompanying this report. The leases are numbered respectively 522, 524, 541, 542. The derrick of No. 3 well, to which this report relates, is located in Lease No. 524.

TRANSPORTATION

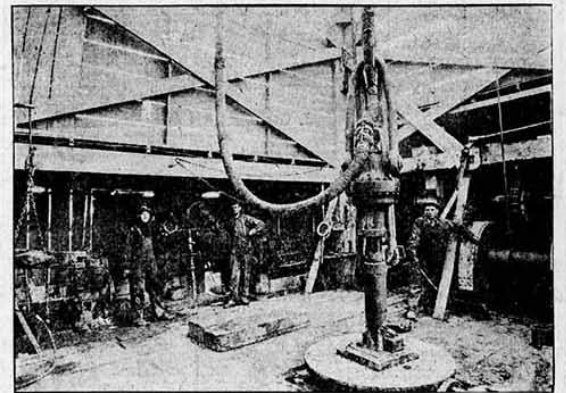
The Company's holdings are reached by macadamized roads from Vancouver, either by Marpole and Ladner, where the Fraser River is crossed by a steam ferry, or by New Westminster, where a combined railway and traffic bridge spans the river. A branch of the Great Northern Railway system runs within a mile of the site of the Company's derrick.

Summary

TO E. A. HAGGEN'S REPORT

The organization and operations of the Boundary Bay Oil Company, Limited, are set forth in detail. The Company's holdings are well located for transportation. The No. 3 well is the deepest well in the field and has struck oil and gas at several horizons. The drill has now entered the Miocene Series of the Tertiary System. This is correlated with the oil-bearing strata of similar age in California, where it constitutes one of the world's most important sources of oil. Proofs are given of its being oil-bearing in this field.

Below the Tertiary is the Cretaceous System, which is correlated with the Chino, another important oil producer of California. This is proved to be petroliferous on the adjacent Gulf Islands, and it is contended that the area contains two important series of strata in which there is every promise of a productive field.



INTERIOR VIEW OF BOUNDARY BAY DERRICK

of the Fraser, and its outcrop at Burrard Inlet and Harrison Lake indicate that it underlies and forms the base of the Tertiary system in the area under discussion. That it is undoubtedly oil-bearing is proved by the well-known oil occurrences in this formation at Graham Island, and the seapines at Pender and Mayne Islands, as well as by the reports of Indians on the Thompson River, where it has been burned by the early fur traders.

Overlying the Cretaceous is the Tertiary System. This includes the Miocene, which Dr. J. M. Dawson correlates with the Miocene of California, the most important oil-producing formation of that state. The Boundary Bay Oil Co.'s No. 2 well has given the most important evidence so far available from a geological point of view. The core penetrated at a depth of about 2100 feet evidently marks the lower strata of the Pliocene, and the limestone and marine shells thereafter entered by the drill evidently mark the upper strata of the Miocene. Shells of Lamnibranchia from this horizon appear to be the Tullia (Lagodon) products of Corral, and a broken fragment of a larger shell appears to represent the species (Lamnibranchia) Marylandia of Dall, both characteristic of the Miocene.

Mr. Milburn, the driller, describes another shell which he obtained from the well but was unfortunately destroyed. This shell he recognized from his experience in drilling in the oil fields of California, as one of the Lamnibranchia from the Miocene of the

in seapines of crude oil at West Vancouver, Burrard Inlet, Stanley Park, Hazel, South Vancouver, West Point Grey, Hattie, Sumas and in the State of Washington, across the International Boundary, south-east of the Boundary Bay Oil Company's site. Oil has been reported from water wells south of Pitt River, South Vancouver, Burnaby, Langley, Prairie and west of the Boundary Bay Oil Co.'s camp. Natural gas occurs at Stevenson, Burnaby, Sumas, Hazel, West Point Grey, Road, where two men were suffocated by it in digging a well.

The bed of limestone at a depth of 2100 feet in the Boundary Bay Oil Co.'s No. 2 well is evidently saturated with oil, as the application of heat to the sample brought up by the bailer drove the oil out of the rock.

Sulphur and salt or brine waters are frequent accompaniments of oil. Sulphur occurs at Burrard Inlet, the new oil field in the Boundary Bay well section strata of seapines, and Dr. Weaver refers to the presence of sulphur in the Tertiary strata of the Gulf Islands. The water at the bottom of No. 1 well at Burnaby shows chlorine on analysis, evidently derived from salt water and brine or brackish waters are reported from water wells at Hazel, south of the Fraser delta.

places the depth of the strata referred to at New Westminster at about 2000 feet and drilling should be carried to that depth at least. The shales are of sufficient thickness to afford an effective capping for any oil that may have accumulated in the porous sandstones.

Drainage Area

The area of the strata favorable for the occurrence of oil and gas is about 40 miles by 20 miles, or 800 sq. miles. The geological survey places the total area of these rocks at 18,000 square miles, so that, in the extent of a productive oil field being demonstrated there is ample drainage area behind it to maintain operating wells.

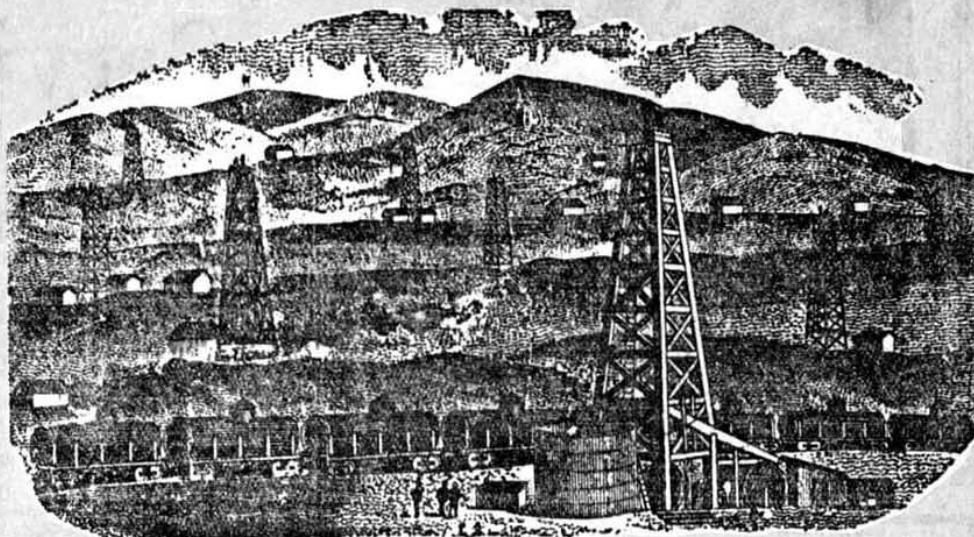
Investigation of the Field

The area has been investigated as to its prospects as an oil field by F. K. J. Berry, M.E., setting for the late Mr. C. E. Meek, by Mr. Cunningham Craig, the eminent Petroleum Geologist of Great Britain, who was actively connected with the discovery and development of the oil fields of Trinidad and the Persian Gulf; by Mr. V. E. Jewell, Petroleum Geologist, Kansas City; and by Dr. Weaver, reporting on the Gulf Islands, formerly Professor of Geology at the University of California and Washington. These

Sumas Oil-Bearing Structure Linked To Bellingham Area

B. C. Developments Forecast; Goshen, Abbotsford and Sumas All One, Says Calgary Operator

Help to Develop B. C.'s Natural Resources



A Prediction of the Fraser Valley Oil Field as it Will Look when Developed

HELP to make it possible by purchasing UTILITY OIL stock. The UTILITY OIL AND GAS CO. LTD. control over 2600 acres of selected leases and are drilling with a rotary drill one and a half miles east of the Empire well.

The well-site has been visited by many experienced oilmen and geologists, who are unanimous in their expressed opinions that it is situated upon a perfect anticlinal structure and the logical position for a gusher well.

IF YOU HAD INVESTED IN ANY OF THE FOLLOWING COMPANIES YOU
WOULD BE RICH TODAY

The UTILITY OIL and GAS COMPANY will very probably appear in similar future lists of successful oil companies.

BECOME A SHAREHOLDER AND PARTICIPATE IN THIS GREAT OPPORTUNITY
—DO IT NOW

\$100 invested in	SINCLAIR OIL CO.	paid.....	\$166,000
\$100	" MID WEST OIL CO	"	\$135,000
\$100	" COALINE OIL CO.	"	\$ 80,000
\$100	" OKLAHOMA OIL CO.	"	\$ 62,000
\$100	" HOME OIL CO.	"	\$ 40,000
\$100	" LUCILE OIL CO.	"	\$ 18,000
\$100	" PINALE OIL CO.	"	\$ 10,000
\$100	" KEARN RIVER OIL CO.	"	\$ 8,000
\$100	" SAN JOAQUIN OIL CO.	"	\$ 5,700
\$100	" S.F. & McK. OIL CO.	"	\$ 5,225
\$100	" PEERLESS OIL CO.	"	\$ 4,300
\$100	" IMPERIAL OIL CO.	"	\$ 4,000
\$100	" NEW OIL CO.	"	\$ 3,900
\$100	" SOURDOUGH OIL CO.	"	\$ 3,800
\$100	" NEW YORK OIL CO.	"	\$ 3,000

The Paraffin Oil Co. for every \$100 invested paid, in ten years, \$492,000
And many other companies have made large fortunes for the small
investors who grasped the opportunity.

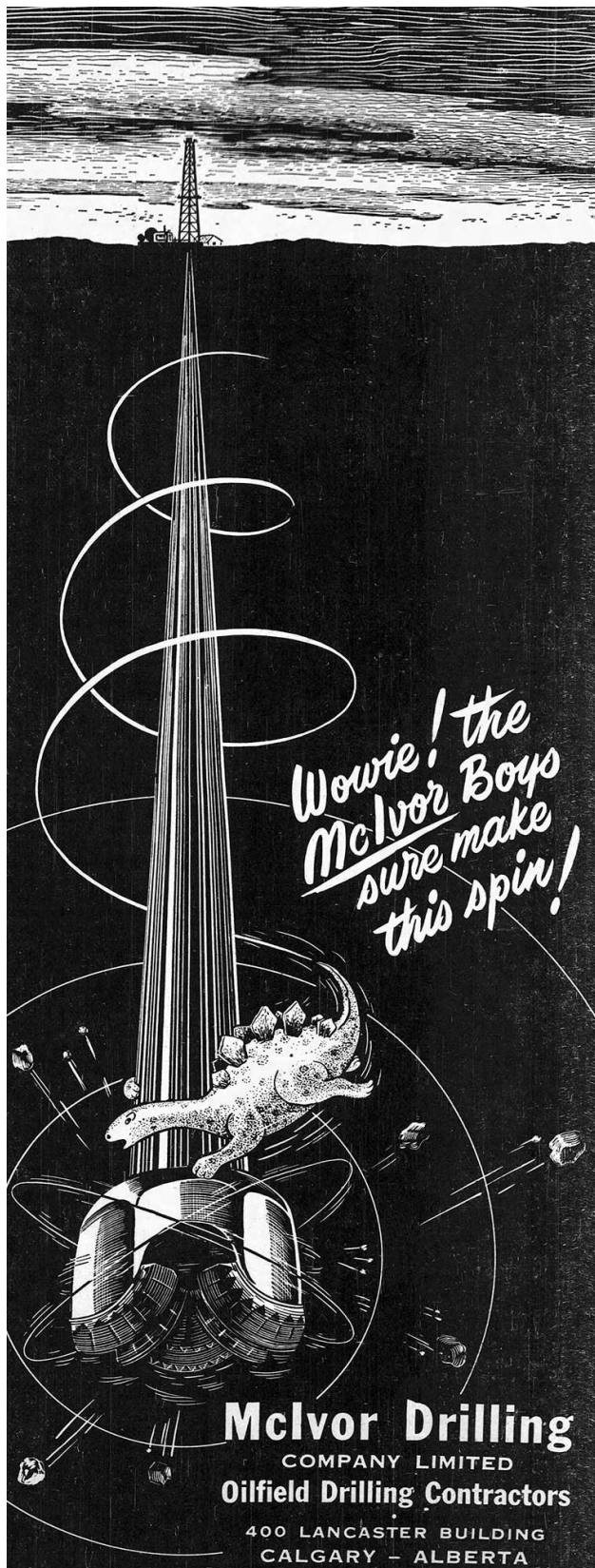
THIS IS YOUR CHANCE—BUY UTILITY—NOW
Call at Our Office for Free Map of the Fraser Valley

UTILITY OIL AND GAS CO. LIMITED

(Non-Personal Liability)

353 PENDER STREET WEST

VANCOUVER, B. C.



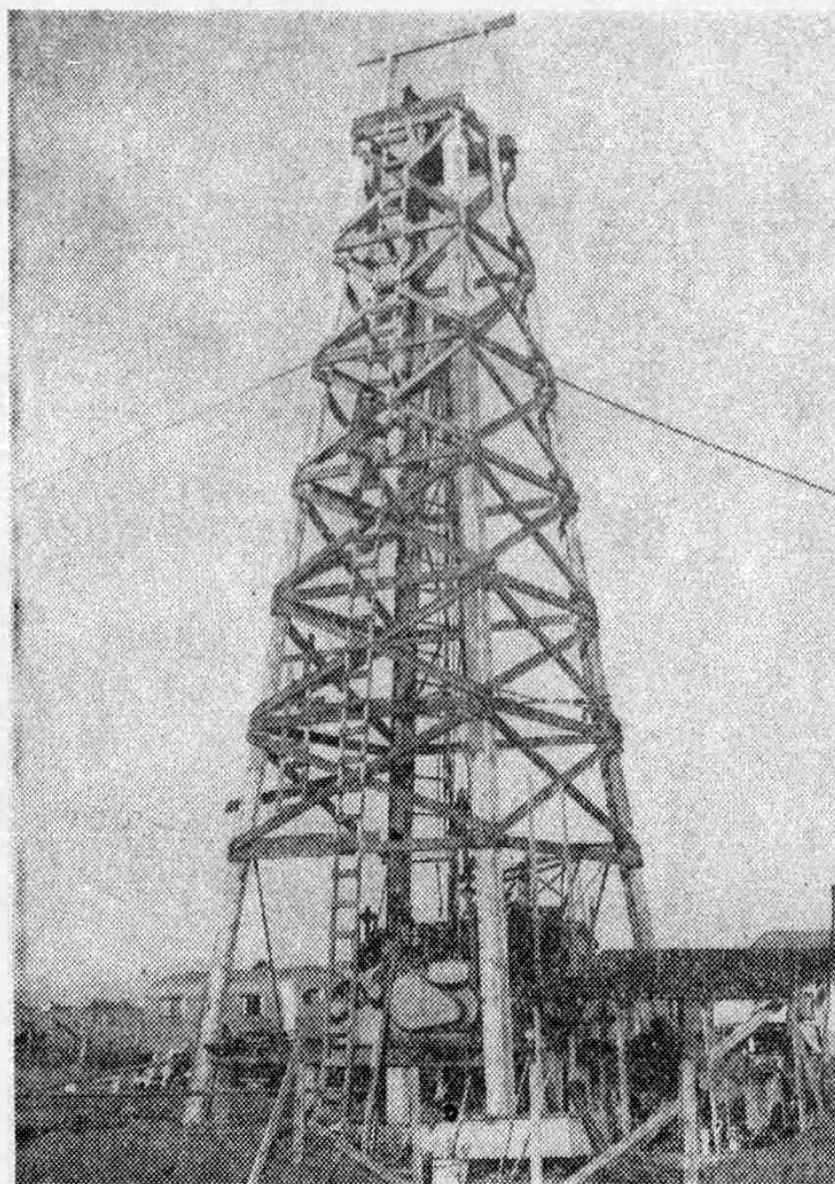
The Second Wave (Part One)

"I certainly see no reason why some of the robber barons can't sink their money in a wildcat in the Peace River," he [Alex. Paton, Conservative MLA, Vancouver-Point Grey riding] said. "Robber Barons" was Samuel Guthrie's term for the oil companies. The Cowichan-Newcastle opposition member wanted to know "why our Tory friends are ready to hand the area over." ... "I think the [B.C. Legislature] House will demand a more adequate explanation from the government as to why it should turn away from its pledge and with such unseemly haste give private interests first claim in this province," he [Charles G. MacNeil, C.C.F. MLA, Vancouver Burrard riding] said. "We are being stampeded into this, and suspicion will arise that it is being done hurriedly and under pressure by interests anxious to get their fingers on oil prospects." ... Mrs. Dorothy Steeves, C.C.F., North Vancouver, "smelled a rat, or perhaps an oil smell." She warned against oil interests as "octopi governing the private monopoly field." ¹

Mounting tempo in every phase of the unfolding B.C. oil play indicates British Columbia is on the verge of a great oil search that will mean millions in new spending and may uncover riches comparable to Alberta's "black gold" bonanza. ... In contrast to the past two decades when a B.C. oil scheme was regarded at best as a crackpot's obsession, today leading companies in the field are shouldering into B.C. ... Following the lead of the Royalite Company, now drilling on Graham Island, in the Queen Charlottes, prospectors are moving in on the Fraser Valley. ²

¹ B.C. Legislature debate on "the amendment to the Coal and Petroleum Act proposed by Hon. Herbert Anscomb, Minister of Mines." *Bill to throw open Peace River oil lands passes second reading in stormy debate*, Vancouver Sun, February 11, 1942.

² *BC oil search gathers speed*, The Province, January 30, 1950.



CAPPED and under control is the natural gas well on the property of Tom Brooke, 707 No. One Road, Lulu Island, which blew in Friday. Half way up the derrick is Tony Gardner, driller. Vancouver Sun, November 19, 1949



500,000 cubic feet of natural gas a day is capacity of Tom Brooke's well out on Lulu Island. It blew in Friday.

Expert Due Vancouver News Herald
November 21, 1949

Gas Well Arouses Speculation

A flurry of interest in oil and natural gas stocks is expected to result from the blowing in Friday of a gas well. It is on the property of Thomas Brooke, Lulu Island. "Any gas in that position is important," said Dr. T. B. Williams, coal, petroleum and natural gas controller for the provincial government. "Beyond that I'd hardly like to go."

John D. Lineham, assistant controller of coal, petroleum and natural gas, is flying here from Victoria to investigate the well. He will attempt to confirm the information about the well which has an estimated capacity of 500,000 cubic feet per day.

A cavalcade of Vancouver cars took interested businessmen to the well Sunday to see it first hand.

The Lulu Island 'Gusher'

The story about the 'rush' for oil and gas in British Columbia and Alberta began to spark in the year following the end of World War Two. In April 1946, as "three major [petroleum] companies ... merged interests in 1,500,000 acres extending across Alberta and including

holdings in the Edmonton area,”³ the rag-tag Richmond Natural Gas and Oil Co. (incorporated in March 1904) began drilling in July 1946 on its 400-acre Lulu Island property located on the Fraser River delta, directly south of Vancouver City.⁴ Lulu Island was later renamed as the municipality or City of Richmond.

As was the case with many other exploration drilling sites in the months and years to come in the Fraser Valley, the locally owned Richmond Natural Gas Company was promoting stock and encouraging investors in the promised land of speculation with financial gains on the horizon. As stated by Tom Brooke, chairman of the North Fraser Harbour Board, owner of the 400-acre Lulu Island farm and with controlling interest in Richmond Natural Gas, “My personal observations over the past 15 years convince me that at various depths ranging from 500 to 1,800 feet are gas sands carrying billions of feet of the very finest quality natural gas that some day will be developed and revolutionize Vancouver and vicinity.”⁵

Tom Brooke started drilling another well. And when Brooke’s “gas well blew in on Lulu Island at 10 a.m.” on Friday November 18, 1949, it made a gigantic splash when featured on the front page of the Vancouver News-Herald newspaper.

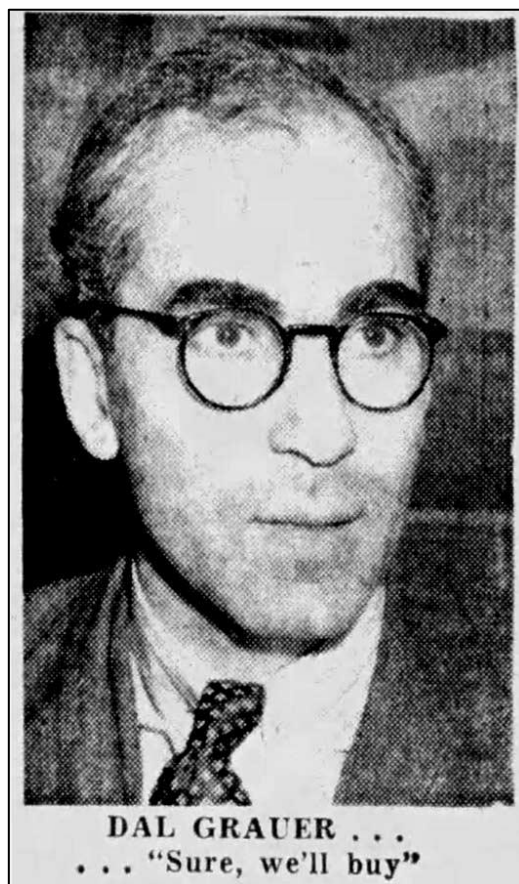
Geological experts say it may be the biggest such development of its kind in B.C. history. ... The Lulu Island find may forecast a Pacific Coast oil field.

In a long-distance telephone interview, Dr. [Colin Hater] Crickmay [Calgary geologist] said ... “This find is bigger than anything in the past. The depth where gas was found is shallower than in Alberta.” They struck gas at 800 feet.

M.A. Durland, president of the Durland Drilling Company ... said “There is a bed down further. ... When we find it, we’ll be ready to talk business with the B.C. Electric.”

[B.C. Electric Company] President A.E. “Dal” Grauer said ... “many geologists have said they believe the Fraser Valley is a good gas field. Others have said there is plenty of oil there.” Mr. Grauer said his company must be assured of a 20-year supply before switching from manufactured to natural gas.⁶

LULU ISLAND GAS
 For Reports See Us
OIL ROYALTIES
 Bought, Sold, Appraised,
 Quoted.
 We recommend shares in
TRANS-WESTERN OILS
 Limited (N.P.L.)
 A diversified royalty holding
 and drilling company, interests
 in many wells in Turner Val-
 ley, Leduc, Lone Rock, etc.
 (Continental-Leduc No. 22 will
 complete in few days).
Consolidated Brokers
LIMITED
 912 W. Pender St.,
 Vancouver
 P.A. 3348



³ 3 big companies to search Alberta for gas and oil, Vancouver Sun, April 8, 1946.

⁴ Natural gas sought in Lulu Island drillings, Vancouver Sun, July 22, 1946.

⁵ Letter to the editor, by T.B. Brooke, Vancouver Sun, September 16, 1948.

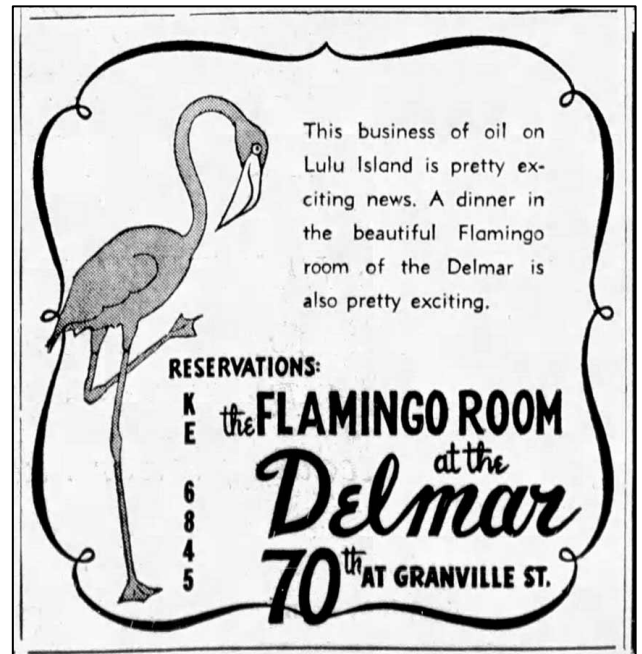
⁶ Lulu Island well blows in; Coast oil strike hinted, News Herald, November 19, 1949.

An estimated 250 cars and over 1,000 people stopped to look over the well that has struck new hopes of a natural gas field on Lulu Island.

Royalite Oil Company Ltd., Calgary, today flew geologist Gordon Hawkins to Vancouver to look over site of the Lulu Island gas strike. Royalite, which will spud in a test well on Graham Island, Queen Charlottes, December 1, is also planning an oil and gas search on the Gulf Islands.

Maynard Davies, well-known Calgary oil operator, also flew into Vancouver and expressed himself as definitely interested in the strike.⁷

“Prospectors” in search of quick riches have applied for claims on Lulu Island since last week’s natural gas “blow.” Dr. T.B. Williams, of the provincial government’s Petroleum and Natural Gas Branch, said Thursday, “quite a number of applications have come in during the last few days.”⁸



Durland and the Surrey Dome Well

The owner of the drilling company, Melville A. Durland, of M.A. Durland Drilling Co. Ltd. (incorporated in August 1947), a cattleman and manager of the B.C. Livestock Exchange, was the former president of a local company, Surrey Dome Oil and Gas Limited, which “had secured leases of gas and oil rights from the B.C. Government covering 2,800 acres in the immediate [south Surrey] Newton vicinity.”⁹ Durland, William Rhodes MacDonald, Francis Rochon, Frank H. Yoemans, William M. Silcock, and W.H. Bushell became directors of the newly incorporated Surrey Dome on March 6, 1943, and on March 10 they applied for petroleum licenses on Sections 28 to 33 in Township 2 of the Surrey Municipality. Surrey Dome’s 132-foot-high derrick and “oil well,” “on the Burkhart Road east of the King George Highway,” was reported in July 1944 to be as far down as 1,667 feet,¹⁰ and is when the company issued 1,000,000 shares. By October 1944, the drilling was down to 2,100 feet. That’s when the drilling ended. In February 1946, the Company “pleaded guilty to a charge of failing to file an income tax return,”¹¹ and in March 1947, Carrie L. Walker, the owner of the lands on which Surrey Dome Oil had secured a lease, began a



⁷ *Sightseers flood Island to view gas well find*, Vancouver Province, November 21, 1949.

⁸ *Quick Riches? Many seek Lulu Island gas rights*, News Herald, November 25, 1949.

⁹ *Looking back*, Surrey Leader, July 23, 1964.

¹⁰ *Oil well down 1,667 ft.; keep drilling: geologist*, Surrey Leader, July 26, 1944.

¹¹ *Oil company fined*, The Province, February 14, 1946.

legal eviction action because “the company defaulted on payments in 1945 and notice to vacate was given in November 1945.”¹²

On December 12, 1949, about two weeks after Tom Brookes’ Lulu Island “gas gusher,” M.A. Durland formed Gulf Ridge Oil and Gas Ltd., issuing 5,000,000 shares, 500,000 of which were given to Richmond Natural Gas in a partnership agreement. By May 1950, the Durland Drilling Co. was charged for failing to file an income tax return.

**Royal City Group Drills
For Oil on Lulu Island**

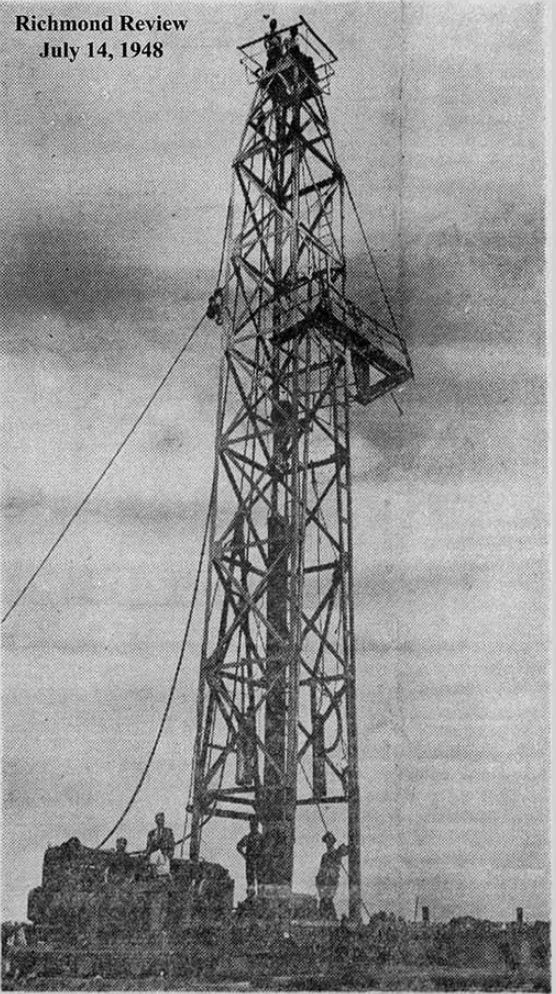
A Royal City syndicate is about to start drilling for oil on Lulu Island. Twenty investors—undiscouraged by failures of other wildcatters several times in the past 15 years—have brought in \$50,000 worth of drilling gear and experienced oil men to do the work.

The Province, July 8, 1948

The Royal City Syndicate

As petroleum interests were being headlined in the newspapers in mid 1948, and as American and Canadian petroleum companies and investors would begin scouting a “4,600,000-acre reservation” of tar sands lands in northern Alberta led by Bear Oil president Frank McMahon and Pacific Petroleums president Norman Whittall,¹³ Tom Brooke’s advertised early activities on Lulu Island motivated a small group of local investors to form the “Royal City syndicate” in early July 1948,¹⁴ incorporated on August 31 as the Royal City Oil and Gas Company Ltd. Directors of the Company in October 1948 were chairman A. Stanley Smith (an oil operator), Harry L. Dorsch (a manufacturer) as secretary, and John Kerster (a farmer), Leslie McIntosh (president of McIntosh & Rice Refrigerator), Dana Quinnell (president of Reliable Taxis). The investors acquired 1,023 acres of oil and gas freehold leases due east of Tom Brooke’s 400 acres.

Richmond Review
July 14, 1948



—Courtesy Vancouver Daily Province

This derrick now placed on Nicolas Wowks’ Farm, can drill down to 5000 feet for the Royal City Oil and Gas Syndicate, who are backing an attempt to find oil on Lulu Island.

**THERE MAY BE ?
OIL WELLS YET
ON LULU ISLAND**

¹² *Eviction sought of drilling concern*, Surrey Leader, March 27, 1947.

¹³ *Helicopters join in search for oil*, Edmonton Journal, November 18, 1948. Inside a network of 23 subsidiaries, “Bear Oil Company, a new incorporation, is the operating medium. Bear president Frank McMahon of Calgary announced Thursday that backers include Tidewater Associated Oil of San Francisco, Pacific Western Oil and Skelly Oil Group of Los Angeles and Tulsa, Pacific Petroleums, Anglo-Canadian Oil, and Princess Petroleums. The last three are Canadian independents. Also backing are Toronto interests represented by General Hogarth and John Frame.” The National Post reported on September 4, 1948, that the area was “nearly 5.25 million acres of Crown oil and gas rights.”

¹⁴ *Royal City group drills for oil on Lulu Island*, The Province, July 8, 1948.

Royal City, with “\$50,000 worth of drilling gear,” began drilling its Royal City No. 1 well on July 14, 1948, on “a section of farmland owned by farmer Nicholas Wowk, on No. 4 Road just south of the Westminster Highway.” Company chairman A. Stanley Smith hired Charles Baird, “a formation technologist from California,”¹⁵ and designer of the ‘Baird formation-tester,’ to professionally steer the 24/7 projected 2,000-foot-deep drilling program undertaken by Bud (Bernard James) Henning of Lloydminster, Saskatchewan, B.J. Henning Drilling Company. B.J. Henning’s operation for the first hole was “as a private venture.”¹⁶ A legal dispute was issued in February 1949 in B.C. Supreme Court by Bud Henning against Royal City claiming \$12,000, which was dismissed following Royal City solicitor Neil McDiarmid’s counter claim of “\$20,000 damages against Bernard J. Henning for alleged negligence in workmanship and also for return of \$7,800.”¹⁷ Royal City also hired Walter Huff a former University of B.C. graduate employed by Gulf Oil’s operations in Venezuela. As Royal City announced the issuance of 2,000,000 Company shares in September 1948, the rig’s drill bit was lost at 1,853 feet, suspending operations and forcing the Company to “move the rig to a new site.”¹⁸ A second drilling operation on the Royal City No. 1 well, by the Royal City Oil and Gas Company, which had suffered a “cave-in,” and then abandoned, was down to 1,853 feet. A year later, following the November 18, 1949, sensational news of a gusher at Tom Brooke’s Lulu Island farm, newly elected Royal City directors, David Pitkethly, Frank Featherstone, John Kester, H.L. Dorsch, P.C. Sanford, and Patrick Hogan “announced plans to join with others in further drilling on its own acreage” on Lulu Island.¹⁹

The Birch Bay Syndicate

The “Birch Bay Syndicate,” a company affiliated with Royal City Oil, obtained 472 acres of leases next to Brooke’s farm. The Syndicate would later be incorporated in Olympia, Washington State as the Pleasant Valley Gas and Oil Company. The president of Pleasant Valley was Charles E. Booth, F.E. Clark as vice president, and H.L. Dorsch as secretary who also served as secretary of Royal City Oil. By August 1950, W.H. Jacklin was nominated president.

It was reported in November 1947 by Washington State Pleasant Valley farmer George Hillje, “on whose farm a test well was sunk,” that “the Canadians,” who were drilling a test well on his farm property, “are planning to organize the Pleasant Valley Gas & Oil Company,” and “had obtained leases from him and from other farmers in the Pleasant Valley district covering six to eight square miles.”²⁰ It was explained in the Bellingham Herald newspaper article:

The fact that gas or oil was being drilled for in that part of Whatcom County came to light October 2 when the Blain fire department was summoned to the Hillje farm where the test well had exploded. Sparks from the drilling equipment ignited gas in the casing of the well which then was down 409 feet.

¹⁵ *There may be oil wells yet on Lulu Island*, Richmond Review, August 14, 1948.

¹⁶ *Well contract awarded*, The Province, September 15, 1948.

¹⁷ *Wrong people in Court, says sued company*, Vancouver Sun, February 21, 1949.

¹⁸ *New well to be drilled on Lulu Island*, Vancouver Sun, September 13, 1948.

¹⁹ *Royal City plans further work*, Vancouver News Herald, December 14, 1949.

²⁰ *Natural gas is found in County*, Bellingham Herald, November 21, 1947.

The Birch Bay Syndicate's operational interests in Whatcom County, just over the American border due south of the Fraser Valley, were suspended for two years due to State regulatory financial non-compliance. The Company's interests would later stir the consideration in 1952 by keen speculation interest eyes of the B.C. Electric Company's executives for underground storage of natural gas "in which the gas from any of the proposed pipelines projected to serve the Pacific Northwest can be stored conveniently and economically."²¹

Both affiliated syndicates – Royal City Oil and Pleasant Valley Gas – shared the same legal counsel, Neil H. McDiarmid, a downtown Vancouver City solicitor and patent lawyer. From a wide background search from news sources, McDiarmid was former president of Skeena Holdings Ltd., a former director of Senator Gold Mines Ltd., a director of Pinebrayle Gold Mines Ltd., secretary of B.C. Craigmont Mines Ltd., and secretary-treasurer of Hedley Monarch Gold Mines Limited. In early August 1948, Hedley Monarch Gold Mines, which formed Hedley Monarch Oils Limited, began drilling for oil "in the South Bantry field in southern Alberta," hiring Royal City Oil's Lulu Island drilling contractor, B.J. Henning Drilling Company.²² In 1958, McDiarmid "and associates," who McDiarmid "declined to name," took "over control of Royal Canadian Ventures Ltd,"²³ a junior independent oil company. In 1960, McDiarmid was elected a director of Fort St. John Petroleums Ltd., a company contracted to deliver gas to Westcoast Transmission.



Van-Tor Oils

Lawyer Neil McDiarmid played a media go-between or representative role for a mystery company, Van-Tor Oils and Explorations Ltd., which was incorporated on September 3, 1948. For about seven years running since its incorporation, there was only one recorded instance – on February 4, 1953 – that Canadian newspapers managed to identify only one of Van-Tor's directors, the so-named president, Bernard E. Hawkins,²⁴ the owner and president of Hawkins Motors located in Vancouver City near the intersection of Kingsway and Fraser Streets.

By 1952, Van-Tor initially acquired a petroleum permit on 29,440 acres in northeast B.C. Peace River country, through which "Westcoast Transmission Company's gas pipeline will go to Vancouver," and

More Gas Wells Due for County

Bellingham Herald, November 7, 1952

An intensive drilling program on the holdings of the Pleasant Valley Gas & Oil Company in Whatcom County near Birch Bay is continuing, with four gas wells already in production.

Ten new wells are to be drilled under direction of Petrol-Structors of New York and Calgary in addition to the four, which are all at a depth of 400 feet or less.

The gas is expected to provide for the commercial needs of adjacent communities, including Bellingham, Ferndale and Mount Vernon. In addition, the pool itself forms a natural storage basin in which the gas from any of the proposed pipelines projected to serve the Pacific Northwest can be stored conveniently and economically.

For example, gas transported by the Westcoast transmission line to Seattle could be piped into the "pool" — permeable underground formation — for storage, to be taken out as required.

Thus the field can serve two purposes: first, the production and marketing of its own gas; second, the storing of gas in transit to Seattle, Portland and Vancouver, regardless of which projected pipeline gets the franchise.

²¹ *More gas wells due for County*, Bellingham Herald, November 7, 1952.

²² *Dredgings in Cariboo favorable*, The Province, August 4, 1948.

²³ *City lawyer gains control of oil firm*, Vancouver Sun, May 2, 1958.

²⁴ *Van-Tor plans to sell bonds*, Vancouver Sun, February 4, 1953.

Atlantic Oil Listed On City Exchange

Shares of Atlantic Oil Company, Ltd., have been approved for listing on Vancouver Stock Exchange and will be called for trading April 26.

Two producing wells in Leduc field are operated by Atlantic, in which Pacific Petroleum Ltd. has a 60 percent interest.

Officers of the new firm include: Frank M. M'Mahon, president; Norman Whittall, vice-pres.; G. Maxwell Bell, George H. M'Mahon and Stanley E. Slipper, directors.

Vancouver Sun
April 23, 1948

another partnership permit with Wilrich Petroleum on 15,000 acres "in the Flathead area."²⁵ Van-Tor made another deal the same year with the Canadian Atlantic Oil Company. More options, ownerships and deals were to come. In 1952, Van-Tor was "capitalized at 3,000,000 shares,"²⁶ and announcement was made on September 13, 1952, that Van-Tor's shares had "been approved for listing on the Vancouver Stock Exchange."²⁷

When news transpired in November 1953 that Van-Tor had "taken over"²⁸ the Pleasant Valley Oil & Gas Co. as its new subsidiary, is when solicitor "Neil McDiarmid" was first identified in the printed press as "Van-Tor general manager."²⁹ An earlier October 28, 1952, announcement of an annual general meeting identified McDiarmid as Van-Tor's secretary. The November 1953 Bellingham Herald news article, which identified that the mysterious Van-Tor company had two offices, one in Vancouver and another in San Francisco, California, said that Van-Tor's interest was in developing an "underground [gas] storage facility," "at the 3,700-acre site."³⁰ News about Van-Tor's takeover or prior interest was leaked a year previous in one news article published in the Montreal Gazette in the opposite end of

\$50,000 Is Estimated Daily Loss As Fire At Atlantic Oil Well Rages Uncontrolled



*Oil Field 'Outlaw'
Finally Breaks Into Flame*

Edmonton Bulletin
September 7, 1948

²⁵ Two wells near Ft. St. John planned by Van-Tor oil team, The Province, May 7, 1952.

²⁶ The Province, July 3, 1952.

²⁷ Vancouver Sun, September 13, 1952.

²⁸ New firm takes over gas field, Bellingham Herald, November 30, 1953.

²⁹ Van-Tor to store gas in Washington field, Times Colonist, November 30, 1953.

³⁰ New firm takes over gas field, Bellingham Herald, November 30, 1953.

Los Angeles Times
November 30, 1953

Gas Storage Area Acquired

SAN FRANCISCO, Nov. 29—Van-Tor Oils & Explorations, Ltd., announced the acquisition of a large underground storage area for natural gas near Blaine, Wash. The reservoir went to Van-Tor by virtue of its purchase of a majority stock control of Pleasant Valley Oil & Gas Co., which now becomes a subsidiary of the company.

The acreage was acquired in anticipation of the entry of natural gas into the Pacific Northwest and involves 3700 acres of which 90 acres have been proved as a gas field by four shallow wells.

Canada about the company bringing into production “four gas wells ... on the holdings of the Pleasant Valley Gas and Oil Co. near Birch Bay, 40 miles south of Vancouver,” which was “owned by a syndicate with Van Tor Oils, Trans Era and Alberta Central Oils, each holding 20 per cent interest.”³¹ It wasn’t until June 2, 1955, in a promotional business report feature by Vancouver News

Herald’s Hugh Armstrong, that Van-Tor’s “management changes” and “diversified holdings,” which Armstrong stated were “not generally known to the investing public,” were finally revealed.³² Van-Tor’s:

- president – **W.C. Mainwaring**, the vice president of the B.C. Electric Co., with a long list of directorships (see below).
- vice president and general manager – **W. Philip Barchard**, assistant gas manager with the B.C. Electric Co., director of B.C. Craigmont Mines Ltd. (alongside Craigmont secretary Neil McDiarmid).
- director – **John A. McMahon**, with the investment firm McMahon and Burns, later president of Inland Natural Gas Ltd., and brother to major petroleum investors George McMahon and Frank McMahon.

³¹ *New gas producers*, The Gazette, November 11, 1952.

³² *Interest in the Van-Tor story*, Vancouver News Herald, June 2, 1955.

Sketch Map Showing Location of VAN-TOR OILS AND EXPLORATIONS LIMITED Holdings in the Fort St. John, Peace River, B.C. Area Prepared from Information Believed Reliable.

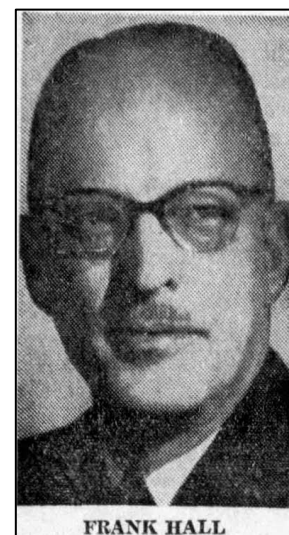
Van-Tor Oils

- Holds 30,000 acres in Fort St. John area.
- First well now drilling at 4,670 ft.
- Approaching Triassic zones.
- 16 out of 17 wells drilled in Fort St. John area have proven successful.

COLONIAL INVESTMENT COMPANY

910-850 W. Hastings, Vancouver, B.C. TAtlow 6457
Vancouver Sun, October 11, 1952

- director – **Frank E. Hall**, president of Hall Securities Ltd., vice president of Hall Co. Ltd., director of Commonwealth International Corp. Ltd., director of Cronin Babine Mines Ltd., former two-time president of the Vancouver Stock Exchange, director of the Gas Exploration Company of Alberta Ltd. (alongside George McMahon), about to be director of the Vancouver Board of Trade.
- secretary treasurer – **Colonel Robert Shankland**, a decorated and celebrated First World War Scottish hero veteran, secretary of Cronin Babine Mines Ltd., secretary treasurer of Western Uranium Cobalt Mines Ltd., secretary of Beaver Lodge Uranium Mines Ltd., manager of the [Frank E.] Hall Building.³³



Schemes that Paved the Way

The timing of the so-called Lulu Island ‘gas gusher’ helped turn the financial speculation tide in late 1949. A complicated set of speculation initiatives in the search for oil and gas were already in motion, but this incident spurred panic among some, and more aggressive initiatives among others. Twelve days before the gusher, the Province newspaper, under a front-page caption “Oil Operator Says B.C. to Tap New Wealth,” interviewed Calgary-based big oil player Frank McMahon who was in Vancouver City promoting “his West Coast Transmission Company,” which was awaiting “a green light from the Alberta Government.”³⁴ Four days after the Lulu Island gusher, Imperial Oil president G.L. Stewart was in Vancouver promoting the possibility of a new oil pipeline from Alberta to Vancouver, warning that “B.C. “restrictive” oil and gas laws are holding up expansion and exploratory programs,” and “the whole philosophy of governmental regulations here is not conducive to any moves at the present time.”

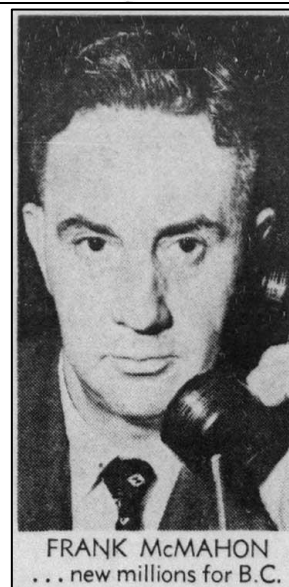
“In British Columbia the Crown can withdraw any lands at any time as Crown reserves,” said M.L. Haider, director of the [Imperial Oil] company. “It means that a company can’t afford to spend millions to find one oil field and no more.”³⁵

Canadian ‘Industrial Revolution’ Predicted

Federal Minister Says Oil, Mineral Finds to Bring Vast Development

An industrial revolution in Canada “comparable to the revolution which made the U.S. the world’s greatest industrial nation” was predicted here Monday by National Revenue Minister James J. McCann.

Vancouver Sun, October 31, 1950



³³ The other directorships of the Van-Tor board members listed here were not provided in the news article and had to be carefully rooted out through a wide search of news articles. There may have been even more directorships.

³⁴ The Province, November 8, 1949.

³⁵ *Imperial may build pipeline to B.C.*, Vancouver Sun, November 23, 1949.



BRITISH COLUMBIA laws governing oil and gas sales and exploration are not conducive to development here now, says G. L. Stewart, left, head of Imperial Oil, visiting in Vancouver. With him is W. C. Garbutt, B.C. manager of the company.

Vancouver Sun, November 23, 1949

Imperial Oil's economic investment threat helped spur Vancouver-Centre MLA (Member of the Legislative Assembly) Allan J. McDonnell to "demand relaxation of British Columbia's oil drilling regulations in order to encourage large-scale search for oil in B.C."

He declared the worst part of the [recently amended Petroleum and Natural Gas] act is Section 53, which gives the government the widest powers to declare oil lands reserved in any area at any time. ... He said a meeting was held recently of the top men of five of the 15 largest oil companies in the world, all of them active in Alberta. They came to the unanimous decision they could not possibly invest money in B.C. for prospecting purposes so long as the present legislation remains in effect.³⁶

Imperial May Build Pipeline to B.C.

Oilmen Say 'Restrictive' Laws Hinder Expansion, Search Plans

By LLOYD TURNER

Vancouver Sun Business Editor

Imperial Oil Limited may build an oil pipeline from Alberta to the coast some time in the future, but B.C. "restrictive" oil and gas laws are holding up expansion and exploratory programs here.

Vancouver Sun, November 23, 1949

At the end of March 1950, the B.C. government caved into the appeals by the petroleum industry, making amendments to an already-amended Petroleum and Natural Gas Act,³⁷ causing increased lease

³⁶ 'Centre' MLA plans drive on oil curbs, Vancouver Sun, December 10, 1949.

³⁷ Petroleum law erased by Kenney, The Province, March 22, 1950.

applications covering “more than eight million acres in B.C.” by April 1, “twice that issued by the Department of Lands and Forests on January 1,” 1950.³⁸

In early March 1944 government introduced “two bills” to “replace the present Coal and Petroleum Act.” Those two bills were “the Coal Act” and the “Petroleum and Natural Gas Act.”³⁹ The two replacement acts came “into effect June 19, 9 a.m.,” 1944.

The Petroleum Act will lift the present reserve on petroleum and natural gas resources and establish a new reserve throughout the province, except in that part of the Peace River Land Recording District lying south of the Peace River and the Fernie Land Recording District.

Both the Petroleum and Natural Gas Act and the Coal Act are based upon the principle that the people own the natural resources of this province and that their rights should be fully protected. It is also recognized that private industry has a right to develop them, but on a basis whereby it will return to the people a fair share of the profits by way of royalty and fees, and that industry will not be permitted to acquire these potential resources and then withhold them from development.⁴⁰

The essence of the *Petroleum and Natural Gas Act* was later summarized in a Province newspaper article: “Formerly, it was impossible for private parties to own these leases, the idea being to keep all such natural resources as oil for the provincial government, and the money, if oil was forthcoming, for the provincial treasury.”⁴¹

By May of 1946, the B.C. government considered “modifying the regulations respecting the development of oil and natural gas resources ... particularly in the Peace River District.”⁴² Under a program of investigation and the introduction of amending legislative Bills, by early August 1947 the B.C. government revised the *Petroleum and Natural Gas Act*:

Under the new Act, former provisions placing all of the province on a reserve basis, which provided that stakers must set aside equal areas for the provincial government have been eliminated.

The new statute provides for a single reserve district in the Lone Mountain area south of Pouce Coupe. In this district ... stakers will set aside an area of the same size as their own holdings for the government. In the rest of the province no government reserve is required.

The change in the statute was made after oil companies indicated they were unwilling to prospect for oil in British Columbia under existing legislation.⁴³

W.C. Mainwaring

To unlock some of the cogwheels in the early oil and gas boom phase and the second wave of petroleum exploration in the Fraser Valley, it is instructive to examine the investment goals, activities, ambitions, and directorship links of Nanaimo-City-born William (‘Bill’) Crossley Mainwaring, a man who rose from the lowly ranks as ditch-digger to become the vice president of the B.C. Electric Company (B.C. Electric),

³⁸ *Oil permit acreage 8 million*, The Province, April 1, 1950.

³⁹ *Prorogation of Legislature is expected soon*, Nanaimo Daily News, March 4, 1944.

⁴⁰ *Royalties, permits, licenses, listed in new coal, oil rules*, Times Colonist, June 10, 1944.

⁴¹ *Companies develop B.C. Oil*, The Province, March 25, 1948.

⁴² *From the B.C. Capital*, The Gazette, May 23, 1946.

⁴³ *B.C. relaxes oil search restrictions*, The Province, August 6, 1947.

owned by the B.C. Power Corporation. Leaving his position since October 1945 as B.C. Electric's vice president of operations on Vancouver Island, he was appointed vice president of the influential private utility corporation on June 1, 1948, to assist its president, A.E. (Dal) Grauer. Originally a London, England-based corporation established in 1897, the former hub of world capital, the B.C. Electric Railway Company had grown to become an organized provincial entity over the ensuing decades. In April - May 1928, when Captain George H. Wilkins flew non-stop over the North Pole, B.C. Electric became a holding company of the B.C. Power Corporation Ltd.,⁴⁴ a new subsidiary of the Power Corporation of Canada (est. May 1925). The B.C. Power Corporation then steered B.C. Electric into harnessing and servicing much of British Columbia's residential and commercial electrification and gasification needs after the Second World War, building and financing hydro electric dams and distribution lines. After announcing his departure from B.C. Electric in 1958, provincial 'powerhouse' Mainwaring's ambitious, mind-boggling empire building schemes to industrialize northeast British Columbia would aid in leading to the Social Credit administration's surprise takeover or nationalization of B.C. Electric in August 1961, a gargantuan irony. Though aware of its possibility, the takeover-move astonished B.C. Electric's executives and shareholders, and Canada's private capital elite.

Biding his time while working through the corporation's ranks, Mainwaring had been in the newspaper social prestige and charity-giving limelight for decades. In 1933, Mainwaring became a director of the Bridge Island Gold Mines; in 1936, a director of Anglo Texas Oils Ltd. with holdings in Texas; in July 1937, elected president of the Northwest Electric Light and Power Association, a position he continued to hold off and on into the 1950s.

By 1948 or earlier, Mainwaring was linked in aiding an elaborate scheme to construct a gas pipeline route from Alberta through B.C.'s mountainous terrain and into the Greater Vancouver servicing area, and then southwards into northwest United States. As he and other powerful brokers were striving forward to achieve that industrious goal amidst the government of Alberta's objection to exporting its natural gas and oil, Mainwaring was approached in June 1950 by the "Fish Engineering Corporation of Houston, Texas" in a separate and opposite south to north scheme for a proposed "\$200,000,000 [gas] pipeline from Texas to Seattle,"⁴⁵ viewed as a coup to outsmart the initial American route proposal by the Northwest Natural

Ottawa Citizen
October 26, 1927

Power

Speeds Canada's Progress

POWER CORPORATION OF CANADA, LIMITED, through its constituents, located from Quebec to British Columbia, is assisting Canada's progress in attracting new industries, and speeding up mining operations throughout the Dominion.

We invite your inquiries for Investment Service.



Location of constituent companies of Power Corporation of Canada, Limited.

NESBITT, THOMSON & COMPANY LIMITED

86 Wellington Street, OTTAWA

Montreal	Toronto	Quebec	Hamilton
London, Ont.	Winnipeg	Saskatoon	Vancouver

615 N

⁴⁴ *Canadian syndicate beats Rothermere B.C.E.R. bid; directors sell holdings*, The Province, April 21, 1928.

⁴⁵ *Texas natural gas may get here first*, The Province, June 30, 1950.



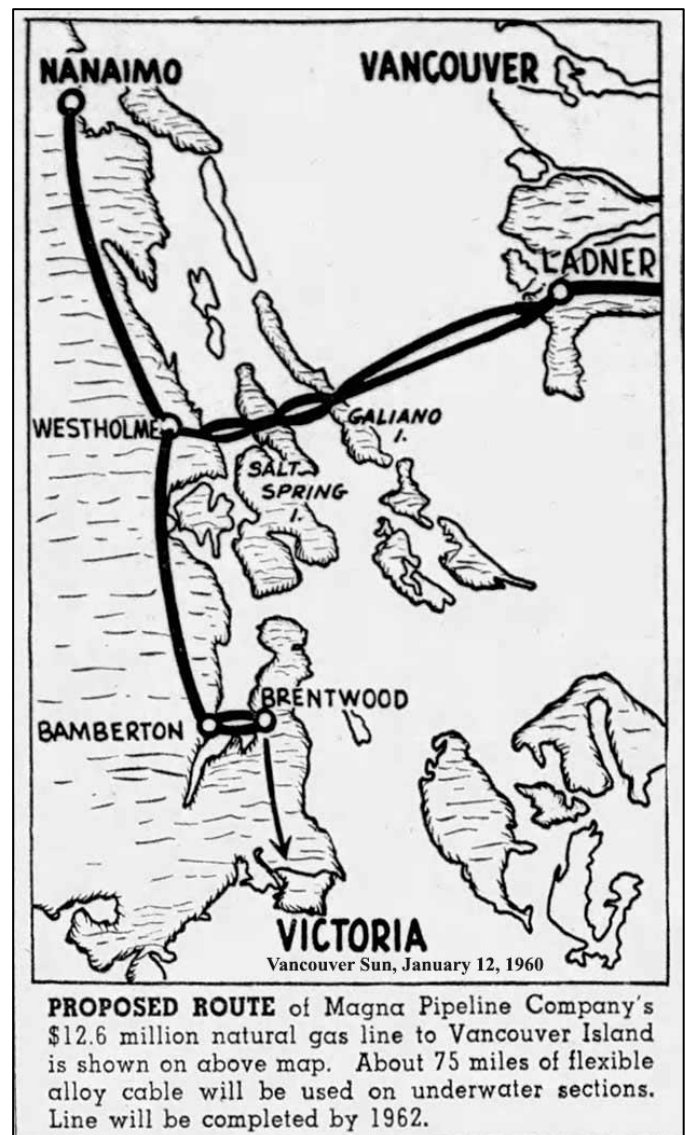
W. C. MAINWARING, vice-president and assistant to the president, B.C. Electric, was named president of the American Gas Association at the annual convention in San Francisco. Mr. Mainwaring is the first Canadian so honored.

Gas Company consortium.⁴⁶ Due to his two webs of scheming, the northwest United States Pacific Coast Gas Association would attribute Mainwaring as one of its own, heralded at the August 1951 annual conference in San Francisco, honouring him to the position as director, “the first Canadian to be elected to the position.”⁴⁷

Mainwaring’s pipeline transmission schemes also included two separate proposals in the 1950s for underwater / submarine gas pipeline routes to Vancouver Island. In May 1952, his first underwater route “would likely “island-hop” from Bellingham through the Gulf Islands to a point somewhere near Cordova Bay,” which was “surveyed aerially by a top-flight engineer.”⁴⁸ A second attempt became known on April 24, 1959, when Mainwaring, president of Van-Tor Oils and Explorations, announced in the company’s annual report that through its controlling interest in Vancouver Island Gas Co. Ltd. (a butane gas distribution company established in 1957),

and based upon \$150,000 engineering and feasibility studies conducted in 1958 “shown to be financially acceptable,” that it “expects to proceed with its underwater natural gas pipeline to Vancouver Island this year.”⁴⁹

Vancouver Island Gas created a subsidiary in October 1958, the Island Transmission Co. Ltd., to conduct the underwater route. Island Transmission fought to oppose Magna Pipeline Co. Ltd.’s separate proposal for a submarine crossing, a complaint that was to be heard at a Public Utilities Commission (PUC) hearing on July 6, 1959. The Charter Oil Company controlled 50 percent of Magna Pipeline, and one of Charter Oil’s directors was Frank McMahon, who was president of Westcoast Transmission, the transport pipeline supplier of natural gas from northeast B.C. Westcoast



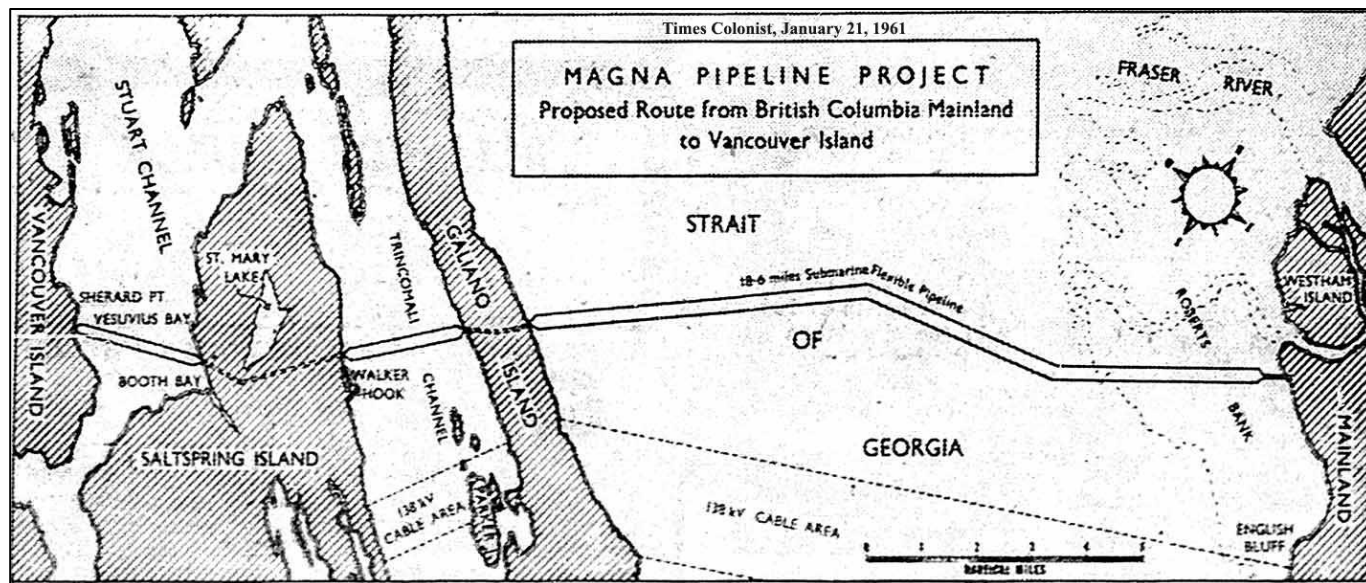
⁴⁶ *Pipeline coup by Texas while Alberta dallies?* National Post, August 19, 1950.

⁴⁷ *Business in Brief*, Vancouver Sun, August 23, 1951.

⁴⁸ *B.C.E. surveys natural gas line route to V.I.*, Victoria Daily Times, May 15, 1952.

⁴⁹ *Van-Tor plans start on undersea pipeline*, Vancouver Sun, April 25, 1959.

Transmission director Norman Whittall, who was also a director of the Inland Natural Gas Company, stated he was “prepared to head up a group of Canadian investors interested in backing the proposal of Magna Pipeline.”⁵⁰ Magna Pipeline’s president, Ralph K. Farris, was also president of Northern Ontario Natural Gas Co. Ltd. Both proposals hinged on obtaining long-term industry contracts: “B.C. Cement at Bamberton; B.C. Forest Products at Crofton; the Harmac pulp and paper mill at Nanaimo; MacMillan & Bloedell pulp and paper mill at Port Alberni; and the B.C. Power Commission’s thermal [gas turbine generation] plant at Chemainus.”⁵¹ Magna proposed to use a new experimental “flexible” pipeline product from the United Kingdom and Island Transmission proposed a seamless steel pipeline.



It was later revealed in December 1959 during a continued PUC hearing that Magna Pipeline “had originally planned a joint project” with Island Transmission on the pipeline crossing but came to a disagreement.⁵² It was explained that when Van-Tor set up the Vancouver Island Gas Company in 1957, “it was understood Magna Gas Company would lay the pipeline across the straits,” and that by 1958, when the company “became aware nothing was happening,” it “decided if no one else will build it, we’ll have to do it.”⁵³

In mid-January 1960 “the provincial government approved a charter for Magna Pipeline Company” expected to cost about \$14,000,000, and “with assurance the line will be completed by the fall of 1961.”⁵⁴ Island Transmission then appealed the decision, contending that Magna’s “proposed cable type does not meet specifications for gas pipelines as set out in the B.C. Pipelines Act,”⁵⁵ and filed a separate complaint in May 1960 with the National Energy Board on gas prices. The complaints were rejected. In June 1959 Island Transmission applied to the provincial government to build the underwater pipeline using “a different type of submarine pipe,” “a special seamless steel pipe which has been successfully used in hundreds of miles of underwater gas and oil transmission lines throughout the world.”⁵⁶ In July 1960 a delegation of “six labor organizations appealed to Transport Minister Lyle Wicks against use of a British-

⁵⁰ *Financing of natural gas pipeline is feasible*, Nanaimo Daily News, July 8, 1959.

⁵¹ *Pipeline needs big industries*, The Province, July 8, 1959.

⁵² *Firms competing for Island gas line had planned joint project*, Nanaimo Daily News, December 10, 1959.

⁵³ *\$16 million pipeline proposed for Island*, Times Colonist, December 8, 1959.

⁵⁴ *Gas ruling triggers \$25 million program*, Times Colonist, January 12, 1959.

⁵⁵ *Magna gas line plan protested*, The Gazette, February 11, 1960.

⁵⁶ *Second firm asks gas line rights*, Vancouver Sun, June 24, 1960.

made flexible cable,” claiming an all-Canadian steel cable line “would provide jobs for Canadians which Magna was giving to Britons.”⁵⁷ As it turned out, neither of the two bidders would build the underwater pipeline. Magna’s contract for a “one continuous length” flexible lead-covered, plastic-cored cable, line to be manufactured by British Callenders Cables Ltd., and for the “world’s longest flexible submarine gas pipeline,”⁵⁸ ran into trouble when British Callender’s “sea trials ... reported there had been trouble in making satisfactory [coupling] joins in the line,”⁵⁹ and backed out of the contract.

Mainwaring’s Pieces of the Action

In addition to his two underwater pipeline schemes, in 1953 Mainwaring began searching for an underground gas storage facility at multiple sites in the Fraser Valley, along with locations in northwest and southwest Washington State. And in order to become a power broker in the underground and underwater schemes, he got himself a big piece of the action.

As an engaging participant in the emergent shaping of northwest North America’s petroleum webbed empire, Mainwaring incorporated Britalta Petroleums Ltd. on April 14, 1949, becoming its treasurer and then its president in February 1950. Britalta’s president was R.H.B. Ker, a director of Home Oil Ltd. and a director of the public utility B.C. Power Commission. Other directors appointed were A. Bruce Robertson, B.C. Electric’s head lawyer and legal counsel since September 1946 and soon to be general solicitor and vice-president of the B.C. Power Corporation in June 1948; director Stanley E. Slipper, the prominent Calgary geologist involved in numerous petroleum surveys in British Columbia and Alberta, who was also a director of Atlantic Oil Co. Ltd. since July 1947; and director George H. Cloakey. In May 1949, Britalta obtained petroleum leases for 200,000 acres on Graham Island, the northern of the two Queen Charlotte Islands (renamed, Haida Gwaii) off B.C.’s northern Coast and due west of the City of Prince Rupert. These were the only lands the government offered for lease before temporarily placing a ‘map reserve’ on all remaining oil and natural gas rights on the Queen Charlottes.

In December 1949, W.C. Mainwaring was appointed member of the Royal Trust Company’s Vancouver Advisory Board, on which Austin C. Taylor, the president of Home Oil Co. Ltd., was a sitting member. Coinciding with Royalite’s drilling of Britalta’s lease property on Graham

Plan Exploration For Oil In Queen Charlotte Isles

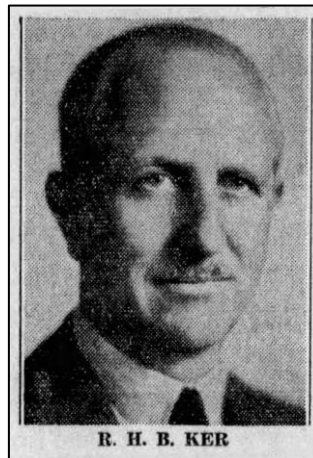
Times Colonist, May 4, 1949

VANCOUVER (CP) — The bleak Queen Charlotte Islands, 400 miles north of here, will be explored for oil with a hope of tapping a coastal oil belt.

A drilling program has been blue-printed by Britalta Petroleum Ltd., which has leased 200,000 acres on Graham Island, one of the Charlottes group.

The first well will be sunk near Tidewater, close to Queen Charlotte City, W. C. Mainwaring, company head, said here today.

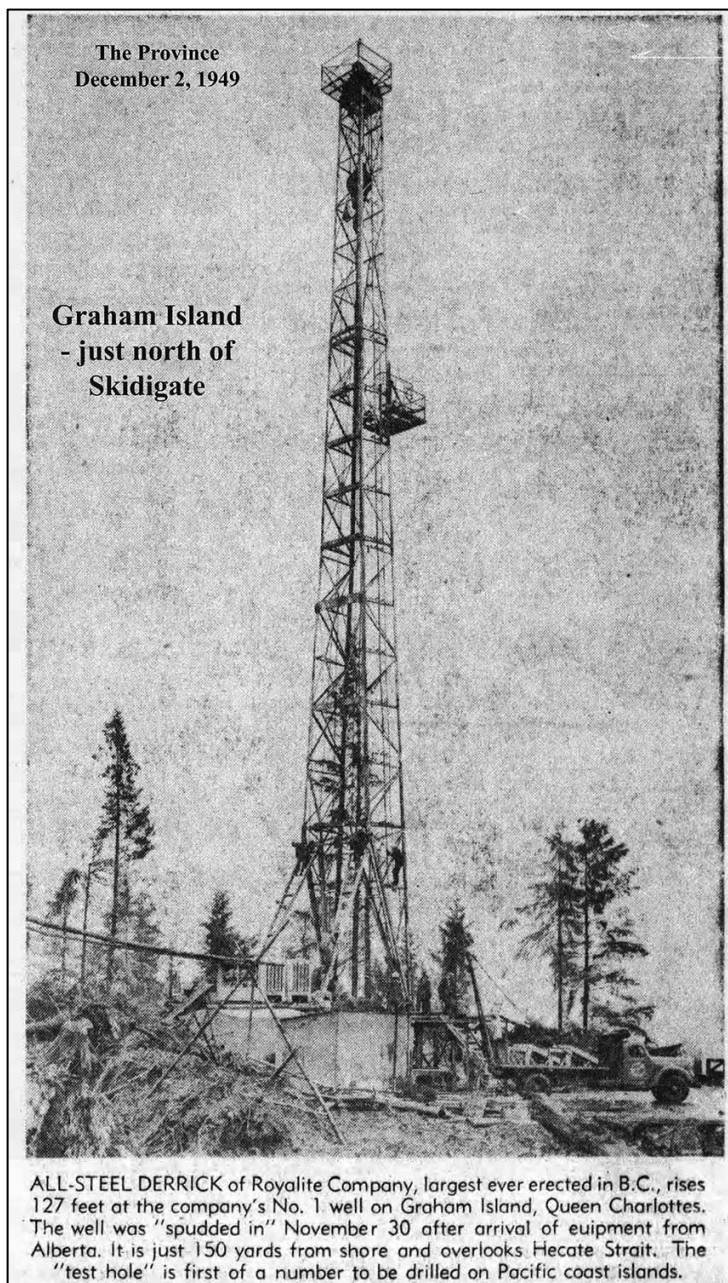
Oil has been found along the coast from California to Alaska, he said. “We think there is a good chance that it may show up here.”



⁵⁷ *British-built pipe protested*, Times Colonist, July 9, 1960.

⁵⁸ Times Colonist, January 21, 1961.

⁵⁹ *Delay in gas delivery*, Times Colonist, May 24, 1962.



Island, on January 12, 1950, S.F. Heard, the president of Calgary-based Royalite Oil Co. Ltd., and vice-president of the Western Canada Petroleum Association, announced the appointment of Mainwaring as a director. Royalite, "Canada's largest independent,"⁶⁰ began drilling on its "Royalite-Queen Charlotte No. 1" well, "just north of Skidigate Indian village," being "the first time that any major oil company has come into British Columbia to drill in a big way."⁶¹ The September 1, 1949, article stated that "Mr. Heard is one of the Dominion's top oil men," who "worked for years in South American fields and later joined Imperial Oil in Canada where he rose to an executive position." Royalite was the celebrated "large producer of oil and natural gas in the Turner Valley and Redwater fields of Alberta." The press noted that "observers see in the present move" – the new partnership between Heard and Mainwaring – "a contact between a company which might develop a large amount of natural gas and a company which is in the gas distribution business," namely the B.C. Electric Co., a "move which has stirred



interest in B.C. oil and gas circles."⁶²

News popped out five days after Mainwaring's appointment that both Britalta and Royalite were expanding their petroleum exploration interests into "in other western provinces," and that Royalite "and a U.S. firm, Pacific Supply Company, will explore crown reservations held in Alberta by Pacific Petroleum Ltd."⁶³ Narrated below, Pacific Petroleum's president Frank McMahon was the main brain

⁶⁰ Business, The Province, September 6, 1949.

⁶¹ Coast oil venture nurtured for years, Vancouver Sun, September 1, 1949.

⁶² Royalite to drill new well, The Province, January 12, 1950.

⁶³ Oil news, The Province, January 17, 1950.



and shaker⁶⁴ behind the March 1949 Dominion charter, or incorporation, of its subsidiary Westcoast Transmission Company Ltd., the proposal for a new natural gas pipeline from northeast B.C./Alberta to the Greater Vancouver inter-municipal area.⁶⁵

Royalite in the Gulf Islands

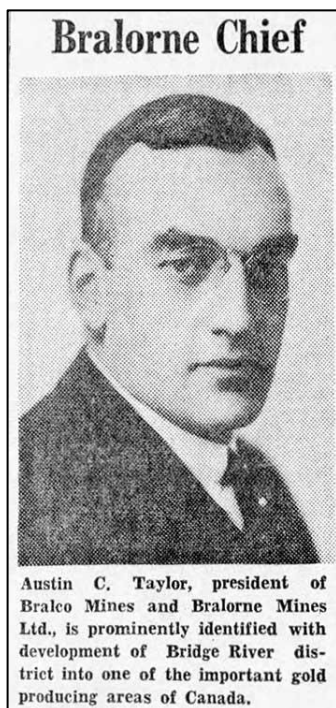
Following an announcement by Royalite on October 17, 1949, regarding an exploration partnership with Pacific Petroleum Ltd. within the Islands of Georgia Strait off the southeast coastline of Vancouver Island, on December 3, 1949, Royalite announced that it would conduct "full geological survey ... on 55,000 acres of land" in the Gulf Islands, "partly under permit from the Provincial Government and partly leased freeholdings."⁶⁶ Pacific Petroleum held "extensive freehold mineral rights in the [Gulf] Islands, acquired some time ago from Canadian Collieries Ltd., of Vancouver." Pacific Petroleum chairman and

⁶⁴ "It was Frank McMahon who first got the idea of a natural gas line to the coast in 1937." (Source: *Pipeline big victory for native son*, Vancouver Sun, April 3, 1952.)

⁶⁵ In January 1949, Pacific Petroleum Ltd. made a change in its Board of directors: "Norman Whittall ... becomes chairman ... Frank McMahon becomes president ... and continues as managing director ... directors are: C.H. Wright of Tulsa, Oklahoma, president of Sunray Oil Corp.; W. W. Porter II, Los Angeles, geologist, Sunray Oil Corp.; E.A. Parkford, Los Angeles, independent oil operator." (*Staff shuffled on oil company*, The Albertan, January 17, 1949)

⁶⁶ *Royalite to intensify Gulf Island oil search*, The Province, December 3, 1949.

president Norman R. Whittall, long-time post-World War One high society colleague of Major Austin C. Taylor, was former director of the Prince Rupert Pulp & Paper Co. Ltd., former director of Innerfold Oils Ltd., former president of Blue Band Navigation Co., president of the Peace River Natural Gas Company, vice president of Atlantic Oil Co. Ltd. (incorporated in Alberta, July 1947), director of the Westcoast Transmission Company, director of Alberta Distillers Ltd., president of Canadian Collieries (Dunsmuir) Ltd. since October 1948, about-to-be-owner of Norman R. Whittall Company Ltd. (takeover of the investment brokerage firm of Ross Whittall Ltd., “specialists in Western Canadian Industrials, Oil and Mining Securities”), about to be president of Inland Natural Gas, and about to be president of the Eastern Trust Company. A January 12, 1950, news article updated information about Royalite’s assets as having “licenses on 18,600 acres of



Crown-held land on 10 of the Gulf Islands between

Vancouver Island and the mainland and a small part of Vancouver Island near Nanaimo.”⁶⁷ The Gulf Islands: Gabriola, Valdez, Galiano, Thetis, north part of Salt Spring, Prevost, Mayne, North Pender, South Pender and Saturna. And “less than 1,000 acres on Vancouver Island in the Cedar and Oyster district between Ladysmith and Nanaimo are involved in the prospecting licences.”⁶⁸

Bralco

Just further north up the eastern shoreline of Vancouver Island from about Courtney to Campbell River, Bralco Ltd. was stirring up the locals with talk of oil and gas in mid-December 1949, so much so that “oil fever” had “gripped Hornby Island,” with 80% of landowners signing “agreements to allow” the company “to prospect for oil” on their properties.⁶⁹ The president of mining syndicate Bralco was Major Austin C. Taylor, long-time post-World War One social elite, financier, early oil investor millionaire and



⁶⁷ *Royalite to sink test well on Gulf Island this summer*, Times Colonist, January 12, 1950.

⁶⁸ *Company is licensed to prospect for oil in Nanaimo District*, Nanaimo Daily News, October 17, 1949.

⁶⁹ *Gulf Island folk have oil ‘fever,’* The Province, December 17, 1949.

managing director of Innerfold Oils Ltd., horse racer / thorough-breeder / pony-prince 'sportsman,' president of Home Oil Distributors Ltd. (marketing of Home Eastern Oil, and subsidiary of Imperial Oil Ltd.), former president of Bralorne Mines Ltd., former president of the Bridge River Company, former vice-president of Wartime Merchant Shipping Ltd. and former B.C. Security Commissioner in charge of internments for 23,000 Japanese civilians,⁷⁰ who would soon be applying for exploration rights in northeast B.C.

Full-Scale Drilling Due for Saturna Oil

Bigger Rigs Going To Island Project

By DON INGHAM, Times Island Editor

First major drilling prospect ever conducted in the Vancouver Island area is about to enter its second stage.

Boyles Bros. Drilling Co. Ltd., working for Charter Oil Co. Ltd., of Vancouver, sank an exploratory hole on Saturna Island to the depth of 2,206 feet, then took down its light rig and moved out.


The drilling site, at the head of Lyall Harbor, now is being gravelled by a fleet of trucks preparatory to bringing in a full-scale drilling rig from Alberta.

It will be operated directly by Charter Oil, which is working with Imperial Oil Co. Ltd., Canadian Collieries, Pacific Petroleums, and Standard Oil of California on the prospect.

Three Shifts

Boyles Bros. moved to the site in October, and by Oct. 30 had started drilling. They

Times Colonist
February 14, 1958



THIS DRILL RIG drove test hole on Saturna Island to depth of 2,206 feet. Dismantled this week, it will be replaced by big Alberta derrick almost double size of prospecting unit. (Times Photo by Halkett.)

Ralph Smith, Boyles Bros. foreman, have made a point of using local help and materials at all time, and a bit of mild prosperity ensued, but nothing to cause any speculation of any kind.

Buy Locally

Drillers buy all their provisions at the local store, and their gas and oil from the Imperial agent on the island. The post office noted a bit of increased revenue, but otherwise no one is excited.

Children at Saturna Island Elementary School play on their slides and swings with hardly a glance at the activity on the drill site just a stone's throw away. Very rarely does a resident saunter along to the prospect out of curiosity, and even people

Charter Oil in the Gulf Islands

Ralph K. Farris, president of the Charter Oil Company Ltd., incorporated in September 1950, announced in December 1958 that wildcat drilling would begin on the north end of Saltspring Island. Charter Oil had four partners, Imperial Oil Ltd., California Standard Co., Pacific Petroleums Ltd., and Canadian Collieries Resources Ltd. It was reported that the same group of companies, which held 239,000 acres over eight

⁷⁰ Austin Taylor "One-man Commission," *Trades Council Secretary Says, Named over Public's Head: Too much power – Bengough*, The Province, September 2, 1942; *Commission nears end of Jap Evacuation – last batches going out at 300 a day*, Vancouver Sun, September 12, 1942; *Austin Taylor visits Jap camp on Hope-Princeton*, Chilliwack Progress, September 23, 1942. For the first expose on Austin Taylor, *His hobby is tough jobs whether in peace or war – career of Major Austin Taylor is chapter of colorful achievements*, The Financial Post, April 14, 1934.

petroleum lease rights in the Gulf Islands, had drilled an unsuccessful 4,000-foot-deep dry hole, the Saturna No. 1 well, at Lyall Harbor on Saturna Island in 1957. Farris, who was also president of Magna Pipe Lines, was hoping to find gas to augment and tie into his bid for an underwater gas pipeline route to Vancouver Island through the Gulf Islands. Previously the Royalite Oil Company held leases in the Gulf Islands. The drilling on Saltspring also came up dry.

Allenbee in the Fraser Valley

Immediately after the Lulu Island gas gusher made the news on November 18, 1949, came a shower of interested parties making application for geological survey rights in the Fraser Valley area. For instance, Russell B. Horton, the president of Allenbee Petroleum Ltd., a “federally incorporated company,” was “awaiting word on its application to the provincial government ... on 60,000 acres in the lower Fraser Valley.” Horton, from the City of Victoria, was president of Horton Cedar Manufacturing Co. The 60,000 acres “run from Point Roberts north to the Fraser River; along the Fraser to New Westminster; east to a point north of Cloverdale; south to within a mile of the border and west to Boundary Bay.”

Allenbee’s consulting geologist was Stanley E. Slipper, the same geologist serving as a director of W.C. Mainwaring’s company Britalta.

The company, with B.C. and Toronto backing, reports a deal with South Brazeau Petroleums and associates for a well to be drilled on a 50 per cent farmout on half the Allenbee acreage. Associated with South Brazeau in the deal are Enjay Petroleums Ltd., North Continental Petroleums and Chief Redwater Petroleums.⁷¹

On February 1, 1950, B.C. Superintendent of Lands R.E. Burns allotted Allenbee and partner South Brazeau “exploration rights on approximately 26,000 acres in the Lower Fraser Valley,” and made announcement shortly thereafter for “a well to test the Surrey Dome structure near



The Province, January 1, 1950
CHILLY CALGARIAN when he arrived in Vancouver was Oil Promoter Maynard Davies (left), who announced with R. S. Brossard plans to drill a test well on the Surrey Dome near Newton. It will be a joint effort of his company, South Brazeau Petroleums, and Allenbee Pete, headed by Mr. Brossard. Mr. Davies thinks we could use a few natural gas wells to warm us up.

⁷¹ *Oil search moves to Valley*, The Province, December 19, 1949.

Gusher Well Expected In Valley; B.C. Cabinet Members To Attend

British Columbia may soon have its first "gusher" at Newton, 15 miles south of Vancouver on the King George Highway.

South Brazeau Petroleum of Calgary and Allenbee Petroleum of Vancouver are spending \$100,000 to bring this well into production, officials said Monday.

"There is a better chance for oil at Surrey than any other well in Alberta, because of proven showings," said Maynard Davies, managing-director of South Brazeau.

The well is expected to go 4500 feet before striking oil or natural gas.

Agreement was reached last January between Allenbee Petroleum, represented by R. A. Brossard, managing director, and South Brazeau, to split 50-50 in the event of a "strike."

GUSHER EXPECTED

Allenbee holds drilling rights

to 26,000 acres and South Brazeau is bearing cost of drilling.

Two flat cars of heavy drilling equipment reached the well site four weeks ago.

Imported shale and rock has been brought in to build a 150-yard road to the well tower. Hauling of heavy equipment necessitated this preparation.

Vancouver News Herald, May 16, 1950

Province, February 28, 1951

Allenbee Abandons B.C. Well

The Allenbee Petroleum test well near Newton on Vancouver's outskirts is being abandoned due to caving difficulties, it was announced by the company here today.

The well was drilled to 4700 feet before being abandoned. The company is now giving consideration to additional seismography surveys of the area in partnership with other interests.

Province, August 25, 1950

Rotary Rig to Drill Surrey District Well

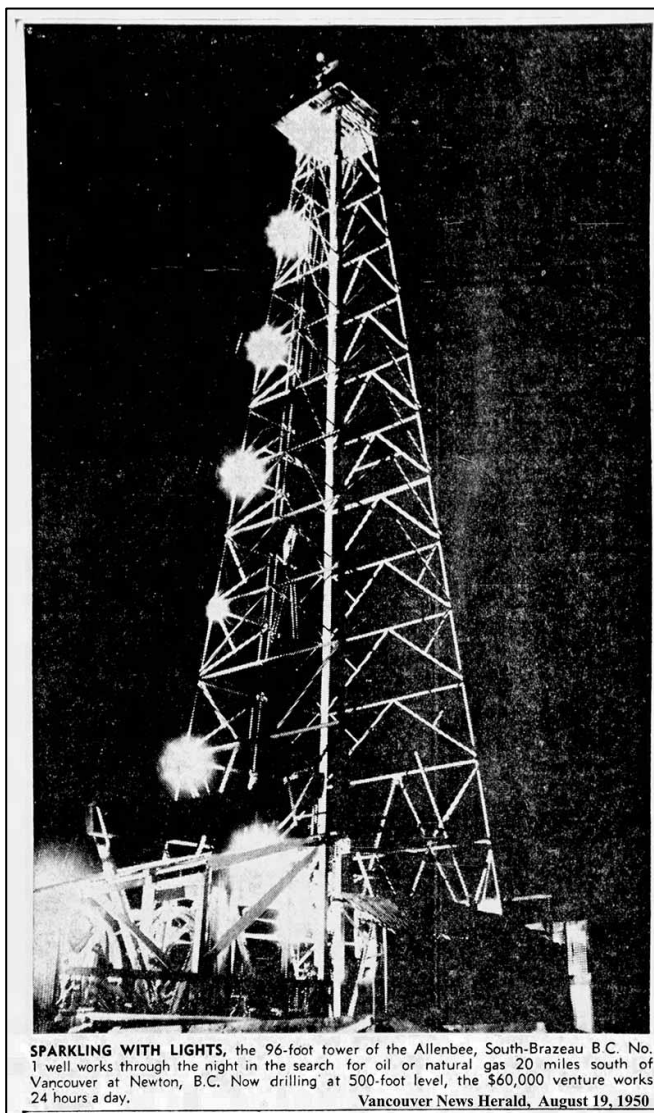
Allenbee Petroleum, which brought in a producer in southeast Leduc field this week, will switch to rotary equipment to speed completion of the Allenbee-South Brazeau well in Surrey Municipality, 20 miles south of Vancouver.

Maynard Davies, president of South Brazeau, says rotary equipment is en route from Seattle by truck, and drilling will be resumed in 10 days.

Rotary equipment will make it possible to complete the Surrey well within 30 days' drilling time. The standard rig ran into heavy gravel and water in the first 475 feet. Water can be kept out of the well by use of rotary equipment.

Newton"⁷² on the King George highway, referring to the abandoned Surrey Dome Oil and Gas well site (narrated above). Maynard Davies, "Calgary promoter" and managing director for South Brazeau, promotionally stated the "geology of the Fraser Valley and other B.C. areas shows more favorable strata for accumulation of oil and gas than any part of Alberta."⁷³

After advertising the issuance of 200,000 Allenbee company shares, Allenbee and South Brazeau began sensationalizing British Columbia's upcoming "first gusher" in May 1950, with the rumour "that members of the B.C. Cabinet will be in attendance for this ceremony."⁷⁴ Eventually in late February



SPARKLING WITH LIGHTS, the 96-foot tower of the Allenbee, South-Brazeau B.C. No. 1 well works through the night in the search for oil or natural gas 20 miles south of Vancouver at Newton, B.C. Now drilling at 500-foot level, the \$60,000 venture works 24 hours a day.

Vancouver News Herald, August 19, 1950

⁷² Deep test oil well to be drilled in Surrey Dome, Langley Advance, February 23, 1950.

⁷³ Oil test well planned in lower Fraser Valley, The Province, February 1, 1950.

⁷⁴ Gusher well expected in Valley; B.C. Cabinet members to attend, Vancouver News Herald, May 16, 1950.

1951, after a series of promotional exposes in the newspapers, and after reaching a depth of 4,700 feet, Allenbee Petroleum's Newton well site was "abandoned due to caving difficulties."

Mainwaring in the Applications Line-Up

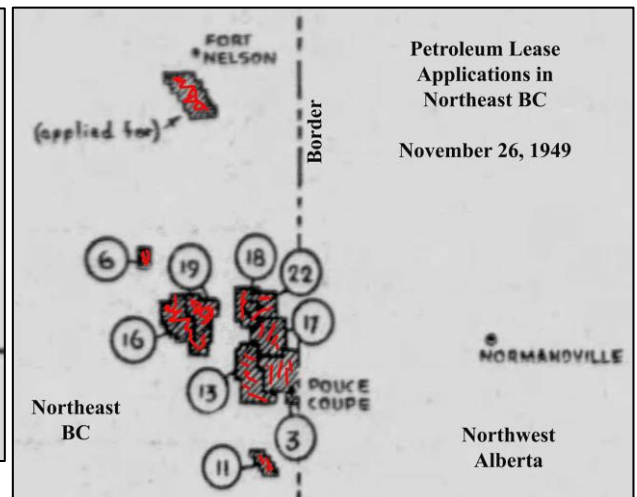
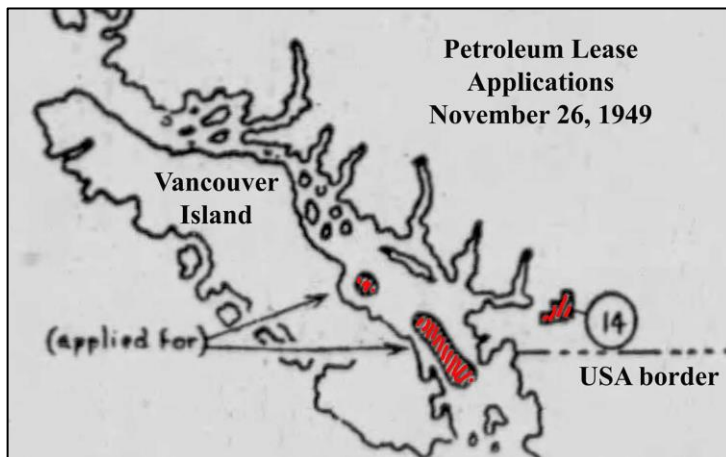
W.C. Mainwaring's new petroleum company Britalta, his appointment to big oil firm Royalite, and his long-held cozy influence with the provincial government led to an amusing sight on Wednesday, February 1, 1950, as noted by the press. Amusing to the public perhaps, but embarrassing no doubt to Mainwaring, who carefully avoided being photographed alongside others who were caught in the line-up by the Victoria Times Colonist newspaper. Like a frenzied rush to get the best advertised deal on a limited sale item, he had been waiting in the dark hours of the morning, as it were, at the Parliament Building in Victoria so he could be the first in line to get first dibs on the petroleum spoils.

Land-office rush days were recalled at the Parliament buildings today when a reserve on oil prospecting in the province was lifted at noon. Five applications were filed and there was a line-up outside the office of Lands Superintendent R.E. Burns which started forming before 9 [a.m.]. W.C. Mainwaring, president of Britalta Petroleum Ltd. and a director of Royalite Oil Co. Ltd., was first in the line. He and his associates took turns in holding the first position until applications were accepted at 12.⁷⁵



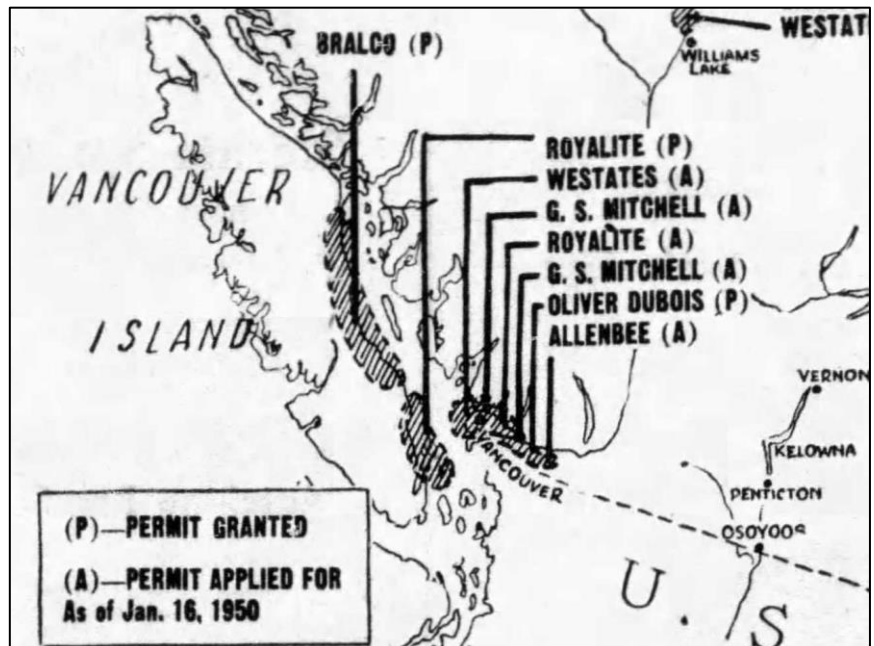
⁷⁵ Rush for oil prospecting licenses as B.C. ban off, Times Colonist, February 1, 1950.

Petroleum Permit Maps



On November 26, 1949, a week after the Tom Brooke's gas gusher on Lulu Island, the Vancouver Sun published a map of B.C. showing the locations of about 22 recently approved and applied for oil and gas leases. At that point, there was only one approved lease in the Fraser Valley for Oliver Dubois, lease number 14, extending from about the municipality of Coquitlam eastward toward the town of Mission on the north side of the Fraser River.

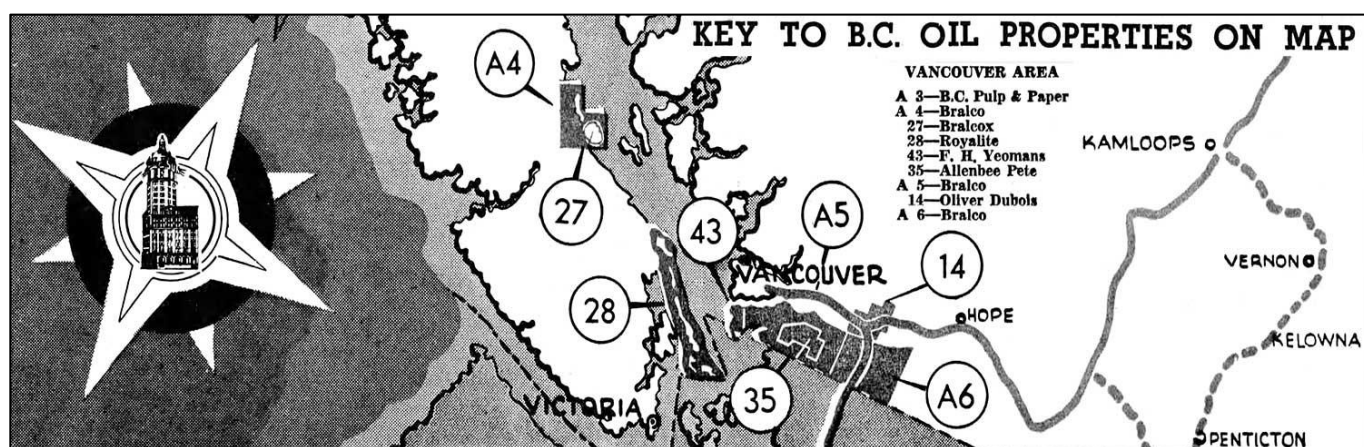
A second B.C. map identifying locations and names of recently acquired petroleum exploration permits was featured in The Province newspaper on January 30, 1950. The rough boundaries showed Bralco's and Royalite's interests on the southeast shores of Vancouver Island, and five interests in the Fraser Valley by Royalite Oil Company, San Francisco-based Westates Petroleum Corporation, Allenbee Petroleum Ltd., an Oliver Dubois, and a G.S. Mitchell. Other pockets of permits were on Graham Island; near the Town of Fort Nelson in the far northeast corner of B.C.; near Ft. St. John and Dawson Creek; between Quesnel and Williams Lake; and in the far southeast corner of B.C. near Fernie.



This was the beginning of the mad rush for petroleum spoils in B.C.

Two months later, a third more detailed and updated full-page map version of B.C. was published in the Vancouver Sun on March 28, 1950. It identified 53 "oil properties" as well as the routes of "proposed natural gas lines." In the Fraser Valley quadrant lay five large permit parcels split amongst four parties covering the entire Fraser Valley area, most of which was on the south side of the Fraser River: Bralco, Oliver Dubois, Allenbee, and a F.H. Yoemans. It was reported on December 9, 1949, that Frank Yoemans, owner of a New Westminster City car dealership, and former director of the Surrey Dome Oil





and Gas Ltd., “will seek a permit to explore 15,000 acres in the New Westminster [Lands] District, including Sea Island,”⁷⁶ lands covering the Tsawassen / Ladner municipalities.

The far northeast B.C. quadrant of the March 28 map showed a remarkable increase in permit parcels, with 24 total interests. Seven of those parcels were under two affiliated parties, Peace River Natural Gas (6) and Norman Whittall (1), with Whittall the common denominator. One parcel was under the name of Bralco, Austin Taylor’s mining company. Four parcels were leased to Oklahoma-based Phillips Petroleum, which had an interest in five other parcels under the name of G.C. Mitchell, whose proper name was Garcon “Charlie” Mitchell. A lone investor from the Lower Mainland, Mitchell had carved out an agreement with Phillips Petroleum and another interest through Calgary-based S.A. Annand with his small Annand Group which incorporated Berkely Petroleum Ltd., all of whom began petroleum exploration near the isolated area of Lone Mountain, 60 miles west of Grande Prairie, Alberta, and south of Dawson Creek, B.C. Within the months to come, and with the promise of a new natural gas pipeline, the B.C. government would lease-grant even more petroleum exploration permits in the northeast petroleum quadrant.

The “All-Canadian” B.C. Petroleum Pipelines Push

In July 1947, Northwest Natural Gas Company, “incorporated in 1946 by the petroleum and gas engineering consultant concern of Brokaw, Dixon⁷⁷ and McKee,”⁷⁸ with offices in New York and Houston, made a big announcement in Calgary on the “feasibility of constructing a pipeline over the Rockies to bring natural gas” to the seaport cities of Vancouver, Seattle and Portland. The consulting firm recently built “the famous 1,200-mile Tennessee line which takes gas from Texas into Tennessee, the El Paso Natural Gas Company line which covers 1,400 miles from central Texas to California,”⁷⁹ and the “Panhandle Eastern Pipeline.”⁸⁰ Newspapers reported that Northwest Natural Gas, which was incorporated in Delaware, had two offices, one at “111 Broadway, New York City, and in the Dexter

⁷⁶ The Province, December 8, 1949.

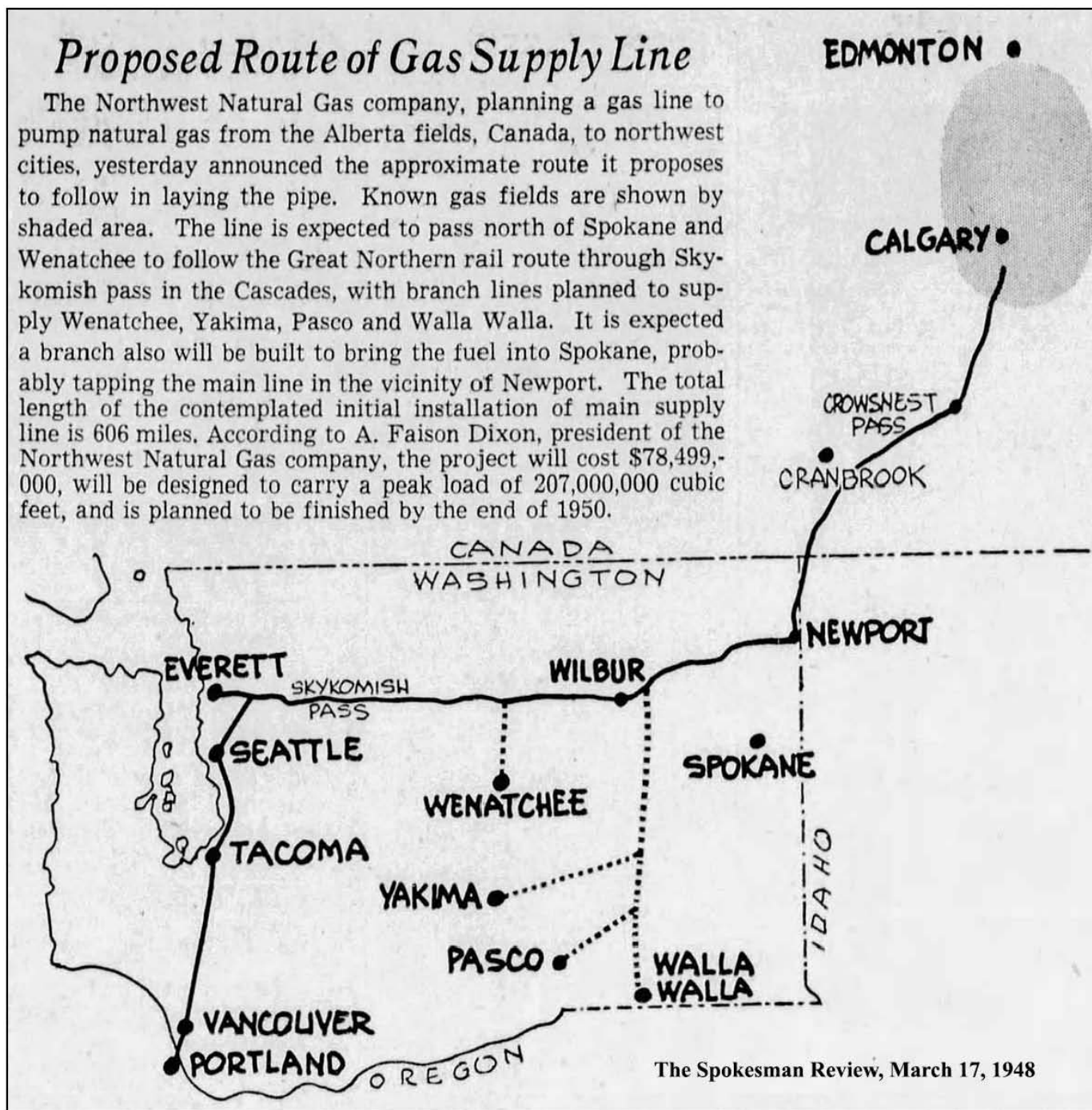
⁷⁷ Canadian newspapers misspelled Dixon as “Dickson.” In 1919, (Albert D.) Brokaw, (A. Faison) Dixon, Donnelly, (A.H.) Garner & (H. Harper) McKee were formed as a consulting group of geologists, petroleum and construction engineers in New York City.

⁷⁸ *Sharp Fray Pends in Northwest Gas Hearing*, Great Falls Tribune, January 29, 1953.

⁷⁹ *Possibility Alberta natural gas may be piped to Pacific Coast*, Times Colonist, July 15, 1947.

⁸⁰ *Gas pipeline survey made*, The Province, December 23, 1947.

building in Seattle,” Washington State,⁸¹ and that its president was A. Faison Dixon, of Brokaw, Dixon and McKee.



The newspapers didn't report that the engineering firm had re-incorporated the Northwest company. The "Northwest Natural Gas Company" seems to have been initially registered in the State of Kansas in about 1931. On November 28, 1940, a gas leak in the then Northwest's distribution line caused a "thunderous blast" at a warehouse building in Toppenish, Washington State, reducing "the two-story, 250-foot-long

⁸¹ *Gas line to City nearer actuality*, The Spokesman Review, March 17, 1948.

warehouse to rubbish,” destroying “a merchandise store, a real estate office, a barbershop and beauty shop, a produce company office and a cafe.”⁸² Eight people died a horrible death, and the other six faced severe burns. It happened at noon time, when “a crew of 20 warehouse workers just had left ... and escaped the tragedy,” with “shattered windows for several blocks around and huge chunks of concrete blown 150 feet.”⁸³ Northwest then faced a bitter lawsuit.

At Least Seven Killed in Toppenish Gas Explosion



At least seven persons were killed, another was believed missing and fourteen were injured in a gas explosion which destroyed a warehouse-business building at Toppenish, near Yakima, Thursday. Fire followed the blast which reduced the structure to ruins. Witnesses said the explosion lifted the roof and flames shot fifty feet into the air, then the roof crashed and the concrete walls began to crumble. The blast shattered windows for several blocks around and huge chunks of concrete were blown 150 feet. The seven identified victims evidently were suffocated in the debris, Fire Chief Leo Henie said, and their bodies burned in the ensuing flames. (Associated Press photo.)

Bellingham Herald, November 29, 1940

A subsequent January 29, 1953, news article in the Great Falls Tribune stated that Northwest Natural Gas Co.'s “financial backing” was “promised by the top-flight underwriting investment banking concern of Morgan Stanley & Co., the off-shoot of the banking concern of J.P. Morgan & Co. Inc.,” with other financing by: “W.C. Langley & Co.; Dominick & Dominick; Moore, Leonard & Lynch; and many Canadians.” Northwest's big promotional news in 1947 got the western Canadian industrial ball rolling.

The Northwest Natural Gas Company became a provocateur, a catalyst for introducing heated political debates across Canada on the controversy of introducing inter-provincial and national export legislations. Rumblings of other export gas schemes soon emerged, such as the December 1947 gas line scheme from Alberta to Winnipeg, Manitoba under a private organization headed by Colonel L.D.M Baxter.

⁸² *Seven killed by explosion*, Los Angeles Times, November 29, 1940.

⁸³ *At least 7 dead after blast, fire strike warehouse*, Richmond Times, November 29, 1940.

Edmonton Weather

Forecast: Light snow today, sunny and cold tomorrow. Low tonight 25 below, high tomorrow 10 below.

The Edmonton Journal

'One of Canada's
Great Newspapers'

FORTY-EIGHTH YEAR

• •

TELEPHONE 25171

EDMONTON, ALBERTA, THURSDAY, JANUARY 25, 1951

SINGLE COPY, 5 CENTS

32 PAGES

Gas Export Proposals Are Rejected

THE CALGARY HERALD

ENTS

CALGARY



CALGARY, ALBERTA, THURSDAY, JANUARY 25, 1951

28 PAGES

No Gas Export 'At Present'; Reserves Called 'Inadequate'



I. N. MCKINNON



D. P. GOODALL



G. W. GOVIER

Members of the natural gas conservation board who reported to the Alberta cabinet.

Reconsideration Likely With More Discoveries

EDMONTON (CP)—Premier E. C. Manning announced today that no export of natural gas from Alberta can be allowed at present due to a lack of adequate proven reserves.

At the same time, Mr. Manning declared his government believes export will be in the province's best interests as soon as sufficient reserves are established to take care of Alberta's needs.

He released figures showing that the amount has almost been reached, announced plans to stimulate the search for gas and cleared the way for early reconsideration of the government's export decision.

The premier made the announcement in releasing an interim report from the Petroleum and Natural Gas Conservation Board on the application of five companies for gas export permits. A combined hearing was held in Cal-

Northwest's vice-president Richard B. Hand⁸⁴ said, "the plans all hinge on Canada's granting permission to export the natural gas."⁸⁵ Both the province of Alberta and the federal government then began "a joint Provincial-Dominion committee of geologists and engineers" to investigate Alberta's proven petroleum reserves, requiring at least "a trillion cubic feet to keep the line going for 20 years."⁸⁶ After the province of Alberta "banned the

Natural Gas For B.C. Halted By Alberta Ban

Four-Country Asian Army Urged By Chinese Nationalist

TOKYO (INS)—Gen. Ho Ying-chin, Nationalist China's war minister, has proposed a four-nation Asiatic army be established to fight communism, with Gen. MacArthur as commander.

Gen. Ho told a news conference "a unified combat organization" should include Japanese, Chinese, Korean and Filipino troops in a program similar to that set up by the North Atlantic Pact.

He said India and other nations which he said are seeking peace through appeasement are deluding themselves, because the third world war is already in progress.

Manning Expresses Hope For Future Export

By Canadian Press

EDMONTON — Premier E. C. Manning announced today that no export of natural gas from Alberta can be allowed at present due to lack of adequate proven reserves.

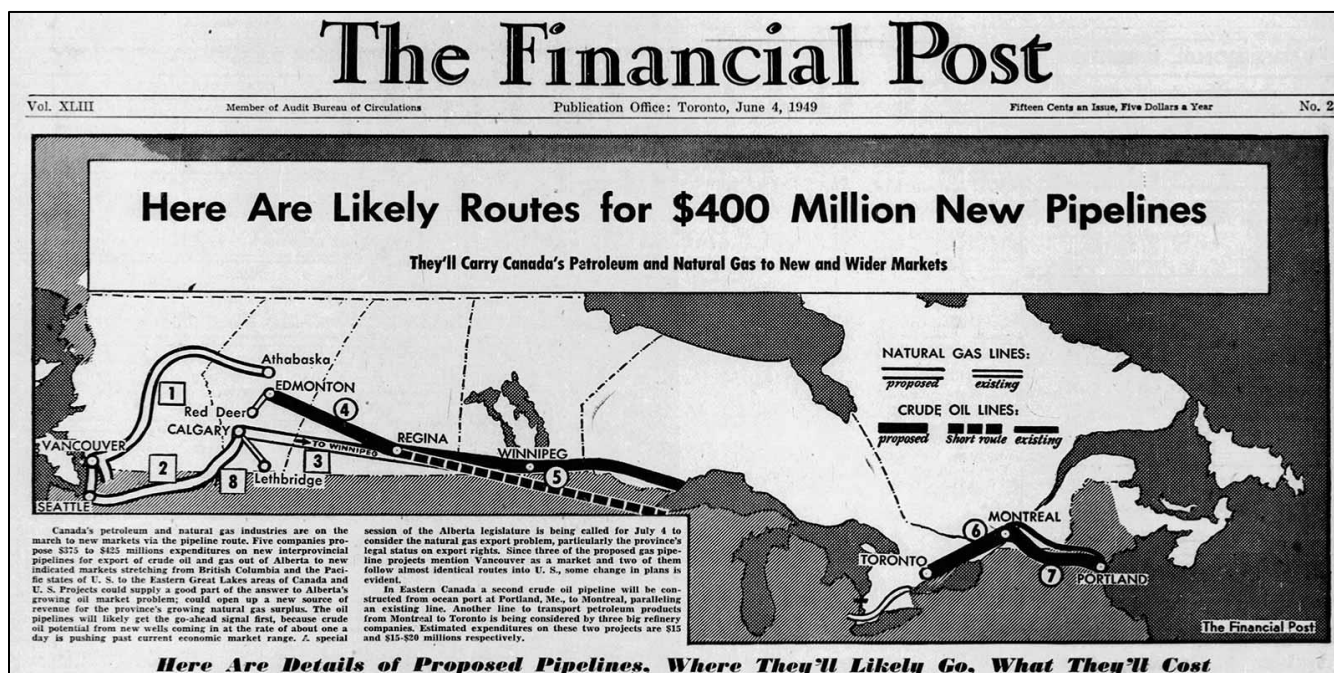
At the same time, Mr. Manning declared his government believes export will be in the province's best interests as soon as sufficient reserves are established to take care of Alberta's needs.

⁸⁴ Some newspaper articles misspelled Hand's name as "Richard B. Hahn," or even "Hahan." Hand died on February 13, 1955, at age 64. His obituary states he was a "corporation lawyer. He specialized in the organization and capitalization of oil and natural gas projects. He was vice president, director and general counsel of Venezuela Syndicate, Inc., a corporation he helped found. ... He was a member of the Bankers Club of America, ... the Delaware State Chamber of Commerce and New York County Lawyers Association. ... was also a member of the Cat Key Club of Cat Cay in the Bahamas ... half-owner of the Bimini Bugle, a newspaper published in the Bahamas under the masthead "The World's Smallest Newspaper." He was also part owner of the Newtondale Racing Stable."

⁸⁵ *Natural gas line waits government O.K., says paper*, The Province, January 12, 1948.

⁸⁶ *Alberta gas may heat Regina and Winnipeg*, Calgary Herald, December 3, 1947.

export of natural gas,” N.E. Tanner, Alberta’s Minister of Lands, Forests, Mines and Minerals, announced the formation of a Gas Survey Committee in late 1948 referred to as the Dinning Royal Commission to “investigate the natural gas reserves of the province,”⁸⁷ and on November 3 established Terms of Reference through Order-in-Council.⁸⁸ The Commission produced a report in 1949, *Inquiry into Reserves and Consumption of Natural Gas in the Province of Alberta*. On Thursday January 25, 1951, after almost two years of official wrangling through government review boards, and with the release of a 100-page report by the Gas Conservation Board, Alberta Premier Ernest Manning’s administration temporarily “recommended against granting permits to export natural gas.”⁸⁹



The possibility of transporting gas soon included the subject of transporting oil, creating a North American and United Kingdom financial empire exploration frenzy, attracting numerous sorts of investors and the creation of new corporate entities and partnerships.⁹⁰ By the end of 1950, as summarized in a lengthy advertisement edition of *The Financial Post* on November 25, 1950, petroleum exploration in western Canada was booming. As the frenzy began to evolve, by June 1949 came proposals for 8 inter-provincial and U.S. export oil and gas pipelines: the Westcoast Transmission Co. gas line to Vancouver; the Alberta Natural Gas Co. gas line to Seattle, Washington; the Prairie Pipe Lines Ltd. gas line from Calgary to Crows Nest Pass into British Columbia and paralleling the Alberta Natural Gas Co. gas line; the Western Pipe Lines Co. gas line to Winnipeg; the Interprovincial Pipe Line Co. oil line to Regina; the Interprovincial Pipe Line Co. oil line extension from Regina to northeast United States; the Trans-Northern Pipe Line Co. oil line from Montreal to refineries in Toronto area; a second oil pipeline from Montreal to Portland, New England.⁹¹

⁸⁷ *Tanner names gas survey committee*, Edmonton Bulletin, October 23, 1948.

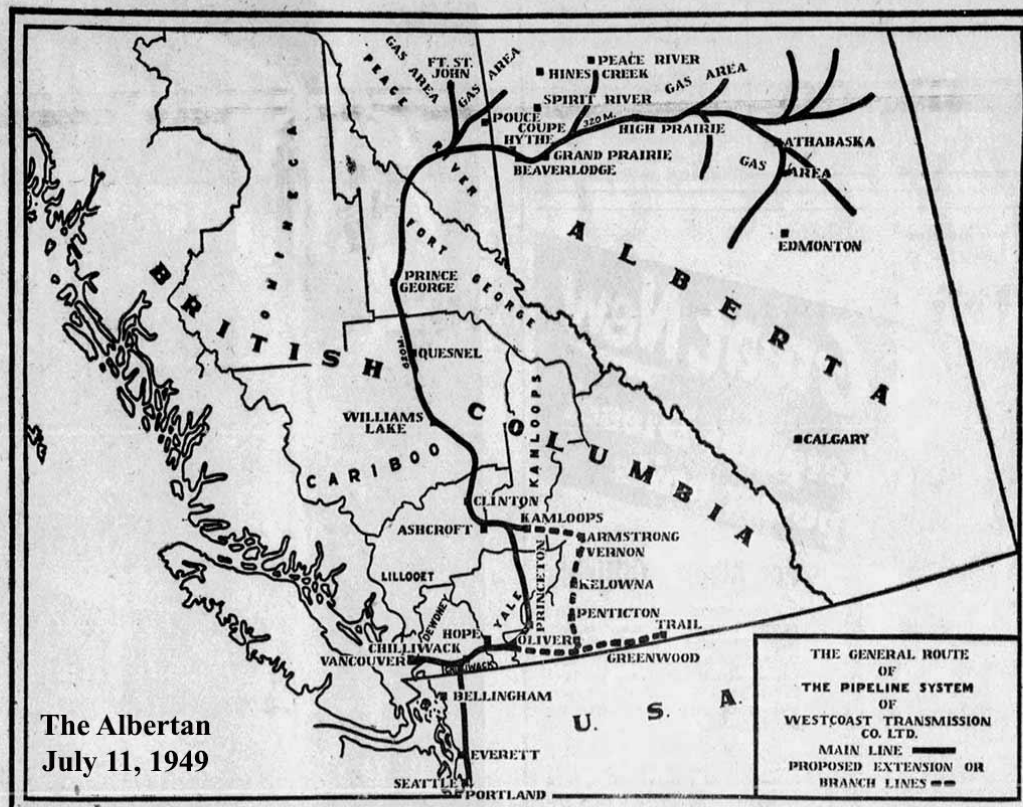
⁸⁸ *Gov't sets terms for gas survey commission*, Edmonton Bulletin, November 3, 1948.

⁸⁹ *Gas export proposals are rejected*, Edmonton Journal, January 25, 1951.

⁹⁰ *Big U.S. firms expand oil play in Alberta*, The Province, July 30, 1949. "Another dozen American independent oil operators and companies were added recently to the growing roster of U.S. concerns taking part in the huge Western Canadian oil play. Their entry boosts to 55 the number of major and independent American interests playing an active role in Canadian oil exploration and development."

⁹¹ *The Financial Post*, June 4, 1949.

Natural Gas for the People of Northern Alberta and British Columbia



The Albertan
July 11, 1949

The All Canadian Route For Natural Gas Pipeline

The general route and the areas to be served in Canada by the pipeline system of Westcoast Transmission Company Limited are shown on the above map. The total length of the line from Athabasca to Vancouver, including the main gathering lines, is approximately 940 miles. The cost is expected to run between \$75,000,000 to \$100,000,000, with Canadian labor, material and supplies to be used to the fullest extent available.

Westcoast Transmission Company Limited was incorporated under Special Act of Parliament at the last session of the Dominion House to transport natural gas from Northern Alberta and British Columbia to Vancouver. Other pipeline companies receiving incorporation under Special Act at the same session were Imperial Oil Company, which proposes to construct a pipeline to transport oil from Alberta to the head of the Great Lakes, and Western Pipe Lines, which will transport natural gas from Alberta to Winnipeg.

WESTCOAST TRANSMISSION COMPANY LIMITED

Toronto General Trusts Building

Calgary, Alberta

At the same time the July 1947 gas pipeline proposal was made by the Northwest Gas Company interests came announcements that "a Vancouver group, composed mostly of oil companies" had proposed another gas pipeline route. It included the backing of the B.C. Electric Company, as confirmed by T.M. Moran its senior vice-president, who stated the utility company had "also been following the possibility of bringing natural gas here."⁹² About eight months later in March 1948, the press finally identified that this "group

⁹² Study pipeline Alberta gas to West Coast, National Post, July 19, 1947.

of prominent businessmen,” Frank McMahon president of Pacific Petroleum (‘Pacific Pete’) Ltd., Canadian industrialist Frank M. Ross (B.C. Lieutenant Governor, October 3, 1955 to October 4, 1960, and appointed director of Westcoast Transmission on August 4, 1960), Colonel Victor Spencer, George A. Martin, and Senator J.W. de B. Farris “have under consideration the construction of a [est. \$40,000,000] 650-mile natural gas pipeline from the Peace River district to the coast,” based on cheaper gas reserves the company found in northeast B.C.⁹³ A year after that, Frank McMahon made application to the Parliament of Canada on March 16, 1949, for a charter of Westcoast Transmission Company Limited, its new subsidiary, and sought the Alberta “government’s permission to export natural gas beyond the province’s borders.”⁹⁴

Organizers of: WESTCOAST TRANSMISSION COMPANY LIMITED

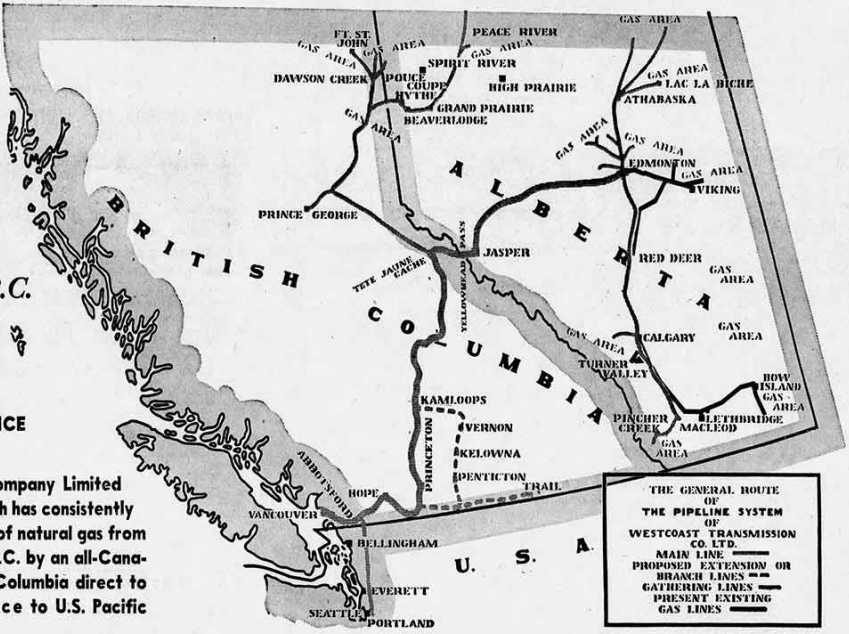
Presently:

- A leading Independent Oil Producer in Alberta
- Developing over 1,000,000 acres in the Peace River District of B.C.
- Planning drilling operations on the B.C. Gulf Islands

It will mean to B.C.

- NEW PAYROLLS
- NEW INDUSTRIES
- NEW ECONOMY
- NEW TOWNS
- DOMESTIC CONVENIENCE

Westcoast Transmission Company Limited is the only organization which has consistently sponsored the transmission of natural gas from Alberta and northeastern B.C. by an all-Canadian route through British Columbia direct to Vancouver, B.C. and thence to U.S. Pacific Coast cities.



THE GENERAL ROUTE OF THE PIPELINE SYSTEM OF WESTCOAST TRANSMISSION CO. LTD.

MAIN LINE ———

PROPOSED EXTENSION OR BRANCH LINES - - -

GATHERING LINES —•—

PRESENT EXISTING GAS LINES —•—

Pacific Petroleum Ltd.

A Company committed to the search for and development of oil and natural gas in Western Canada

EXECUTIVE OFFICE
304 Toronto General Trusts Bldg.,
Calgary, Alta.

REGISTERED OFFICE
504 Seymour Street,
Vancouver, B.C.

FIELD OFFICE
9616—101A Avenue,
Edmonton, Alta.

Vancouver Sun, March 28, 1950

⁹³ Plan pipeline from Peace River to Pacific Coast, Edmonton Journal, March 9, 1948.

⁹⁴ Export of gas sought in Bill, Edmonton Journal, March 16, 1949.

Board Here Next Week

Edmonton Journal
January 29, 1949

Pipeline To Coast Proposed For Gas From Peace River

CALGARY, (CP)— Details of a proposed pipeline to transport natural gas from the Peace River district to Vancouver were laid before the Dinning royal commission Friday.

Frank McMahon of Calgary, representing the Peace River Natural Gas Company Limited and associated oil companies said the group was willing to construct and operate an 800-mile natural gas pipeline from northern Alberta and northern British Columbia to Vancouver at a cost of \$50,000,000 to \$100,000,000. The line would be constructed if sufficient gas reserves were proven in that area.

In early December 1947, Pacific Petroleum incorporated a new subsidiary, Peace River Natural Gas Co. Ltd., the front company for Frank McMahon's new 26-inch (later, 30-inch), high-pressure gas pipeline scheme from the town of Athabasca to Grande Prairie, then west to Dawson Creek and down to Vancouver City. Pacific Petroleum also incorporated another subsidiary in July 1947, Atlantic Oil Ltd. in order to register even more control over petroleum leases and partnerships. By early 1949, Pacific Petroleum had other corporate partners in gas development: Pacific Western Oil Corp., Tidewater Associated Oil Company, Sunray Oil Corporation, and Eastman Dillon and Co.,⁹⁵ all of which shared a combined "leases on 6,000,000 acres in northern Alberta and B.C."⁹⁶

There were two alternate gas pipeline routes contemplated by Pacific Petroleum, in addition to the company's main pipeline stem west of Edmonton that it later applied for with Canada's Board of Transport Commissioners on October 22, 1949. Those northeastern routes were due west of Dawson Creek over the Pine Pass and then south down the river valleys to Prince George, and the other over the Monkman Pass southwest of Dawson Creek to the mountainous northern slopes of the upper Fraser River and west to Prince George. After political skirmishes with the Alberta government on its export policy, and with strategic petroleum supply leases in place in northeast B.C. and in northwest Alberta, in November 1950 Frank McMahon withdrew the main stem gas pipeline route west of Edmonton opting for the Pine Pass route to Prince George after gaining earlier special concessions with the government of Alberta to construct an export gas pipeline from the Grand Prairie area to Dawson Creek.

The contention between two gas pipeline consortiums to gain export approval from Alberta were intensely debated in the Alberta legislature, by the federal Board of Transport Commissioners and by Canadian Parliament for two years. On March 18, 1949, the Canada Gazette published a notice of intention for federal parliament to pass a special "Act to incorporate" the Westcoast Transmission Company, which it did, much to the annoyance of its rival, the Alberta Natural Gas Company, which failed similar application in September 1949, following. The hurdles faced by the Alberta Natural Gas Company, the subsidiary of the Northwest Natural Gas Co., was because Canadian legislators favored an "all-Canadian" export route to advantage B.C. Interior customers, i.e.: "Fiery Arthur L. Smith, KC, Progressive Conservative MP for Calgary West, has promised to "filibuster again" against any bill to incorporate a natural gas pipeline to Vancouver that did not guarantee an all-Canadian route."⁹⁷

⁹⁵ *Gas export declared threat to coal mining*, Calgary Herald, January 28, 1949.

⁹⁶ *Gas line to city blueprinted*, The Province, January 29, 1949.

⁹⁷ *Fiery Calgary MP hits pipeline plans*, Vancouver Sun, January 21, 1950.

New Tactics Delay Gas Pipeline Bills

Vancouver Sun, April 4, 1950

Filibusterers Use Up Time Taking Votes During Comic, Corny Debate

By DILLON O'LEARY

Vancouver Sun Ottawa Bureau

OTTAWA, April 4.—The gas pipeline filibuster got wobbly Monday as debate raged all day in the Commons.

Comedy, corn and confusion were routine throughout, and at times the antics of some usually decorous MP's came close to making a mockery of Parliament.

By late 1949, the American-based Northwest Natural Gas partners were United Gas Pipeline Co., Panhandle Eastern Pipeline Co., Tennessee Gas Transmission Co., and the El Paso Natural Gas Co.⁹⁸ During the continued federal debates opposing the incorporation of Alberta Natural Gas, it was revealed in March 1950 that Austin C. Taylor and B.C. forestry tycoon H.R. MacMillan, "perhaps two of the most-wealthiest men out there," were backers of the American consortium,⁹⁹ including "selling out" endorsement by federal Trade Minister C.D. Howe¹⁰⁰ who was accused by MP Howard Green of misleading Vancouver City Council.¹⁰¹ It was reported in December 1949 that Westcoast Transmission had also sneakily proposed an American option similar to the Northwest Natural Gas route "as a 'joker' in the deck."¹⁰² That option was reportedly amended in Westcoast's federal charter "to remove from the company the right to build part of the pipe-line outside of Canada,"¹⁰³ officially dropped by Westcoast on April 21, 1950.¹⁰⁴

By late 1949, a third application by the Prairie Natural Gas Company, "organized by Toronto interests," was also vying "planning a route from southwest Alberta to the U.S,"¹⁰⁵

Pipeline Debate Enlivens Session

Austin Taylor, H. R. MacMillan Rapped in Calgary MP's Speech

Vancouver Sun

March 8, 1950

By DILLON O'LEARY

OTTAWA, March 8.—Parliament's gas pipeline debate jumped lively Tuesday night. Jack MacDougall (Lib., Vancouver-Burrard) tangled with George Cruickshank (Lib., Fraser Valley) when the Vancouver MP argued that parliament had no right to dictate the route of any proposed gas pipeline.

That doughty filibusterer, Arthur Smith (PC, Calgary West), took a verbal swipe at H. R. MacMillan and Austin Taylor, Vancouver business men who have added their names to the list of petitioners on behalf of the bill to incorporate Alberta Natural Gas.

Alberta Natural Gas proposed to pipe gas from Alberta to the Pacific Coast via the Northwestern United States. Mr. Cruickshank and Mr. Smith led the successful filibuster last session against this. They are demanding an "all-Canadian" route to the coast.

WEALTHIEST MEN

Mr. Smith took note of Mr. MacMillan and Mr. Taylor as "perhaps two of the wealthiest men out there." Of their listing among the bills petitioners, he commented:

should be ruled "out of order" in future, Mr. MacDougall advised Speaker Ross MacDonald.

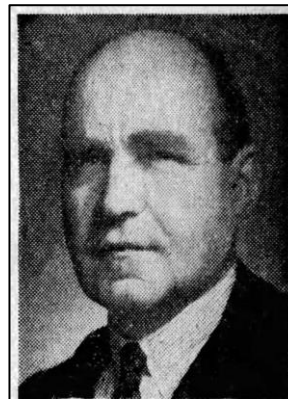
A route over "rough terrain" would mean higher costs to British Columbia consumers, he said.

He wanted Canadians to have "first call" on this natural gas, particularly the citizens of British Columbia and Greater Vancouver.

But he was against creation of a monopoly for any company "already incorporated" by refusal to pass any further gas pipeline bills.

His statement that "no one can say where this (Alberta natural gas) pipeline is going to be built" was greeted with loud hoots of laughter from Mr. Smith.

Owen Jones (CCF, Yale) also voiced objections to an American route, and said he would oppose



H. R. MacMILLAN
... backing Northwest



AUSTIN C. TAYLOR
... petitioner for Northwest

⁹⁸ 3 pipeline companies await board decision, The Albertan, October 26, 1949.

⁹⁹ Pipeline debate enlivens session, Vancouver Sun, March 8, 1950.

¹⁰⁰ [MP] Green forecasts betrayal of BC in pipeline deal, Vancouver News Herald, April 13, 1950.

¹⁰¹ Gibson jumps fence, fights pipeline Bill, Vancouver Sun, May 3, 1950.

¹⁰² Westcoast still faces fight before piping gas to Coast, Vancouver Sun, December 12, 1949.

¹⁰³ New Bill may solve filibuster, The Province, April 8, 1950.

¹⁰⁴ Drops U.S. line, Westcoast committed to B.C. route, Vancouver Sun, May 2, 1950.

¹⁰⁵ Alberta gas jumps while debate rages, The Province, December 14, 1949.

and a fourth by an application "by S. Bruce Smith, K.C., Edmonton, company solicitor" in April 1950 for Prairie Pipe Lines Ltd., "controlled by Canadian citizens in Alberta and other provinces."¹⁰⁶

The saga of federal Parliament's months-long filibustering of the American gas pipeline option route was headlined in the front page of the Vancouver Sun newspaper on May 1, 1950, "Titans of Wall Street Fighting for West's Gas Line Privileges – 'Battle of Billions' Behind Filibusters."

Titans of American finance and Canadian business are battling over Western Canada's natural gas. They have caused bad feeling between British Columbia and bordering American states, are threatening to set the west against the east, and have been responsible for some of the most ludicrous sessions in the history of the House of Commons. The simple surface argument is, which route will the proposed natural gas pipeline from Alberta to the coast take?

But it has involved two of Wall Street's greatest financial institutions. And today their golden bludgeons are beating out a battle of "billions" that is resounding through the political chambers of the land. ... Westcoast Transmission Co. ... backed by the huge Eastman, Dillon and Co. financial house of New York ... Northwest Natural Gas Co. ... with the assistance of the mighty Stanley and Co. of Wall Street.

The eight-month-long filibustering ended on May 16, 1950, and the passage of the "bills to incorporate the Alberta Natural Gas Company and Prairie Transmission Lines Ltd."¹⁰⁷

In November 1950, Westcoast Transmission Co. Inc., Pacific Petroleum's "American affiliate of Westcoast Transmission Co. Ltd. of Calgary" which was incorporated in Wilmington, Delaware, filed an

The Vancouver Sun

MONDAY, MAY 1, 1950

Titans of Wall Street Fighting For West's Gas Line Privileges

FOR B.C. ROUTE



LONG a proponent of the B.C. route for the pipeline is Norman Whittall, Vancouver financier, and one of the backers of the Westcoast Transmission Co.



HOWARD GREEN, MP ... champions B.C. route



FRANK M. McMAHON ... Westcoast's head.



GEORGE CRUICKSHANK, MP ... pipeline filibusterer

'Battle of Billions' Behind Filibusters

Titans of American finance and Canadian business are battling over Western Canada's natural gas. They have caused bad feeling between British Columbia and bordering American states, are threatening to set the west against the east, and have been responsible for some of the most ludicrous sessions in the history of the House of Commons.

The simple surface argument is, which route will the proposed natural gas pipeline from Alberta to the coast take?

But it has involved two of Wall Street's greatest financial institutions. And today their golden bludgeons are beating out a battle of "billions" that is resounding through the political chambers of the land.

Cabinet ministers and M.P.s. industrialists and financiers are all in the act, which only last week became so heated that even calm Louis St. Laurent blew up in a prime ministerial cloud of fiery French-English temper.

Here is the current lineup in the controversy between the two main competing companies:

Westcoast Transmission Co., a Vancouver-Calgary firm, backed by the huge Eastman, Dillon and Co. financial house of New York, wants to pipe the natural gas through northern Alberta and British Columbia, thence into the U.S.

On Westcoast's side is, of course, Frank M. McMahon of Calgary, head of the firm who has had the idea of an all-Canadian line for the last 15 years. B.C.-born, he is the organizer of a number of western companies, and is reported to be an oil millionaire.

With him is Norman Whittall, Vancouver financier, and others, including two of Canada's leading bond houses, Wood, Gundy & Co., and Nesbitt Thomson & Co.

On the political end he has the unflinching support of the entire B.C. government, all Progressive Conservatives, including George Drew, Howard Green, M.P. (Vancouver Quads), Art Smith (P.C. Calgary West), all federal CCF members, and two Liberals, George Cruickshank (Fraser Valley) and John Sinnott of Springfield, Man.

Sometimes corny, sometimes clownish George has put on the comic armor of a natural-born Don Quixote and charges out of his Fraser Valley homeland to pin back the Morgans, the Northwest company, and everyone in his way, in one of the longest filibusters in Canada's history.

George and his cohorts, Art Smith and Howard Green don't seem interested in the many millions of the American financiers or in the oil companies, either. Theirs is a more personal battle. They want the gas piped through northern Alberta and B.C. before it enters American territory, because they claim this will build up the unpopulated north of both provinces and be more advantageous economically to the Canadian west.

IN OPPOSITION GROUP



TARGET of filibusters in the long battle of the pipelines in the House is Reconstruction Minister C. D. Howe, who denies any kind of a "deal" against Canadian route.



H. R. MacMILLAN ... backing Northwest



AUSTIN C. TAYLOR ... petitioner for Northwest

Strong Team for Westcoast

Attorney-General Gordon Wismer, also speaks openly in favor of Westcoast, and his opinion is echoed by practically every board of trade or chamber of commerce from Vancouver to Prince George.

Against this is a powerful machine led by A. Faison Dixon, internationally known engineer and president of Northwest Natural Gas Co.

He is helped by Ralph Campney (M.P. Vancouver Centre) who is reported to be a power in federal Liberal circles, and who is spokesman, legal adviser and one of the sponsors in Parliament for Northwest's bill.

Aiding him are Austin C. Taylor and H. R. MacMillan, two of B.C.'s top industrialists, who have signed their names as petitioners for Northwest.

Federal Gov't for Northwest

To this formidable front, though, is added the almost entire weight of the Federal Liberal Party, from Trade Minister C. D. Howe down.

Even British Columbia members, despite an opposite stand taken by the party here, seem grimly in line in aiding Northwest in its incorporation bill.

This doesn't daunt the opposition, and "fearless" George Cruickshank and his black continue to battle openly against any pipeline company that threatens to build outside Canada before B.C. is served first.

St. Laurent Loses Temper

When Mr. Cruickshank left in the performance others on his side take over.

For example, Joseph Harris (P.C. Toronto-Danforth) talked the bill out of one sitting by pre-empting a weird and wondrous prescription on world travel. With expressive gestures and bellowing voice he dealt with varied subjects and ended with a discourse on camels in Nigeria which carried "buckets and buckets of water."

Maj.-Gen. George Peakes (P.C. Nanaimo) simply whipped out an old speech of his on national defense to talk it out in another case. And Leon Baile (P.C. Three Rivers) talked in French to confuse government hecklers.

The hottest session, and one which carried "buckets and buckets of water."

May-Gen. George Peakes (P.C. Nanaimo) simply whipped out an old speech of his on national defense to talk it out in another case. And Leon Baile (P.C. Three Rivers) talked in French to confuse government hecklers.

The hottest session, and one which carried "buckets and buckets of water."

Please Turn to Page Two See "Wall Street"

Others in Team Sent In

When Mr. Cruickshank left in the performance others on his side take over.

For example, Joseph Harris (P.C. Toronto-Danforth) talked the bill out of one sitting by pre-empting a weird and wondrous prescription on world travel. With expressive gestures and bellowing voice he dealt with varied subjects and ended with a discourse on camels in Nigeria which carried "buckets and buckets of water."

Maj.-Gen. George Peakes (P.C. Nanaimo) simply whipped out an old speech of his on national defense to talk it out in another case. And Leon Baile (P.C. Three Rivers) talked in French to confuse government hecklers.

The hottest session, and one which carried "buckets and buckets of water."

May-Gen. George Peakes (P.C. Nanaimo) simply whipped out an old speech of his on national defense to talk it out in another case. And Leon Baile (P.C. Three Rivers) talked in French to confuse government hecklers.

The hottest session, and one which carried "buckets and buckets of water."

Please Turn to Page Two See "Wall Street"

Howe on Spot in Commons Over His Pipeline Promise

¹⁰⁶ Fourth firm seeks to export Alberta Gas, Calgary Herald, April 11, 1950.

¹⁰⁷ 2 Alberta pipeline Bills passed after heated clashes in House, Vancouver Sun, May 16, 1950.

application with the U.S. Federal Power Commission to “construct and operate a pipeline for the transportation of natural gas in the state of Washington and Oregon.”¹⁰⁸ Shortly thereafter, the Canadian parent, Westcoast Transmission Co. Ltd., filed a new application with the Canadian Board of Transport Commissioners to pipeline gas from northeast B.C. over the Pine Pass, down through Prince George and on to Vancouver, cancelling its “route through the Yellowhead Pass from Edmonton to Vancouver.”¹⁰⁹

THE VANCOUVER SUN - Sat. June 4, 1949 25

Natural Gas FOR VANCOUVER BY PIPELINE

WESTCOAST TRANSMISSION CO. LTD.
is Pleased to Announce

CONTINUING PROGRESS ON THEIR NEW NATURAL GAS PIPELINE PROJECT

- The engineering firm of Ford, Bacon & Davis of New York have completed their preliminary survey and inspection of the proposed route.
- The pipeline will tap the rich gas areas of Northern Alberta and the Peace River area of British Columbia and will bring Natural Gas via an all-Canadian 900-mile route direct to Vancouver. It will cost approximately \$100 million.
- The construction of this pipeline within British Columbia will entail vast expenditure of money on labour and materials. It will foster the growth of many new industries along its route and in the Vancouver area.
- Domestic consumers in towns and cities adjacent to the pipeline will share in the "Better Way of Living" through an abundant supply of Natural Gas.
- With an outlet for Natural Gas assured, British Columbia can look forward to an intensive search for oil and gas in the rich Peace River Block.

WESTCOAST TRANSMISSION CO. LTD.
Vancouver, B.C.

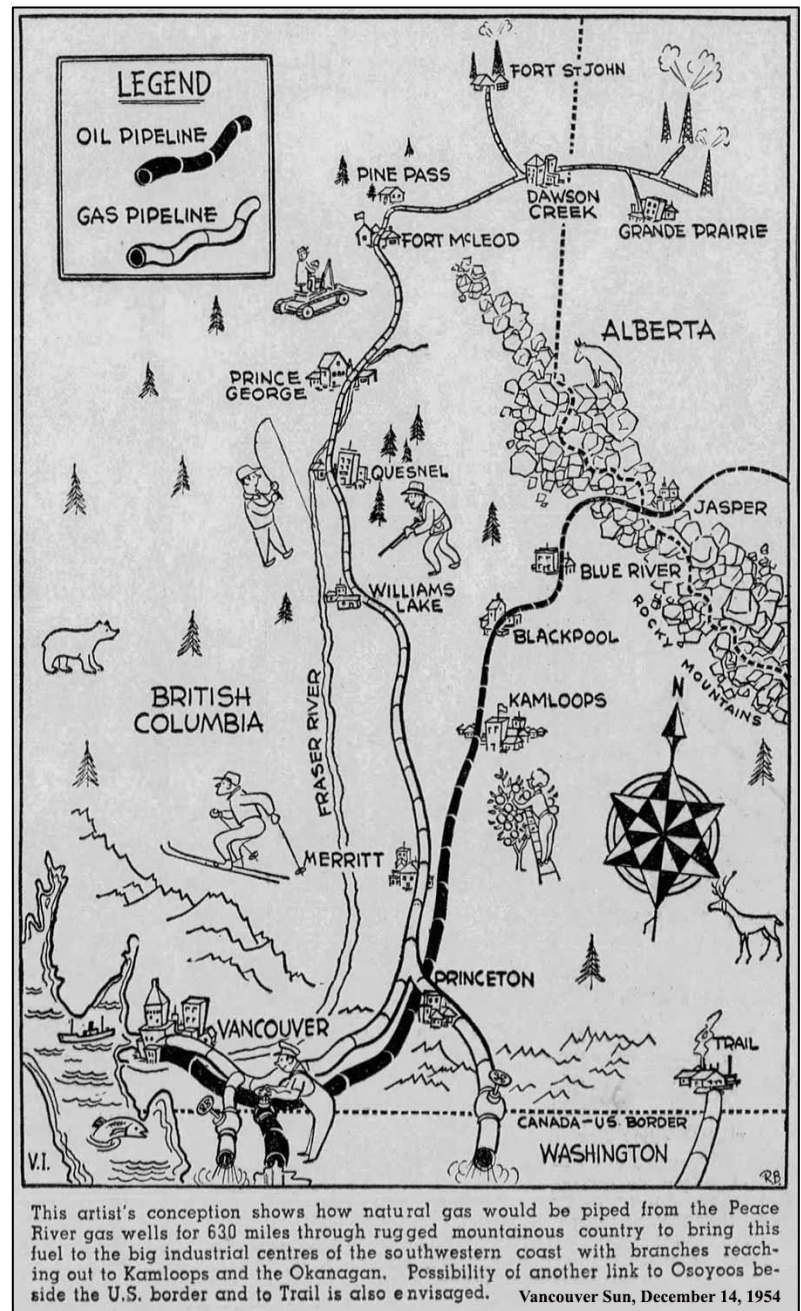
¹⁰⁸ Westcoast asks permit to build U.S. pipe line, Calgary Herald, November 7, 1950.

¹⁰⁹ Pipeline firm asks change in north gas export route, Edmonton Journal, November 24, 1950.

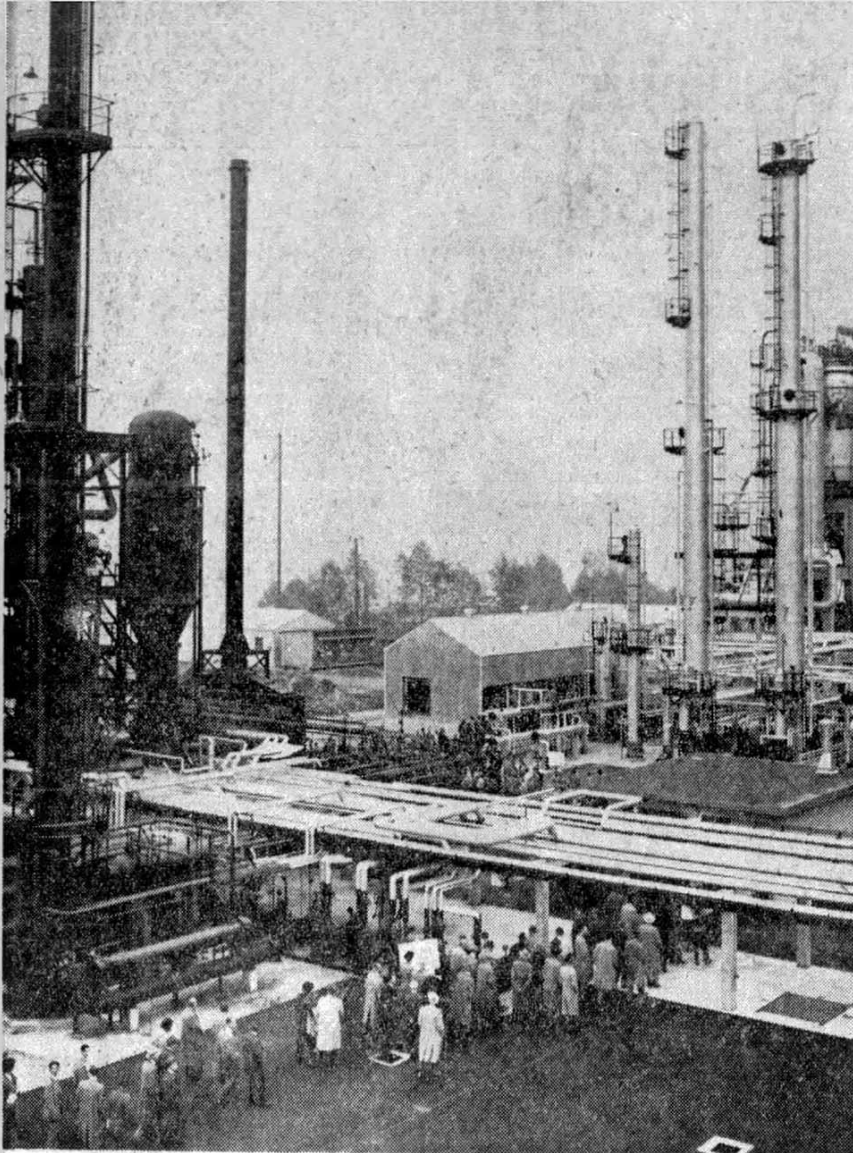
In November 1950, U.S. Standard Oil and Bechtel Corporation quickly adopted the Rocky Mountain Jasper National Park east-west mountain pass route for its new oil pipeline transport proposal after Westcoast Transmission Co. officially abandoned its main-stem gas pipeline route west of Edmonton through Jasper National Park and westward through the Fraser River headwaters (discussed below). The two American companies incorporated the Trans Mountain Oil Pipeline Company on March 21, 1951, by a Special Act of federal (dominion) parliament. After heated debates in federal parliament about export and Canada's energy security, and environmental consequences of altering park conservation values, construction for this oil pipeline began in February 1952.¹¹⁰

In June 1952, as the Trans Mountain Oil Pipe Line was being constructed, Westcoast Transmission applied to the federal Board of Transport Commissioners for its \$100 million British Columbia pipeline route project. Waiting upon its imminent approval, Frank McMahon's brother, John McMahon, former two-time Vancouver Stock Exchange president and owner of investment firm McMahon & Burns, helped form the Inland Gas Company Ltd., becoming its vice president, and soon to be president. Norman Whittall, the chairman of Pacific Petroleum which owned Westcoast

Transmission, became temporary president of Inland. By 1988, Inland would wow the North American continent with the largest privatization purse purchase of B.C. Hydro's natural gas division, forming B.C. Gas Inc., to become the big apple private utility corporation in western Canada. Upon its 1952 incorporation, branching off Westcoast Transmission's main stem pipeline, Inland set up a distribution pipeline network for B.C.'s Interior settlements and industries.



¹¹⁰ Refer to a summary history of this pipeline in the author's online [Oil Pipeline Timeline, Appendix A](#), of his July 10, 2006, submission to the National Energy Board (now called the Canadian Energy Regulator), called "Pushing the Tar Sands Envelope: Kinder Morgan's Anchor Loop Application and the Oil Sands Agenda."



B.C.'s petroleum products output will be substantially increased with the official opening Saturday of new \$10,000,000 fluid catalytic refinery of Standard Oil Company of British Columbia in North Burnaby which has designed processing capacity of 11,000 barrels of Alberta crude oil per operating day.—George Smith photo.

The Vancouver Sun newspaper was ablaze of the good news on the front page of its December 14, 1954, Tuesday edition, "Gas Pipeline Deal Heralds Big New B.C. Industrial Era:"

British Columbians today hailed the start of a great new industrial era that will be fired by a natural gas pipeline from the Peace River area to Vancouver and the United States. Announcement of the multi-million-dollar project, involving the signing of an agreement by the Canadian company,



PREMIER BENNETT
... sees new era

Gas Deal Big Boost For B.C.

Premier W. A. C. Bennett today predicted a new era of development and prosperity for British Columbia with the signing of a multi-million dollar agreement to pipe natural gas from the Peace River area.

His words keynoted the reaction of business and political leaders who greeted the pipeline announcement with unbounded jubilation.

Agreement, between West-coast Transmission Company of British Columbia, the Pacific Northwest Pipeline Corporation of New York and El Paso Natural Gas Company of Tulsa, Oklahoma, was signed Monday in Tulsa.

Van Sun, Dec 14, 1954

Westcoast Transmission, and two major American gas firms was made in Tulsa Oklahoma, late Monday afternoon.

Government and business leaders foresaw the announced plan for a [\$110 million] 630-mile gas line from the Fort St. John area to the international boundary as one of the greatest industrial boosts yet for this province. Natural gas is expected to be available in Vancouver about September 1956.

After months of hush-hush negotiations, the big three of the multi-million-dollar gas deal, Frank McMahon, president of Westcoast; Ray C. Fish, chairman of the Pacific Northwest Pipeline Corp., and Paul Keyser, president of the El Paso Natural Gas Company, announced the contracts have been signed. Pacific Northwest, the Texas company that beat out Westcoast for U.S. Federal Power Commission approval to pipe gas to the Pacific Northwest states last June, will take 300 million cubic feet of gas a day from Westcoast. ... Fish's Pacific Northwest will construct a \$160 million line from the San Juan basin of New Mexico and Colorado to link up with Westcoast at the Canada-U.S. border.

The December 1954 Vancouver Sun edition featured separate photos of brothers Frank and George McMahon, with a backgrounder on brother Frank, the "Friendly Tycoon":

Known as the flying gas man, who has jumped tens of thousands of miles around the continent in his own Lockheed Lodestar, he is a bundle of energy with an eye peeled continually on any development deal. "I always believe in making a deal a day," he once told his friend Dick Whittall.

In November 1955, "A U.S. government ruling, issued in Washington ... will permit the piping of Canadian gas into the northwestern United States and allow the Pacific Northwest Pipeline Corporation to import 300,000,000 cubic feet per day from the Westcoast Transmission Co." ¹¹¹

Ringbearers W.C. Mainwaring, brothers John, George and Frank McMahon, amongst others, were linked together in an evolving elitist petroleum empire brotherhood, unlocking, distributing and profiting by the resource riches and empire building of western Canada.



¹¹¹ *U.S. may well store gas from north B.C.*, Times Colonist, July 12, 1956.



VANCOUVER, B.C., WEDNESDAY MORNING, OCTOBER 9, 1957

Norman Whittall

Frank Ross

W.A.C. Bennett

Frank McMahon

Dal Grauer

George McMahon

Giants of oil, gas, power and finance gather in Vancouver

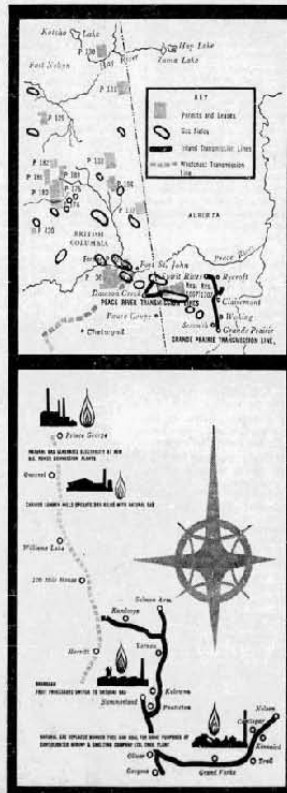
(Photo by Villy Svarre)

SEVERAL MILLIONAIRES were among the group of prominent Canadians and Americans who gathered Tuesday for the opening ceremonies of the Westcoast Transmission Company's natural gas

pipeline. From left are Norman R. Whittall, Vancouver; Lieut.-Gov. Frank Ross, James Muir, Montreal; Lloyd S. Gilmour, New York; Premier Bennett, Frank McMahon, Calgary; Dal Grauer, Van-

couver; George McMahon, Calgary; Dr. H. L. Purdy, Vancouver; John McMahon, Vancouver; D. P. McDonald, Calgary; Paul Kayser, Houston, Texas; J. K. McCausland, Toronto; C. H. Wright,

Tulsa, Oklahoma; Hon. Ray Reiersen, Alberta minister of industries and labor, and Ald. George Cunningham. This picture was taken by Province staff photographer Villy Svarre in the Hotel Vancouver.



BIG COUNTRY

LOCATE...INVEST...GROW
IN THE INTERIOR OF
BRITISH COLUMBIA...

Natural Gas... Industry's most versatile working tool — is paving the way for a new commercial empire in the interior of British Columbia. The signs are already evident in the fast growing communities of the Okanagan, Cariboo and Kootenays now served by the Inland Natural Gas Company's pipelines.

Consider the facts. The B.C. interior is a land rich in raw materials... a land generously supplied with power, water and modern transportation facilities... a land where industry has room to expand free from the restrictive high costs of urban communities... a land where workers can enjoy full and prosperous lives, a land abundant in water sports, bird and big game hunting.

Many people come to visit the interior of British Columbia every year, the more fortunate ones stay.

INLAND NATURAL GAS

HEAD OFFICE 1155 WEST GEORGIA ST., VANCOUVER, B.C.



March 18, 1961



TO GET to the main house, the visitor passes gardens and the estate manager's house before coming to this full view of Sun 'n Sea.

The Mainwaring Modest Mansion

W. C. Mainwaring was a multiple charity participant and contributor and industry elite celebrity. The public was all a flutter about The Province Newspaper's weekly B.C. Magazine, February 6, 1954, special two full-page intimate feature on the Mainwarings' new luxurious, opulent and technologically-savvy "Sun 'n Sea" named mansion ranch house on Ocean Park Road located between Crescent Beach and White Rock. It was unabashed, free advertisement.

In a grove of fine cedars and firs the house sprawls on open lawns in a shape like a letter U with upright arms spread wide and lopped off midway. Throughout its length of some 250 feet and floor area of 6,700 square feet under roof, its width nowhere exceeds that of one room and the corridor that runs from first to last room.



West wall of the section of house facing the [Semiahoo] Bay is virtually all glass from floor to ceiling, giving unobstructed view from living, dining and master bedroom, and den. Panes are double for heat retention, and ventilation is by means of adjustable venetian louvre glass window sections, and by overhead exhaust fans.

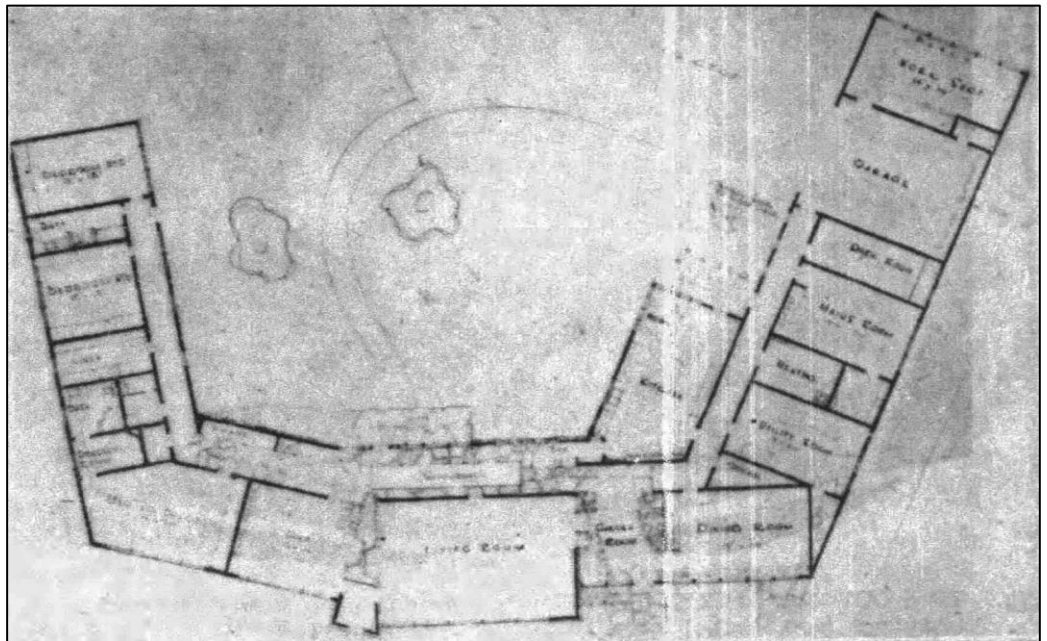
Its chief mechanical marvels are the electrical and heating systems. More than 8,000 feet of half-inch copper tubing imbedded in an insulated concrete slab floor circulate warm water to all parts of the house. Thermostats in each section, and numerous cut-off valves permit selection of temperature for any room. Three electric pumps on automatic control circulate the heating medium. In this "radiant" system the warm floor is the only source of heat except for fireplaces in livingroom and den.

The Ocean Park house is a showplace of electrical illumination ingenuity. From a panel in the master bedroom both indoor and outdoor lighting can be controlled by low voltage switching. Circuits are opened and closed noiselessly by finger-tip touch. The location of any light burning in the building or on the grounds is registered by a small tell-tale indicator on the master panel.

Low-voltage switching is found throughout the house. In the drop ceiling dining room, main lighting is indirect and of varying intensity and a choice of four colors. In the under surface of the

drop ceiling, approximately covering the dining room table area, a series of seven blue pin-lights form the pattern of the dipper star system.

Although power supply is from utility company mains, there is a standby power plant that takes over automatically in event of a power failure.



Owing to the great length of the house, communications aids are required. Most rooms have wall receptacles for plugging in portable telephones in addition to separate intercommunication telephone system. An electric organ in the livingroom is connected with a tone cabinet in the corridor that conducts the sound to most sections of the dwelling. A feature of the main corridor is the fishpond and lily pool about midway in length. The pool is partly inside the house, and partly outside.

The Mainwaring Sun N' Sea estate was the perfect entertainment centre for high society friends and parties, engulfed with architectural and technological wow and pizzazz. For instance, when an earlier estimated 1,000 delegates were to be gathered at the Hotel Vancouver from September 7 – 10, 1954, for “the first Canadian convention of the Pacific Coast Gas Association,” an association “headed by W.C. Mainwaring,”¹¹² the delegates’ wives were invitationally “entertained at the home of the W.C. Mainwarings on Ocean Road Park, White Rock.”¹¹³

FIRST TIME IN CANADA

Gas Chiefs Coming For Convention

Sixty-first annual convention of Pacific Coast Gas Association will open next Wednesday in Hotel Vancouver —first time the meeting has been held in Canada.



EARL H. EACKER
... from Boston

Top executives in the gas utility field in North America will be among the 700 persons expected to attend.

W. C. Mainwaring, vice-president and assistant to the president of B.C. Electric, will preside over sessions. He is the first Canadian to be president of the association. B.C. Electric is host company.

DISCUSS PIPELINE

Although the issue is not scheduled in the program, there is a keen interest in the convention because of Peace River natural gas development and the recent battle before the federal power commission in Washington, D.C., over delivery of natural gas to the American northwest.

Leaders from the United States who will talk Wednesday afternoon are Walter J. Herr-

¹¹² *Vancouver plays host to 1,000 gas delegates*, The Province, August 23, 1954.

¹¹³ The Province, September 4, 1954.

As part of the narrative revealed in part two of the Second Wave, on the evening of Wednesday, December 2, 1959, "Mr. and Mrs. W.C. Mainwaring are entertaining at dinner tonight in honor of visiting directors of the Peace River Power Development Company and their wives. Among those from London are Lord Tweedsmuir, Lord Polworth, Sir Andrew McTaggart, Bernard Gore, Ralph Chantrill, Farran Ackhurst and Mr. and Mrs. R.H.R. McGill. Mr. and Mrs. J.C. Dale are here from Edmonton and K. Birger Strid from Sweden."¹¹⁴

SCENERY AND SETTING AT "SUN 'N' SEA" will form the beautiful background for a luncheon Wednesday when wives of delegates to Pacific Coast Gas Association convention will be entertained at the home of the W. C. Mainwarings on Ocean Park road, White Rock. Pictured with their hostess (right) checking over final plans for the affair which will be the main social event for the ladies during the convention are Mrs. Ralph P. Purves whose husband is in charge of registration and Mrs. H. L. Purdy, wife of Dr. H. L. Purdy, vice-president B.C. Electric and general chairman of the PCGC. Mrs. Mainwaring, whose husband is the first Canadian to be president of the PCGA, is chairman of the local ladies committee and convention hostess. The gathering, Sept. 7-10, will be attracting outstanding executives in the gas utility field.

Full Visitors List For Gas Parley

Vancouver will be the destination of hundreds of visitors from North, East, South, West and as far away as Barbados and Hawaii next week.

As the first big conclave of our brand, new, Fall, more than 700 delegates will be arriving in the city to attend the Pacific Coast Gas Association's convention September 7-10.

Included in the large gathering and while most of the delegates are from Pacific Coast states, also present will be Mr. and Mrs. Harold Massey, New York; Mr. and Mrs. Rewick McDowell and their daughters, Jane and Cathy of Lake Bluff, Ill.; Mr. and Mrs. W. F. Rockwell, jr., Pittsburgh, Penn.; Mr. and Mrs. D. H. Tucker, Houston, Texas; Mr. and Mrs. H. F. Steen, El Paso, Texas; Mr. and Mrs. C. W. Stewart, Bridgeport, Conn.; Mr. and Mrs. E. J. Wortham, Davenport, Iowa; Mr. and Mrs. Arthur B. Allyne and Mr. and Mrs. A. E. Englebright, Honolulu; Mr. and Mrs. S. E. Cowan, Mr. and Mrs. L. C. Olpin, Mr. and Mrs. J. D. Roberts, Salt Lake City, Utah; Mr. and Mrs. W. C. Hamilton, Philadelphia, Pa.; Mr. and Mrs. Earl H. Eacker, Boston, Mass.

Also attending will be Mr. and Mrs. Welton W. Heath, Wellesley, Mass.; Mr. and Mrs. Earl M. Jorgenson, Phoenix, Ariz.; Mr. and Mrs. H. Leigh, Whitelaw and Mr. and Mrs. W. F. Woods of New York.

The convention will officially open Tuesday evening at 7:30 p.m. with an informal dinner in the main ballroom of Hotel Vancouver. Principal social event for the ladies will be on Wednesday when they will be entertained at luncheon at the beautiful home of the W. C. Mainwarings on Ocean Park Road, White Rock.

Thursday at noon, wives of delegates will again join their husbands in Hotel Vancouver ballroom for luncheon when the Hon. J. W. deB. Farris, Q.C., DCL, LL.D., will speak on "Good Neighbors in a World of Discord."

Thursday afternoon, delegates and their wives will board the Princess of Nanaimo for a cruise to Nanaimo when they will enjoy a buffet supper on board.

Young families of delegates are not being left out of the entertainment picture either. While their parents are busy, on Wednesday, Thursday and Friday, the youngsters will be taken on organized and supervised tours of the RCMP barracks, tours of the North Shore mountains, Cleveland Dam, the Suspension Bridge and Stanley Park.



EN ROUTE TO VANCOUVER to attend Pacific Coast Gas Convention next week are Mr. and Mrs. E. D. Sherwin of San Diego, the former, vice-president of the PCGA. The first time the association has ever met in convention in this city, the Sherwins are eagerly looking forward to their arrival here and despite busy convention sessions are planning to combine holiday pleasure with business on their trip north.

¹¹⁴ *Here and There*, Vancouver Sun, December 2, 1959.

BLAZING NATURAL GAS

Shows the wealth of B.C.'s fabulous PEACE RIVER AREA

An extensive deep test drilling and exploration program for oil and gas is now being undertaken by two of the world's largest oil companies—

**RICHFIELD OIL CORPORATION
OF CALIFORNIA**
and
**COMPAGNIE FRANCAISE
DES PETROLES OF FRANCE**

This work was based on preliminary exploration expenditures of upwards of \$1,000,000 by Peace River Petroleum Ltd. and affiliates.

Upon performance by these two major oil producers, each will hold a 35% interest and be entirely responsible for all drilling and development costs. Peace River Petroleum Ltd. will retain a 25% free carried interest in the whole project, which encompasses a vast potential oil and gas acreage of 166,000 acres.

**PHOTO AND MAP SHOWS AREA
WHERE DRILLING IS NOW
UNDERWAY**



**Unlimited possibilities exist
in B.C.'s OIL & GAS
Development Program!**

Peace River Petroleum Ltd. has prepared an interesting and informative brochure covering the natural gas seepages and other indications of oil-bearing structures. This brochure will gladly be supplied on request.



Picture shows group toasting wieners over one of the many large gas seeps in the Monkman Pass area of Peace River, B.C. Seeps similar to this have led to the discovery of many oil fields on this continent.

Inset map shows strategic location of this property.

Please send me without cost or obligation your informative brochure.

PEACE RIVER PETROLEUMS LTD.
850 West Hastings St.,
Vancouver 1, B.C.

NAME _____

ADDRESS _____

PEACE RIVER *Petroleums* LTD. (NPL)

850 West Hastings St.

Vancouver 1, B.C.

Tatlow 5857

A prospectus dated July 27, 1956, has been issued and filed with the Registrar of Companies of British Columbia, and will be furnished to any person who subscribes or applies for shares. **Nanaimo Daily News, September 4, 1956**

Industrialists roasting wieners over their 166,000-acre Peace River Petroleum's lease "fire" at Monkman Pass.

The Second Wave (Part Two)

*Plans to develop the Lower Fraser Valley into an industrial empire were discussed by mayors and reeves of eight municipalities Wednesday night. All agreed the Fraser will be one of the great industrial valleys of the world if proper planning is undertaken. ... “Now is the time to get out and sell it,” [New Westminster City] Mayor Jackson said.*¹¹⁵

*By now it is general knowledge that Richfield Oil Corporation has taken over most of the existing exploration permits in this part [the Fraser Valley]. Since Richfield is one of the major petroleum companies, we can anticipate a pretty active exploration program in the Fraser Valley in the coming years.*¹¹⁶

*It marks the first time a major oil company has entered the oil search in the Fraser Valley.*¹¹⁷

*Natural gas and oil rights from Chilliwack to the coast on the south side of the Fraser River have been taken up by four oil companies. ... [Chilliwack MLA and Mines Minister Kenneth Kiernan] said that it is unlikely there would be much oil activity on the north shore of the Fraser River because it was too mountainous.*¹¹⁸

*Mr. Mainwaring has been concentrating on the potentials of natural gas for more than a year. In 1951, he traveled over 100,000 miles on research and survey trips; averaged less than two days a week at home during that period.*¹¹⁹

*If you want anything sold in British Columbia, get Bill Mainwaring to do it.*¹²⁰

Kris Petroleums Ltd.

In 1953, Raymond Shaw, a “former Alberta wildcatter”¹²¹ from Calgary, incorporated Kris Petroleums Ltd., who in turn incorporated a subsidiary, Kris Petroleums (Wash.) Ltd. Other Kris directors were Gordon W. Ramsay (Vancouver City accountant), Elmore Meridith (Q.C., Vancouver City lawyer), Robert E. Lee (retired, Lyndon Washington), and Cecil Stuurmans (Bellingham real estate man). Kris obtained a 58,000-acre petroleum lease on the north side of the U.S. border near Aldergrove, and an adjacent 13,000 acres south of the border in Washington State, east of Blaine. It was reported that from 1953 to 1955 Kris Petroleums had “three test drills made ... sunk to the depths of 600 feet, 1,640 feet, and 2,832 feet respectively.”¹²² Kris was continuing exploration activity that had been conducted a couple of decades earlier in the Fraser Valley by the Spartan Oil, Empire Oil, and Boundary Bay Oil companies.

In April 1955, when Kris Petroleum began drilling “off the Guide Meridian Road, about a half a mile south of the international border” and just north of the town of Lyndon, Washington, it was reported that

¹¹⁵ *Industrial empire forecast on Fraser*, The Province, February 14, 1957.

¹¹⁶ *Kiernan Calling ...* W.K. Kiernan, B.C. Minister of Mines, Chilliwack Progress, May 20, 1959.

¹¹⁷ *Richfield launches Valley oil search*, The Province, August 22, 1959.

¹¹⁸ *Mines Minister tells the Progress, All Oil Rights Grabbed*, The Chilliwack Progress, March 22, 1960.

¹¹⁹ *B.C.E. surveys natural gas line route to V.I.*, Victoria Daily Times, May 15, 1952.

¹²⁰ *Interest in the Van-Tor story*, Vancouver News Herald, June 2, 1955.

¹²¹ *Group seeks oil in Fraser Valley*, Vancouver Sun, April 13, 1955.

¹²² *Langley oil drilling to begin in May*, The Province, April 13, 1955.

“three unnamed Vancouver millionaires ...as well as other Canadian and American backers” were fronting “\$280,000 in an oil-drilling venture in the Fraser Valley area.” Hercon Petroleum Ltd. from Alberta partnered with Kris Petroleum in May 1955. The ventures with Kris Petroleum also included another drilling site scheduled a month later in the Aldergrove area, north of its U.S. border site near Lyndon. It was reported that drilling began in August 1955 on “the property of J. Henderson on LeFeuvre Road South,”¹²³ On the Kris well site on Guide Meridian Road south of the border, the drill bit reached 5,700 feet by mid July 1955.

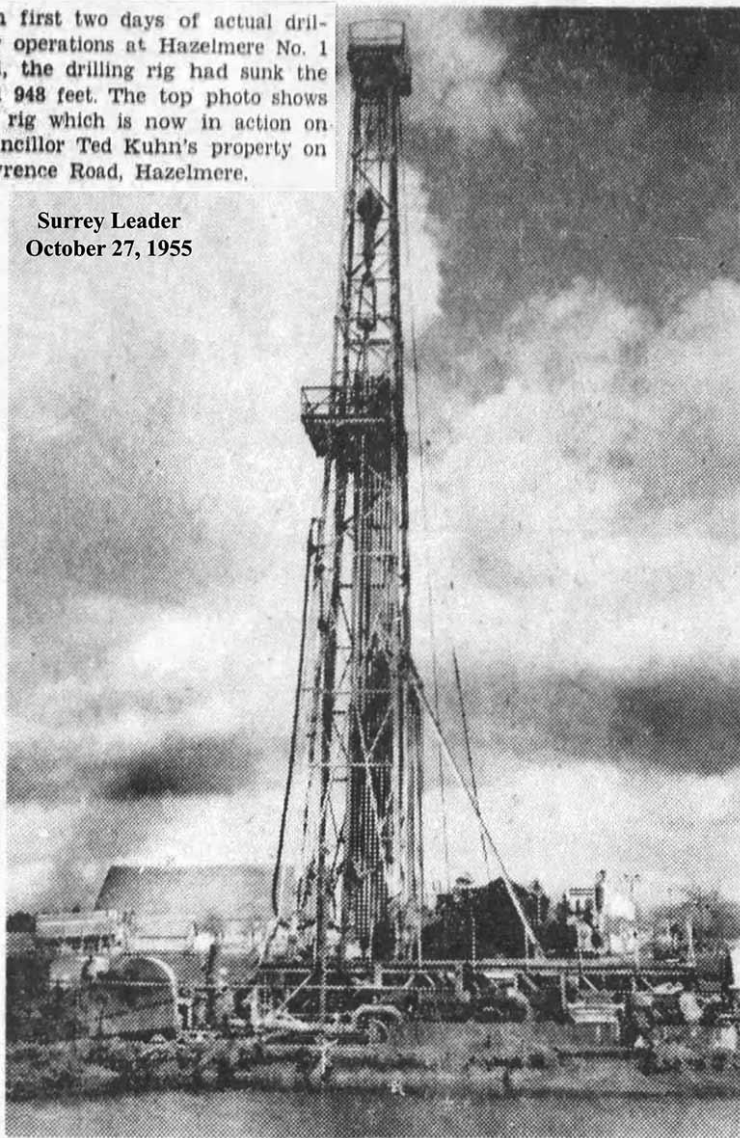
Hazelmere Farmer’s Pool

A drilling site for Hazelmere No. 1 well was in operation in October 1955 “on Councillor Ted Kuhn’s property on Lawrence Road” in Hazelmere,¹²⁴ a small community just east of White Rock municipality and in the southwest extremity of the Surrey municipality at the American border. The Seavant Development Company of Vancouver, hired to conduct the drilling on Hazelmere No. 1 well from a 122-foot-high derrick, was down to 948 feet after two days of drilling. Bill Vernon and Ted Kuhn were members of the “Hazelmere Farmer’s Pool which is providing the land leases for this drilling venture,” who clearly noted in an October 27 advertisement that their well was “in no way associated with Hercon & Kris Petroleum & Keay Petroleum Ventures at Aldergrove, B.C.”

Surrey Councillor Kuhn of Ward 5 had asked B.C. Electric Company’s lawyer, Walter H. Johnson on Monday June 12, 1955, at a Council meeting about natural gas being found in Surrey. “This is a very important question,” said Kuhn, as “there is a lot of freehold land, and I know two wells are going to be drilled in Surrey this summer,”¹²⁵ meaning his own property.

In first two days of actual drilling operations at Hazelmere No. 1 well, the drilling rig had sunk the well 948 feet. The top photo shows the rig which is now in action on Councillor Ted Kuhn’s property on Lawrence Road, Hazelmere.

Surrey Leader
October 27, 1955



¹²³ *Oil drilling rig moves to Abbotsford*, The Province, August 11, 1955.

¹²⁴ Surrey Leader, October 27, 1955.

¹²⁵ *B.C. Electric tries to by-pass municipalities on franchises*, Surrey Leader, June 16, 1955.

Key Oil & Gas in Abbotsford

Using a Wilson Rotary Rig, newly formed Vancouver City-based Key Oil & Gas (1955) Ltd. and Edmonton City-based Hercon Petroleum Ltd. began “speculative venture” drilling for oil and gas in March 1956 at the Hercon-Key-Evans No. 1 wildcat site “on a chicken ranch” southwest of Abbotsford near the Abbotsford airport. The site at the “southwest corner of Huntington Road and 370th Street,” was chosen after completing an “intensive study of all existing geological information relating to the area south of the Fraser River between Chilliwack and New Westminster.”¹²⁶ Key Oil had a partnership agreement with Hercon Petroleum Ltd., part of a “farm-out deal with J.R.J. Jamieson and Associates.”¹²⁷

The Vancouver News Herald quoted the spins made by Hercon president Conrad Humbke at a special promotional opener event for “newspaper visitors” that the “black gold” site in “Vancouver’s backyard,” deemed “the most important exploratory well now underway in B.C.”¹²⁸ The newspapers, as always, were helping fuel investor interest.

Key Oil’s first of many future newspaper advertisements in southwestern B.C. published from March through to December 1956 stated it had “oil and natural gas leases totalling 61,000 acres,” and were “operators of permit No. 305 and permit No. 688 covering this acreage.” The advertisements were meant to promote its stock, the “first public offering” of “300,000 treasury shares” going for “30 cents per share.” By October 1956 the company was “authorized to sell 500,000 shares at 35 cents.”

Key Oil stated that on March 19 its consultants, “Blanchet and Associates, geologists and petroleum engineers of Calgary, Alberta,” had examined



HERCON PETROLEUMS LTD. PIONEERING THE OIL INDUSTRY IN THE FRASER VALLEY

Will this lead to a discovery well? Most major oil fields in Alberta were started in a similar manner.

Write — Phone — WIRE
for information obtained so far, at 7410 feet—the greatest depth ever reached in the Fraser Valley.

For information only, fill in coupon:

¹²⁶ *Oil search underway at Abbotsford*, Vancouver News Herald, February 4, 1956.

¹²⁷ *Fraser Valley well down 2,500 feet*, Vancouver Sun, March 29, 1956.

¹²⁸ *Abbotsford oil well unveiled*, Vancouver News Herald, April 19, 1956.

INVEST in BRITISH COLUMBIA

KEY OIL & GAS
(1955) LTD. (N.P.L.) VANCOUVER, B.C.

NOW DRILLING for OIL and GAS
in the
FRASER VALLEY

COMPANY PROPERTIES: Owners of Oil and Natural Gas Leases totalling 61,000 acres and operators of: Permit No. 305 and permit No. 688 covering this acreage

The LATEST REPORT based on an analysis of sand and shale samples taken at depth of 1700 ft. on March 19th, 1956, substantiates the findings of Messrs. Blanchet and Associates, geologists and petroleum engineers of Calgary, Alberta, from whose reports our present drilling site was selected. Evidence of Gas and Oil seepages and recent geological findings make this a speculation of particular interest.

First Public Offering
300,000 Treasury Shares
30c per share

CONSULT YOUR BROKER

A Prospectus has been issued in respect of shares offered by the Company, which has been filed with the Registrar of Companies. A copy of the Prospectus will be furnished to every person who subscribes or applies for such shares.

The Wilson Rotary Rig now drilling 24 hrs. daily on company's property near Abbotsford Airport.

For information and Prospectus write or phone:

KEY OIL & GAS (1955) LTD.

211 - 215 Bower Building, 543 Granville St. TAllow 7833

THE COMPANY RESERVES THE RIGHT TO WITHDRAW THIS ISSUE AT ANY TIME
Vancouver Sun, March 23, 1956

samples found at the 1,700-foot level. Key Oil also hired Oklahoma born and Calgary City-based Harold Brett as its chief geologist for “drilling operations in the Fraser Valley.” In its advertised “24 hours per day” drilling operations – the roaring diesel engine noise and lights of which had undoubtedly annoyed local farmers – Key Oil announced to its “600 Lower Mainland investors” on November 15 that it had hired geologist Gordon Bell with the Calgary-based Schlumberger Well Surveying Corporation who “electro-logged and micro-logged our well to the total depth of 7,410 feet.” The company had to temporarily suspend the drilling operation to await “new equipment ... which is necessary for greater depth.” By mid-December 1956, Key Oil had drilled down to the “7,565-foot level – now more that 1,600 feet deeper than any well drilled in the Fraser Valley.” The final depth of the wildcat well was at 7,846 feet.

After finding a hair’s width of oil, the company exaggerated the potential of the Abbotsford airport chicken ranch well, stating in a July 24, 1957, Vancouver Sun advertisement, “Watch for Startling Announcement Soon: Consulting geological opinions confirm that crude oil recovered below 7,750 feet is coming from structures similar to those from

which many of the better wells in California, Kansas, Texas and Northern Mexico are receiving their best production!” In September 1957, Key Oil refused to identify the name of “a major company” that “made a substantial contribution to work at the well,”¹²⁹ with speculation that it was Imperial Oil.¹³⁰

Narrated below, that mystery company was most likely Richfield Oil of California which had been eagerly eyeing B.C. petroleum potential assets beyond its holdings in B.C.’s northeast petroleum fields, and beyond its significant and vast lease holdings of Alberta’s Athabasca tar sands. After renewing its Permit No. 305 lease with the B.C. government on August 12, 1957, Key Oil came up dry, and suspended drilling in August 1958 after reaching a depth of 7,862 feet and running a tab of “more than \$900,000 so far on development of two permits near Abbotsford.”¹³¹

HERCON PETROLEUMS LTD.

Now Drilling
BELOW 1½ MILES IN FRASER VALLEY
TREASURY OFFERING
25c PER SHARE

Company drilling rig operating 24 hours per day in search for oil, in Fraser Valley on permit 305 covering 45,103 acres in which Hercon hold 31½% of any oil production obtained.

ALSO

Hercon-Petroleum Ltd. holds oil properties and production in Alberta, 5% interest in approximately 13,000 acres in State of Washington, adjoining permit 305 and interest in 12 American claims at Beaver Lodge, Saskatchewan.

August 14, 1956

CONSULT YOUR BROKER

¹²⁹ *Production Test Set for Oil Well*, Vancouver Sun, September 27, 1957.

¹³⁰ *Imperial's interest sparks oil rumor*, The Province, November 10, 1956.

¹³¹ *\$19,000 paid for Key Oil property*, Vancouver Sun, June 23, 1959.

At Key Oil's annual meeting in New Westminster City on June 22, 1959, shareholders learned that after Richfield Oil's takeover payment of "\$19,000 for its property and wildcat well in the Fraser Valley," the Company was still in debt, with one shareholder yelling that Richfield was "selling us down the river!" Bellingham, Washington State company director Robert E. Lee (who would soon become vice president of Can-American Petroleum Ltd.) retorted, "you can't sell a company down the river if it doesn't have anything to sell!" Company directors revealed that Richfield Oil was their best bet, saying "overtures had been made by Imperial Oil, Pacific Petroleum and "numerous others".¹³²



R.H. Stanfield in Chilliwack

In a separate Fraser Valley petroleum venture to Key Oil & Gas, Altamont Exploration Company president Ross H. Stanfield stated to the Chilliwack Progress newspaper in March 1957 that he was "attempting to get ten thousand acres of oil leases in the Chilliwack area," refusing "to divulge why he believes there is oil, gas or other hydrocarbons in the area, but said that, if found, his and another unnamed company would put up enough funds to go ahead on the venture."¹³³ The article stated that "several people have signed leases giving them 12.5% royalties on any gas found." Stanfield: "the only way the project can go ahead is for farmers owning their oil rights to come in with us," and added that "any damage to their land would be paid for." Under the said contract terms, "the lessee also agrees not to drill a well within 200 feet of a house or barn, and to pay compensation for damage to crops or land caused by the drilling operations." Scheduled rental payments to farmers under the agreements ranged

¹³² \$19,000 paid for Key Oil property, Vancouver Sun, 1959.

¹³³ Oil sought in Chilliwack District, Chilliwack Progress, March 27, 1957.

from a paltry one dollar per year to five dollars per acre and added benefits from production royalty percentages.

Eight months later Altamont Exploration president Stanfield was furious, saying, "Oil prospecting in the Chilliwack area will never commence unless a minority of farmers change their attitude," adding that "we have gone ahead in Saskatchewan, Alberta and Manitoba, without any of the trouble we have had here."¹³⁴

Oil Sought In Chilliwack District

Drilling Could Start In May

CHILLIWACK, B.C., WEDNESDAY, MARCH 27, 1957

Ross Stanfield, president of Altamont Exploration Company, told The Progress today that he is attempting to get ten thousand acres of oil leases in the Chilliwack area.

"We have reason to believe that there might be oil or natural gas in the area," he stated.

"If everything goes well and we get the co-operation we need, we hope to commence drilling in May."

Mr. Stanfield refused to divulge why he believes there is oil, gas or other hydrocarbons in the area, but said that, if found, his and another unnamed company would put up enough funds to go ahead on the venture.

7 YEARS IN BUSINESS

Mr. Stanfield has been associated with mining circles about seven years—in particular in the mining of copper, lead and silver in the Cranbrook area.

The resistance or "trouble" Stanfield was referring to, was a "segment of local farmers" that were "holding out," preventing his company from getting the 10,000 acres it required for exploration. By mid-1959, Stanfield acquired 8,400 acres of provincial government leased lands (Permit No. 801), and 1,600 acres from private property agreements.

The odor of public resistance Stanfield got a whiff of from Fraser Valley residents would become remarkably poignant thirty-three years later.

At the same time in 1958, some 600 miles to the east near Pincher Creek in the southwest corner of Alberta, whiffs of escaping and seeping toxic sour (hydrogen sulphide, H₂S) gas from petroleum wells and newly built petroleum facilities were killing cattle and overcoming farmers, events that would eventually lead to a class action lawsuit.



¹³⁴ *Minority won't sign – oil quest at a standstill*, Chilliwack Progress, November 13, 1957.

IF YOU LIKE FAST ACTION-

AND LIKE TO SEE FOR YOURSELF HOW THINGS ARE GOING --

THIS OPPORTUNITY IS FOR YOU!

RIGHT NOW, as this newspaper goes to press, the drill bit is churning deep into the soil and rock a short distance south of Chilliwack. FRASER VALLEY CHILLIWACK No. 2 is now on its way to test formations believed favorable to commercial accumulations of oil and natural gas. Highlights of this promising picture are as follows:

For more than 50 years eminent geological opinion has named the Fraser Valley as a highly likely source of petroleum wealth. Accumulation of natural gas and oil have been found at many locations in the area.

One of the world's great oil companies, **RICHFIELD OF CALIFORNIA**, is engaged in an intensive survey after leasing efforts had gained them access to more than half of the valley's total acreage.

FRASER VALLEY PETROLEUMS Ltd., a Vancouver-based corporation with offices in Chilliwack, holds Government Permit No. 801, located directly south of Chilliwack, these holdings have been subjected to careful preliminary tests during the past 2 years.

The completely modern drilling rig is capable of efficient performance to a depth of 6,000 ft. and is in thoroughly experienced hands. The new structural test well is conveniently located and may be viewed at any time by those interested in the future of the company and district.



Fraser Valley Petroleum Ltd.

(Non - Personal Liability)

Head Office
No. 8 — 709 Dunsmuir St.,
Vancouver 1, B.C.

Chilliwack Office
No. 21, Boyd Building,
Young & Gore Sts.

We have prepared an Informative Brochure which is available upon request. Just fill in and mail the coupon to our office. There is absolutely no cost or obligation involved.

A copy of the company's prospectus has been filed with the Registrar of Companies at Victoria, B.C.

Chilliwack Progress, December 4, 1959

CLIP THIS COUPON

CLIP THIS COUPON

To: FRASER VALLEY PETROLEUM LTD., (N.P.L.)
No. 8 — 709 Dunsmuir St.,
Vancouver 1, B.C.

Please let me have a copy of your Informative Brochure and full information on FRASER VALLEY PETROLEUM LTD. (N.P.L.)—without cost or obligation, of course.

Name

Address

CLIP THIS COUPON

CLIP THIS COUPON

News surfaced in July 1959 that Altamont Explorations and Island Prince Copper were nevertheless pushing ahead, planning to drill at “the farm of Don Kickbush, on Chilliwack River,” following “tests which have been carried on since November” 1958 “to a depth of 1,130 feet.”¹³⁵ By end September 1959 no drilling had begun, and the consortium of three companies, Fraser Valley Petroleum, Altamont and Island Prince opened a promotional office at No. 21 Boyd Building on Gore Street and Young Road South in the Town of Chilliwack. Aside from Island Prince Copper Ltd., which John S. Hilton was identified as separately affiliated with, Hilton and Stanfield were stated directors of Altamont and recently incorporated Fraser Valley Petroleum Ltd. (August 21, 1959), with Stanfield as president and Hilton as secretary. It was stated in March 1960 that Charles E. Booth from Vancouver, and Robert Clark from Chilliwack were



¹³⁵ *Chilliwack farm may produce oil*, The Province, July 30, 1959.



Oil in the Fraser Valley?

- RICHFIELD PETROLEUM CORPORATION AND PURE OIL LTD., two major American oil companies, are now drilling in the Fraser Valley.
- CAN-AMERICAN PETROLEUM LTD. plan to start drilling within a few weeks about 4 miles south of Abbotsford.
- CHARTER OIL announces drilling in southwest B.C.
- FRASER VALLEY PETROLEUM LTD. (N.P.L.), an all-Canadian company now drilling at 2100 ft. level at Chilliwack, B.C., on Permit No. 801, invites your participation in an exciting drilling venture for oil and natural gas at Vancouver's back door, by this offering of:

200,000 SHARES AT 30c PER SHARE

Commercial production of oil or gas in the Fraser Valley would have a tremendous economic impact on the whole Lower Mainland and would offer large profit opportunities to those fortunate enough and with foresight enough, to get in on the ground floor with our progressive company.

FRASER VALLEY PETROLEUM LTD.

(Non Personal Liability)

543 Granville St., Rm. 215 Vancouver 2, B.C.

A 3,000,000 Share Company 50c Par Value

A prospectus has been filed with the Registrar of Companies for British Columbia, and will be furnished to every person who subscribes or applies for any of the shares offered hereby. These shares are to be considered "speculative."

DETACH AND MAIL NOW

FRASER VALLEY PETROLEUM LTD. (N.P.L.)

543 Granville St., Room 215 Vancouver 2, B.C.

I hereby apply for _____ shares at 30c per share and I enclose my cheque (or money order) for \$ _____ or please send me a brochure on your company.

Name _____ (Print) _____ Phone _____

Address _____

Occupation _____

Signature _____



THE MANY DIALS and switches inside the Schlumberger gives the layman the impression it is as complicated as the cockpit of a modern jet. In the above photo, R. H. Stanfield (left), president of the Fraser Valley Petroleum Ltd., looks on as George Kokonis, engineer for the logging company from Calgary, adjusts dials.

Chilliwack Progress, July 24, 1963

directors of Fraser Valley Petroleum, and the company's sales manager was Lee McGonigal, former manager of Chilliwack's Empress Hotel. In 1960, J. Norman Wright, North Vancouver real

estate investor (Dow-Page Real Estate Ltd.), and former small-time international oil investor who reportedly developed New Zealand's first commercial oil well, was hired as a consultant to Fraser Valley Petroleum. Very little was stated, and virtually nothing known, about Island Prince Copper in the newspapers. Altamont Exploration became a publicly traded company in 1966.

The "Kickbush homestead at 181 Chilliwack River Road" was a celebrated part of the recent settlement history of Chilliwack, with immigrant roots going back to the late 1800s.¹³⁶ Don Kickbush had been an active softball and soccer player, before he turned his full-time attention to farming and raising his herd of Holsteins. Now a derrick was being raised amongst his pea field and Holsteins. Drilling on a "test hole" on Don Kickbush farm began on Monday November 23, 1959, under driller Frank Zimmerman from Moses Lake, Washington, who had drilled wells in Texas and Arizona. Government regulations

AN INVITATION . . .

TO THE CITIZENS OF CHILLIWACK AND DISTRICT TO ATTEND THE OPENING OF DRILLING OPERATIONS IN THIS AREA AT WHICH TIME OUR NEW DRILL RIG WILL BE ASSEMBLED FOR INSPECTION.

PARKING IN THIS AREA IS ILLEGAL!

Free Bus Service

From Pacific Stage Lines Depot to Well Site.
EVERY HALF HOUR FROM 1:00 P.M. TO 4:30 P.M.

SAT.-SUN.-FEBRUARY 2ND 3RD

**Fraser Valley Petroleum
Limited (NPL)**

EVERYONE WELCOME

FREE COFFEE and DOUGHNUTS SERVED AT THE SITE

¹³⁶ Community portrait, Don Kickbush, farmer, Chilliwack Progress, April 22, 1953.

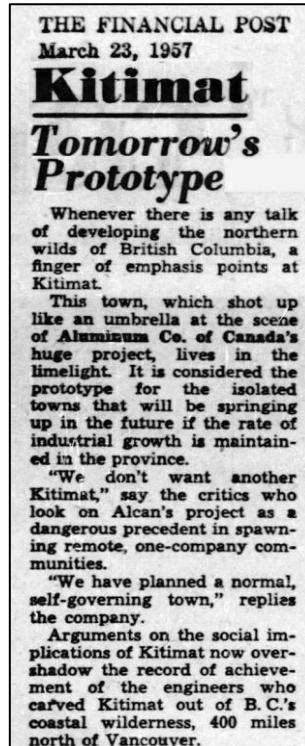
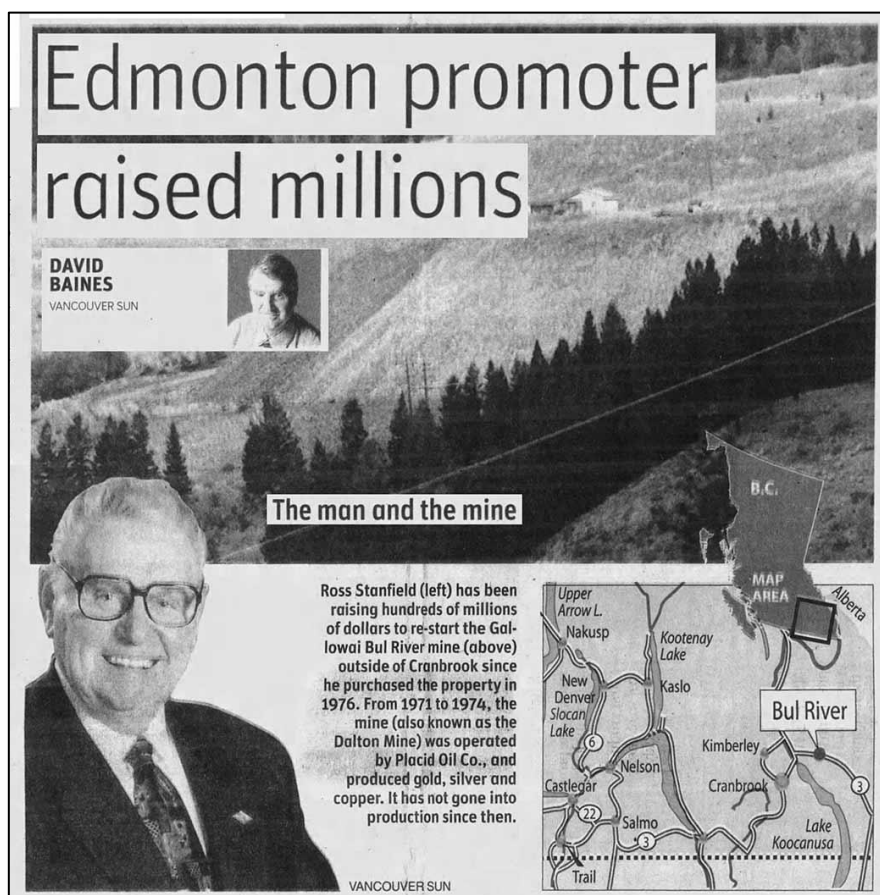
limited test holes to 2,000 feet. On February 4, 1960, R.H. Stanfield applied to the government “to convert the company’s operation from a test hole to a well.”

Drilling suspended in December 1961. By mid May 1962, drilling resumed at 2,140-foot level. Drilling continued, on and off, until late July 1963 when the hole was eventually down to 5,200 feet, and when Daniel T. Gunn from Billings, Montana became manager of drilling operations. On November 13, 1964, William Irwin, superintendent of the B.C. Securities Commission, rejected Fraser Valley Petroleum’s prospectus for company shares to be sold to the public, a decision which the company later appealed.

Five decades later in 2009, Vancouver Sun Business reporter David Baines wrote a long series of investigations on investment shenanigans by mining promotor Ross H. Stanfield. Turns out that Stanfield, the once Chilliwack oil promotor, was a confidence man and fraudster.

A group of disgruntled shareholders has filed a minority oppression petition against Gallowai and Bul River in B.C. Supreme Court. The petition alleges that Stanfield – who owns all the voting shares – has been running the companies in an autocratic and secretive manner, and “has failed to live up to the reasonable expectations of non-voting shareholders” to put the mine into production.”¹³⁷

Signs of ‘something amiss’ had been leaked decades earlier. In 1962, in Alcan’s instant, one-company community town of Kitimat created by a special Act of the B.C. Legislature in March 1953, a newspaper reported that “Ross Hale Stanfield was charged with carrying on a business in Kitimat without a trade licence.”¹³⁸ In October 1969, came an investigation by the U.S. regulatory agency, the Securities Exchange Commission (SEC), concerning the American Mobile Telephone & Tape Co. Ltd. which had failed to register shares bought



¹³⁷ *Edmonton promoter raised millions for mining project with questionable future*, Vancouver Sun, October 22, 2009. First of a series.

¹³⁸ Northern Sentinel, May 10, 1962.

by California residents. Directors of American Mobile were R.H. Stanfield and Benson Hilton. The matter was also investigated by the B.C. Securities Commission.¹³⁹

David Baines' first full-page October 2009 investigative article stated that the 81-year-old Stanfield "was a co-founder of the massive Gibraltar copper mine near Williams Lake, which went into production in 1972," and "in 1976, he acquired the Gallowai Bul River gold property from the Hunt brothers of Texas and began raising money privately." Baines also discovered that there was a warrant for Stanfield's "arrest outstanding in the State of California, in respect of his activities as secretary of a Canadian and American company for which the funds were raised in California." To counter ore sample evidence gathered by the B.C. Geological Survey Branch that contradicted Stanfield's "spectacular news" of ore bodies reported by his geologist at the mine property, Stanfield hired a remote Russian laboratory firm to convince his shareholders otherwise.

Empire Oil: Cooking the Books

During the initial petroleum exploration phase in the Fraser Valley from 1914 to 1924 – prior to the four more waves of petroleum exploration in the Fraser Valley (1944 – 1994) – were other confidence schemes.

For instance, the Empire Oil & Natural Gas Company Ltd. was incorporated on March 9, 1917, with R.H. Wright as president, H. Heaton (vice president), John M. Lacey (secretary), and directors A.S. Lock, James McDonald, and George Mutch. On Empire's 960 acres of lease lands, Empire Well No. 1 was located near "the intersection of the Yale and Otter Roads" in Aldergrove, on the Matsqui Prairie.¹⁴⁰ Not far distant was another exploratory wellsite on 2,000 acres of leases owned by the Monarch Oil and Natural Gas Company Ltd., incorporated on September 18, 1919, which Empire Oil took over in January 1922 (Monarch and Empire had shared the same building office in downtown Vancouver at the 612 Standard Bank Building since 1920). Two examples of the company's paid advertisements:

Nothing will bring greater prosperity to Vancouver; nothing will give you greater returns on a few dollars invested. ... Some of the best businessmen of Vancouver are stockholders in

**EMPIRE OIL AND NATURAL
GAS COMPANY LIMITED**
(NON-PERSONAL LIABILITY)

Authorized Capital \$250,000.00 Par value 10c per share

The holdings of this company, which consist of 960 acres, are situated in the Langley Municipality, near Aldergrove, and is considered one of the best locations in the Fraser Valley on which to prospect for oil.

It is a well-known fact that both gas and oil seepages are to be found throughout the Fraser Delta, and it is the opinion of many, who have had experience in other oil fields, that there is an immense area, underlain by oil, extending from Sumas to Boundary Bay, the finding of which will be a matter of national importance.

The holdings of this company are practically in the centre of this great area, and, when oil is found in commercial quantities, will be worth many millions.

Nothing will bring greater prosperity to Vancouver: nothing will give you greater returns on a few dollars invested. Look at the millions being made in the new oil fields of Wyoming, Colorado, Kansas, Oklahoma and Texas. The same may happen here any day. The time to invest in oil is at the beginning while the price is low. Take the history of any new oilfield and you will find that those who had the faith and courage to invest before the oil was struck made fortunes overnight.

The progress being made on Empire Well No. 1 is very satisfactory, the drill now being down about 300 feet in a 9-inch hole, and considerable gas has been encountered. Locations for Empire No. 2 and Empire No. 3 have been completed and drilling will be started on these two wells in the near future.

Some of the best business men of Vancouver are stockholders in this company, and you can be sure of an honest, capable management and quick action on your money.

A few dollars invested now may give you a new start in life.

Invest your money in a local company, one that you can keep in touch with all the time, one that you can go out to any day and see the drill working and above all one that will mean so much to Vancouver.

The low capitalization of \$250,000 makes this a very desirable investment for those who have a few dollars to spare.

A limited number of shares in this company will be placed on the market Monday, May 20, at 10 cents per share.

Opportunity is again knocking at your door, grasp it now before it is too late. This may be your last chance as the number of shares at this price is limited and may be taken off the market at any time without further notice.

If interested call or write The Province
May 18, 1918

**PACIFIC COAST DEVELOPMENT
COMPANY LIMITED**
OPEN EVENINGS
Phone Sey. 1489 419 PENDER STREET W.
295-1-47

¹³⁹ B.C. company faces check, The Province, October 10, 1969.

¹⁴⁰ Oil is found in brown shale, Vancouver Sun, February 7, 1920.

this company, and you can be sure of an honest, capable management and quick action on your money.¹⁴¹

Empire well down to 3,620 feet; still in hard capping. Showings of crude oil increasing very fast, also a little gas starting to come; all indications point to a big well when the drill breaks through this capping. It is an absolute certainty that "Empire" will get a commercial well – there is real crude oil of a very high grade in the well now and increasing every day. R.W. Wright, president.¹⁴²

Empire Oil

Capitalization only \$250,000. WELL NOW DRILLING Holdings 960 Acres

The holdings of this company are situated near **Aldergrove** in the **Langley Municipality**, which is recognized as the best location in the Fraser Valley for Oil. The drilling of the well is under the supervision of **Mr. Roy J. Widney**, who has had twenty years' experience in the California and Alberta Oil Fields and is considered one of the best drillers in the country. A heavy standard rig, capable of going down 5000 feet if necessary is now being installed, which, when completed, will be the largest and most up-to-date plant in British Columbia.

Action Not Words Our Motto

The **Empire Oil Co.**, which started in a small way, against all kinds of obstacles and opposition, has quietly forged ahead until today it ranks first in the field with the **best location**, the **best driller**, the **best equipment**, and we believe will have the **first commercial well**.

Invest your money in a company that is actually drilling and trying to accomplish something—you are guaranteed a square deal and a run for your money under an honest, capable management.

Empire Oil is absolutely the best buy on the market today at **10 cents per share**. Prices subject to advance at any time without further notice. It will pay you to investigate this company before placing your money elsewhere.

IF INTERESTED CALL OR WRITE

Pacific Coast Development Company, Ltd.

Phone Sey. 1489. Open Evenings. 419 PENDER ST. WEST.

Vancouver Sun, February 19, 1919

¹⁴¹ Company advertisement, The Province, May 18, 1918.

¹⁴² Company advertisement, Vancouver Sun, July 25, 1922.

At a special meeting in early 1927, Empire Oil shareholders demanded an investigation of the company. On July 26, 1927, under the authority of the Lieutenant-Governor-in-Council through the powers of the *Companies Act*, the government ordered the appointment of F.J. Carter, a Vancouver City chartered accountant, to investigate Empire Oil, Fraser Valley Oil Wells Ltd., Beaver Oil and Natural Gas Co. Ltd., and Empire Investment Co. Ltd. It took many months for Carter, an experienced accountant, to forensically unravel the complexities after examining most, but not all, of the books.

On Tuesday, April 3, 1928, the “internal affairs of the Empire Oil & Natural Gas Co. Ltd. were given a considerable airing at a meeting of the shareholders ... at the Board of Trade auditorium.” The Province newspaper reporter summarized the findings of Carter’s report:

The [three-hour] debate waxed warm after Mr. Jonathan Ross, solicitor for certain of the shareholders, had read the voluminous report of Mr. Carter. Distrust of the administration of R.H. Wright, president of the company for eleven years, was shown when a resolution was carried by an overwhelming majority asking for the resignation of Mr. Wright and the present directorate.

Wright and the various companies operated very extensively in the Fraser Valley wells some years ago and investments and trading in the various shares probably ran into millions of dollars. The Empire Company was organized in March 1917, and the first 100,000 shares were offered to the public at 2 ½ cents, with a commission to the Pacific Coast Development Company of 40 percent. The Pacific Coast Development Company was another Wright incorporation with a paid-up capital of \$300. In October 1921, the capital of the Empire was quadrupled to the amount of \$1,000,000 by the issuance of 7,500,000 shares of ten cents each.

The newspaper narrative continued at length explaining more of the complications about shares, takeovers, offers, and the transactions involving a separate company, “the British Financial Corporation, which had been incorporated in June 1922,” with “numerous other transfers between the companies in 1924 and 1925.”

In July 1924, Empire sold out to the Fraser Valley Oil Wells Ltd. In 1921, the Empire Trading Company was formed with Wright and his associates as directors, also of this company. This company carried on a large trading business on the Vancouver Stock Exchange. Late in 1923, a

Empire Oil and Natural Gas Company Limited

(Non-Personal Liability)

EMPIRE WELL now down 3620 feet; still in hard capping. Showings of crude oil increasing very fast, also a little gas starting to come; all indications point to a big well when the drill breaks through this capping.

It is an absolute certainty that “Empire” will get a commercial well—there is real crude oil of a very high grade in the well now and increasing every day. It is quite likely the next few days will show up something big.

Vancouver Sun, July 25, 1922
R. H. WRIGHT, President.

Empire Oil Co. Has

• • • • •

An Exciting Meeting Here

very serious situation arose, large losses having been made and members of the exchange called for settlement.

In November 1923, Mr. Wright with A.S. Lock and others incorporated the B.C. Montana Oil Wells Ltd. and on one day there was a transaction involving 45,000,000 shares. Stock exchange losses of \$27,011 of the Empire Trading Company were adjusted by the sale of 20,000,000 of the B.C. Montana shares. The enquiry by Mr. Carter explains the muddle of accounts. He has been unable to find any trust or other agreement covering the disposition of the remaining 25,000,000 shares.

In concluding his investigative report, Mr. Carter said:

“I feel compelled to say that the work of obtaining this information contained in this report has been arduous: that continuously I have been compelled to call for explanations where they should not be necessary if proper entries had been made in the books of the company; that the books of the company do not show truly the real standing of affairs; that the company’s affairs have been carried on largely by Mr. Wright and the Pacific Coast Development C. Ltd., which is very irregular; that probably moneys of the company have been used for the payment of losses on the exchange of Mr. Geo. Stewart and the Empire Trading Co. Ltd., over whose books and records I have no right of inspection.”

Richfield Oil’s Entry and Tar Sands Extravaganza

After the Los Angeles, California-based Richfield Oil Corporation announced in July 1958 that it was “starting an exploration oil drilling program in the Queen Charlotte Islands”,¹⁴³ news broke out in March of 1959 that the “major American oil company is planning an intensive search for oil and gas in B.C.’s lower Fraser Valley.”¹⁴⁴

Five months prior to the Fraser Valley surprise news, Richfield Oil’s Board of Directors announced the most bizarre, audacious, insane and lunatic scheme of the century, perhaps of all time itself.

Officials of Richfield Oil Corporation announce they will hold meetings with cabinet officials in Ottawa next week to discuss the use of nuclear explosions in developing Richfield Oil properties in Alberta.

Richfield to Enter Valley Oil Search

Intensive Exploration to Cover Large Area in Lower Mainland

By **JOHN USHER**
Sun Business Writer

A major American oil company is planning an intensive search for oil and gas in B.C.’s lower Fraser Valley.

Richfield Oil Corporation has already taken over permits covering 162,273 acres in the Fraser Valley and Greater Vancouver areas.

Negotiations for a further 44,533 acres are expected to be completed within the next week.

The permits were offered to Richfield by several local companies on a “package deal.”

W. R. (Bill) Mulger, lands manager of Richfield’s Calgary office, was in Vancouver last week to complete arrangements. He declined to say, however, when the firm will send crews into the area.

Vancouver Sun, March 31, 1959

¹⁴³ *Richfield confirms oil drilling plans*, Vancouver Sun, July 9, 1958.

¹⁴⁴ *Richfield to enter Valley oil search*, Vancouver Sun, March 31, 1959.

The company said it will attempt to get agreement on setting up a joint feasibility committee to study the project. The committee would include members of the Canadian government, the United States Atomic Energy Commission and Richfield.

Richfield now leases some 2,000,000 acres of tar sands in the Athabasca area from the Alberta government, and for the last two years has been carrying on discussions on possible use of heat generated by atomic explosions to free oil from the sands.¹⁴⁵

<h1>10 Million A-Bombs Needed To Tap Alberta's Oil Cache</h1>		
<p>Special to The Sun OTTAWA—A federal mines expert said today it could take up to 10,000,000 atomic bombs to free all the oil in Alberta's immense Athabasca tar sands.</p> <p>Dr. John Convey, director of the mines branch, said that at a cost of \$1,000,000 a bomb it would mean an outlay of 10 trillion dollars.</p> <p>He told the Commons mining committee that Canada should explore the possibility</p>	<p>of making its own A-bombs for the project.</p> <p>U.S. SCHEME The tar sands are believed to contain more than 300,000,000,000 barrels of oil—almost double the world's total known reserves.</p> <p>Dr. Convey seemed unmoved by the astronomical figures he quoted the committee.</p> <p>The A-bomb method of freeing the oil is a scheme of the</p>	<p>Richfield Oil Corporation of California. A government-industry committee under Dr. Convey is studying its feasibility.</p> <p>He said his estimate on the number of bombs which might be required for a full-scale operation was based on an assumption that one bomb—he called it a nuclear explosive—would be used for each acre of the 17,000 square miles of oil sands, at 640 acres to the square mile.</p> <p>OPERATION SAFE</p>
<p>Vancouver Sun, April 16, 1959</p>		

Oddly, there was nothing new about Richfield Oil's application at the time, but for the sheer scale of the scheme is what attributes its candidacy for the Halls of Infamy. From the time the scheme was first publicized in March 1958 by Professor Gerald W. Johnson before a congress of 4,000 members at the national convention of petroleum geologists, by April 1959, Dr. John Convey, a federal director of Canada's Mines Branch, stated "it could take up to **10,000,000 atomic bombs to free all the oil in Alberta's immense Athabasca tar sands. ... at a cost of \$1,000,000 a bomb ... would mean an outlay of 10 trillion dollars.**"

The tar sands are believed to contain more than 300,000,000,000 barrels of oil – almost double the world's total known reserves. Dr. Convey seemed unmoved by the astronomical figures he quoted the committee.

The A-bomb method of freeing the oil is a scheme of the Richfield Oil Corporation of California. A government-industry committee under Dr. Convey is studying its feasibility. He said its estimate on

¹⁴⁵ *Oil firm plans atom shot talks*, The Province, January 23, 1959.

the number of bombs which might be required for a full-scale operation was based on an assumption that one bomb – he called it a nuclear explosive – would be used for each acre of the 17,000 square miles of oil sands, at 640 acres to the square mile.

As for the cost, he said, it is likely the present cost of \$1,000,000 each for a 10-kiloton bomb would “go right down” once there was a commercial market for them. ... Dr. Convoy said that from information available so far, the operation is expected to be safe.¹⁴⁶

28—Santa Cruz Sentinel

Sunday, December 14, 1958

Atomic Bomb May Soon Be Harnessed For Peace Time Uses

Dr. Convoy’s ‘idea’ of “safe” would have been attributed to the then applied notion of “peacetime” or “clean” A-bomb applications, ignoring the repercussions of radioactive fallout and half-life contamination nightmares. To put things into proper perspective, from 1945 to March 1958 three Nation entities – the United States of America (121), the Soviet Union (60), and the United Kingdom (16) – had detonated a combined 197 nuclear bombs above and below ground.¹⁴⁷ By end of 1998, these nuclear blasts totalled 2,053, with the involvement of additional nation states.

Key to Athabaska tar sands?

Peaceful atomic blasts

Province, November 21, 1958

By J. R. WALKER
Southam News Services

In 1958, Dr. Gerald Johnson, who in September 1957 “helped the Atomic Energy Commission pioneer recent underground detonations in Nevada,”¹⁴⁸ namely the ‘Rainier’ atomic blast, was “working with the Atomic Energy Commission on “Operation Plowshare,” a study of the feasibility of using nuclear explosives for industrial and natural resource programs.”¹⁴⁹ At the Pacific Southwest Mineral Industry press conference on March 27, 1958, Johnson “pointed out the step from “evaluation” to actual commercial blasts could come “fairly rapidly:”

He listed these developments: A large copper mining firm wants to shatter a mountain of low-grade ore for easier mining. A power company hopes to tap the underground heat of an atomic blast for power generation. Several oil companies want to get at billions of barrels of residual oil by building up underground pressure through atomic blasting.¹⁵⁰

By August 1958, the newspapers were reporting more applications:

Once the problem of assuring against radioactive contamination of sea water is solved the scientists at the University of California’s Livermore laboratory say a big harbor 300 feet deep with a wide

¹⁴⁶ *10 Million A-Bombs Needed to tap Alberta’s Oil Cache*, Vancouver Sun, April 16, 1959. The Vancouver Sun also stated on August 9, 1958, that the Monsanto Chemical Co. had published an article about a hydrogen explosion “under the tar sands would produce such great heat it would make the Athabasca oil flow freely.”

¹⁴⁷ *A Time-Lapse Map of Every Nuclear Explosion Since 1945*, by Isao Hashimoto, YouTube.

¹⁴⁸ *Nuclear blasts may give boost in oil supply*, Concord Transcript, March 12, 1958.

¹⁴⁹ *Researcher claims we live in Ice Age*, Oakland Tribune, November 8, 1958.

¹⁵⁰ *UC Scientist says industry is seeking atomic bombs*, The Sacramento Bee, March 28, 1958.

channel could be created in the [Alaska] northland with four explosions. And they are confident the radiation problem will be licked in no distant future.¹⁵¹

Atom Landscaping Can Reshape Earth

Vancouver Sun, November 8, 1958

Underground Tests Reveal Way To Dig Out Canals, Crush Rock

And, while advertising the benefits of “opening up Alberta’s fabulous tar sands,” and “the oil shale beds in New Brunswick, too,” Dr. Johnson stated at the fifth annual conference of The Atomic Industrial Forum held in Washington, D.C., that if nuclear devices could be detonated in New Mexico’s salt beds, “the explosion of a one-million-ton atomic bomb exploded underground in such a mass every ten days would produce almost 500,000 kilowatts of electricity, enough to light a city of half a million people.”¹⁵³ At the same conference, John J. Grebe, Dow Chemical director of nuclear and basic research, said “there is enough petroleum in underground shale in Europe, the U.S., Canada and Brazil to make the Middle Eastern oil supply look like “a drop in the bucket,” and that it is enough “to float almost every country in 30 feet of its own oil.”

“Following Russian Premier Khrushchev’s United States visit” in late September 1959, Richfield Oil’s plans to “set off the test blast at Athabasca next February or March” of 1960 were most thankfully and fortunately abandoned. “The reason given it was learned today, is a warming of the cold war,” and

Following four additional October 1958 underground nuclear blast tests in Nevada, Dr. Johnson stated in a paper before the National Academy of Sciences on November 7, 1958, that “if excavation with thermo-nuclear energy becomes feasible ... harbors, canals, dams, lakes and other massive features of the earth’s surface can be created or changed with a few explosions.”¹⁵²

Sacramento Bee, March 28, 1958

UC Scientist Says Industry Is Seeking Atomic Bombs

SAN FRANCISCO — UP — Gerald W. Johnson, a University of California scientist who conducted the underground “Rainier” atomic blast in Nevada for the atomic energy commission, has hinted there soon may be a commercial demand for atomic bombs in American industry.

Johnson, of the Livermore, Alameda County, Radiation Laboratory, told a press conference at the Pacific Southwest Mineral Industry conference yesterday technicians from several industrial firms are working with AEC scientists on necessary “evaluations.”

He pointed out the step from “evaluation” to actual commercial blasts could come “fairly rapidly.”

He listed these developments:

A large copper mining firm wants to shatter a mountain of lowgrade ore for easier mining.

A power company hopes to tap the underground heat of an atomic blast for power generation.

Several oil companies want to get at billions of barrels of residual oil by building up underground pressure through atomic blasting.

Johnson asserted the Rainier shot proved beyond doubt underground atomic blasts can be used industrially without serious danger.

Radiation in the Nevada tunnel shot, he stated, was confined to a ball of 700 tons of melted rock at the center. A total of 600,000 tons of rock was crushed by the “low energy” atomic blast.

¹⁵¹ U.S. scientists probe oil sands extraction, Vancouver Sun, August 9, 1958.

¹⁵² Atom landscaping can reshape Earth, Vancouver Sun, November 8, 1958.

¹⁵³ Key to Athabasca tar sands? Peaceful atomic blasts, The Province, November 21, 1958.

statements to the effect that “resumption of nuclear tests, even for peaceful purposes, now is considered unlikely at least for some time.”¹⁵⁴ Despite the Geneva “test ban” talks, the United States announced plans to resume “peaceful application of atomic explosions” on limited test sites later in 1960.¹⁵⁵

The origins of this madness were tied to the New York City headquarters of The Atomic Industrial forum, a privately financed “non-profit organization of industry, labour and educators.” By 1957, “16 nuclear reactors were completed by U.S. firms, the Atomic Industrial Forum reveals:”

The Forum’s annual report reveals: “American industry signed contracts for the construction of seven uranium ore processing mills, 13 companies announced plans to enter the field of nuclear fuel element production and began construction of plants for the production of zirconium, and two companies completed construction of plants for the production of beryllium.”¹⁵⁶

Richfield Oil’s exploration entry into the regional political and domestic affairs of the Lower Mainland municipalities and into the halls of the B.C. provincial government brought with it the corporation’s flamboyancy, and new flavours and scents of North America’s unparalleled industrial and capitalism expansion boom that required vast amounts of fossil-fuel energy. In January 1963, at a Lower Mainland site, and at an exploration cost of \$800,000 dollars, Richfield Oil in partnership with Pure Oil Ltd. would happily boast that they had drilled the deepest petroleum well in all wells drilled in western Canada to that date, at 14,792 feet, which they, nevertheless, had to unhappily abandon.

The Rise of Van-Tor and Mainwaring’s Hunt for Underground Gas Storage

Narrated in Part One of the Second Wave, Van-Tor Oils and Explorations Ltd. (NPL) was incorporated in September 1948 and was listed on the Vancouver Stock Exchange in September 1952. Little was reported to the public about this company until the November 1953 press announcement that, in its hunt for an underground gas storage facility in Washington State, and “in anticipation of construction of a natural gas pipeline to serve Lower Mainland and U.S. Pacific Northwest communities,”¹⁵⁷ Van-Tor had incorporated Pleasant Valley Oil & Gas as its new subsidiary after gaining

majority control over its stock, with petroleum permits covering 3,700 acres in Whatcom County in northwest Washington State. It was stated in 1952 that Pleasant Valley was “connected with natural gas interests in Canada who want to bring a pipe line into the Northwest,” with “the idea behind these wells is



¹⁵⁴ 'Thaw' stalls Athabasca atom blast, Vancouver Sun, September 30, 1959.

¹⁵⁵ U.S. and Russia match explosions – Competitive co-existence goes underground, The Province, April 21, 1960.

¹⁵⁶ Industries make rapid progress in atom use, The Pittsburgh Press, January 6, 1958.

¹⁵⁷ Van-Tor to store gas in Washington State, Times Colonist, November 30, 1953.

to have a natural storage space for the Canadian gas so Bellingham would have a continuous supply in the event of a pipe line breakdown.”¹⁵⁸

And it wasn't until June of 1955 that Van-Tor's directorships were first revealed, with W.C. Mainwaring as its president, alongside other corporate and financial elites.¹⁵⁹ In 1955 both Mainwaring and director John McMahon were offered “options to purchase 50,000 shares each of Van Tor oil stock at 50 cents a share,” which at the time were selling a “90 cents a share.”¹⁶⁰ Six days later, the stock was selling at \$1.03. Van-Tor also had at least two petroleum lease permits in northeast B.C. acquired in the early 1950s (one parcel of 29,440 acres and another of 15,000 acres), and partnership agreements with Pacific Petroleums, Canadian Atlantic Oil Company, Wilrich Petroleums (of Toronto), and Trans Era Oils Ltd. for the development of natural gas and oil.

In April 1956, Mainwaring, the vice president of the B.C. Electric Company, a subsidiary of the B.C. Power Corporation Ltd. (a holding company of the Canada Power Company), was promoted from vice president to president of Western Development and Power Ltd., a subsidiary of B.C. Electric's parent, B.C. Power Corporation. Lining up B.C. Electric's expansion plans with imminent arrival of Westcoast Transmission's new gas pipeline into the Fraser Valley by end of 1956, Mainwaring was investigating an underground gas storage location, about 200 of which had already been experimentally developed by the petroleum

WHEN NATURAL GAS COMES — Some Investors Will Profit!

Which Stocks will benefit when Natural Gas comes to the Vancouver-Seattle-Portland area? We have prepared a report which discusses the Natural Gas outlook and presents in detail the current position and future prospects for . . .

VAN TOR OILS & EXPLORATIONS LTD.

Write or phone for your copy today, without obligation

HALL SECURITIES LIMITED

200 Hall Bldg.

PA 8311

The Province, May 10, 1954

U.S. Well May Store Gas From North B.C.

Millions of cubic feet of natural gas piped from the northern gas fields of British Columbia may be stored 800 miles away in a huge underground well just south of the B.C.-Washington border, it was learned today.

The stored gas would be held in reserve after the needs of customers in B.C. and the north-western United States have been supplied.

(A U.S. government ruling, issued in Washington last November, will permit the piping of Canadian gas into the north-western United States and allow the Pacific Northwest Pipeline Corporation to import 300,000,000 cubic feet per day from the Westcoast Transmission Co.)

The move to store gas in Washington was disclosed in a deal by a Vancouver company, Van-Tor Oils and Exploration Ltd. The company will borrow \$1,500,000 from Western Development & Power Ltd.—a subsidiary of B.C. Electric—to acquire shares in the capital of Pleasant Valley Gas & Oil Co., a Washington corporation, as well as to complete financing of its own gas property in the Peace River country.

The Pleasant Valley company owns a well just south of the U.S. border capable of storing large quantities of the natural gas to be piped from the northern gas fields of Fort St. John.

The loan sought by Van-Tor would bear interest at 5 per cent per annum.

The principal and interest of the loan would be secured by bonds of the Van-Tor company, the bonds constituting a first mortgage on the company's present and future holdings.

The sum of \$200,000 from the loan would be used for the purchase of treasury shares in the capital of the Pleasant Valley company, and of the balance, \$250,000 would go to acquire the franchise to serve Nanaimo with gas, and development of a gas distribution system there.

A further \$500,000 would be used to complete Van-Tor's title to the 10 per cent interest in 70 sections of the Fort St. John gasfield.

Times Colonist, July 12, 1956

¹⁵⁸ *Birch Bay to receive gas from wells near Blaine*, Bellingham Herald, September 25, 1952.

¹⁵⁹ In a Vancouver Sun, June 25, 1955, newspaper announcement of his appointment as a new director of Deeks-McBride Ltd., the caption listed most of his affiliations: “past president of the Canadian Electrical Association, Northwest Electric Light & Power Association, Pacific Coast Gas Association, Vancouver Rotary Club, and Vancouver Electric Club. He is also a director of Royalite Oil Company Limited; Britalta Petroleums Limited; and member of the Advisory Board of the Royal Trust Company.”

¹⁶⁰ *Directors of Van Tor get big options*, Vancouver Sun, June 10, 1955.

industry in North America. By 1989, companies and corporations would develop and operate about a grand total 400 underground gas storage facilities in Canada and the United States.

In July 1956, Van-Tor Oils made an offering for shares in the Pleasant Valley Gas & Oil Co. The deal, announced on July 27, 1956, said that "Pleasant Valley has a shallow gasfield with storage possibilities near Blaine, Washington, 30 miles south of Vancouver." It was announced on August 17, 1956, that Van-Tor would:

Receive \$1,837,500 for its treasury from Western Development & Power Ltd., a subsidiary of B.C. Power Corporation, when the plan is fully approved. The funds will be used by Pleasant Valley for a development at Birch Bay, where it is hoped an important storage will be developed for natural gas for the Pacific Northwest gas utilities, in which Van-Tor will have a substantial holding. As part of the plan, Van-Tor would turn over to Western Development a 51 percent interest in Pleasant Valley Gas & Oil Co.¹⁶¹

It was later identified that with Western Development's financing, "Van-Tor bought a 10 per cent interest in Permit 22 in the Peace River country, where Pacific Petroleum was the operator; bought a 69 per cent interest in Vancouver Island Gas Co. Ltd. (Vigas); and participated in exploration for underground gas storage in Washington State."¹⁶²

Van-Tor vice president Philip Barchard stated:

It was the Birch Bay storage basin that primarily brought Western Development & Power Ltd. into this financing agreement. Its potential importance as a storage basin for

Big traders of 1957 on Vancouver exchange

The Province, January 27, 1958

INDUSTRIALS — 5 LARGEST TRADERS

Inland Natural Gas Co. Ltd.	263,379	\$ 2,358,049.11
Can. Collieries Resources Pfd.	248,527	186,662.90
Capital Estates Inc.	132,725	654,558.52
Can. Collieries Resources	131,044	683,300.39
Alberta Distillers Ltd. Voting Trust	126,250	176,735.00

INDUSTRIALS — 5 HIGHEST VALUES

Inland Natural Gas Co. Ltd.	263,379	\$ 2,358,049.11
B.C. Power Corp. Ltd.	20,875	941,439.79
Inland Natural Gas Co. Ltd. 5% Pfd.	54,905	904,401.68
Powell River Co. Ltd.	20,434	784,763.14
Trans Mtn. Oil Pipe Line Co.	7,578	727,913.63

OILS — 5 LARGEST TRADERS

<u>Van Tor Oils & Exp. Ltd.</u>	3,314,551	\$ 6,090,856.85
Peace River Petroleum Ltd.	1,458,395	1,957,335.10
Futurity Oils Limited	1,383,825	975,873.50
United Oils Ltd.	695,555	2,177,391.00
Sparmac Petroleums Ltd.	592,895	147,381.75

OILS — 5 HIGHEST VALUES

<u>Van Tor Oils & Exp. Ltd.</u>	3,314,551	\$ 6,090,856.85
Pacific Petroleum Ltd.	127,358	3,200,416.97
Peace River Natural Gas Co. Ltd.	165,480	2,413,743.02
Fort St. John Petroleum Ltd.	400,566	2,307,457.45
United Oils Ltd.	695,555	2,177,391.00

VAN TOR UPS SHARE CAPITAL

Authorized capital of Van Tor Oils and explorations Ltd., has been increased to 4,500,000 shares of 50 cents par value by creation of an additional 1,500,000 shares.

There are now 2,277,957 shares of the company issued and authorized for trading.

Vancouver Sun, May 3, 1956

¹⁶¹ BCE to finance Van-Tor: Natural gas storage planned by company, The Province, August 17, 1956.

¹⁶² Van-Tor investors facing dilemma, Vancouver Sun, February 12, 1964.

natural gas from both the Peace River and U.S. areas makes it of strategic value in the Pacific Northwest, particularly to B.C. Electric.¹⁶³

A July 1957 newspaper article stated that "Pleasant Valley is owned 51 percent by Western Power and Development Co. Ltd., a wholly owned subsidiary of B.C. Power Corporation, and approximately 48 percent by Van-Tor Oil & Explorations Ltd."¹⁶⁴

In January 1957, Pleasant Valley's proposed storage project at "2,000 feet underground with the injection point presently planned on Paul Bailey's Rt. 3, Ferndale, property," was to "include some 9,000 to 10,000 acres" in Whatcom County between Ferndale and Blaine, about half, or 4,500 acres, were under lease. At a "cost between \$1,500,000 and \$2,000,000," the "ultimate area, covering an estimated 20 square miles," was "located in Townships 39 and 40, Range 1-East, and should provide a pocket for storage of between 35 and 40 billion cubic feet of natural gas."¹⁶⁵ The Bellingham Herald newspaper stated that "the project hinges on a Bill to be introduced [next day] Tuesday in the State Senate by Sen. Homer Nunamaker (D-Bellingham)," as "present public laws of the state have no provision for underground storage."

Pleasant Valley's land man, J.C. West, said the project "will have no effect on surface use of the land," and that "about a half dozen wells, to cost nearly \$300,000, will be located over the area."

It was revealed in mid-February 1957 that in "an amendment "agreed upon two weeks ago," and as a condition of project approval, the company must carry liability insurance or be in position to "secure payment of any liability resulting from any occurrence arising out of or caused by the operation or use of storage facilities".¹⁶⁶ Four months later Pleasant Valley announced on June 6 that it was "suspending lease acquisition activities," because the company's geologists were taking a second look at the project's geological capabilities.¹⁶⁷ With Van-Tor's prospects waning, it abandoned the Whatcom County

Vancouver Sun, July 15, 1957

Tests Slated For New Gas Storage Plan

Pleasant Valley Gas & Oil Company is planning to turn a "dry" gas well into a giant storage tank capable of holding several million cubic feet of natural gas.

Tests have started on the Birch Bay underground storage area, to investigate the possibility of pumping natural gas back into the ground for future use.

Dr. H. L. Purdy, president of Pleasant Valley, says that seismicographic tests will be made to secure more detailed information.

A well was sunk 10 years ago, but failed to produce gas. It is considered, however, that the area would make a "natural" storage basin.

If tests are successful, the gas store will be used by B.C. Electric and possibly distributors in Seattle and Portland.

Apart from reducing the overheads on present tanks, which cost \$90,000 to paint and maintain, the natural store will safeguard against loss of supply due to breaks in the pipeline and will also reduce charges considerably.

Birch Bay Gas Storage Plan Moves Ahead

B.C. Power Corp. Ltd. reports it has made favorable progress in its efforts to locate natural gas storage structures underground in Washington.

Pleasant Valley Gas and Oil Co., owned 51 per cent by Western Development and Power Co., a wholly-owned subsidiary of B.C. Power and 47.3 per cent by Van-Tor Oils and Explorations Ltd. is holder of the ground in Washington and is conducting the investigations.

Natural storage for gas underground would be a valuable asset for B.C. Electric Co. Ltd., B.C. Power subsidiary which supplies natural gas to Vancouver and the rest of the population centres of South-eastern British Columbia. It would reduce the costs of furnishing gas in peak demand periods.

One of the storage areas is in the Birch Bay region, 40 miles south of Vancouver, where \$75,000 has been spent to date to evaluate prospects for gas storage. Vancouver Sun, Oct. 4, 1957

¹⁶³ B.C. Power Corp. Loans \$1.5 million to Van-Tor, Vancouver Sun, August 17, 1956.

¹⁶⁴ Test set for gas storage, The Province, July 10, 1957.

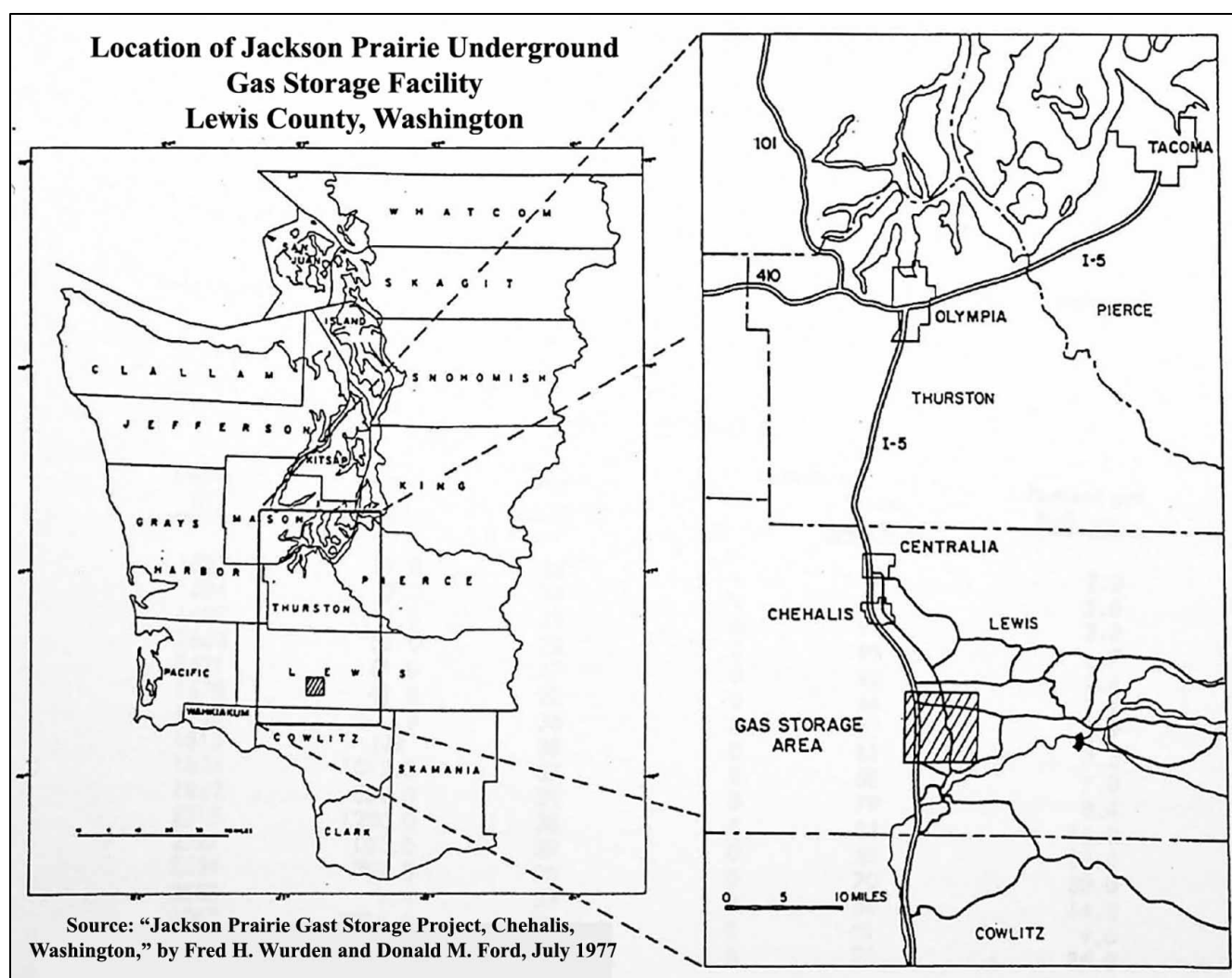
¹⁶⁵ Underground gas storage planned here, Bellingham Herald, January 21, 1957.

¹⁶⁶ Protests on gas Bill unfounded, company states, Bellingham Herald, March 3, 1957.

¹⁶⁷ Gas firm stops lease acquisition, Bellingham Herald, June 6, 1957.

underground storage project and cast its storage eyes southward near the Washington State hamlet of Mary's Corner where it had already staked optional roots.

It was announced in March 1958 that Washington State Division of Mines and Geology issued a permit to Pleasant Valley Gas to "drill an exploratory oil well near Mary's Corner in central Lewis County," south of Chehalis, and the name of the well "Pleasant Valley – J.W. Tanner – Continental Oil Company Guenther Well No. 1."¹⁶⁸ Tanner acquired properties from Continental Oil, which had previous partnership interests in drilling for oil north of Chehalis at Coal Creek in 1955 to 1956. The permit application was made by Texas-born James W. Tanner, a resident of Olympia, "who has been associated with the operations of the Sunshine Mining Company's Medina Well No. 1 near Ocean City and other oil exploration activity in the State."¹⁶⁹ In 1958, Tanner was being "sued for about four million dollars by [Percy J.] Boylan [secretary-treasurer of the Oil, Uranium, Gas Corp.] for alleged conspiracy to deprive Boylan of oil drilling rights in Gray Harbor," Washington, a suit that was dismissed by Judge George H. Boldt.¹⁷⁰



¹⁶⁸ *Gets oil well permit*, The Spokesman Review, March 6, 1958.

¹⁶⁹ *Permit granted for oil well in State*, Bellingham Herald, March 6, 1958.

¹⁷⁰ *Sued lawyers sue suers in court switch*, The Tacoma News, May 16, 1958.

Jackson Prairie Test For Natural Gas Storing Set

SEATTLE (AP) — Three companies, acting under a natural gas storage law passed by the 1963 Legislature, will begin geological testing of a 4,000-acre tract in Southwestern Washington Monday.

The three are Washington Natural Gas Co., Washington Water Power Co. and El Paso Natural Gas Co.

George M. Brunzell, president of Washington Water Power, said Friday the area to be tested has a potential for storage of between 15 and 20 billion cubic feet of gas. It is at Jackson Prairie, about nine miles southeast of Chehalis.

"Storage of natural gas underground will permit stockpiling during low use periods for ultimate consumption during peak use periods. . . ." Brunzell said.

He said geologists would begin the tests by exploding small dynamite charges on the surface at spaced intervals and measuring the time or length of the shock waves created.

Washington Natural Gas operates in Western Washington, Washington Water Power has gas distribution systems in Eastern Washington and Northern Idaho and El Paso serves 11 western states.

Longview Daily News
April 20, 1963

Mary's Corner was near Jackson Prairie, the name eventually given to the future underground gas storage facility controlled from 1963 onwards by an American consortium of three companies, Washington Natural Gas Company, Washington Water Power Company, and the El Paso Natural Gas Company. Well No. 1 being drilled "by a Utah outfit . . . Miracle and Wooster" was on private property owned by Sylvester Guenther. It was noted that Van-Tor's Pleasant Valley had already "pieced the oil and land leases together" back in 1956.¹⁷¹

Pleasant Valley's contract with Tanner was for the company to fork over \$15,000 annually for lease payments, and Tanner would ultimately receive \$450,000 if the company were to take over his 4,000-acre farm and timberland properties. From April to May of 1958, Pleasant Valley conducted a seismic survey and drilled a test hole, "but no gas or oil was found but the strata apparently was suitable for gas storage."¹⁷² From 1959 to 1961 "Pleasant Valley did no more work and gave no indication whether it would

exercise its option." The reason stated for the lapse in exploration activities at Jackson Prairie was that with Van-Tor's \$350,000 investment costs lost in its bid for an underwater pipeline route to Vancouver Island, in petroleum development costs in northeast B.C., and because of "tests at Birch Bay and later Chehalis for storage [that] were unsuccessful," "Van-Tor ran out of money."¹⁷³

In August of 1961, when the W.A.C. Bennett Social Credit government expropriated or nationalized the B.C. Power Corporation and all its subsidiaries, including B.C. Electric, the Western Power Development Company and Van-Tor, "B.C. Power was [now] only interested in liquidating"¹⁷⁴ and

Van-Tor Investors Facing Dilemma

Ft. St. John Takeover Leaves Faint Hope of Gain by Option

Vancouver Sun, February 12, 1964

What happens to a once-glamorous but now-faded speculative oil stock that could make thousands of dollars in paper profit on a stock option—if it only had the money?

That's what shareholders and investors are wondering today about Van-Tor Oils and Explorations Ltd., which was forced on Tuesday to transfer all its assets to Fort St. John Petroleum Ltd.

All the unhappy shareholders got in return was an option, exercisable by June 1, to buy 500,000 shares of Fort St. John at 80 cents a share.

Fort St. John sold for \$1.28 on Tuesday, but dropped 13 cents at noon today, apparently in fear that the option would

in Van-Tor debentures, overdue more than \$300,000 in principal and interest. If this had not been done, Fort St. John would have foreclosed.

HALL EXPLAINS

Now Fort St. John was riding high, while Van-Tor shareholders appeared still numbed by the turn of events. Here is how it happened, as Hall explained to the meeting:

In 1956, Van-Tor issued \$1.5 million in debentures to Western Development & Power Co. Ltd., a subsidiary of B.C. Power Corporation.

With the money, Van-Tor bought a 10 per cent interest in Permit 22 in the Peace River country, where Pacific Petroleum was the operator; bought a 69 per cent interest in Vancouver Island Gas Co. Ltd. (Vigas); and participated in exploration for underground gas storage in Washington State.

PIPELINE DREAM

Hall said Van-Tor went into Vigas with the dream of building a pipeline to Vancouver Island. About \$350,000 was advanced for this purpose, but after hearings Magna Pipeline Co. was given a certificate to do the job. (Magna was later unable to proceed with the project, and was bought by Cascade Natural Gas of Seattle.)

Tests at Birch Bay and later Chehalis for storage were unsuccessful, Van-Tor ran out of money, and the land leases were surrendered.

Hall said it had been expected that development costs in Permit 22 would be paid



FRANK HALL

. . . has option problem.

be exercised. At \$1.15 per share, this would give Van-Tor a paper profit of \$175,000 if it could only take up the option.

THIN HOPE

¹⁷¹ *Drillers moving in — Mary's Corner new site for oil drilling*, The Daily Chronicle, March 6, 1958.

¹⁷² Bill Fletcher, Vancouver Sun, February 22, 1962.

¹⁷³ *Van-Tor investors facing dilemma*, Vancouver Sun, February 12, 1964.

¹⁷⁴ *Ibid.*

“didn’t care about gas storage in the U.S.”¹⁷⁵ As a result, in 1962 Van-Tor surrendered its lease agreements with J.W. Tanner’s lands at Jackson Prairie. Van-Tor Oils and Explorations Ltd.’s final blow came on February 11, 1964, when all of its assets were forcibly transferred by government to Fort St. John Petroleum Ltd. Van-Tor’s four million shares were now only worth four cents on the dollar.

This was a sad end for Van-Tor, one of the most heavily traded and talked about speculatives on the Vancouver Stock Exchange in the mid 1950s. By 1957 the stock hit \$2.79 a share, the company was developing oil and gas fields and planning a pipeline to Vancouver Island.¹⁷⁶

Richfield Oil Enters the Fraser Valley

On March 31, 1959, the Richfield Oil Corporation announced a negotiated “exploratory venture” “package deal” with “several local companies” on “permits covering 162,273 acres in the Fraser Valley and Greater Vancouver areas,” and “a further 44,533 acres in the Cloverdale, Hazelmere and Langley areas” with leases owned by at least three companies, “Van-Tor, Royal Canadian Ventures and Peace River Pete.”¹⁷⁷

Phil Barchard, vice-president of Van-Tor, said today these permits will be signed over to Richfield “within the next week.” The American company will search for oil and gas. If any likely gas storage facilities are located, Van-Tor will probably take them over. Van-Tor has been drilling for underground storage wells for the B.C. Electric Company for some time. It is currently carrying out drilling in the Pleasant Valley area in Washington State, but Hazelmere has also been suggested as a likely area.



Richfield’s package deal included “50,000 acres near Abbotsford Airport, where Key Oil has been drilling since 1956,” and “permits for a further 112,000 acres formerly held by oil man John G. White and lumberman Elmer Palmer in the Boundary Bay area.”

Richfield Oil began operational seismic surveys “west of Abbotsford” in early April 1959, averaging \$25,000 a month:

The work is being carried out by a crew of 12 and office staff of five employed by Western Geophysical Co., Calgary. The crew brought eight trucks of equipment from Alberta for drilling and shooting. Head of the survey crew is Warner Loven, and the job should take from four to six months, he estimates.¹⁷⁸

¹⁷⁵ Bill Fletcher, Vancouver Sun, February 22, 1962.

¹⁷⁶ *Van-Tor investors facing dilemma*, Vancouver Sun, February 12, 1964.

¹⁷⁷ *Richfield to enter valley oil search*, Vancouver Sun, March 31, 1959.

¹⁷⁸ *Seismograph survey seeks oil in valley*, The Province, April 21, 1959.

Richfield Oil has assembled more than 200,000 acres in the Fraser Valley – almost half the entire valley ... Seismographic work already is underway on the acreage which takes in the land from Abbotsford west to the Gulf of Georgia and from the U.S. border to the Fraser River.¹⁷⁹

By June of 1961, the RCMP (Royal Canadian Mounted Police) reported that Richfield Oil was setting off “small dynamite charges about a mile off-shore” from White Rock as part of its seismic surveys,¹⁸⁰ no doubt disorienting and chasing off the local whale populations.

On Friday, August 21, 1959, Richfield Oil announced the finalization of its March 1959 package deal now with seven corporations “and private individuals” for amalgamated Fraser Valley lands covering a whopping 206,000 acres. The companies were: Big Horn Petroleums Ltd.; Delta Oil and Gas Co.; Gulf Developments Ltd.; Peace River Petroleums Ltd.; Richwell Petroleums Ltd.; Royal Canadian Ventures Ltd.; and Van-Tor Oils and Explorations Ltd. A condition of that deal said, “Van-Tor, Peace River Pete, Royal Canadian Ventures and Richwell retain the rights to any underground capacity for storage of gas which may be found in the first two permits,” being government permits No. 670 and No. 677, but not permit No. 804.

With addition of the new acreage, it is anticipated that valuable correlations will be possible with the complete seismic program and the well drilling test carried out by Van Tor et al on 670 and 677. What petroleum men call “a high” – a promising geological set up for drilling – is reported to exist on some of the acreage acquired from Peace River Pete [Pete = Petroleum].¹⁸¹

Through its chain of Van-Tor subsidiary command, in 1959 the B.C. Electric Company was quietly test drilling for an underground gas storage facility candidate in the Hazelmere homestead community in the Fraser Valley. And, with little fanfare, Richfield Oil was also privately interested in developing an underground gas storage site in Point Roberts, the American corporation in the American territory peninsula just south of Tsawwassen.


Kiernan Calling...

By Hon. W. K. Kiernan
Minister of Mines

From time to time I receive inquiries regarding oil exploration in the Fraser Valley. By now it is general knowledge that Richfield Oil Corporation has taken over most of the existing exploration permits in this part. Since Richfield is one of the major petroleum companies, we can anticipate a pretty active exploration program in the Fraser Valley during the coming years.

Chilliwack Progress
May 20, 1959

In this column I will attempt to answer some of the questions most commonly asked in relation to surface rights as they are affected by the issuance of an exploration permit by the government.



¹⁷⁹ *Richfield launches Valley oil search*, August 22, 1959.

¹⁸⁰ *White Rock blasts part of oil survey*, June 14, 1961.

¹⁸¹ *Richfield launches Valley oil search*, August 22, 1959.

LOCAL COMPANIES SHARE

Richfield launches Valley oil search

By **WILLIAM E. RYAN**
Province Business Editor

Richfield Oil Corp. has assembled more than 200,000 acres in the Fraser Valley — almost half the entire valley — and has launched a comprehensive search for oil and gas.

Seismographic work — a preliminary to actual drilling — already is underway on the acreage which takes in the land from Abbotsford west to the Gulf of Georgia and from the U.S. border to the Fraser River.

The big U.S. oil company brought the valley acreage under its control to over the 200,000-acre mark with signing of an agreement, announced Friday, with a group of independent oil companies and private individuals.

The deal was signed with Van Tor Oils and Explorations Ltd., Royal Canadian Ventures

Ltd., Peace River Petroleum Ltd., Richwell Petroleum Ltd., Delta Oil and Gas Co., Big Horn Petroleum Ltd., Gulf Developments Ltd. and private individuals.

Richfield made a cash payment to these companies for permits 670, 677 and 804, covering about 45,000 acres.

These companies retain a three per cent gross over-riding royalty in all oil or gas production which Richfield may find. As well, Van Tor, Peace River Pete, Royal Canadian Ventures and Richwell retain the rights to any underground capacity for storage of gas which may be found in the first two permits.

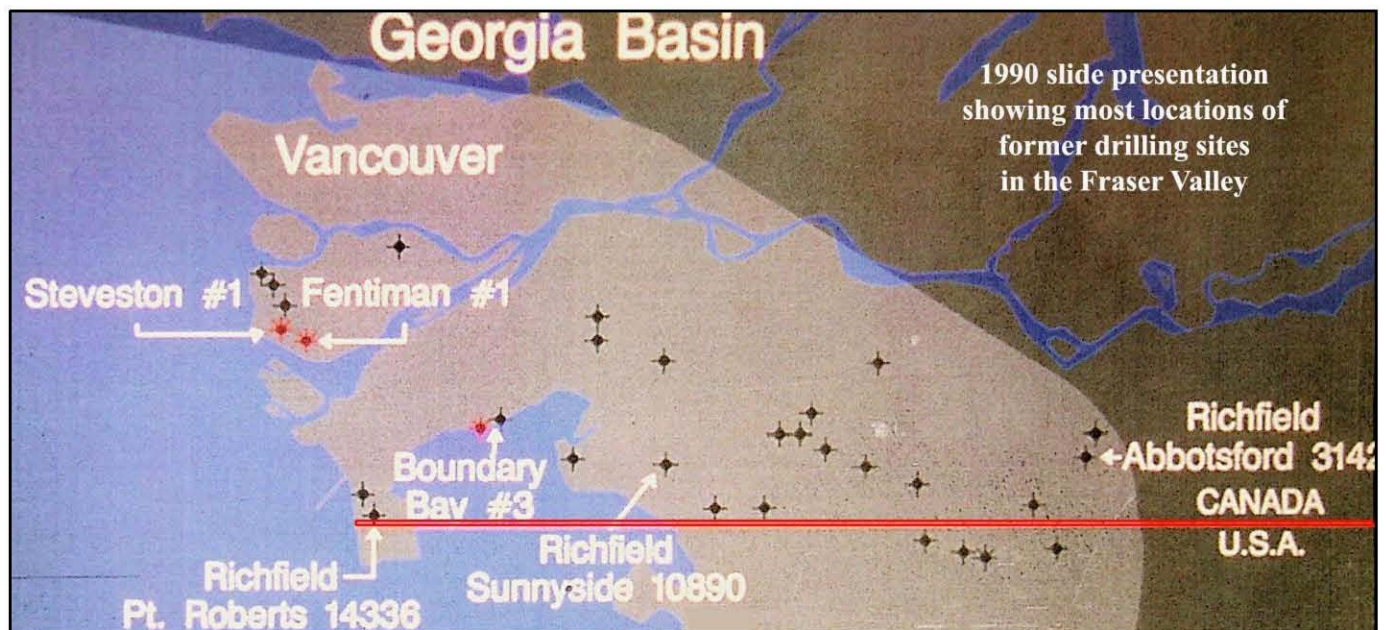
It marks the first time a major oil company has entered the oil search in the Fraser Valley.

Richfield crews have been conducting seismic surveys and other geological work in the valley for several months. They have not yet announced drilling plans.

But with addition of the new acreage, it is anticipated that valuable correlations will be possible with the complete seismic program and the well drilling test carried out by Van Tor et al on 670 and 677.

What petroleum men call "a high"—a promising geological setup for drilling—is reported to exist on some of the acreage acquired from Peace River Pete.

Province, August 22, 1959



Richfield in Abbotsford

After two years following its announced intention for Fraser Valley petroleum exploration, and following partnership agreements and seismic surveys, in late 1961 Richfield Oil began its exploration drilling programs in Abbotsford and Tsawwassen.

Richfield Oil is clearing a site to erect an oil drilling rig near Mill Lake, two miles southwest of Abbotsford. It is understood the company has plans to drill two extra exploratory wells in the area ... The company has moved a rig from the Queen Charlotte Islands to Vancouver and will shortly move it to Abbotsford. ... Richfield had done considerable drilling in the Queen Charlottes but for the present has stopped operations there. Key Oil spent nearly \$500,000 on an unsuccessful well about one and a half miles from the new drilling site. The Richfield well is expected to go down 8,000 feet and cost will likely be about \$160,000. ¹⁸²

The first fleet of trailer trucks carrying equipment for the Richfield-Pure Oil companies' oil drilling program near Abbotsford rolled out of Vancouver Wednesday night. Five hundred tons of equipment, including drilling rigs, complete living quarters, steam plant, etc. are being moved by Johnston Terminals here to the site at Centennial Park, 1 ½ miles south of the highway outside the valley city. Five trucks were in the first convoy. The big load will require 28 trailer loads. The equipment was brought to Vancouver by rail from Calgary and is being delivered to Commonwealth Drilling Company at the site. Oil drilling is expected to start as soon as the operation is set up on a Key-Hercon drilling permit. ¹⁸³

An oil drilling crew has started operations in the Emerson Road area of Matsqui. The well is being sunk by Commonwealth Drilling Co. Ltd of Calgary under contract to the Richfield Oil Corporation. Site of the test well is off Emerson Road, opposite the MSA Centennial Park, on property owned by William L. Woollacott. The well is the third in the Matsqui area in recent years. First two, located on LeFeuvre and Huntingdon roads, have been abandoned. ¹⁸⁴

Richfield in South Surrey

The Surrey Leader newspaper said that on "Tuesday night," January 9, 1962, at "8:30 p.m.," Richfield Oil Corporation and Pure Oil Company began drilling "on the five and one-half acre property of James H. Dool, 2219 Coast Meridian Road, South Surrey in a search for oil or natural gas."

This is the second of three wells in the Fraser Valley. An estimated three million dollars will be spent on the three holes. The first one, completed in Abbotsford recently, proved dry. Fifty-two holes have been drilled through past years in the Valley and adjacent land in the U.S.A., but all have been dry. The third of new holes will be drilled in the Point Roberts area. ¹⁸⁵

¹⁸² *Richfield Oil plans drilling in the Valley*, The Province, November 24, 1961.

¹⁸³ *Equipment rolls to oil drilling site*, Vancouver Sun, November 30, 1961.

¹⁸⁴ *Oil well drilling starts in Matsqui*, The Province, December 9, 1961.

¹⁸⁵ Surrey Leader, January 11, 1962.

Richfield abandoned its Abbotsford well in January 1962 after drilling down to 3,144 feet. The South Surrey well was abandoned in early April 1962 after reaching a depth of 10,895 feet at a cost of almost \$500,000.



Richfield in Tsawwassen

By early December 1961, Richfield's first wildcat well in Tsawwassen, which its "drilling crew is logging an average of 100 to 105 feet a day,"¹⁸⁶ was down to 13,126 feet, with "nothing that could be classified as commercial."¹⁸⁷

Alongside test wells drilled in Abbotsford and near Cloverdale, this would mark the company's third dry well. This was after "the big American oil company" had been

¹⁸⁶ Vancouver Sun, December 8, 1961.

¹⁸⁷ Ibid.

busy “buying oil and gas leases from property owners on both sides of the border,” at Tsawwassen and Point Roberts “for some months,” extending “two to three miles each side of the border,”¹⁸⁸ comprising some 200,000 acres.¹⁸⁹

IT'S YOUR BUSINESS

By BILL FLETCHER, Vancouver Sun Business Editor

Oil Bit Bites Into Tsawwassen

While the host of summer and permanent residents of Tsawwassen Beach eye the proceedings with sharp misgivings, a towering drilling rig pounds away 24 hours a day on a rocky knoll 200 feet above tide-water in a search for oil.

Technically, the operation is what oil men refer to as a “tight hole”—that is one about which they aren't giving out any information.



JACK DAIGLE
... coal but no mine

However, a drawing Texan named Jack Daigle, who is looking after the project for Great Basins Petroleum, has released a few facts about the big oil hunt 25 miles from downtown Vancouver.

Drilling has been underway now for several weeks and it won't be too long before Great Basins has a pretty good idea of the true value of its \$75,000 hole.

A Canadian firm, called Seavan Development Company, has sent its bits more than 5,000 feet through the formations along Englishman's Bluff where British men-o'-war used to lob cannonballs during target practice in preparation for a possible shooting war with

Uncle Sam when there was quite an argument over location of the boundary.

Their Fingers Are Crossed

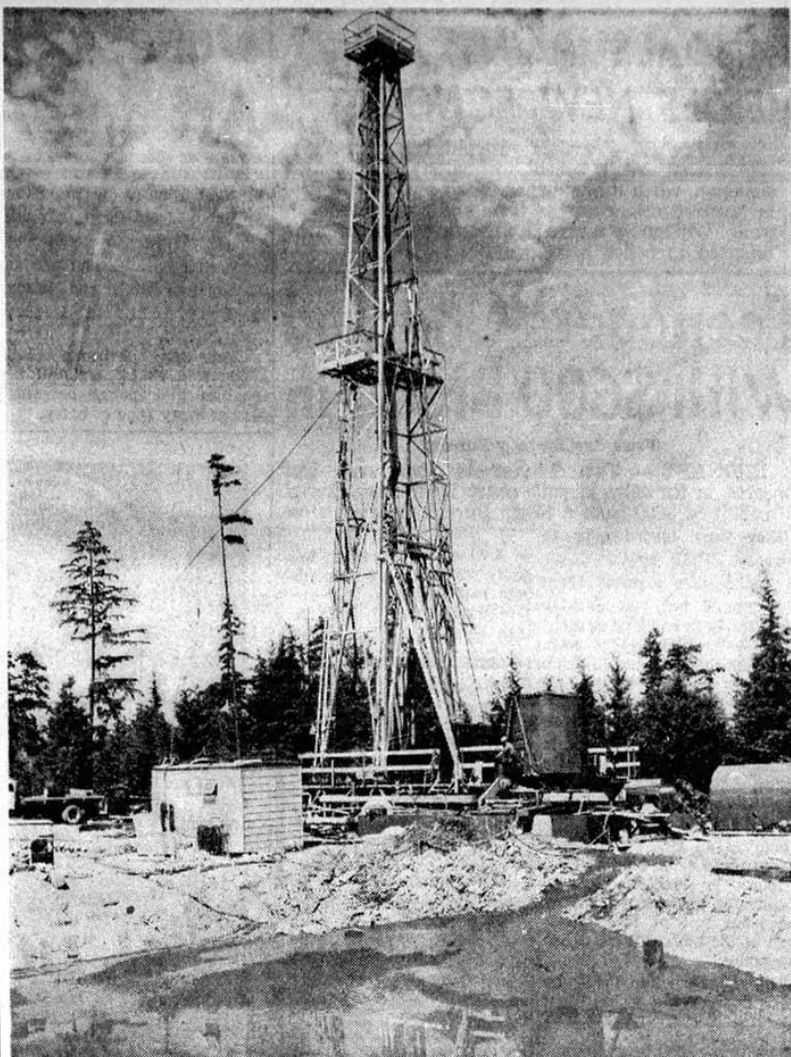
Great Basins' “target” today is 6,000 feet and they're keeping their fingers crossed.

“So far we haven't encountered anything saleable,” Daigle said, “But we have hopes of picking up something in the last few hundred feet.”

One of the primary reasons for the drilling, he went on, is to get sub-surface information about the area which is lacking now.

“We hope to get enough information to ‘shoot’ the whole area,” Daigle volunteered.

He said the plan is to run a seismograph—a test with electrical impulses to measure the geological formations; then sink a number of shallow wells and finally, a “deep test” well.



Twenty-four hours a day this oil drilling rig grinds down on Englishman's Bluff above Tsawwassen beach, southwest Delta, as Great Basins Petroleum of Denver, explores for liquid wealth in Boundary area.—Dan Scott photo.

Vancouver Sun, August 18, 1955

The Surrey Leader newspaper reporting on Richfield Oil's upcoming fourth, or second Tsawwassen wildcat test well, said it would likely be set up on “the bluff directly overlooking the [Vancouver – Victoria] ferry terminus and located roughly a half mile north of the U.S. border.”

The location is about five miles west of Richfield's recently abandoned wildcat which went to a depth of over 12,000 feet. Nearest previous attempt was the Great Basin No. 1 well which was abandoned back in 1955 after reaching a depth of 6,000 feet. The new attempt – a deep well by any

¹⁸⁸ Surrey Leader, June 14, 1962.

¹⁸⁹ *Deepest coastal well looks to be dry hole*, The Province, January 22, 1963.

Canadian standards – will be drilled on one of a number of blocks of land wholly-owned by Richfield in the Point Roberts area.¹⁹⁰

**Richfield to Drill
Near Tsawwassen**

**\$500,000 Test Well Slated
For Site North of U.S. Line**

Vancouver Sun, May 31, 1962

By JOHN USHER

Richfield Oil Corporation will drill a \$500,000 test well in the Pebble Hill area of Tsawwassen, less than a mile from the U.S. border at Point Roberts.

After a re-zoning hearing held at Delta municipal hall on June 4, 1962, Mayor and Council approved a special rezoning designation – “subsurface investigation and development district” – of four acres of residential lands “to permit a three-month oil drilling operation by Richfield Oil Co.”¹⁹¹ The drilling operation “between Fourth and Fifth avenues west of Fifty -second Street,” would continue well beyond the allotted permit schedule, from June 15, 1962, to January 18, 1963, when “a drill bit got stuck in the bottom” of the 14,792-foot hole.¹⁹² A Vancouver Sun photo showed Richfield’s gigantic 146-foot-high oil derrick towering upwards “in a potato field at Pebble Hill,”¹⁹³ and the Surrey Leader’s photo of Richfield’s “35-ton draw works” for the 700-ton drilling rig “being loaded onto a flatcar at Blairmore, Alberta.” The rig was “powered by four natural gas-fuelled engines, each rated at 485 horsepower,” one of “only two rigs of this size in all of Canada.”¹⁹⁴

A June 14, 1962, Surrey Leader news article seems to have been the first that contained detailed information about Richfield Oil’s delicate public relations strategy for its drilling operations on the potato field in a residential area, a foreshadowing of public controversies to come in the late 1970s to early 1990s.

Oil Drilling Crews at the Half Way Mark for Boundary Bay Hole

Richfield Oil Corporation is about half way down on the “deep hole” the company is drilling in the Boundary Bay area. Drilling began on Pebble Hill on South Delta in June, with the company stating its intention of taking the hole down to the 14,000 foot mark if necessary.

If it goes that deep, it will be the deepest test hole drilled west of the Canadian Rockies. The drillers have now passed the half way mark.

If the oil well is not successful the land will be restored to its original state, which was residential land use.

Drilling an oil well in a summer resort area has its problems, and the oil company and the drilling contractor have taken special pains to see that operations do not create a nuisance. Heavy haulage and trucking is done during the daytime, though the drilling rig operates around the clock, with three shifts. Each shift consists of five men.

Surrey Leader, August 23, 1962

¹⁹⁰ *Richfield sets new wildcat test*, Times Colonist, March 9, 1962.

¹⁹¹ *Delta rezones land to allow oil drilling*, The Province, June 6, 1962.

¹⁹² *Deepest coastal well looks to be dry hole*, The Province, January 22, 1963.

¹⁹³ Vancouver Sun, June 12, 1962.

¹⁹⁴ *Natural gas powers drill rig*, The Province, December 18, 1962.

Drilling an oil well in a summer resort brings its own special problems. ... While drilling a major well like this one is a 24-hour, seven days a week project, the company will concentrate as much of the well site activity as possible in the hours from 8 a.m. to 8 p.m. The drilling contractor, Loffland Bros. Co. of Canada, is bringing four special quiet-running motors from California to power the drilling rig. Motor exhausts will be muffled and chains, normally used in separating the lengths of the drill pipe during the big-changing operation will be replaced by ropes as another noise abatement measure. The steels racks upon which the metal pipe is stacked will be boarded over with 3-inch by 12-inch planks to cut down on metal noise.

One of the most unusual noise-deadening measures will be that of "winterizing" or sheathing the drilling rig. Normally the lower part of the rig and its operating machinery is enclosed as protection only against the bitterly cold winter on Northern British Columbia and Alberta. The Point Roberts venture, being close to residential areas, calls for enclosing the ground-level components to a height of 27 feet.

Gentling the "Roughnecks." Drilling superintendent B. Loudermilk of Calgary will thoroughly brief the well drilling personnel, many of whom have become used to working in wilderness areas of Northern Alberta and British Columbia. "We are impressing upon them," said Mr. Loudermilk, "that they are visitors in a settled community. We are cautioning our workers to pay strict attention to their driving habits and their off-duty behaviour, and to have a constant awareness of their responsibilities as newcomers and temporary residents of the area."¹⁹⁵

A subsequent Surrey Leader news article two months later reported that "the drilling rig operates around the clock," not the 12-hour operation information stated earlier:

Drilling an oil well in a summer resort area has its problems, and the oil company and the drilling contractor have taken special pains to see that operations do not create a nuisance. Heavy haulage



¹⁹⁵ Surrey Leader, June 14, 1962.

and trucking are done during the daytime, though the drilling rig operates around the clock, with three shifts. Each shift consists of five men.¹⁹⁶

On Friday, January 18, 1963, the Richfield Oil and Pure Oil partnership well, called "Richfield Pure Point Roberts 6-3-5," "reached 14,792 feet ... when the drill bit got stuck in the bottom of the hole," with its "drillers now "fishing" to recover it." The drilling bit was valued at just over \$10,000. That "deepest oil well ever drilled on Canada's west coast ... is likely to be abandoned as a "duster" (dry hole)." The 6-3-5 well "is the latest failure in a series of attempts to discover oil or gas since 1937."¹⁹⁷ The partnership spent about \$700,000 on its last test well site, and about \$100,000 on its leases.

Two months later, in March 1963, the B.C. government passed legislation to compensate Richfield Oil's and the French Petroleum Company's 18 leases alongside the Peace River west of Fort St. John as the new provincial or Crown-owned B.C. Hydro and Power Authority entity was preparing to build the Peace River dam.

Can-American Petroleums

Vancouver City-based Can-American Petroleums Ltd. launched a shares-offering advertisement in the Vancouver Sun on December 18, 1961, stating it had recently acquired:

12,750 acres of oil leases near Lyndon, Washington, across the border from Abbotsford in the Fraser Valley ... [with] the opportunity for ... oil, gas, or a gas storage structure. ... Richfield Oil Corporation and Pure Oil are now drilling on B.C. Permit 305 near Abbotsford – the start of a \$3,000,000 program. Can-American's acreage on the U.S. side of the border adjoins it. Their proposed well will be a 4-mile step-out.

¹⁹⁶ Oil drilling crews at the half way mark for Boundary Bay hole, Surrey Leader, August 23, 1962.

¹⁹⁷ Deepest coastal well looks to be dry hole, The Province, January 22, 1963.

Dry Hole Ends Plan For Valley

Richfield Oil's dry hole at Tsawwassen has discouraged further exploration by the company in the area.

Richfield-Pure Oil put down the deepest well ever drilled on the west coast — 14,792 feet — before calling it quits early this year.

A spokesman for the company said the cost of drilling alone was about \$700,000. In addition, the company had put out more than \$100,000 on hundreds of leases on both sides of the boundary.

The firm still has an investment there — five drill collars and a bit costing more than \$10,000 that are still at the bottom of the hole.

"We have no further plans to drill in the Fraser Valley area," a company spokesman said.

"We didn't get enough encouragement to justify another venture at that depth."

The spokesman said the company hasn't relinquished its leases in the area.

Most of them are five-year leases and the spokesman indicated the company will probably hang onto them for that long at least — just in case.

— Vancouver Sun, March 30, 1963 —

Business Notes

Firm Gives Up Leases on Oil

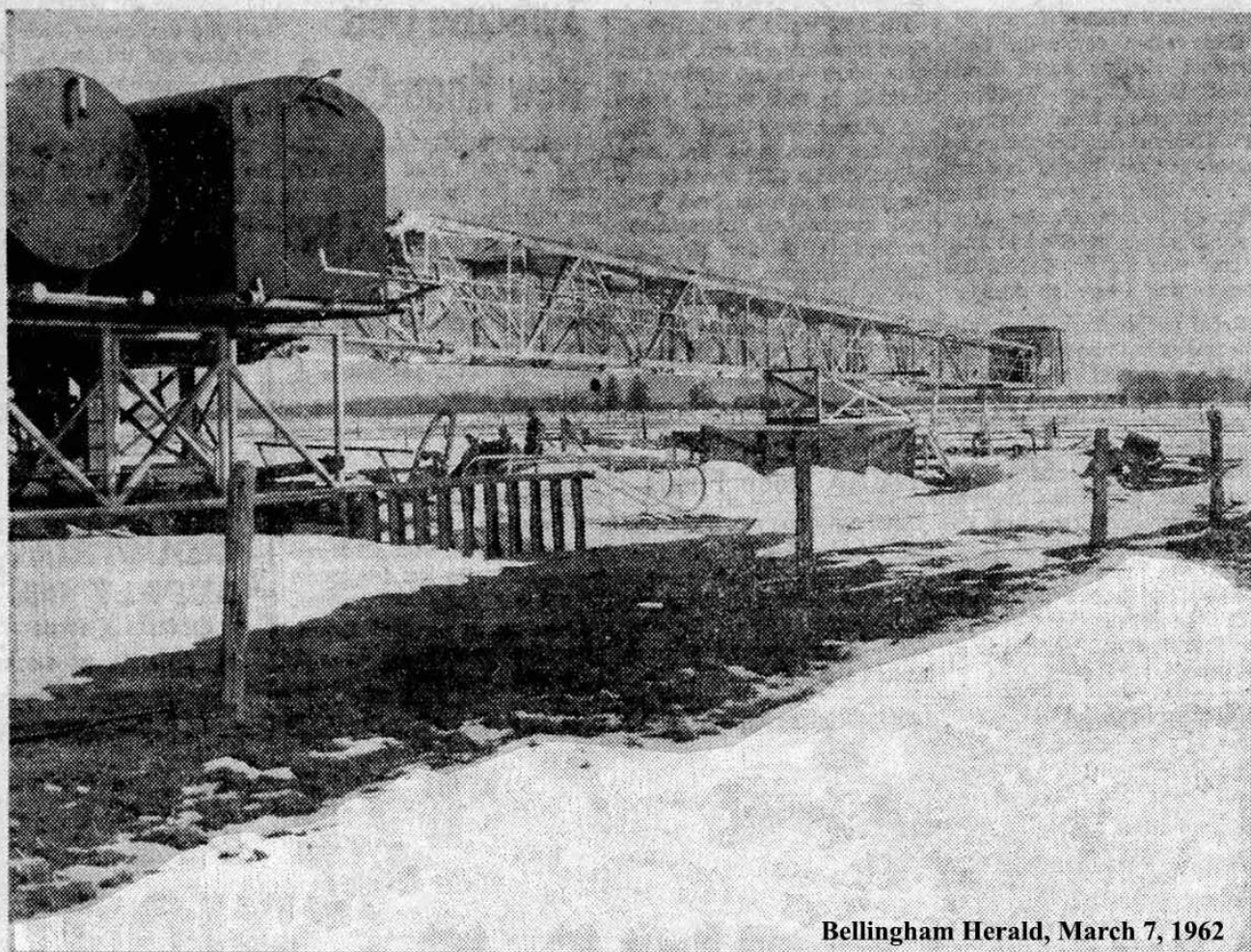
Bellingham Herald, August 13, 1963

POINT ROBERTS — Richfield Oil Corp. has cancelled its leases of Point Roberts land for oil and gas. It also terminated the rights granted for gas storage.

Most of the leases were obtained in August, 1961, and thousands of dollars were spent obtaining them and paying the lessors, local residents estimate.

The company also leased land adjoining Point Roberts on the Canadian side of the border where a well was drilled and abandoned.

Can-American's leases, "a border tract formerly held by Kris Petroleum Ltd.,"¹⁹⁸ extended "along the border for 10 and a half miles from a point seven miles east of Blaine."¹⁹⁹ Another article reported that Can-American had "mineral rights to 35,000 acres east of Lyndon."²⁰⁰



Bellingham Herald, March 7, 1962

BIG RIG MOVES IN — Can-American Petroleum, Ltd., has moved a drilling rig into Whatcom County about 2½ miles north of Lynden. Peter C. Brooks, secretary of the company, is standing under the derrick which will be set up "within a few days."

Brooks said the rig was moved in, but the snow and bad weather delayed work. The well will be drilled on the Maurice Stremmer property just off Pangborn Road. Brooks said the company expects to go to a depth of about 6,000 feet.—Herald photo.

Can-American, in partnership with Edmonton City-based Hercon Petroleum Ltd. which owned the drilling equipment, began drilling Stremmer Well No. 1 in mid-March 1962 in Washington State, "near the junctions of the Pangborn and Assinks Roads about three miles northeast of Lynden on the Maurice Stremmer property,"²⁰¹ "about 1 ½ miles south of the B.C. border in the Lyndon area of Whatcom County," or about "ten miles southeast of Richfield Oil's" drilling pad in South Surrey.²⁰² It was also reported that Can-American was taking "over an oil drilling rig at Huntington Road test well site [in

¹⁹⁸ *Business notes*, Bellingham Herald, August 7, 1960.

¹⁹⁹ *New oil search launched in Washington State area*, Times Colonist, December 21, 1961.

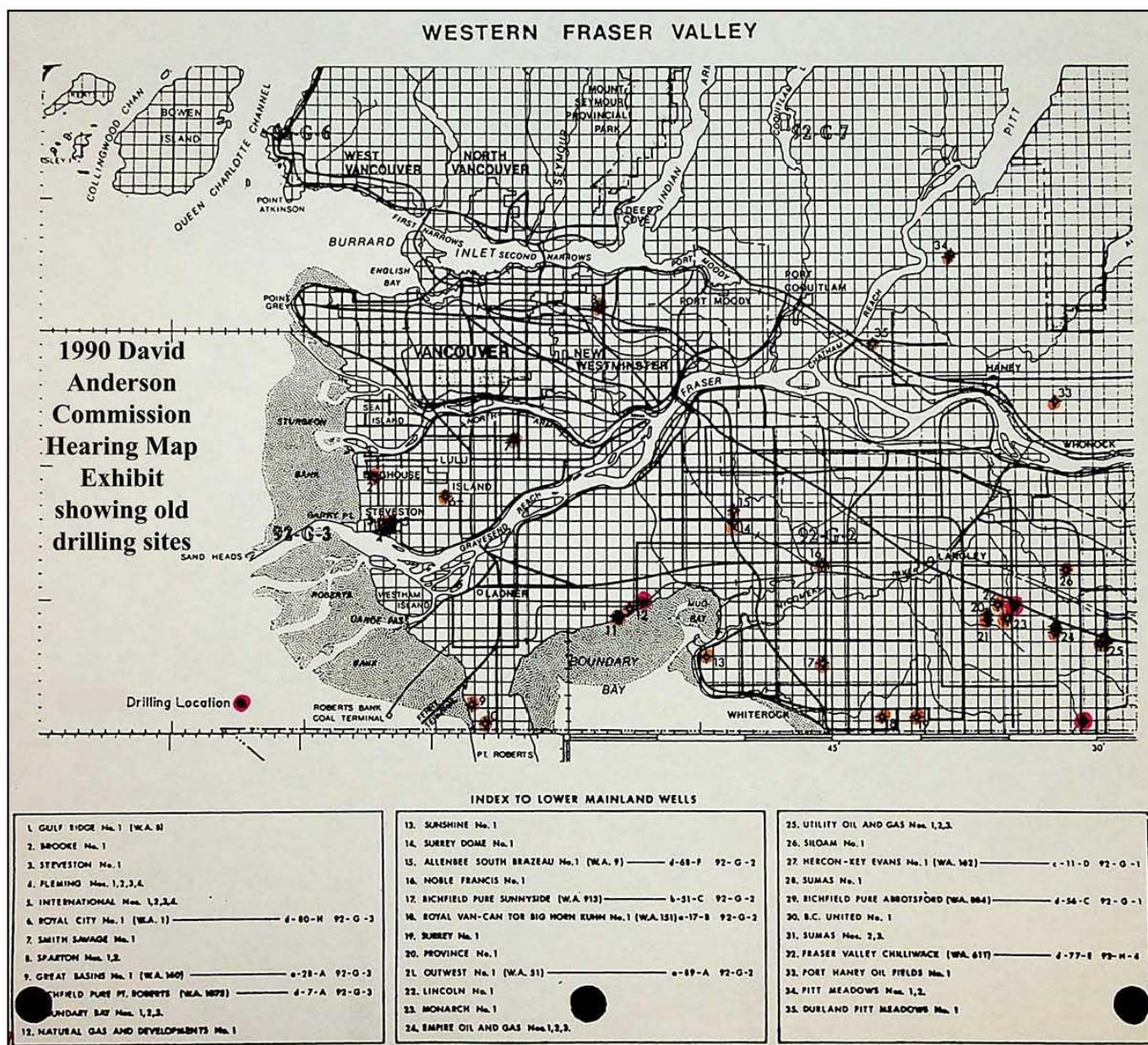
²⁰⁰ *New oil search set for County*, Bellingham Herald, October 23, 1961.

²⁰¹ *Largest oil drilling rig to start in County soon*, Bellingham Herald, March 12, 1962.

²⁰² *Drilling planned near B.C. border*, Vancouver Sun, March 15, 1962.

Abbotsford], idle since drilling was suspended some time ago.”²⁰³ In early April 1962, Can-American became listed for trading on the Vancouver Stock Exchange.

On September 10, 1962, at its 135-foot-high tower rig, Can-American publicized that at a well depth of 6,040 feet it discovered “both dry and wet gas” and was attempting to put “the well into production.”²⁰⁴ By March 19, 1963, the company reported a “broken drill stem” at 7,802 feet, the “drill cones were lost grinding through the shale.”²⁰⁵



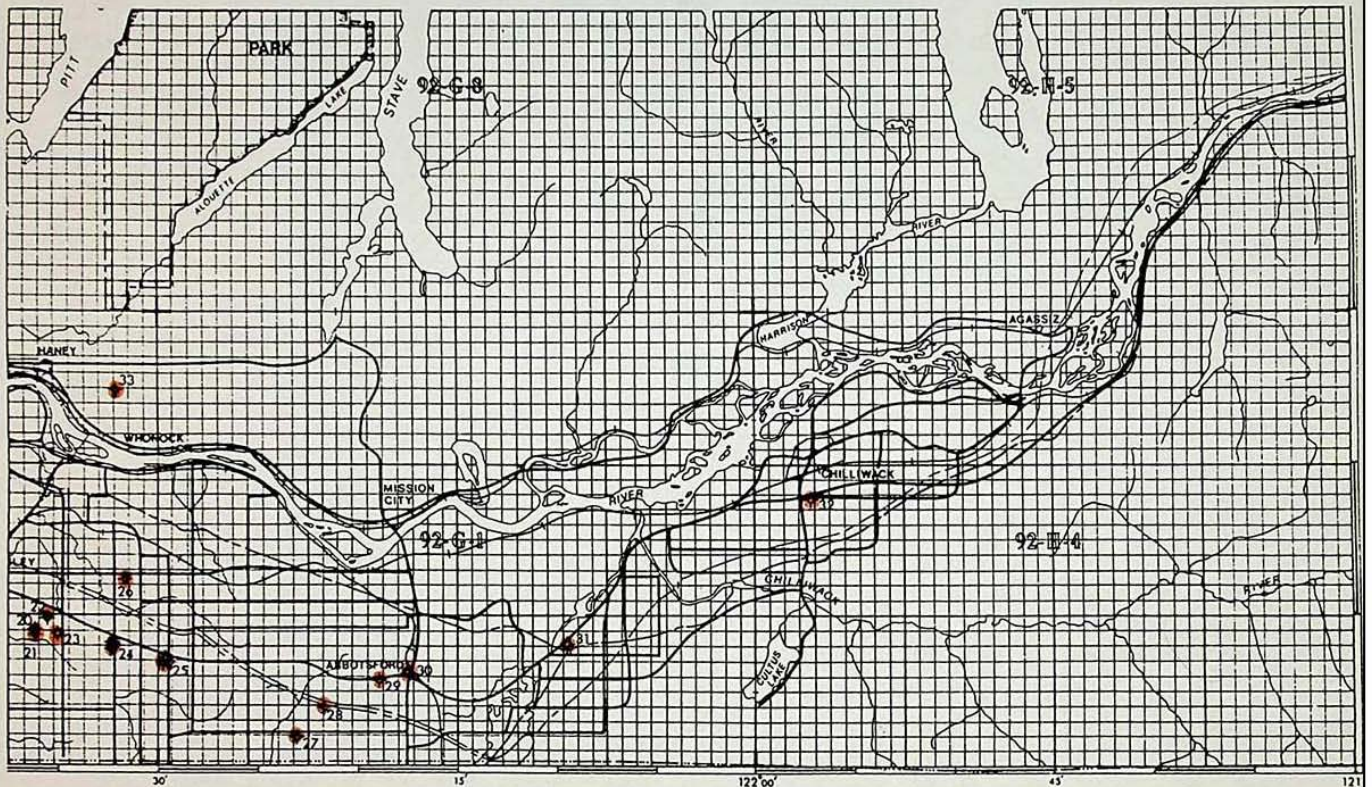
²⁰³ Valley roundup, Vancouver Province, January 10, 1962.

²⁰⁴ Can-American test well in County shows indication of gas discovery, Bellingham Herald, September 10, 1962.

²⁰⁵ Broken drill stem slows up operations at Lynden well, Bellingham Herald, March 19, 1963.

EASTERN FRASER VALLEY

Fi



1990 David Anderson Commission Hearing Map Exhibit showing old drilling sites

INDEX TO LOWER MAINLAND WELLS

1. GULF RIDGE No. 1 (W.A. 8)
2. BROOKE No. 1
3. STEVESTON No. 1
4. FLEMING Nos. 1, 2, 3, 4
5. INTERNATIONAL Nos. 1, 2, 3, 4
6. ROYAL CITY No. 1 (W.A. 1) ——— d-80-H 92-G-3
7. SMITH SAVAGE No. 1
8. SPARTON Nos. 1, 2
9. GREAT BASINS No. 1 (W.A. 100) ——— a-28-A 92-G-3
10. RICHFIELD PURE PT. ROBERTS (W.A. 1079) ——— d-7-A 92-G-3
11. BARRY BAY Nos. 1, 2, 3
12. AL GAS AND DEVELOPMENTS No. 1

13. SUNSHINE No. 1
14. SURREY DOME No. 1
15. ALLENBEE SOUTH BRAZEAU No. 1 (W.A. 9) ——— d-68-F 92-G-2
16. NOBLE FRANCIS No. 1
17. RICHFIELD PURE SUNNYSIDE (W.A. 913) ——— b-31-C 92-G-2
18. ROYAL VAN-CAN TOR BIG HORN KUMH No. 1 (W.A. 151) a-17-B 92-G-2
19. SURREY No. 1
20. PROVINCE No. 1
21. OUTWEST No. 1 (W.A. 31) ——— a-89-A 92-G-2
22. LINCOLN No. 1
23. MONARCH No. 1
24. EMPIRE OIL AND GAS Nos. 1, 2, 3

25. UTILITY OIL AND GAS Nos. 1, 2, 3
26. SHOAM No. 1
27. HERCON-KEY EVANS No. 1 (W.A. 102) ——— c-11-D 92-G-1
28. SUMAS No. 1
29. RICHFIELD PURE ABOTSFÖRD (W.A. 884) ——— d-56-C 92-G-1
30. B.C. UNITED No. 1
31. SUMAS Nos. 2, 3
32. FRASER VALLEY CHILLIWACK (W.A. 611) ——— d-77-E 92-H-4
33. PORT HANEY OIL FIELDS No. 1
34. PITT MEADOWS Nos. 1, 2
35. DURLAND PITT MEADOWS No. 1

W.C. Mainwaring's Bold Empire-Building Move

*Two and three-day air trips between Victoria [City] and Stockholm, during [the 1956] negotiations on the Wenner-Gren agreement, were common things, officials said here. They said, "it was nothing for officials of the firm to fly from Victoria to Stockholm to get a ruling on the firm's position and be back in three days." No government officials went to Sweden. Representatives of the Swedish interests also were so fearful of a "leak" that they once flew to Seattle to send some cables to Stockholm.*²⁰⁶

*The Sekanais Indians living in the area call their country Omoenekhah, meaning lake-like or sluggish river. As Omenica to the white man it will mean jobs, new industry, new wealth.*²⁰⁷

One-Time Ditchdigger Ends Career as Big BCE Wheel

A man who rose from ditchdigger to vice-president of B.C. Electric Co. retired today after more than a quarter-century with the company.

Retirement of 64-year-old William C. Mainwaring was announced by BCE president A. E. "Dal" Grauer.

Mr. Mainwaring was also Mr. Grauer's assistant.

Appointment of two new company vice-presidents was announced at the same time.

Jack H. Steede, 54, chief engineer of the electrical division, will take charge of all BCE electrical operations on the mainland.

DIRECTS SUBSIDIARIES

He takes over from vice-president Tom Ingledow, who will direct B.C. Engineering Co. Ltd., a BCE subsidiary.

Second new vice-president is John J. Carson, 39, director of the company's industrial relations.

Mr. Grauer also announced that E. Douglas Sutcliffe, 38, will become general manager of Western Development and Power Ltd., another BCE subsidiary.

TRAVELLED MUCH

He was formerly executive assistant to Mr. Mainwaring.

William Crossley Mainwaring was a busy man right up to his retirement. He esti-



W. C. MAINWARING
...ends long career

mates he has travelled the equivalent of 20 times around the world by air on company business.

His chief function was to tackle special jobs delegated by the president, such as the exhaustive study of the possibilities of introducing natural gas into B.C.

Mr. Mainwaring showed a keen business sense at 13 in Nanaimo, his home town. He developed and printed photo-

graphs for the town's two drug stores, in his bathtub, often processing as many as 200 rolls a day.

"I made a hell of a profit," he said.

Mr. Mainwaring started work in 1911 as a meter reader for Nanaimo Gas and Power Co. A year later he joined the company's pipe-laying gang as a ditchdigger, became a coal stoker, then moved into the office as bookkeeper.

He was made manager in 1917. He came to Vancouver in 1918 and was with Northern Electric until 1932, when he went to the BCE.

Mr. Mainwaring, father of four children, and his wife Gladys live in a luxurious country home, "Sun 'n' Sea," at Ocean Park, between Crescent Beach and White Rock, about 30 miles south of Vancouver.

Vancouver Sun
October 2, 1958

*"He [Mainwaring] is president of the Peace scheme."*²⁰⁸

*The entire scheme, the whole Wenner-Gren invasion, has been a disgraceful charade. This has become more apparent each month.*²⁰⁹

*"At the exact moment Premier Bennett was announcing the B.C. Electric take-over in the House [at 2 p.m.], funeral services for the late B.C. Electric chairman A.E. (Dal) Grauer were underway in Vancouver."*²¹⁰

*"By a stroke of irony, the last rites were being said for Dr. Grauer just as Premier W.A.C. Bennett rose in a suspense-filled, extraordinary session of the provincial legislature to announce that the government would acquire the B.C. Electric Co. Ltd. immediately and operate it as a public utility."*²¹¹

²⁰⁶ The Province, February 14, 1953.

²⁰⁷ *The last frontier awakes*, The Province, February 12, 1957.

²⁰⁸ Comment by federal External Affairs Minister Howard Green, in *Power export ban hits Peace River power deal*, Times Colonist, December 4, 1959.

²⁰⁹ *You're not alone, Mr. Bonner*, Vancouver Sun, January 22, 1962.

²¹⁰ *BCE takeover effective at once; Peace plan under same control*, The Province, August 2, 1961.

²¹¹ *1,800 gather at Cathedral in tribute to Dal Grauer*, Vancouver Sun, August 2, 1961.

On Wednesday October 1, 1958, at age 64, about eight years before his sudden passing at age 72, William Crossley Mainwaring, estimated to have “travelled 20 times around the world by air on company business,” retired “after more than a quarter century with the [private utility B.C. Electric] company.”

Mr. Mainwaring was responsible for investigating new hydro-electric sites, helping industry locate in B.C., and preparing for the introduction of natural gas in the lower mainland. He has a score of community, charitable and industrial associations and was awarded the OBE for his work with the Air Raid Precautions in the Second World War.²¹²

It was reported that Mainwaring had retired “for personal reasons.”²¹³ Those unexplained reasons were about to be revealed and seriously contemplated by interested parties some five weeks later. In throwing the dice for empire, things would ultimately turn out to get quite dicey for the retiree.



NEXT YEAR IS RIGHT NOW FOR B.C. ELECTRIC . . . Ground-breaking gets underway immediately on huge \$10,000,000 Jones Lake project. Top engineering and executive trio, from left, W. C. Mainwaring and T. Ingledow, Vice-Presidents, and President A. E. Grauer, look over the site for their company's biggest single project in 1951. Jones Lake development will provide 2,400,000 manhours of work; wherever possible, contracts are being placed with local industry.

The Province, December 11, 1950

²¹² *One-time ditchdigger ends career as big BCE wheel*, Vancouver Sun, October 2, 1958.

²¹³ *'Bill' Mainwaring retires after 26 years with BCE*, Times Colonist, October 2, 1958.

On Monday November 10, 1958, as the B.C. Supreme Court was hearing continued highly embarrassing evidence on bribery and conspiracy charges issued against former Social Credit Party Lands and Forests Minister Bob Sommers for granting certain Forest Management License agreements, the B.C. Electric Company announced that, through its subsidiary Western Development and Power Ltd., it had "joined hands with the mammoth Wenner-Gren interests and three other companies in a proposed half-billion-dollar hydro power scheme on the Peace River," stating that it had "a one-fifth interest in Peace River [Power] Development Co." for the proposed construction of the "world's largest dam" ²¹⁴ and mountainous route right-of-way clearing for 600 miles of transmission lines. It was stated a year later that it was considered "the biggest power project ever undertaken anywhere in the world." ²¹⁵

★★★★
VICTORIA, B.C., MONDAY, NOVEMBER 10, 1958—30 PAGES
PRICE: 10 CENTS SATURDAY, 14 CENTS

BCE TAKES FIFTH SHARE IN WENNER-GREN HYDRO

TODAY: Occasional rain, warmer. High 56.

60th YEAR—No. 166 PA 4211 34 PAGES

The Province

VANCOUVER, B.C., WEDNESDAY, OCTOBER 9, 1957

Today's Tides

High 5:58 a.m. 13.4 feet
Low 11:38 a.m. 8.1 feet
High 5:10 p.m. 13.1 feet
Low 11:54 p.m. 4.4 feet

BY CARRIER \$1.50 Per Month
7 CENTS
Metropolitan Edition

Wenner-Gren pact announced

VAST POWER PLANT FOR B.C.

Sputnik 1 sees all, tells all

LONDON — (Reuters) — Russia's earth satellite is sending coded signals on temperatures and other data, Pravda disclosed today.

The article in the Russian newspaper gave new details of the 180-pound sphere whizzing around the earth. A third satellite is moving around the world with the baby moon and the carrier rocket, Pravda said. The third satellite is the protective cone which shielded the earth satellite as it was rocketed into space.

It still is impossible to tell when the flight of the only when it is passing over satellite launched Friday, Russia.

NOW MOSCOW radio says Sputnik is learning new things about the electro-magnetic south Pole.

How this information is being learned by Soviet scientists tracking Sputnik in the Antarctic is not explained.

Sputnik might carry a magnetometer to measure changes in the earth's magnetic field. A planned U.S. moon will do this.

Pravda adds:

"The artificial satellite is the first step towards the conquest

Penguin poppa pushing pebbles in Chico pabulum

No. 3 penguin at Stacey Park is one father who doesn't know best.

Zoo curator Alan Best discovered him feeding baby penguin, Chico, peanut shells, pebbles and all sorts of unhealthy odds and ends that people throw into the penguin pond.

All the birds feed Chico whenever they have the chance. But except for his father, they gave him his proper diet of salmon.

Since people won't stop throwing refuse into the penguin pond we had to take No. 3 out," said Mr. Best.

Pedestrian fatally hurt by truck

An elderly pedestrian was fatally injured; and another accident victim critically hurt in the wreckage of a truck in two separate accidents in Vancouver late Tuesday.

Dead is Rowen Tedder, 64, of 2012 McMillan St., died at General



PREMIER BENNETT
... my most momentous announcement ...

BIG DAY IN B.C.'s GROWTH

Three momentous events in B.C. history — all in the power-energy field — occurred Tuesday.

(1) Details of the immense Wenner-Gren hydro electric project are given on this page.

(2) B.C. Electric announced the "go ahead" on its thermal electric program for this area. BCE has signed a contract for an additional 144,000,000 cubic feet of gas a day with Westcoast Transmission pipeline, with delivery to start in 1961 — meaning thermal power will be produced then. The additional gas represents more electrical power than the total capacity of BCE's system has today.

(3) Westcoast Transmission turned on the gas at this end of its 650-mile Peace River pipeline, sending it into Vancouver mains and south to U.S. markets.

Details of the latter two developments are on

\$400 million hydro plan

By DILLON O'LEARY
Province Staff Reporter

A 4,000,000 horsepower hydro-electric development on the Peace River, costing between \$400,000,000 and \$600,000,000, was announced Tuesday at a press conference by Premier Bennett.

Agreement to proceed with surveys—which must be completed by Dec. 31, 1959—was signed Monday between the B.C. Government and principals for Axel Wenner-Gren, whose surveys of the Rocky Mountain Trench proved up what may be the world's greatest hydro development.

Premier Bennett said it would mean power delivered to Vancouver and Vancouver Island at rates the same or less than those of the B.C. Electric, and at one-third less than power could be developed for, and transmitted to, Vancouver from Columbia River hydro developments.

Total power development would equal that of the Grand Coulee and Hoover dams combined, he said, and could make B.C. "one of the great industrial centres of the world."

The 4,000,000 horsepower would be produced cheaper than at any other source — including the

stated in this agreement that the development will pay full rates and taxes and no special concessions of any kind have been given by the government," he

²¹⁴ BCE takes fifth share in Wenner-Gren Hydro, Times Colonist, November 10, 1958.

²¹⁵ Can Wen-Gren pull it off? Times Colonist, November 17, 1959.

Social Credit Party premier W.A.C. Bennett, premier for 6 years running, who had authorized engineering “surveys at the lower end of the [Rocky Mountain] trench ... last October [1957],” “hailed the announcement as “the most momentous” of his life.” That scheme which forecast “an ultimate development of 4,500,000 to 8,000,000 horsepower” would be four to eight times greater than B.C. Electric’s accumulated hydro electric developments load of “1,000,000 horsepower.”²¹⁶

The Times Colonist news revealed that none other than W.C. Mainwaring was to be president of the new Peace River Power Development Company, a subsidiary of the Wenner-Gren B.C. Development Company incorporated on November 21, 1956, an arm of the Wenner-Gren Foundation of Stockholm, Sweden. It was also reported that the Peace River development “scheme has emerged from a two-year preliminary engineering survey,”²¹⁷ meaning that Mainwaring had obviously been in the know and part of this scheme for many months prior to his ‘retirement.’ At a November 12, 1958, press conference, Mainwaring, the conceptual mastermind behind all three of B.C. Hydro’s future three dams on the Peace River, stated:

A 400- to 500-foot dam would be built on the Peace and would be able to generate about 4,000,000 horsepower. A further 4,000,000 horsepower could be developed by a series of downstream dams.

Dal Grauer, Mainwaring’s former boss at B.C. Electric, stated on November 12, 1958, that the reason “his firm was associating itself with the Peace River power project” was because of meeting “the needs of important areas it serves after the mid 1960s:”

If the power is to be supplied by hydro, it must come from one of three big rivers – the Fraser, the Columbia or the Peace. The Fraser cannot be developed because of the salmon problem. Partly because of international problems we can get no assurance of power from the upper Columbia. This leaves only the Peace River.²¹⁸

B.C. Power Commission general manager, H. Lee Briggs, was given the boot, dismissed at 2:30 pm., Friday November 14, 1958, by Commission chairman T.H. Crosby “for daring to speak without permission”²¹⁹ two days after the big press conference when the publicly owned Commission was offered a partnership in the new Peace River development scheme. Briggs, who would soon serve on the National Energy Board, was critical of the Wenner-Gren scheme’s financing and had asked Crosby in October to forward a letter of information to B.C. Finance Minister Dr. J. V. Fisher. That, and a subsequent, letter was never sent. Briggs “had risked his job because his sense of integrity would not permit him to be silent about Premier Bennett’s proposals for refinancing power commission debt for alleged political advantages.”²²⁰ He also forewarned, “if I am discharged from my present position, I have every intention of stumping the platforms of this province until the next



²¹⁶ *Power chief defies Bennett – huge Wenner-Gren project barred*, Vancouver Sun, November 12, 1958.

²¹⁷ *Columbia power gets Ottawa backing over Peace project*, Vancouver Sun, November 10, 1958.

²¹⁸ *Peace ‘only river we can depend on,’* The Province, November 13, 1958.

²¹⁹ *Public campaign urged – Briggs raps ‘sellout’ to Wengren*, Times Colonist, November 15, 1958.

²²⁰ *House probe demanded on charges by Briggs – Strachan to move investigation; Briggs fired*, Times Colonist, November 15, 1958.

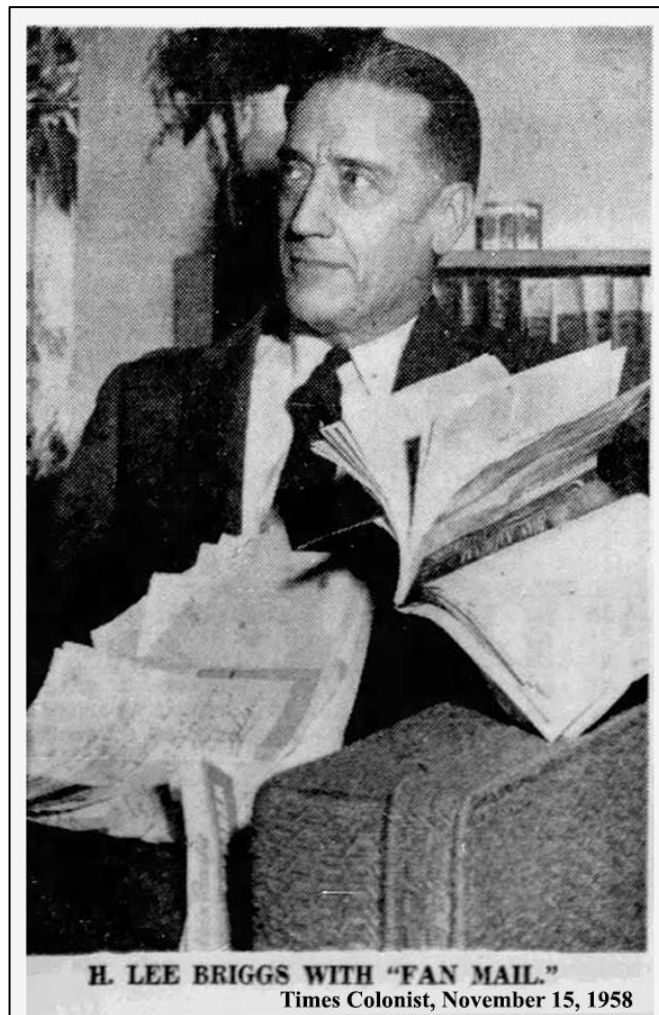
election to let the people know the rancid things that go on here in electric power matters,”²²¹ and “I will not stand idly by while those charged with the administration of the financial affairs of this province prostitute the 80,000 customers of the B.C. Power Commission to fulfill its political promises.”²²²

Briggs accused the government of granting Axel Wenner-Gren “a treasure in natural resources “worth more than King Solomon’s mines”.”²²³ In a lengthy prepared treatise published in the *Times Colonist*, Briggs narrated the future of B.C.’s valuable natural resources, summarizing that the province’s water-power resources were “non-diminishing and perpetually renewing sources of power,” that “will become worth more than all the gold taken from the Cariboo and Klondike, and all the lead and zinc taken from Trail and Kimberley, with the fisheries of the Pacific Coast thrown in for good measure.” “At this very moment,” he continued, the B.C. government was “permitting a single man without more than the token surveillance of the Legislature” to harness the Peace River and its resources, that “if the people of this Province permit such an act, it will be to their detriment.”

Concerning Wenner-Gren’s new company, Briggs stated:

The chairman is to be Mr. William C. Mainwaring, indeed a highly capable individual when it comes to getting things done. Until his resignation last month, he was a vice-president of the B.C. Electric Company. It is not thought that his friendships with that company have been severed. ... Many years ago, it was written: “Who keeps the truth from the people, stands in the way of God.” In recent years the people have not been told the truth. Still more years ago, it was spoken: “He whom the Gods would destroy, they first make drunk with power.”²²⁴

Briggs’ written critique “which attacked alleged profiteering by the B.C. Electric, brought a strong rebuke from B.C. Electric president Dal Grauer.” Grauer “charged Mr. Briggs with being in a state of “emotional disintegration” and quarreled with Mr. Briggs’ analysis of the profit factor in the company operations.”²²⁵



²²¹ *I asked God for guidance*, Vancouver Sun, November 12, 1958.

²²² *Debt-juggling details bared*, Vancouver Sun, November 12, 1958.

²²³ *Bennet giving BC's treasure away – Briggs*, The Province, November 15, 1958.

²²⁴ *Briggs – Wengren*, Times Colonist, November 15, 1958.

²²⁵ *House probe demanded on charges by Briggs – Strachan to move investigation; Briggs fired*, Times Colonist, November 15, 1958.

In his treatise, Briggs advised that “the special combination of a large natural resource coupled with a large natural monopoly in the distribution of an essential and universally used product – is to go for public ownership in which all the benefits in service and profits are returned to the people whose property the resource is.” His recommendation for public ownership, which the CCF opposition party long argued for, was oddly adopted three years later by the right wing, ‘free enterprise’ Social Credit administration.

Weather: Mostly
Cloudy, Mild
Details on Page 5

Victoria Daily Times

The Home Paper
TELEPHONE 2-3131
Circulation (to 8 p.m.)...2-3131
Classified (to 8 p.m.)...2-3131
NIGHT
Night Editor (to 11 p.m.)...2-3133

VOL. 124, No. 37
★★★★
VICTORIA, B.C., WEDNESDAY, FEBRUARY 13, 1957—34 PAGES
PRICE: 10 CENTS SATURDAY, 14 CENTS

GOERING'S EX-MEDIATOR BEHIND GIANT B.C. DEAL

CAREER IN BRIEF

Wenner-Gren —Who Is He?

By PETER MURRAY

The man behind B.C.'s newest multi-million development scheme is a mystery figure who has been described as "one of the last of the international capitalists."

He is Axel Wenner-Gren, Swedish financier, who made a fortune from vacuum cleaners and went on to other fields, including munitions-making, international finance and dabbling in world politics.

In 1942 he was personally blacklisted by the U.S. state department and later Great Britain for his questionable activities during the war.

He was linked to Nazi leader Hermann Goering and accused of trading with Axis countries.

After a 1936 meeting with Goering he told newsmen they had parted with "no compromise of ideas but with mutual respect between men who stand firmly for their convictions."

Wenner-Gren steadfastly denied he was sympathetic to Nazi ideals and said that he was devoted to the cause of peace.

The globe-trotting Swede, now 73, went into eclipse after the 1942 blacklisting and went into seclusion in a spacious hacienda in Mexico with his American-born wife.

Recently he has been regaining some of his lost power in international finance.

Three years ago he bought control of a big steel industry in West Germany's Ruhr



Mining Spokesman, City MLA Hit Out At \$1 Billion Plan

British Columbians today cast a wary eye on plans revealed Tuesday for development of a multi-million dollar industrial empire in the northern section of the province.

The vast development will be financed by Swedish industrialist Axel Wenner-Gren whom Victoria M.L.A. George Gregory today called a one-time mediator for the Nazi Hermann Goering.

It will be based on an untapped wealth of hydro, timber and mineral resources north of Prince George to the Yukon border.

Lands and Forests Minister Ray Williston told the legislature that the Swedish interests have the Yukon border.

First reaction to the huge development program came to start construction of a from Thomas Elliott, manager of the B.C. and Yukon Chamber of Mines in Vancouver.



TENTH OF B.C. INVOLVED IN MULTI-MILLION NORTHLAND PROJECT

Proposed route of a 400-mile railway cutting angle-wise across Northern B.C. along the Rocky Mountain trench is indicated on this map. Revolutionary monorail system would start at Fort McLeod from northern terminus of P.G.E. and end at Yukon boundary.

Resources-rich area to be served by railroad totals 40,000 square miles. Long-range plan calls for the railway to join up with Alaskan and Yukon railway systems. Projected route is the same one selected by U.S. army engineers during last war.—(Times map)

FINAL BULLETINS

Egypt Rejects Dulles Plan

Giving Away Tenth of Province

He accused the British Columbia government of being "overzealous in its attempts to develop the province."

Mr. Elliott said it appears the government is conceding one-tenth of the province's mineral resources.

"I intend to look into this matter thoroughly."

"We want to develop British Columbia but I have a feeling that the people of this province would like some assurance on our potential partners."

"The fact that Mr. Wenner-Gren was blacklisted by both Great Britain and the United States during the last war raises some serious considerations."

It seems passing strange that...

Legion Discussion Expected

An ex-serviceman belonging to "My object in studying this

It was on February 12, 1957, that information was first revealed and discussed in the B.C. Legislature about "Swedish financier [Dr.] Axel Wenner-Gren" and his plans "for an industrial empire in an untapped frontier land" somewhere north and northeast of Prince George.²²⁶

Swedish multi-millionaire Axel Wenner-Gren ... who once trod the farm lanes of Sweden selling cream separators, was blacklisted by the Allied governments during the Second World War for his Nazi sympathies. Wenner-Gren, once a relative by marriage to Hermann Goering, acted in his behalf as a mediator in the Russo-Finnish war.²²⁷

²²⁶ 'Frontier' agog at industrial empire's scope, Ottawa Citizen, February 14, 1957.

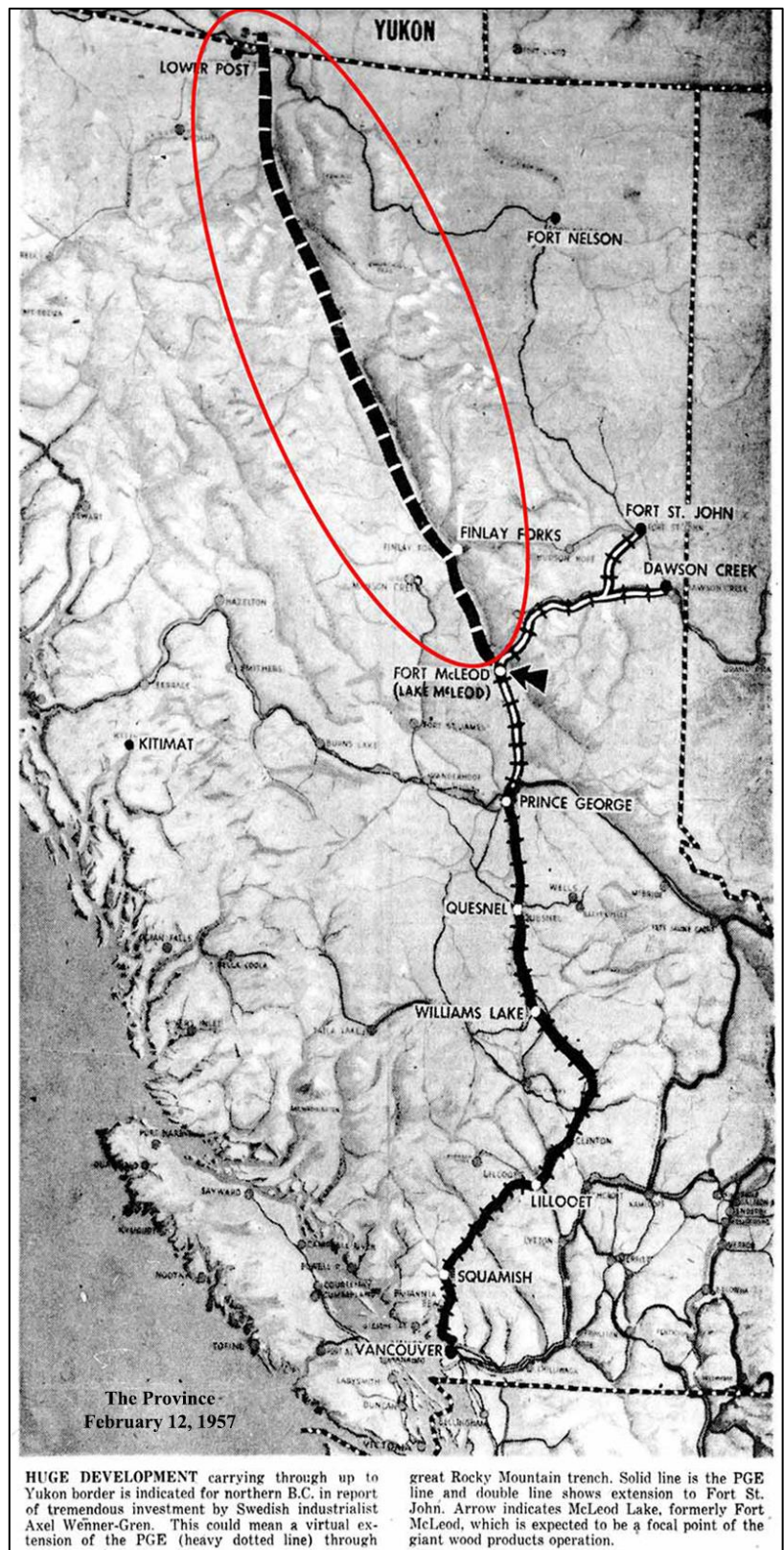
²²⁷ Can Wen-Gren pull it off? Times Colonist, November 17, 1959.

Wenner-Gren was blacklisted by Canada under order-in-council in 1942 as “an enemy of Canada,” with whom Canadians were forbidden to trade. “This blacklisting extended eventually to Great Britain, the United States, Nassau and Peru.” ²²⁸

The western Peace headwaters plan included the following:

1. A complete aerial survey of the industrial potentials in a 40,000-square mile area [9.32 % of B.C.’s land mass], lying north of Prince George, between the Peace River in the east and the western divide.
2. A 400-mile revolutionary monorail railway to connect with the northern extension of the Pacific Great Eastern Railway.
3. Development of the vast forest, hydro and mineral resources in the area.
4. An ultimate investment of \$1,000,000,000 [one billion] or more. ²²⁹

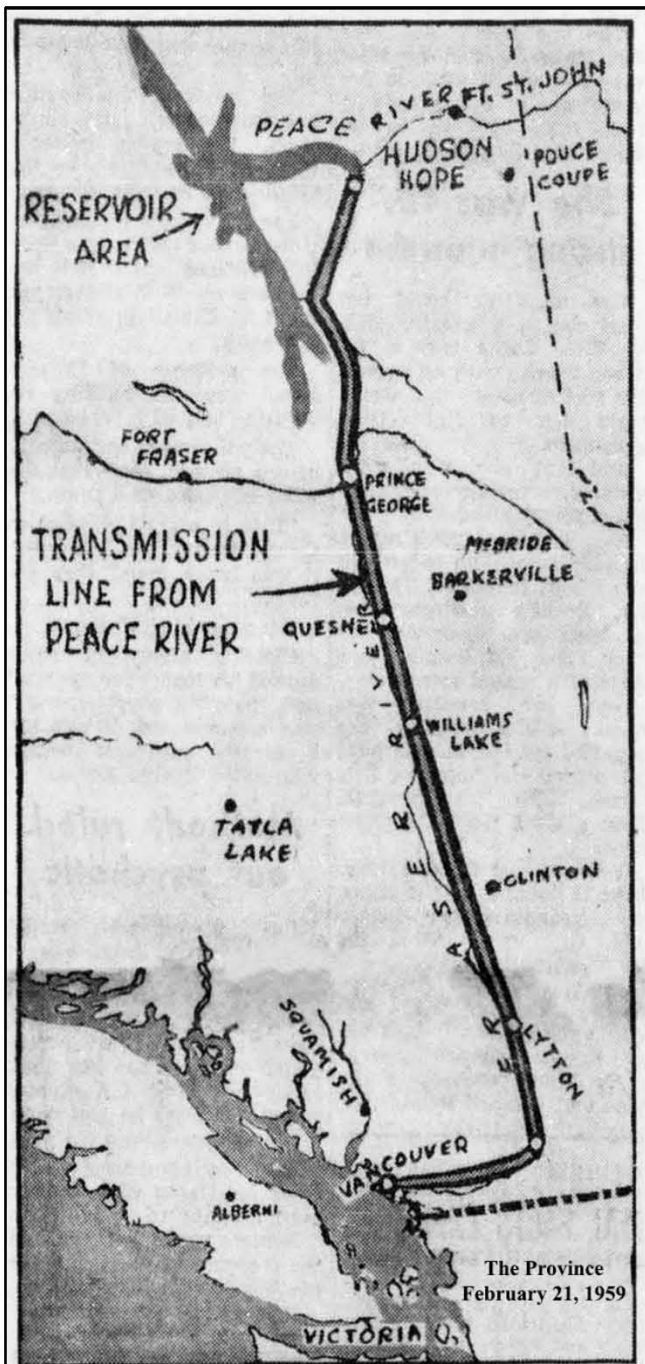
The one-billion-dollar investment estimate also included “an industrial development of pulp mills, steel mill, mines and lumber,” an extensive land mass “held under a government [400-mile-long land and mineral] reserve [and a water reserve on the Peace, Parsnip and Finlay Rivers] until the Wenner-Gren organization finishes \$5,000,000 worth of surveys, already underway.” ²³⁰ Additional industrial complex proposals would follow.



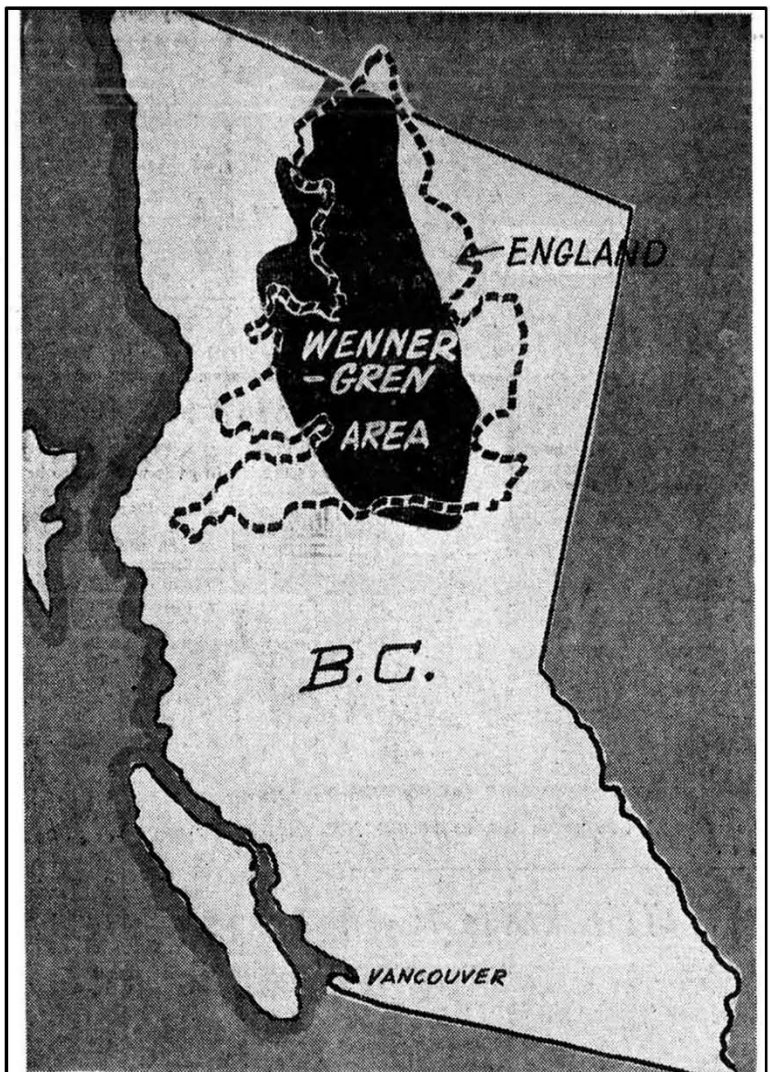
²²⁸ Blacklisted as ‘enemy of Canada,’ Times Colonist, December 8, 1959.

²²⁹ ‘Frontier’ agog at industrial empire’s scope, Ottawa Citizen, February 14, 1957.

²³⁰ Special rights? No, says Bennett, The Province, February 14, 1957.



HUGE NEW DAM planned by Wenner-Gren interests would be built 16 miles west of Hudson Hope creating the widespread reservoir area indicated on map. A transmission line 600 miles long would link Hudson Hope with the lower mainland.

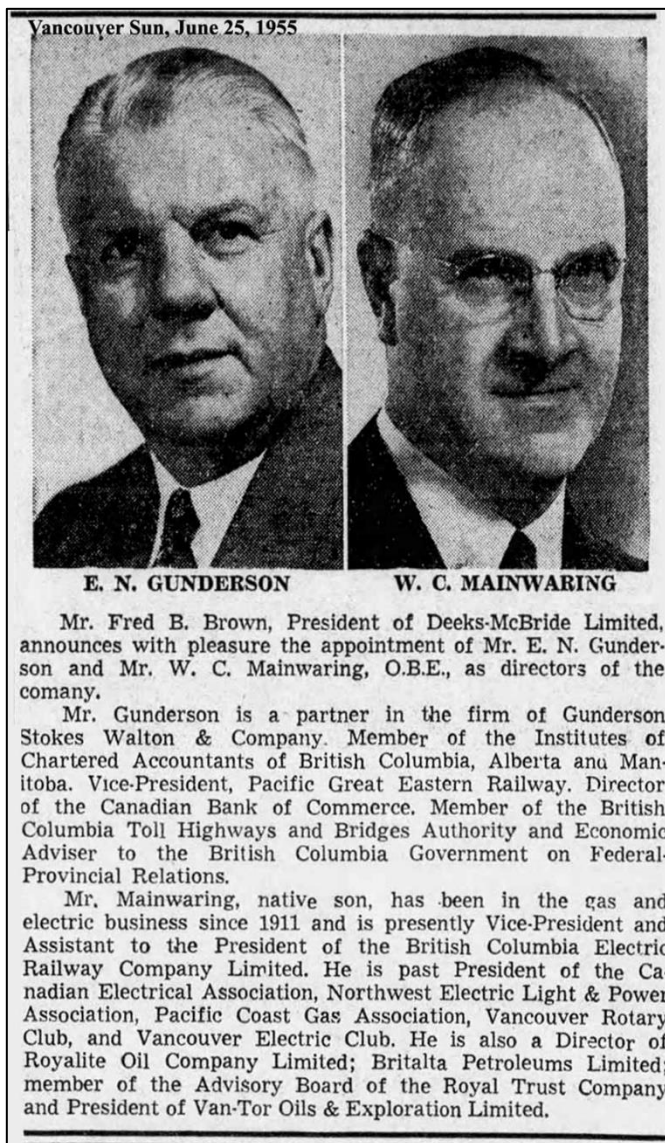


Vancouver Sun, February 15, 1957
NORTHERN EMPIRE of 40,000 square miles (dark area) of Rocky Mountain Trench being surveyed by Wenner-Gren interests is shown in relation to 58,000-square-mile area of England and Wales (black dotted line) superimposed on B.C. map.

Secret negotiations between Wenner-Gren representatives Birgir Strid and Bernard Gore and the B.C. government began in early September 1956, with a memorandum of intention signed on November 11, 1956.²³¹ Consideration soon began for the government to hand over a forest management license, with an official from the newly incorporated Wenner-Gren B.C. Development Company stating, we “will build at lease one pulp mill of not less than 100,000 tons annual capacity, sawmills, hydro-electric power units, townsites, roads, hospitals and schools, including technical institutions.”²³² The February 13, 1957, Province newspaper edition also stated that “negotiations have been going on for 2 ½ years” prior, meaning investment and speculation scheming began in late 1954:

It all started on Sunday afternoon at a fashionable cocktail party in London. There, Bernard G. Gore, a [Wrenner-Gren] Foundation representative, met W.A. McAdam, B.C. agent-general in London. The talk turned to B.C. and its potentialities. It wasn't long after that Mr. Gore came to B.C. to see the government.

By some remarkable and suspicious coincidence, the Social Credit administration's B.C.'s special trade representative Einar M. Gunderson – former unelected and specially appointed B.C. Finance Minister (1952-1953), and vice-president of publicly owned Pacific Great Eastern Railway (PGE, later B.C. Rail) which B.C. premier Bennett was president of – was visiting the British Columbia House in London on Wednesday and Thursday, September 1-2, 1954, where Agent General for B.C., W.A. McAdam, held a special “reception” attended by a long list of distinguished guests, business and trade representatives.²³³ By 1956, PGE was constructing the first railway line north of Prince George through the Pine Pass to connect with the Peace River lands' vast petroleum and forest resource zones. It is interesting to note that an influential banker-minded salesman representing railway and vast land speculation interests might want to connect with another Swedish monorail industrialist to open-up northern B.C. As it would soon turn out, Gunderson became Axel Wenner-Gren's third right hand man in his new B.C. companies, resulting in flurries of criticism by politicians and investigative reporters. However, no reporters had raised questions to link Gunderson's September 1954 visit in London to the originating affairs with Wenner-Gren.



²³¹ *Bennett defends Gunderson role*, The Province, February 14, 1957.

²³² *\$5,000,000 survey signed, first stage of gigantic project*, The Province, February 13, 1957.

²³³ *Receptions in London honor B.C. official*, The Province, September 1, 1954.



ADVANCE MEN for Swedish tycoon Dr. Axel Wenner-Gren are B. G. Gore, left, and K. B. Strid who checked over Tuesday's Province which carried exclusive stories and pictures on colossal northland development. Mr. Gore, who will be managing director of foundation company, will open city office March 1. Mr. Strid is chairman of board of new company. They said the total project would take a lifetime to complete. See story, page 25. (Chas. Jennings Photo).



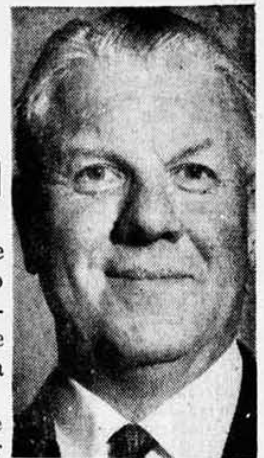
BRITISH ARCHITECT
Percy Gray is technical and planning advisor for the Wenner-Gren B.C. Development Co., which will undertake huge development in B.C.'s northland. He is a member of the Vancouver firm of McKee and Gray.

The Province, February 14, 1957

BENNETT DEFENDS GUNDERSON ROLE

Vancouver Province
February 14, 1957

'Has right' to position



EINAR GUNDERSON
... conflict of interests?

Premier Bennett today stoutly defended the right of PGE vice-president Einar Gunderson to be a director of the Wenner-Gren B.C. Development Co., although the premier told The Province he did not know that Mr. Gunderson was a director.

Mr. Gunderson today confirmed he was one of three directors in the company which has announced plans for a billion-dollar development of the Rocky Mountain Trench.

Said Premier Bennett:

"Every Canadian has the right to be the director of any company he wishes, and Mr. Gunderson is no second-class Canadian. He is a director of the Canadian Bank of Commerce and of other firms."

(Other firms include Deeks-McBride Ltd., and Black Ball Ferries Ltd.)

Mr. Bennett said that Mr. Gunderson was not a director of the firm when the memorandum of intention was signed last Nov. 11 and added the government had signed "nothing since his appointment."

He said that Birgir Strid of Stockholm and Bernard Gore of London were brought to his office early in September when the B.C. agent-general in London was here on a holiday. Negotiations followed and the memorandum was signed Nov. 11.

Omineca survey started

By BEN METCALFE
Province Staff Reporter

PRINCE GEORGE—First survey to establish the extent of mineral resources in the Rocky Mountain Trench that will be exploited under the proposed billion dollar government deal with Axel Wenner-Gren, Swedish financier, has begun.

Chief geophysicist of the party conducting the search for wealth is Carl Ericson of the Lundberg Exploration Company of Toronto. He flew into Prince George two days ago, while news of the pro-

a great day for British Columbia



A NEW ERA in British Columbia's Development

- Direct route from Vancouver to Prince George.
- 470 miles of modern railroad in operation.
- 366 miles of new line under construction from Prince George to Fort St. John and Dawson Creek.
- One of North America's most scenic tourist attractions.

Members of the Board of Directors:



HON. W. A. C. BENNETT
Premier
President, Board of Directors



MR. J. A. KENNEDY
Director



MR. E. M. GUNDERSON
Executive Vice-President
Director



MR. B. ALLEN
Director



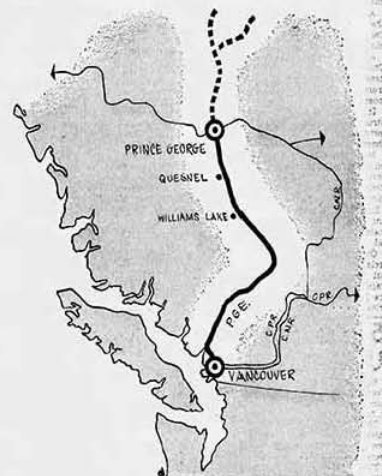
HON. W. R. T. CHETWYND
Minister of Railways
Director

PACIFIC GREAT EASTERN RAILWAY COMPANY

Head Office: 1095 West Pender Street, Vancouver, B.C.
Phone PACIFIC 3131

Vancouver Sun, August 27, 1956

NEW PGE SERVICE TO THE NORTH LINKS
B.C.'S VAST RESOURCES WITH THE
CONTINENT'S GREAT RAILROAD NETWORKS



On September 30, 1957, seven months following the big news about the government's secretive dealings with Wenner-Gren, W.C. Mainwaring accompanied B.C. "Attorney General Robert Bonner on his four-week trade visit to Europe."²³⁴ On their trade mission, Bonner, and his party of three, which included Dr. Gordon Shrum of the University of B.C. (the director of the B.C. Research Council, to be appointed by Bonner's administration as chairman of the B.C. Power Commission and later, chairman of B.C. Hydro), and Tom Sturgis, B.C. Deputy Minister of Industrial Development, first met with B.C. Agent General W.A. McAdam "concerning expansion of trade services between British Columbia House in London and European countries,"²³⁵ and then with the "British Board of Trade, the Scottish Council and various industrial groups." The B.C. Legislature had recently passed new legislation for "the wider role of the Agent General's office" meaning that "Mr. McAdam is agent general for Europe as well as the United Kingdom." Attorney General Bonner stated, "I personally believe British Columbia should aim at a population of 5,000,000 by 1975." Mainwaring, president of B.C. Electric's Western Development and Power Corporation, "said the group's job is to put information about power, markets and other necessities to location in B.C. before west European investors."²³⁶



Vancouver Sun, February 13, 1957
Huge Wenner-Gren development plan for B.C. was conceived by B.C. Agent-General William McAdam at a London cocktail party two years ago.



B.C. TRADE COMMISSION currently touring Europe took time out in Cologne to ride on the new, full-scale monorail built by Wenner-Gren. Left is Attorney-General Robert Bonner. Seated, third from

left, is Dr. Gordon Shrum of UBC; fourth is T. L. Sturgess, deputy trade minister, while standing, left, is W. C. Mainwaring, fourth member of team. Standing, third from left, is Bernard Gore,

The Province, October 22, 1957

²³⁴ W.C. Mainwaring, Gordon Shrum, on Europe trip, Times Colonist, September 25, 1957.

²³⁵ Added staff possibility at B.C. House, Times Colonist, September 26, 1957.

²³⁶ Free trade offers little to B.C. – Bonner, The Province, October 1, 1957.



The B.C. trade missionaries also met with the German industrial firm Krupps of Essen and its president, Alfried Krupp, an old controversial Second World War arms dealer friend of Dr. Axel Wenner-Gren who in 1936 "bought a one-third interest in the Bofors munitions works from Krupp of Germany."²³⁷ In Cologne, Germany the B.C. group "took time out ... to ride on the new, full-scale monorail built by Wenner-Gren," the overground rail system "similar to the type planned for development of B.C.'s Rocky Mountain trench."²³⁸ B.C.'s political opposition members soon began referring to the scheme as the B.C. Rocky Mountain "stench."

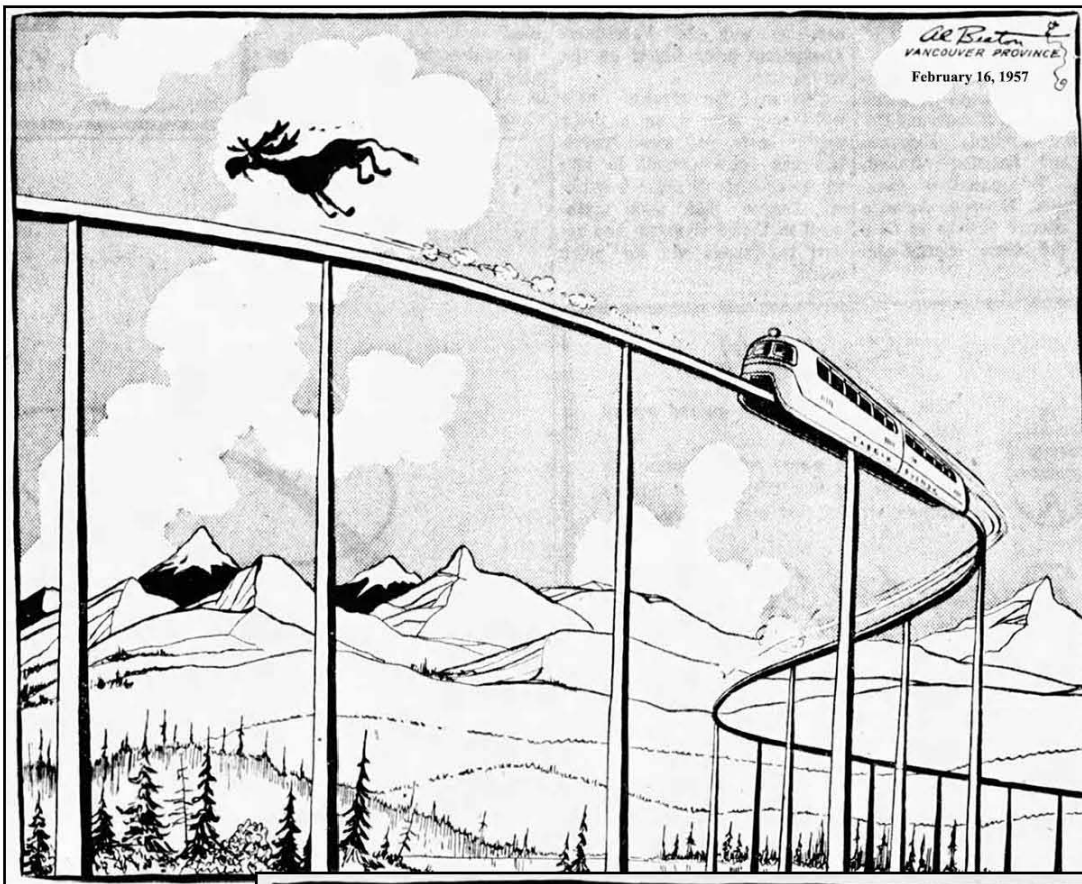
A May 28, 1957, Vancouver Sun article explained that B.C. Electric's subsidiary, the Western Development and Power Limited, had been incorporated in 1956 and "its chief job is selling industries on the idea of building a plant in B.C.," and that "the company started sending B.C. propaganda all over the world," with "its slogan, "Business is moving to B.C."" Company president Mainwaring's executive assistant, Doug Sutcliffe, said "we don't actually sell real estate, but we do just about everything else to get them here."²³⁹ A half year later, and two months following Bonner's special European trade mission, United Kingdom Properties Ltd. was setting up shop in downtown Vancouver announcing a "proposed multi-million office skyscraper at Hastings and Granville," and that W.C. Mainwaring was appointed as one of its directors.²⁴⁰ By 1958, Mainwaring was elevated to chairman of U.K. Properties.

²³⁷ *Wenner-Gren – who is he?* Times Colonist, February 13, 1957.

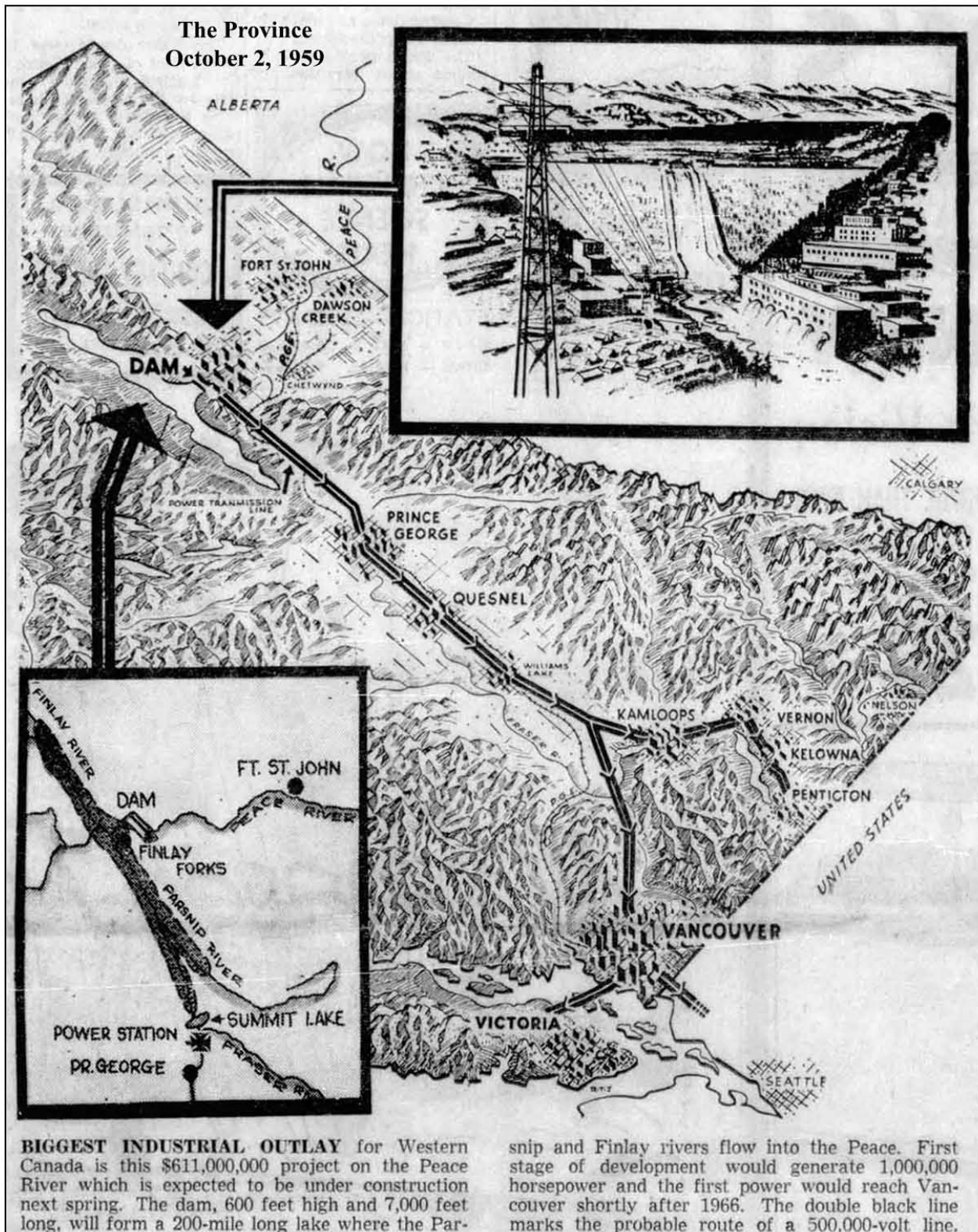
²³⁸ Photo caption, The Province, October 22, 1957.

²³⁹ *BCE subsidiary lures new industry to B.C.*, Vancouver Sun, May 28, 1957.

²⁴⁰ *New building here hinted by U.K. firm*, Vancouver Sun, December 3, 1957.



It was stated on November 20, 1958, that the Wenner-Gren B.C. Development Company “has sold its plans and memorandum of agreement between Axel Wenner-Gren and the provincial government” to President Mainwaring’s Peace River Power Development Company “for an assessed value of \$2,705,028.” And by late February 1959, Peace River Power had chosen the dam site, 16 miles west of Hudson’s Hope, with construction scheduled to begin by May 1960.



Also announced in February 1959, Mainwaring and director Ralph Chantrill's bizarre proposal for a "grandiose industrial" plan, a "uranium diffusion plant in the B.C. north utilizing Peace power:" "They suggest that the pure uranium produced in the plant be supplied to the nuclear energy plants proposed by the federal government as part of Ottawa's plan to populate and develop the Canadian north."²⁴¹ Chantrill, "of British Thomson Houston, is one of the world's top hydro-electric engineers." The two directors "point out flatly that Peace power could refine uranium – providing a market for uranium mines," explaining that "the process is simply "converting energy into nuclear energy"."

Mainwaring, recently appointed as a director of Global General Insurance Company, as director of Imperial Investments Ltd. (the name later changed to Laurentide Financial Corp.), and director of Western Copper Mills, was a guest speaker, alongside B.C. Attorney-General Robert Bonner, at the fall conference of the Pacific Northwest Trade Association held at the Fairbanks' University of Alaska in early September 1959. The two 'partners' had previously been on a special trade mission to Europe in 1957 to sell off B.C.'s northeast resources to investors. The conference theme was "Our Awakening Northland." Mainwaring advised the conference attendees that the Peace River Dam and power transmission line projects were almost ready to go.



A day before his departure to Fairbanks, Alaska, Mainwaring, with no academic credentials but that of an OBE (Order of the British Empire award), participated on a "power panel" debate at a September 1, 1959, meeting of the Canadian Bar Association. Sitting to his right on the panel of six was Attorney-General Robert Bonner. To his immediate left was Kenneth Billington, the executive secretary of the Washington Public Utility Districts' Association. "Billington said government's role must be active and effective, "even to the extent of actually financing, constructing and operating energy-producing projects". Mainwaring countered, saying "the government should act in the role of regulator and not "socialist operator".²⁴²

²⁴¹ *Peace River power can save uranium mines*, The Province, February 24, 1959.

²⁴² *Legal brains in clash over energy control*, The Province, September 2, 1959. When Mainwaring's vice president and general manager of Pleasant Valley Gas & Oil Co., Howard N. Walters, attended the International Chamber of Commerce (ICC) congress in Naples, Italy on May 8, 1957, he said "the ICC is the only organization representing the full business community which is in a position to deal effectively with a tendency by government to interfere with economics by active participation or excessive regulation," and "given a little power, governments tended "to wield a club instead of a spur". (*Government 'wields club – not spur,'* The Province, May 9, 1957.)



Along with building empire, comes the duty of 'entertaining empire.' (Source: The Province, July 16, 1959)





Mainwaring and his Wenner-Gren directors were planning to export an unknown quantity of their Peace Dam electricity south of the international border into Washington State, a plan which his company directors had been largely obfuscating. This infuriated Premier Bennett's opponents.

In their original announcement, according to newspapers carrying the story, "none of the principals mentioned export of power to the U.S." But a map they released at the time, showing damsites and transmission line routes, had one transmission line crossing the border south of Vancouver.²⁴³

When federal Minister of External Affairs Howard Green, federal Minister of Resources Alvin Hamilton, and General McNaughton arrived in B.C. on December 3, 1959, to meet with B.C. Lands and Forests Minister Ray Williston and B.C. Attorney-General Robert Bonner, Green told reporters at the Empress Hotel in Victoria that evening "the Canadian government does not propose to relax its policy of refusing export of electric power to the United States."²⁴⁴ This news, and related investigations by reporters, infuriated Mainwaring, his directors, and main investors. Mainwaring became unhinged and began

²⁴³ *Can Wen-Gren pull it off?* Times Colonist, November 17, 1959.

²⁴⁴ *Power export ban hits Peace River power deal*, Times Colonist, December 4, 1959.

clashing with and lashing out at the newspapers, which ended up moving public opinion even more against his empire schemes.

It is the business of newspapers to probe, continued Mr. [Stuart] Keate [publisher of the Victoria Daily Times], “to question, to seek out the facts and report them so that readers, who will ultimately determine the future of power in B.C. by force of public opinion, may make up their minds and act with wisdom.” A newspaper can do this objectively, “and that is where we differ from Mr. Mainwaring. We hold no shares in the Peace River Power Development Company, or any other power agency in the province.”²⁴⁵

“Mr. Mainwaring says that there is no confusion among people who know the score and understand technical things. He says the only confusion exists in the minds of ignorant and malicious journalists. But an astonishing number of editors and correspondents, at home and abroad, have told me that this is one of the most frustrating stories they’ve ever examined, for the very reason that the principals themselves – the promoters, the experts, the technicians and the politicians – seem to be talking at cross-purposes.”

He [Times editor Stuart Keate] quoted Mainwaring as saying last June in Victoria, “I am a great admirer of Dr. Axel Wenner-Gren and the things that he has already done for British Columbia.” “There are not many Canadians, I am convinced,” said Keate, “who share this admiration. No amount of propaganda – no massive injection of personal chlorophyll – nor all the perfumes of Arabia – can sweeten his record or commend him as a man to be trusted with such a vast Canadian heritage.”²⁴⁶



At the June 1961 British Electrical Power convention held in Eastbourne, England, Dal Grauer, chairman of B.C. Electric, who “presented a 65-page paper outlining Canada’s power picture,” told the audience of some 500 members that “British Columbia should export hydroelectric power,” explaining “export of power should not be discouraged by export taxes, if the national energy board finds it is in the best interests of Canada.”²⁴⁷ In a long letter to Prime Minister John Diefenbaker, B.C. opposition leader Robert Strachan referenced a quote from “Grauer’s article in a book, *Canadian Issues*, published earlier this year,” which contradicted Grauer’s statement made in England about the export of power. In that article, Grauer wrote: “It would be sound public policy to keep the cheapest power for British Columbia’s use and to stimulate development here rather than to export the least expensive power.”²⁴⁸ Dal Grauer’s private utility had a substantial investment interest in the Wenner-Wren Peace River project, which Mainwaring, his former vice president and assistant, was now president of. And B.C. Electric’s solicitor, chief counsel, and senior vice president, A. Bruce Robertson, had been a director of Wenner-Gren’s Peace River Power Development Co. Ltd. since 1958. Grauer’s and Mainwaring’s push for export of Peace River power was all part of very cozy, elaborate, inter-corporate relationship schemes.

²⁴⁵ ‘B.C. saddled forever with costly power,’ *Times Colonist*, December 8, 1959.

²⁴⁶ *Publisher charges: Peace River power scheme mired in ‘cross-purposes,’* *Vancouver Sun*, December 9, 1959.

²⁴⁷ *B.C. Electric head calls for export of electricity,* *Vancouver Sun*, June 14, 1961.

²⁴⁸ *Ban Columbia Sale to U.S., Strachan asks Diefenbaker,* *Vancouver Sun*, June 14, 1961.

As the Wenner-Gren representative interests and the B.C. Power Company were merging on the empire building front, in 1961 Dal Grauer's earthly fate was quickly approaching, even as his appointment as chairman of the Western Development and Power Limited was announced in March 1961.

As chairman, Mr. Grauer will be chief executive officer and chief policy maker, while Mr. [R. Bruce] Robertson as president, will be chief operating officer. Mr. Robertson is also senior vice-president of the parent company, British Columbia Power Corporation. Mr. Grauer will exercise general control over Western Development, as he does over all the B.C. Electric group of companies. Western Development is responsible for investing in land and other industrial projects, and of new development.²⁴⁹

And, even as rumors began in March 1961 of the W.A.C. Bennett government taking over B.C. Electric: "Grauer said that talk of a possible takeover arose when Prime Minister Diefenbaker said this tax-sharing arrangement [of "federal corporation income tax on investor-owned utilities was to be returned to the provinces"] would continue to March 31, 1962."²⁵⁰

On July 15, 1961, at age 55, and three months after the passing of his mother Marie Grauer, Dal Grauer was announced to be "critically ill" with leukemia having been "under treatment for several months and was confined to Vancouver General Hospital on his return from a trip to England," the trip to Eastbourne where he presented his paper on the export of electricity at the British Electrical Power convention.

Dr. Grauer [a Rhodes scholar, and Ph.D. in economics, and Chancellor of the University of B.C. since 1958] learned he had leukemia in the spring of this year. He was examined in New York on the way to England at the end of May. Although he was then chronically ill, doctors believed he was fit to travel.²⁵¹

Dal Grauer died two weeks later Friday, July 28, 1961.

Mr. Grauer was one of nine children of pioneer cattle farmer and butcher John Jacob Grauer who settled here shortly before the Great [Vancouver City] Fire of 1886.

He was a director of a host of companies: Royal Bank of Canada, Montreal Trust Company, Sun Life Assurance Co. of Canada, MacMillan Bloedel and Power River Co. Ltd., Canadian Chemical Co. Ltd., Ventures Ltd., Dominion Bridge Co. Ltd., Ford Motor Company of Canada Ltd., Canadian Liquid Air Company Ltd., Webb and Knapp (Canada) Ltd., Investors Syndicate of Canada Ltd., and Western Copper Mills.

He also had a wide range of other related interests: member, board of directors, International Chamber of Commerce; member, National Industrial Conference Board, New York; member, [former 1957-1958 chairman] Canadian Council of National Industrial Conference Board; member, Advisory Committee on Atomic Power, Atomic Energy of Canada Ltd.; member, Dollar Sterling Trade Council.²⁵²

²⁴⁹ *New post for Dal Grauer*, Langley Advance, March 2, 1961.

²⁵⁰ *If BCE sold: B.C. takeover possibility discussed by Dal Grauer*, Vancouver Sun, March 30, 1961.

²⁵¹ *Dal Grauer critically sick of Leukemia*, Vancouver Sun, July 15, 1961.

²⁵² *Dal Grauer dies – victim of leukemia*, Vancouver Sun, July 28, 1961.

He master-minded the \$650 million post-war expansion program which forged it [B.C. Power Corporation] into one of the most successful private utility companies in North America. ... He was considered to have “made” the B.C. Electric.²⁵³

DAL GRAUER DIES

The Sun
FOUNDED 1886
VOL. LXXV—No. 238
VANCOUVER, FRIDAY, JULY 28, 1961 10 CENTS

Victim of Leukemia

Dr. A. E. "Dal" Grauer, chairman and chief executive of the B.C. Electric Co. Ltd., and chancellor of the University of B.C., died at 5:05 p.m. today of leukemia.

Dr. Grauer, 55, one of the province's most able and illustrious native sons, had been suffering from the disease since this spring.

He learned his condition was chronic when examined in New York in May and entered Vancouver General Hospital when he returned here in late June from a trip to England.

**★★★★★
FINAL EDITION**

Director of Many Firms

The other surviving members of his immediate family are his brothers, Gus, Rudolph, Carl, John and Fred, of Vancouver, George, of Ladner, and two sisters, Pauline and Mary, of Vancouver.

He was a director of a host of companies: Royal Bank of Canada, Montreal Trust Company, Sun Life Assurance Co. of Canada, MacMillan, Bloedel and Powell River Co. Ltd., Canadian Chemical Co. Ltd., Ventures Ltd., Dominion Bridge Co. Ltd., Ford Motor Company of Canada Ltd., Canadian Liquid Air Company Ltd., Webb and Knapp (Canada) Ltd., Investors Syndicate of Canada Ltd., and Western Copper Mills.

He also had a wide range of other related interests:

member, board of directors, International Chamber of Commerce; member, National Industrial Conference Board, New York; member, Canadian Council of National Industrial Conference Board; member, Advisory Committee on Atomic Power, Atomic Energy of Canada Ltd.; member, Dollar Sterling Trade Council.

He belonged to the Capilano Golf and Country Club, the Royal Vancouver Yacht Club, and the University Club in Vancouver, the Union Club in Victoria, and the University Club and the Mount Royal Club in Montreal.

He was a member of the Zeta Psi fraternity at the University of B.C.

His home was at 3390 The Crescent in Vancouver.

Wanted to Be at Home

He left the hospital two weeks ago. His condition at that time was critical. His family said he wanted to be at home when the end came.

Mr. Grauer gave up a brilliant career as university professor and government adviser to take the position of general secretary of the B.C. Electric in 1939.

He rose quickly through executive posts and stepped up to president and chairman of the board seven years later at the age of 40 in 1949.

He was the driving force behind the company's huge \$650 million post-war expansion program. He resigned the presidency last December.

Despite his heavy business responsibilities he managed to carve himself a deep niche in the community and cultural life of British Columbia.

His death came as he was serving his second three-year term as chancellor and chairman of the board of governors of UBC.

Funeral arrangements are to be announced.

Mr. Grauer was one of nine children of pioneer cattle farmer and butcher John Jacob Grauer who settled here shortly before the Great Fire of 1886. His father died in 1936 and his mother in April this year.

Mr. Grauer's wife, Shirley, is from another prominent pioneer family, the daughter of Mr. and Mrs. Ernest A. Woodward. His children, all at home, are Gay Siergaard, 22, Romilly Starr, 20, Dal Neith Ritchie, 16, Steven Peter, 14, Leilage, 13, and John Christopher, 10.

Grauer Biography, Page 3

to president and chairman of the board seven years later at the age of 40 in 1949.

He was the driving force behind the company's huge \$650 million post-war expansion program. He resigned the presidency last December.

Despite his heavy business responsibilities he managed to carve himself a deep niche in the community and cultural life of British Columbia.

His death came as he was serving his second three-year term as chancellor and chairman of the board of governors of UBC.

Funeral arrangements are to be announced.

Mr. Grauer was one of nine children of pioneer cattle farmer and butcher John Jacob Grauer who settled here shortly before the Great Fire of 1886. His father died in 1936 and his mother in April this year.

Mr. Grauer's wife, Shirley, is from another prominent pioneer family, the daughter of Mr. and Mrs. Ernest A. Woodward. His children, all at home, are Gay Siergaard, 22, Romilly Starr, 20, Dal Neith Ritchie, 16, Steven Peter, 14, Leilage, 13, and John Christopher, 10.

CHIEF EXECUTIVE OFFICER of the B.C. Electric and chancellor of the University of British Columbia. Dr. A. E. "Dal" Grauer died at his home, 3390 The Crescent, today. He had been suffering from leukemia since this spring.

The newspapers announced that Grauer's funeral service was to be held Tuesday, August 1, at Christ Church Cathedral at 2:30 p.m. in downtown Vancouver. About 1,300 "friends and strangers gathered" inside the Cathedral, and "another 500 waited in silence outside in the bright afternoon sunlight," where "industrialists, financiers, the great and the mighty, the men of industry and commerce, the men from the university, mingled with ordinary citizens."²⁵⁴ Vancouver Sun reporter Barry Broadfoot stated:

By a stroke of irony, the last rites were being said for Dr. Grauer just as Premier W.A.C. Bennett rose in a suspense-filled, extraordinary session of the provincial legislature to announce that the government would acquire the B.C. Electric Co. Ltd. immediately and operate it as a public utility.

²⁵³ *Grauer a man of many facets*, Vancouver Sun, July 28, 1961.

²⁵⁴ *1,800 gather at Cathedral in tribute to Dal Grauer*, Vancouver Sun, August 2, 1961.

Outside in the bright sunlight, hundreds who had stood in silence for an hour watched as the casket was placed in a hearse for the last ride, [driving ever so slowly] past the huge BCE building that is his monument, to the family plot in Forest Lawn cemetery, where a brief graveside ceremony was held.

On the eleventh anniversary of the Social Credit's rise to power on August 1, 1952, the timing of the Premier's announcement through legislative Bill No. 5 on the takeover of the giant private utility corporation, as its capitalist captain was being buried, was more than mere irony. It was extraordinary pathos that went literally 'through the roof', raising the collective eyebrows of modern-day Shakespearians and

stirring the ghosts of ancient Greek elegists. CCF (Co-operative Commonwealth Federation) party Kalso-Slocan riding MLA Randolph Harding responded to Bennett's announcement as his fellow opposition party members collectively thumped on their bench desks, "Today is the birthday of Social Credit and you are giving them public ownership – socialism!"

Through legislative Bill No. 5:

All shares of BCE capital stock were automatically vested in the government. All the directorships were automatically terminated, and new ones will be appointed by the cabinet. Shareholders in Peace River Power Development Co. Ltd., a private company formed to build the giant dam on the Peace, don't fare so well. The [Bill 5, Power Development] Act provides for all its rights and interests in hydro plans and the application it made to the provincial water comptroller last year, to be taken over by the Crown-owned BCE.²⁵⁵



The Province, August 2, 1961
STRANGE TURN OF EVENTS Tuesday saw the hearse leading Dal Grauer's funeral procession pass the BCE building within minutes of the government announcement it was taking over the company.
 Gordon Sedawies photo

²⁵⁵ *BCE takeover effective at once; Peace plan under same control*, The Province, August 2, 1961.

From the remaining rubble after the government's takeover, and with the death of Dr. Axel Wenner-Gren on November 24, 1961, and the slow disintegration of the Wenner-Gren B.C. Development Co., Mainwaring shocked the Social Credit government in January 1962 in a bold move on the formation of a new company, Alexandra Forest Industries Ltd., which had been incorporated "a month before" Axel Wenner-Gren's death.²⁵⁶ Mainwaring's new forest industrial complex site was moved from its original proposed site near Hudson's Hope, a site that would have been closer to Mainwaring's numerous personal petroleum assets and interests in the northeast B.C. rural population centres of Ft. St. John and Dawson Creek.

The new Alexandra Forest Industries has been one of the best-kept secrets in B.C. financial circles. It was formed five months ago [August 1961], less than a month after Bennett took over the B.C. Electric and Wenner-Gren's Peace River Power Development Co. It was literally a salvage operation made necessary by that move and given urgency by the death of Axel-Wenner-Gren.²⁵⁷

Site of the proposed forest products complex has been changed from a location beside the Peace River hydro project at Portage Mountain near Hudson Hope. The new site is on the east shore of the Parsnip River about 100 miles north of Prince George. ... The project is expected to lead to the development of a new townsite of 5,000 or more.²⁵⁸

Mainwaring stated how in the original 1956 agreement with the government, "\$500,000 worth of forest surveys were made by Wenner-Gren" and that government placed "a crown reserve ... on the forest areas involved," clarifying that "the 1956 agreement did not include granting of a forest management licence in the area or any other concessions:" "we will have to go through exactly the same routine as anyone else would have to do if they wanted to apply for a tree farm licence there."²⁵⁹ Mainwaring's "plans call for construction of a pulp mill with a capacity of 500 tons a day, a paper mill with a daily capacity of 750 tons, a sawmill and a plywood factory,"²⁶⁰ and stated in November 1958 that due to his Peace River dam plans "a large pulp mill would almost certainly be developed to harvest timber in the area that must be flooded behind the proposed power line."²⁶¹

Mainwaring said that the huge area to be flooded behind B.C. Hydro's Portage Mountain dam contains one billion feet of merchantable timber and it is hoped to log this first.²⁶²

His was a critical statement of intent, because in the early 1950s when Alcan flooded some 358 square miles of lakes and forest lands alongside and within the northern boundaries of Tweedsmuir Park for its massive \$329,000,000 hydro development project that diverted the headwaters of the Nechako River, Alcan promised the government it would spend \$100,000,000 to remove the forests in the vast flooded basin zones but failed to do so, causing great havoc and grief in decades to follow: "The Coalition government of the day let Alcan off with \$250,000 worth of clearing," and "there were howls about the unsightly condition but these gradually died down."²⁶³ In paving the way for Alcan's massive and

²⁵⁶ *High Finance and Low Modernism: The Failure of the Wenner-Gren British Columbia Project, 1956-1961*, by Frank Leonard, B.C. Studies, No. 210, Summer 2021, page 61.

²⁵⁷ *Faith and surgery made Alexandra*, National Post, January 27, 1962.

²⁵⁸ *Forest products complex*, The Province, April 19, 1963.

²⁵⁹ *No favors given on Peace timber*, Times Colonist, January 19, 1962.

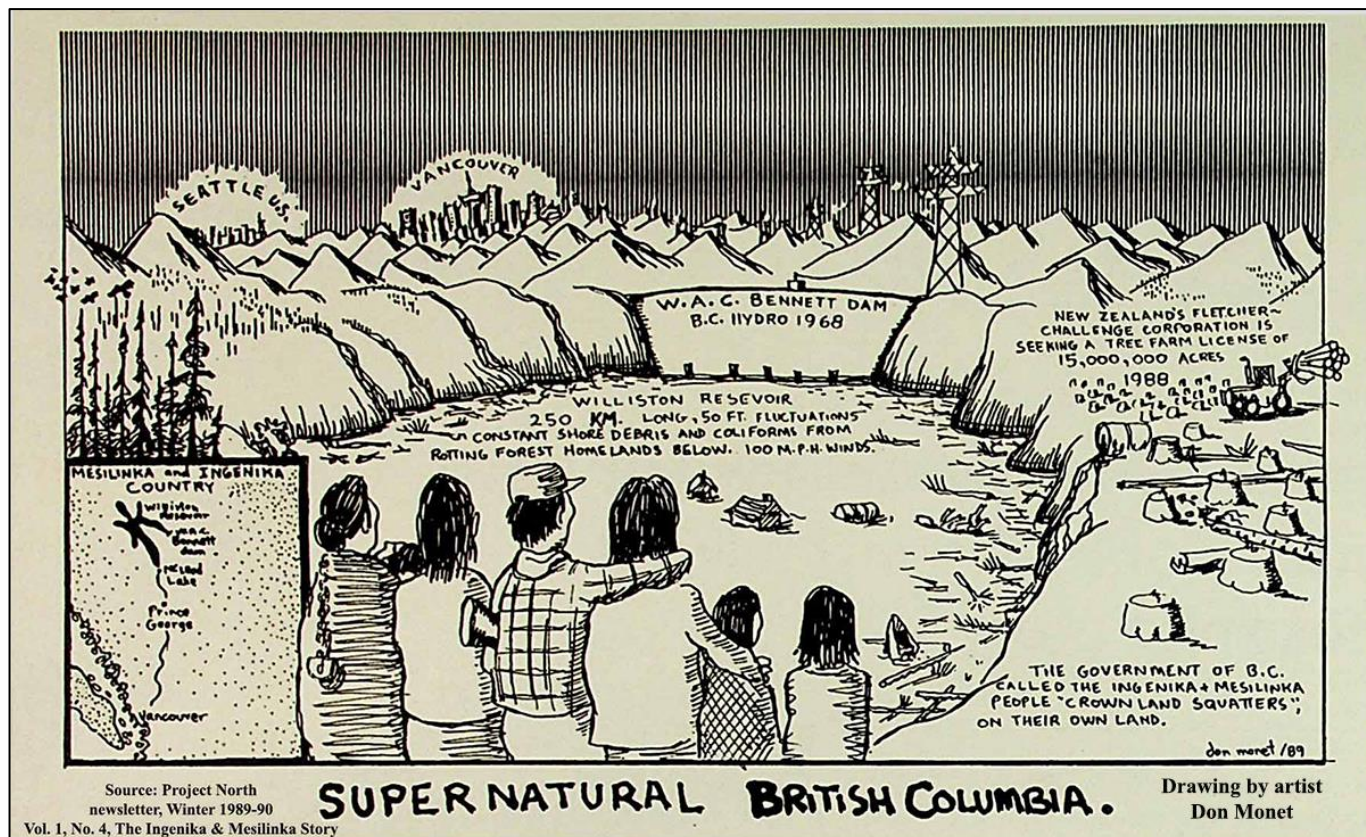
²⁶⁰ *Calder speaks – extend line to coast, PGE urged*, Times Colonist, February 13, 1964.

²⁶¹ *Power Commission invited to join in Wenner Gren Survey*, Vancouver Sun, November 12, 1958.

²⁶² Bill Fletcher, Vancouver Sun, April 20, 1963.

²⁶³ Bill Fletcher, Vancouver Sun, May 17, 1963.

controversial hydro-electric developments that diverted much of the Nechako westward, cutting off salmon migrations and altering the characteristics of the river's water regime, on June 20, 1955, the Social Credit government, in the mere stroke of a pen, removed 1,156,5000 acres from Tweedsmuir Provincial Park. When Lord Tweedsmuir junior came to visit the Park with his wife for a three-week vacation in September 1955, where they climbed Tweedsmuir Peak "and placed a rock on the cairn erected in memory of his father," ²⁶⁴ the young Lord Tweedsmuir "didn't want to get into the controversy" when asked by reporters about Lands Minister E.T. Kenney's and the provincial Cabinet's decision to "cut one-third" of the park "for the Alcan project." ²⁶⁵ The young John Buchan Jr. Lord Tweedsmuir was reluctant to get into a squabble because of his directorships and big-business involvements, who would soon be appointed to Mainwaring's Peace River Power company.



The same resource negligence occurred in the late 1960s with the B.C. Hydro & Power Authority after it nationalized B.C. Electric. When B.C. Hydro flooded some 450,000 acres of the Parsnip, Finlay and upper Peace River valley bottoms to create the enormous Williston Reservoir (often erroneously referred to as a "Lake") for the W.A.C. Bennett dam, within an area described as "five times the size of Lake Okanagan," B.C. Hydro, which also torched First Nations' hunting cabins, failed to remove and clear away a majority of the valley forest lands, creating decades of disastrous navigable and recreational boat grief from forest debris, and the submerged trees, whose roots giving way would launch randomly like missiles, bursting high out of the deep reservoir waters. At the gateway into Mainwaring's instant Town of MacKenzie there stood for years a gigantic monument bulldozer with a multi-stub-mounted 'tree crusher' roller commemorating this failure.

²⁶⁴ *Tweedsmuir finish wilderness holiday*, The Province, October 7, 1955.

²⁶⁵ *Lord Tweedsmuir in Vancouver on way to park named after father*, The Province, August 29, 1955.

Vancouver Sun columnist Bill Fletcher summed it all up. He said that it in the 1950s it cost B.C. Electric \$9,000,000 to clear off the forests on 1,800 acres for the Buttle Reservoir (Lake) on Vancouver Island near Campbell River, a cost which averaged \$5,000 an acre. That same computation amounted to “be roughly \$2,100,000,000” and “three times as much as the cost of the whole [Peace River] hydro project,” referring to the world’s largest dam project as a “multi-billion-dollar headache.” Because there wasn’t “an organized lobby of conservationists and outdoor sports enthusiasts to insist that the man-made inland lake be curried and combed like the centre of attraction in a national park,” Lands and Forests Minister Ray Williston’s “idea is [to] leave a big share of the job to nature,” as part of his “new school of thought on reservoir clearing.” Williston said that with the to-be-flooded 450,000 acres behind the 600-foot-high dam, the “government is readying the area for timber auctions and setting specifications covering the logging and utilization of the wood,” and “areas not under water will be put on a sustained yield basis.”²⁶⁶

In 1963, Alexandra Forest Industries partnered with B.C. Forest Products Ltd., a Vancouver Island-based major company (est. 1946) to scope out the development of forestlands north of Prince George. (B.C. Forest Products was one of the companies named in the conspiracy and bribery scandal of Forest Minister Bob Sommers but escaped judgement by the Supreme Court in 1958 for lack of evidence.) A “\$60 million pulp and lumber project” partnership agreement proposed to eventually employ some 3,000 workers was signed on January 28, 1964, for a holding company and the issuance of 1,350,000 shares, at one dollar a share, divided among seven companies and individuals: B.C. Forest Products (500,000), Argus Corporation (250,000), Mead Corporation (200,000), International Caribbean (80,000, a Wenner-Gren company), Glore, Forgan & Company (70,000), Wenner-Gren B.C. Development (240,000), and W.C. Mainwaring (10,000).²⁶⁷ Over the next two long years, the partnership’s applications for a Tree Farm Licence and pulp mill tenures were rejected by Lands, Forests and Water Resources Minister Ray Williston, until July 1965 when it signed “a Timber Sale Harvesting Licence agreement giving it cutting rights to 60 million cubic feet annually in the Finlay Public Sustained Yield Unit for 42 years:” “Under an agreement with the provincial government, Alexandra must build a pulp mill, with a maximum capacity of 400 tons per day and have it in production by December 31, 1970.”²⁶⁸



In 1988, Premier Bill Bennett Junior’s Social Credit administration, through Forests Minister David Parker, entertained a highly controversial proposal (one of fifteen or more TFL roll-over proposals) by the Fletcher Challenge corporation for an unprecedented, gigantic Tree Farm License (TFL), overtop of Alexandra’s license area, a massive proposal equal in size, and almost identical, to Wenner-Gren’s 1957 reserved development boundaries. The proposal was rejected by strong public opposition.

In January 1967, as B.C. Hydro & Power Authority began flooding the valley bottoms near the instant town of MacKenzie, B.C. Forest Products Ltd. acquired “100 per cent control of Alexandra Forest Holdings Ltd. and the latter’s subsidiary, Alexandra Forest Industries Ltd.” BCFP previously maintained

²⁶⁶ Bill Fletcher, Vancouver Sun, May 17, 1963.

²⁶⁷ *Hush-hush forest survey closes \$60 million deal*, Vancouver Sun, January 31, 1964.

²⁶⁸ *Timber available for big project*, Vancouver Sun, July 9, 1965.

500,000 shares of the 1,395,000 total shares, of which seven companies and individuals owned 789,500 shares and Mainwaring now 50,000. Mainwaring's forest company "built the new town of MacKenzie on Morfee Lakes, 100 miles north of Prince George," and has "a modern sawmill with a capacity of 60 million board feet annually."²⁶⁹

For the Wenner-Gren B.C. Development Co.'s mining interests, which Mainwaring, Bernard Gore, and K. Birger Strid were directors of, they incorporated four new independent companies, "Totem Mining Co. Ltd., Metot Mining Co. Ltd., Julian Mining Co. Ltd., and Mart Mining Co. Ltd."²⁷⁰ The companies were registered at a "same Vancouver address,"²⁷¹ and "had 134 claims in 1962, 182 claims in 1963, and 352 claims in 1964."²⁷² In 1962, "Mainwaring said Wenner-Gren's prospecting between 1957-1961 resulted in 600 claims being filed, after aerial electromagnetic surveys totalling 164,000 flying miles," and that "about half those claims have been dropped, but this year we expect to file another 200 claims."²⁷³ In its late 1950s Rocky Mountain Trench mineral surveys the Wenner-Gren interests spent about \$2 million.

It was revealed some fifteen years later that when provincial botanist Adam Szezawinski and biologist Charlie Guiget submitted their report to government in 1959 on the Spatsizi Plateau area of the Stikine Valley on the area's "unique ecosystem," where "Wenner-Gren was exploring for minerals," summarizing that the area "should be preserved," "word had come down from [Premier] Bennett that I [Adam Szezawinski] should be shut up or fired."²⁷⁴

**Naturalist
Muzzled?**

In Mainwaring's new mining companies, he and his partners would spend "a further \$450,000 to extend those surveys."²⁷⁵

Two of the four companies formed to take over mineral claims held by Wenner-Gren B.C. Development Co. Ltd. had registered 129 claims in the Rocky Mountain Trench of northern B.C. up to January 15 [1962], Mines Minister [Ken] Kiernan reported today. Totem Minerals Ltd. holds 99 claims in the general area of Takla Lake, about 150 miles northwest of Prince George, and another eight farther north in the Rocky Mountain Trench region. Metot Minerals Ltd. had registered 22 claims in the Tatsamenie Lake area of far-northern Atlin mining division.²⁷⁶

Mr. Kiernan said Totem has 107 claims in the Omineca, Cariboo, and Liard mining divisions, and Metot has 22 in the Atlin area.²⁷⁷

Among other companies conducting exploration programs in B.C. are: Julian Mining, which is spending about \$100,000 investigating properties in the Tulsequah, Stikine River, Whitesail Lake and Endako areas.²⁷⁸

²⁶⁹ *Alexandra taken over by BCFP*, The Province, January 5, 1967.

²⁷⁰ *New company to handle northern pulp project*, The Province, January 18, 1962.

²⁷¹ *Calder speaks – extend line to coast, PGE urged*, Times Colonist, February 13, 1964.

²⁷² *Wen-Gren associates hike mine holdings*, Times Colonist, January 29, 1965.

²⁷³ *Bennett has a real ally in Wenner-Gren offspring*, National Post, January 27, 1962.

²⁷⁴ *Naturalist muzzled?* Times Colonist, June 16, 1975.

²⁷⁵ *Faith and surgery made Alexandra*, National Post, January 27, 1962.

²⁷⁶ *129 mineral claims filed in 'Trench'*, Times Colonist, January 30, 1962.

²⁷⁷ *Mining firms stake claims*, The Province, January 31, 1962.

²⁷⁸ *Risk capital likes the look of mineral potential in B.C.*, The Financial Post, March 7, 1964.

The [upper] Stikine [River headwaters] is a very hot field. The companies operating helicopters on charter read like a fair section of the mining who's who ... Anaconda in partnership with Julian Mining Co. ... Dick McCann, a veteran prospector who staked the nucleus of 156 claims now held by Anaconda Copper Co. and Julian Mining Co. ... Anaconda and Julian hold 156 claims in a 60-40 partnership, with Julian doing the work and technical direction from Anaconda.²⁷⁹

ATLIN – A pilot and three Vancouver prospectors were killed Monday when an aircraft crashed at Trapper Lake, 90 miles southwest of here. ... They were employees of Julian Mining Co. of Vancouver which operates a general prospecting camp on Trapper Lake ... [which] is about 320 miles northwest of Prince Rupert.²⁸⁰

Farther north, at Trapper Lake, which is situated near the headwaters of Taku River, the Julian Mining Company is reported to have discovered a promising deposit of copper ore with silver and other metals. It is understood an extensive program will be carried out on this deposit this year. The Anaconda Company is understood to be participating with Julian Mining.²⁸¹

On Monday, July 13, 1964, Peace River Power Development Company Ltd.'s chairman, Sir Andrew MacTaggart, "chairman of Power Securities Corp. of London, one of Peace River Power's largest shareholders," announced that the company was "going into voluntary liquidation."

Last March Pacific Northern Railway, another phase of the projected development ["of Wenner-Gren and promoter Bernard Gore"], went into voluntary liquidation. Peace River Power received an \$8 million settlement from the government after the expropriation. It went to court in an effort to get higher compensation but has now given up the fight. In an annual report filed with the provincial government in June 1961, it was disclosed that Wenner-Gren B.C. Development Company had sold 1,560,512 of its shares and [Bernard] Gore, 350,000. This left W-G with 5,573,912 shares and Gore with 880,660. It was never revealed what the two had received for the stock sold at this time or the balance disposed of later.²⁸²

The \$8 million payout of outstanding remaining 12,942,086 shares, from an original stock value of one dollar, now reduced to \$0.57 cents, went to thirteen entities:

- Power Securities (3,231,046 shares - \$1,841,696)
- Associated Electrical Industries (4,246,376 shares - \$2,420,434)
- Western Development and Power, the subsidiary of B.C. Power Corp (2,486,514 shares - \$1,417,313)
- British Insulated Callender's Cables Ltd. (318,000 shares - \$181,260)
- Close Brothers Ltd. (265,000 shares - \$151,050)
- John Laing & Sons (Holdings) Ltd. (325,000 shares - \$185,250)
- Canadian Utilities Ltd., of Edmonton (442,000 shares - \$251,940)
- Taylor Woodrow (Overseas) Ltd. (325,000 shares - \$185,250)
- Henry Amsbacher & Co. of London (801,150 shares - \$456,656)
- Nesbitt, Thomson & Co. (125,000 shares - \$71,250)

²⁷⁹ *Stikine – B.C.'s hot staking area*, The Province, August 1, 1964.

²⁸⁰ *Crash kills pilot, three prospectors*, Vancouver Sun, September 22, 1964.

²⁸¹ *Important mining projects*, The Province, May 25, 1965.

²⁸² *Peace River firm to call it quits*, Vancouver Sun, July 13, 1964.

Peace River Firm To Call It Quits

Shareholders to Receive 57 Cents for Their \$1 Shares

By BILL FLETCHER
Sun Business Editor

Peace River Power Development Company Limited is going into voluntary liquidation.

The decision to wind up the company, formed by the late Swedish industrialist Axel Wenner-Gren, to develop electricity on the Peace, was announced today by board chairman Sir Andrew MacTaggart.

MacTaggart is also chairman of Power Securities Corp. of London, one of Peace River Power's largest shareholders.

DREAM ENDS

The wind-up will write the final chapter to the multi-billion dollar dream of Wenner-Gren and promoter Bernard Gore to develop northern B.C.

Last March Pacific Northern Railway, another phase of the projected development, went into voluntary liquidation.

Although Peace River Power Development Co. is breathing its last, the Wenner-Gren idea is being brought to fruition by B.C.'s Premier Bennett who expropriated the B.C. Electric and Peace River Power on Aug. 1, 1961.

\$8 MILLION

Peace River Power received an \$8 million settlement from the government after the expropriation. It went to court in an effort to get higher compensation but has now given up the fight.

In announcing the company's demise, Sir Andrew said, "This company, which has developed a hydro-electric project acknowledged by everyone, and particularly by the government of British Columbia, to be one of the greatest, has been treated in a way which in my experience of such matters covering a period of 50 years is unparalleled."

MEETING SET

An extraordinary general meeting of Peace River Power shareholders will be held Aug. 5 in the board room of lawyers Campney, Owen & Murphy to approve the wind-up. The meeting will be asked to name company president William C. Mainwaring as liquidator "without remuneration."

Mainwaring said today that he will probably be the only shareholder at the meeting. British directors will not be here for the obsequies. They have given their proxies to Mainwaring.

Peace River Power has already made an interim distribution of 50 cents a share.

MacTaggart said that a further seven cents will be distributed, making a total payment of 57 cents on each of the \$1 shares.

The Wenner-Gren interests and Bernard Gore, who formerly controlled the company, sold the last of their shares 18 months ago.

HOW STOCK HELD

Here is how the company's stock is registered.

Power Securities, 3,231,046; Associated Electrical Industries, 4,248,376; Western Development and Power, a subsidiary of B.C. Power Corp., 2,486,514; British Insulated Callender's Cables Ltd., 318,000; Close Brothers Ltd., 265,000; John Laing & Sons (Holdings) Ltd., 325,000; Canadian Utilities Ltd., of Edmonton, 442,000; Taylor Woodrow (Overseas) Ltd., 325,000; Henry Amsbacher & Co., of London, 801,150; Nesbitt, Thomson & Co., 125,000; Wood, Gundy & Co., 125,000 and Norman R. Whittall Ltd., 250,000.

Total shares: 12,942,086.

RELUCTANT MOVE

Sir Andrew said the decision of Peace River's executive committee to recommend liquidation was reached "with the greatest reluctance and only in view of the legal opinions which have been received. . . ."

In his letter to directors and shareholders, MacTaggart said, "The British and Canadian companies associated with this

company were encouraged by the government (of B.C.) to embark on this great project and responded to this by putting up considerable capital and by contributing their skill and experience to the project.

"This company was formed in order to carry out the maximum economic development of the Peace River, after Dr. Wenner-Gren and his associates had made preliminary studies, which indicated that . . . the Peace River constituted one of the largest power resources in North America.

PAID IN CASH

"All shares of this company were paid for in cash at the price of \$1 per share with the exception of the shares issued to Dr. Wenner-Gren and his associates in respect of their preliminary studies.

"They had already expended approximately \$2.7 million on the project and, after negotiations and on the advice of our financial consultants, the company issued three shares for every dollar which they had expended. This was a lower rate than is normal in such projects. For all other shares they paid \$1 per share as did the other shareholders."

(Wenner-Gren's company received 7.1 million shares and Gore received 1,230,660 of this total).

ALWAYS WILLING

Of the expropriation, MacTaggart said:

"We were always willing to negotiate a settlement, but we were never given the opportunity to do so. . . ."

The company attempted to get a fiat to prosecute the government but was turned down. It then claimed damages for conversion of its assets. This claim was dependent on the expropriation legislation being declared ultra vires. Chief Justice Lett made this declaration in the B.C. Power Corp. case.

MacTaggart said the government would not admit this was binding on them and we had to go to the courts for a further declaration, this time by Mr. Justice Munroe, that the 1961 legislation was ultra vires.

"Before we could continue our action for conversion, the government in March, 1964, by legislation which was declared to be retroactive to Aug. 1, 1961, re-enacted the provisions of the 1961 Act with certain modifications.

"Counsel has advised that since the 1964 Act expressly prohibits us from taking any other legal proceedings, there is no procedure now open to the company whereby it can obtain adequate compensation for the seizure of its assets.

"We have, therefore, had to agree to our action for conversion being dismissed on payment of our legal costs."

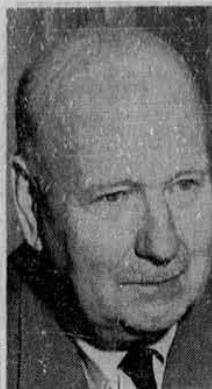
SHARES SOLD

In an annual report filed with the provincial government in June, 1961 it was disclosed that Wenner-Gren B.C. Development Company had sold 1,560,512 of its shares and Gore, 350,000. This left W-G with 5,573,912 shares and Gore with 880,660.

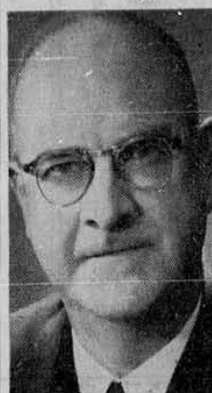
It was never revealed what the two had received for the stock sold at this time or the balance disposed of later.

Mainwaring said that he doesn't think Wenner-Gren B.C. Development or Gore received as much as \$1 a share at any time.

The two Peace River Power payments will total \$7,410,000 of the \$8 million received, the difference being \$590,000. Mainwaring said Peace River Power had outstanding obligations, one for almost \$500,000 which was owing to International Power & Engineering Consultants Ltd.



Wind-up of former Wenner-Gren company was announced today by board chairman Sir Andrew MacTaggart.



Liquidator of Peace River Power Development Company will be W. C. Mainwaring, firm's president.

Peace Power Had Served Its Purpose

VICTORIA (Staff) — Lands and Forests Minister Williston said Peace River Power was incorporated to perform a purpose and, with that purpose already served, "it seems axiomatic it would wind up."

Referring to the company's board chairman, Sir Andrew MacTaggart, Williston said, "he came in with part of the overall power situation as it was developing in B.C."

"He's probably not too happy with the outcome but the public interest has been served and you can't always serve individual interests when this is done. Sir Andrew has always been a staunch advocate for the value of this enterprise and he had the vision of its importance in the B.C. economy."

- Wood, Gundy & Co. (125,000 shares - \$71,250)
- Norman R. Whittall Ltd. ((250,000 shares - \$142,500).

Two months after B.C. Forest Products gained full control of Mainwaring's Alexandra Forest Industries Ltd., came news of his sudden passing on March 24, 1967, while vacationing in California. An ambitious, self-taught salesman who helped steer the vehicle of B.C.'s booming industrial resource empire, and who handily profited by it, died behind the wheel of a domestic vehicle.

William Crossley Mainwaring, one of British Columbia's best-known businessmen, died Friday in California while on his way home from a holiday. He was 72. He was pronounced dead at the California town of Blythe after suffering an apparent heart seizure in his car.

Mr. Mainwaring was former president of the Peace River Power Development Co. Ltd. and was vice-president of the B.C. Electric Co. before it was taken over by the B.C. government. He was president of Interco Management Ltd. of Vancouver, chairman of United Kingdom Properties Ltd., president of Mart Mining Co. Ltd., vice-president and director of Canusa Mines Ltd., and was a director of Alexandra Forest Industries Ltd., Atkins and Durbow Ltd., Global General Insurance Co., Global Life Insurance Co., Global Reinsurance Co., Alberta Distillers Ltd., Laurentide Financial Corp., Royalite Oil Co. Ltd., Union Steamships Ltd., Yorkshire Trust Co., North American Recreation Industries Ltd., B.C. Automobile Association, and the Julian Mining Co. ²⁸³

The obituary omitted citing numerous other companies and corporations from his empire building roster and portfolio, most likely because they were not on file and easily accessible or forgotten by newspaper staff.

Mainwaring, who rose from a meter reader to become one of B.C.'s top power executives, died Friday in California. ... Mr. Mainwaring got all his formal education in Nanaimo. At the age of 17, [in 1912] he joined Nanaimo Gas and Power Co. as a meter reader. Six years later he was manager of the firm. He came to Vancouver in 1918 as a salesman with Northern Electric Co. and was appointed sales manager in 1920. He joined the B.C. Electric as merchandise manager in 1932, became vice-president in 1944 of Vancouver Island operations, then vice-president and assistant to the vice-president in 1948.

He was a member of the board of governors of the Pacific National Exhibition and on the board of trustees of the B.C. Medical Research Institute.

During the Second World War he was loaned to the Bank of Canada as a member of the National War Finance Committee, and to the provincial government as an administrator of civil defence, for which he was awarded the Order of the British Empire [OBE] in 1946. That same year he was named an officer of the Order of St. John of Jerusalem. A governor of Rotary Club and a former commissioner of the St. John Ambulance Brigade in B.C., he was a member of numerous community and service associations. ²⁸⁴

The United Kingdom Properties and Intercom Management Company announced that, "out of respect to the memory of W.C. Mainwaring," it was closing down its office operations on "Thursday afternoon, March 30, 1967."

²⁸³ *Ex-power executive dies at 72*, Times Colonist, March 25, 1967.

²⁸⁴ *Mainwaring dies on family holiday*, Vancouver Sun, March 25, 1967.

1958 Directors of the Peace River Power Development Co. Ltd.

W.C. Mainwaring: President. His background is narrated throughout the two segments of “The Second Wave.”

Bernard G. Gore: A British businessman, originally “a polish jew who fled to England during the Second World War,” said to have been the originator of the Wenner-Gren scheme after getting “the idea of the B.C. adventure “from a neighbor in London during a chat over the garden fence”,”²⁸⁵ and then writing a letter in the early 1950s to “Wenner-Gren associate Lennart Bruce,” which was then “passed on [to] the Wenner-Gren’s “chief of staff, Birger Strid.” It was Percy Gray, of the London architectural and surveying firm, Hooper Belfrage and Gray, “who claims to have first conceived the multi-million-dollar project.”²⁸⁶ Gore then “made a [secret] agreement with the provincial government in B.C. in 1956,” and “got twenty percent of the shares” and became managing director of Wenner-Gren B.C. Development Co. Ltd., and deputy chairman of Peace River Power Development Co.²⁸⁷

K. Birger Strid: Born in Sweden in 1907. In 1941 he joined Sweden’s Axel Wenner-Gren’s company Semper as a salesman. He became chairman of the Wenner-Gren Foundation and chairman of the Wenner-Gren B.C. Development Co. Ltd. (incorporated on November 21, 1956.) After the death of Axel Wenner-Gren on November 24, 1961, he became the administrator of the Wenner-Gren estate. In July 1975, the Swedish courts found Strid guilty of gross fraud, breach of trust and tax evasion in the mismanagement of the Wenner-Gren’s financial empire and was sentenced to two years along with a fine of 5 million kroner.

A. Bruce Robertson: Became a member of the B.C. Bar in 1928. Past president of the B.C. Bar Association in 1945, and former member of the Vancouver legal firm, Robertson, Douglas and Symes, before joining the B.C. Electric’s legal department in 1946. First B.C. lawyer to appear before the Privy Council in London in 1946. Appointed as Q.C. (Queen’s Counsel) in August 1950. Vice president and general solicitor for the B.C. Power Company and B.C. Electric. Director of Royalite Oil Company Ltd. (1950 following). Secretary of Britalta Petroleum Ltd. (1951 following).



²⁸⁵ Frank Leonard, in his 2021 BC Studies article, *High Finance and Low Modernism: The Failure of the Wenner-Gren British Columbia Project, 1956-1961*, identified that “British Landscape planner Percy Gray” was this “London neighbour.” Gore and Birger Strid then hired Gray to travel to British Columbia to make the initial negotiations for Wenner-Gren with the provincial government.

²⁸⁶ *Har far has Wenner-Gren plan for B.C. advanced*, Times Colonist, April 6, 1957.

²⁸⁷ *Wenner-Gren ‘had \$800’ in billion-dollar plan*, Vancouver Sun, September 25, 1975.

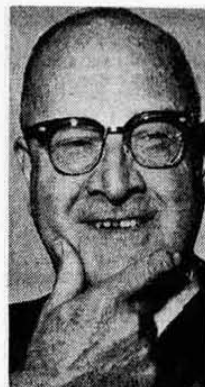
**THESE ARE THE PRINCIPALS IN WENNER-GREN
POWER DEVELOPMENT OF PEACE RIVER**



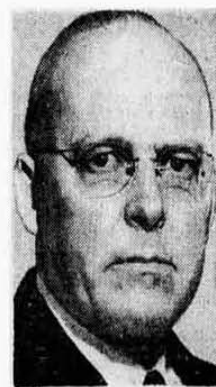
BERNARD GORE
... deputy chairman



BIRGER STRID



WILLIAM C. MAINWARING
... president



A. BRUCE ROBERTSON



**POWER EXPERT Ralph
Chantrill of Britain**



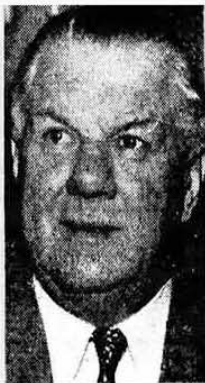
**SIR ANDREW
MacTAGGART**



LORD TWEEDSMUIR



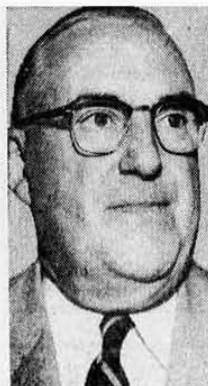
EARL ALEXANDER



EINAR GUNDERSON



... **SEN. S. S. MCKEEN**



A. F. McALPINE



GEORGE CUNNINGHAM



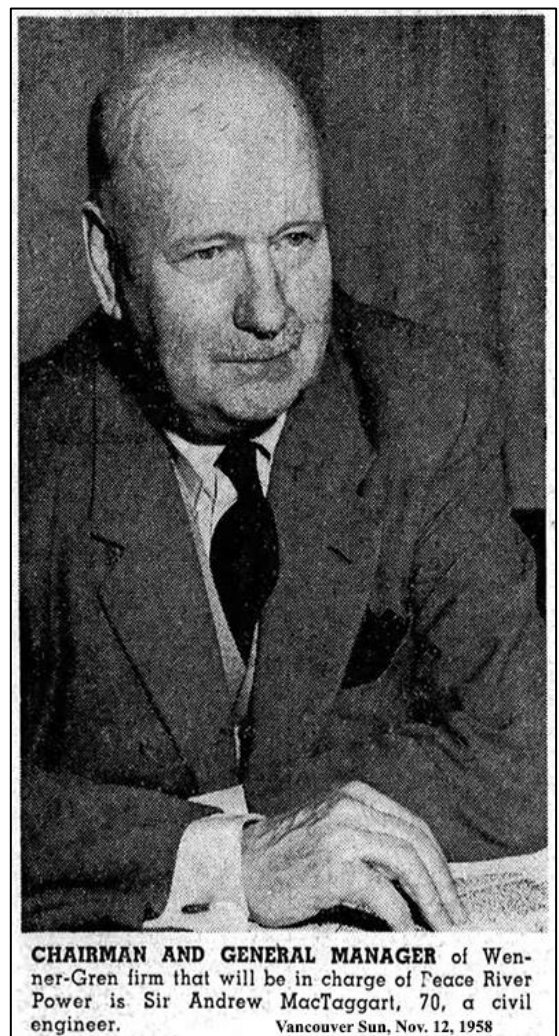
Former Vancouver police
commissioner, lawyer
William C. Murphy

Peace River Power Development Company directors, 1958

Ralph Chantrill: Born in 1902, the 56-year-old Russian-born Englishman was chief technical engineer and consultant with the Peace River Power Development Co. He was technical manager with the British Thomson-Houston Company Ltd. (a subsidiary of Associated Electrical Industries of England) in charge of the Wenner-Gren survey teams' investigation the Rocky Mountain Trench, and the author of the survey reports. He is said to have conducted long-range economical electrical transmission surveys for Wenner-Gren in Africa and Russia. Another account said Chantrill designed "the Owen Falls generating station on the Nile," the "Belgian Congo project with a 1,000-mile transmission line," the "Toronto subway," the "electrical setup for the Canadian British Aluminum Co. smelter at Baie Comeau, Quebec," on "many major dams in India developing up to 2,000,000 horsepower," where "he spent 20 years advising governments," and "schemes for harnessing hot-spring power in Africa and New Zealand." ²⁸⁸

Lord Tweedsmuir (born, John Norman Stuart Buchan): 47. Son of former Governor-General of Canada (1935-1940), John Buchan, First Baron Tweedsmuir, the author of "The Thirty-Nine Steps," through whom the government named the 3.3 million-acre Tweedsmuir Park in mid-western British Columbia in 1938, an honor later besmirched by the B.C. government and Alcan's hydro-electric project flooding. He served as a government official in Uganda from 1934-1936. The 2nd Baron Tweedsmuir was a Lieutenant Colonel with the Canadian Infantry Corps, and in 1946 appointed as an officer of the Order of the British Empire (OBE). Chairman of the editorial board of Canada Weekly Review, and former president of Commonwealth and British Empire Chambers of Commerce (1955-1957). Director of BOAC (British Overseas Airways Corp.). Director of Dalgety and Company. Director of RSA Insurance Group Ltd. President of the Institute of Rural Life. Director of the Sun Alliance Company. Former chairman of the Joint East and Central African Board (1950-1952).

Sir Andrew MacTaggart: 70, a civil engineer, an industrialist, the builder of huge power projects in Scotland, Italy, India and East Africa. Director of the British Steamship Company (1950). President of Balfour Beatty and Co. (Canada) Ltd., a Canadian subsidiary of London-based civil engineering and construction firm Balfour, Beatty and Co., one of the largest consulting engineering firms in the world. He was appointed chairman and managing director of the Power Securities Corporation in August 1952, a London-based finance corporation which took over the Balfour Beatty assets in 1922 and ten other subsidiary companies with projects all over the world. He was vice-president of the International Federation of Builders and Civil Engineering Contractors. A member of the British Employer's Confederation. Director of Sheerness Harbour Ltd. In March 1960, B.C. Engineering Co. Ltd., a 1954 subsidiary of B.C. Power Corporation Ltd. (the parent company of B.C. Electric), announced an "agreement in principle" partnership



²⁸⁸ *Peace hydro job biggest for Chantrill*, The Province, October 9, 1957.

with London-based Balfour, Beatty and Co. to form International Power and Engineering Consultants Ltd. to build up Canadian and international clientele. B.C. Power Corp. president A.E. Grauer became vice chairman of the new company, and MacTaggart chairman. The new company's "engineers have carried out civil, mechanical and hydro-electric work for the Aluminum Company of Canada [at Kitimat], the B.C. Electric, and others."²⁸⁹

Earl Alexander [Harold Alexander, fourth son of the Earl of Caledon]: Tunis resident. After 'Lord' 'Viscount' Alexander served as Canada's Governor-General (1946-1952), and after becoming a member of the Canadian Privy Council (he was one of four non-Canadians on the privy council, along with Winston Churchill, the Duke of Windsor, and former Australian Prime Minister William M. Hughes), the King of England elevated him as 'Earl' in 1952 because of his military accomplishments with the British army at Dunkirk, in Burma, North Africa, and Italy (General Eisenhower's Deputy Commander in Chief). In 1946, the King named him Field Marshall Alexander. As the King conferred upon his rank of 'Earl,' Prime Minister Winston Churchill appointed him as Britain's Defence Minister (February 1952 – October 1954). He was a director of Barclays Bank Ltd. and a director of the Phoenix Insurance Co. Ltd. In 1955, Alexander became a director of Aluminium Limited, the parent company of the Aluminum Company of Canada Ltd. (Alcan). In October 1955, Alexander visited Alcan's operations at Kitimat, as did former Senator S.S. McKeen (see below). In 1956, the Queen of England conferred upon Alexander as Chancellor of the Order of St. Michael and St. George, an Order founded in 1818 by King George the Third. In 1956, Alexander became chairman of Northern Aluminium Company Ltd., the fabricating subsidiary of Aluminium Ltd. of London. In 1957, the Queen appointed Alexander as Lord Lieutenant for the County of London. On October 27, 1958, a week before his appointment as a director of the Peace River Power Development Co., Earl Alexander suffered a heart attack while duck hunting on Lake Erie near Port Rowan. On February 14, 1959, Alexander resigned as director of the Peace River Power Development due to ill health.

Einar M. Gunderson: An accountant and income tax specialist, a former provincial income tax inspector for the province of Alberta, and senior partner of Gunderson, Stokes, Peers, Walton and Company of Vancouver, he served on the Vancouver Board of Trade's taxation committee. A member of the Institute of Chartered Accountants' council. In anticipation of running for a by-election in the riding of Oak Bay,



ALEXANDER THE BUSINESSMAN: Field Marshal Earl Alexander, former governor-general of Canada and U.K. defence minister and wartime Allied commander in the Mediterranean was in Montreal as a businessman yesterday. He was one of the two new directors appointed to the board of Aluminium Limited (the other, M. B. de Sousa Pernes, also of London). Earl Alexander returns to the U.K. today. *The Gazette*, Apr. 29, 1955 (Gazette Photo Service)

²⁸⁹ *Peace consultants reorganize group*, *The Province*, March 25, 1960.

B.C. Premier W.A.C. Bennett appointed Gunderson as Finance Minister on August 21, 1952, even though he didn't hold a seat in the Legislature. Fifteen months later, when finally running for his seat, the B.C. Finance Minister lost to George Gregory in the November 24, 1953, by-election, losing his unelected position as Finance Minister. He then served as executive vice president of Pacific Great Eastern railway, a B.C. government corporation since 1918, which Premier Bennett was later president of.

Gunderson was a director of the B.C. Toll Highways and Bridges Authority. When appointed as director of Canadian Bank of Commerce in February 1955, it "raised eyebrows in the Legislature," because he served as "economic advisor" with the Social Credit administration. Director of Blackball Ferries Ltd., director with Deeks-McBride Ltd., a construction firm which W.C. Mainwaring was a director of, and director of Wenner-Gren B.C. Development Co. Ltd. In May 1960, he was appointed president of the Pacific Northwest Trade Association, and as a director of Marshall Wells of Canada. On August 4, 1961, Premier W.A.C. Bennett appointed Gunderson as a director of the 'new' B.C. Electric, which became the B.C. Hydro and Power Authority on March 30, 1962, the merger between B.C. Electric and the B.C. Power Commission.

Stanley S. McKeen: Former secretary treasurer of the Vancouver Merchants' Exchange (1929). Principal of McKeen & Wilson Ltd (marine transportation). Former federal Liberal Party Senator. Chairman of Union Steamships Ltd. (alongside new director W.C. Mainwaring in 1957). Chairman of Straits Towing. Director of Deeks-McBride, alongside Gunderson and Mainwaring. Former Vancouver-Point Grey riding MLA. the founders of the Pacific Northwest Trade Association 1943, which he served as president from 1943-1947. Vice president of Canadian Council of the International Chamber of Commerce.

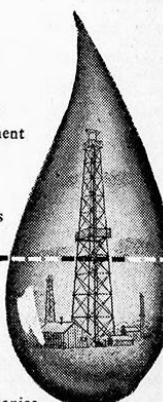
A.F. McAlpine: recently retired Royal Bank of Canada supervisor for British Columbia (since 1946). Canada's Bank," and bankroller of Alcan's hydroelectric project. Director of Ocean Cement & Supplies Ltd. (in 1961). Director of British Ropes Canadian Factory Ltd. (in

George Cunningham: President of Cunningham Drug [Stores Ltd.] Co. Ltd., with 44 retail drug stores in British Columbia. Director of the B.C. Power Corporation since March 1944 (when H.R MacMillan and Austin C. Taylor resigned as directors). A member of the University of B.C. Board of Governors, 1935-1965. Director of Torrence Holdings Ltd., a personal corporation. Former Vancouver City alderman (Jan. 1954 – Jan. 1958). Officer of the Greater Vancouver Metropolitan Industrial Development Commission (beginning in February 1954), assigned as officer of "harbors and industries." Director of the Imperial Bank of Canada (1958), a governor of the B.C. Lions football club. He died of a heart attack at age 76 on March 7, 1965, while vacationing in Palm Springs, California.

**First IN
CANADA'S
OIL FIELDS**

For information about Western Canada's fabulous oil development consult The Royal Bank of Canada. This bank has been established in the western oil fields since 1927. Our branches are strategically located in the heart of the Turner Valley, Leduc, Woodbend and Redwater areas. Officers in Edmonton and Calgary are well informed on recent developments, Government regulations and all matters of immediate concern to oil companies, drilling companies, supply houses and others with a direct interest in the industry.

Address enquiries to A. F. McAlpine, Supervisor, Vancouver, or E. B. Durham, Supervisor, Calgary, Alta.



CANADA'S OIL BANK –

"A Story of Oil" is the title of a recent Royal Bank Monthly Letter. It will help you understand the significance and scope of Canada's oil development. Ask for a copy at your local branch, or write to Head Office, Montreal.

**THE
ROYAL
BANK
OF CANADA**

One of
in

"Oil
1960).



(Brigadeer) William Cameron Murphy: Son of B.C. Supreme Court Justice Denis Murphy, W.C. Murphy became a Vancouver lawyer in 1929. In 1942, he was promoted Lieutenant-Colonel of the B.C. Dragoons regiment in the United Kingdom. In December 1944, Murphy, a war hero and tank warfare strategist, received the Distinguished Service Order and a Distinguished Conduct Medal for daring in the face of the enemy in World War Two as brigadier with the Fifth Canadian Armored Corps in Italy, and then invasion commander of the First Canadian Armored Brigade. After the war, Murphy was appointed Commander of the Order of the British Empire and Commander of the U.S. Legion of Merit. Murphy joined the Vancouver law firm of Campney, Owen, Clyne, Murphy & Owen. In 1950, Murphy was named Q.C., Queen's Counsel, alongside A. Bruce Robertson. With the construction in the 50-acre Lulu Island cement factory, in July 1956 Murphy became a director of the newly incorporated Lafarge Cement of North America Ltd. (alongside director Austin C. Taylor and president Frank M. Ross, a former B.C. Lieutenant Governor), a subsidiary of Lafarge France. Murphy served as a Vancouver City police commissioner from 1955 to March 1958. He became a director of Wenner-Gren B.C. Development Co. Ltd. in March 1957. He became secretary of Western Copper Mills Ltd. in August 1957, alongside directors W.C. Mainwaring, A.E. "Dal" Grauer, and John A. McMahon, which was building a copper mill on Annacis Island. He was president of the Canadian Western Pipe Mills Ltd., and director of Global Reins Co., Global Life Insurance Co., Great Western Garment Co., Johnston Terminals Ltd., Alberta Phoenix Tube and Pipe Co. Ltd., Vancouver Tug Boat Co. Ltd., Western Forest Industries Ltd., Burrard Dry Dock Co. Ltd., Canadian Sumner Iron Works Ltd., and Nelson Laundries.

MILITARY-STYLE OPERATION BARED

'Generals' Share Big Profit In Vitamin Pill Promotion

A high-pressure vitamin pill promotion is using chain-letter tactics, pseudo-military echelons and some of the city's best brains to sell British Columbians drugs they don't need.

It is of a type branded by federal officials as a "racket." The militant, sometimes farcical, yet potentially dangerous campaign to convince the best-fed people in history that they are undernourished is conducted from thickly carpeted offices on Vancouver's Howe Street.

These are the offices of Nutri-Bio of Canada Ltd., an offshoot of a United States firm, one of whose salesmen came out on the losing end of criminal prosecution for making false curative claims.

LIKE REVIVAL

At least 2,000 men and women in the past two weeks attended revival-like meetings in a downtown Vancouver banquet room to be recruited into the sales force as generals, colonels, majors, captains, lieutenants, sergeants, corporals and plain buck privates.

The door-to-door peddling of these and other promoters' pills is described by the B.C. regional director of the federal food and drug branch, H. O. Tomlinson, as "nothing more nor less than a racket which promises to make the promoters amazing amounts of money."

Company spokesmen have advised the Better Business Bureau that its major Canadian shareholder is W. C. Mainwaring, president of Peace River Power Development Co.

The bureau was told Mainwaring, a former B.C. Electric Co. vice-president and former president of the B.C. Medical Research Foundation, holds 49 per cent of the shares.

COMPANY LAWYER

Brig. William C. Murphy, former Vancouver police commissioner, holds one per cent in his capacity as company lawyer, the bureau was told.

It was also told that Charles W. Young, American promoter who was connected with Nutri-Bio distribution in the U.S., holds 49 per cent, and that Bob Cummings, film and TV star and long-time friend of Mainwaring, holds the other one per cent.

Cummings, the bureau was told, is executive vice-president of Nutri-Bio's American company.

It is the householder, that descendant of the mark of yesterday who begged to be taken by itinerant snake medicine pedlars, who supports the dizzy pyramid of commissions and profits which is the heart of the Nutri-Bio campaign.

COST \$26

The pills are selling in B.C. for \$26 for a six-month supply of 1,002 pills. An idea of the profit there ready to be cut up was given The Sun by a Toronto company which quoted a price of \$3.50 for the same number of pills, the same advertised ingredients.

The chain-letter system of

Vancouver Sun, Monday, October 24, 1960



W. C. MAINWARING
... "major stockholder"

profit divvying disperses the loose cash this way:

At the top of the sales pyramid is the "general." He deals directly with home office because he is a big spender.

He puts out \$6,900 for Nutri-Bio products which to the end customer would cost \$13,000. Several Greater Vancouver residents wrote cheques for \$6,900 at the recent sales meeting and were appointed generals.

At steadily increasing prices, the general sells to the colonels, the colonels sell to the majors, the majors sell to the captains, and so on down the chain of command.

Everybody gets his cut and some get hefty commissions besides.

At the bottom of the ladder is the man or woman who knocks on doors, the distributor whom Nutri-Bio's lavish, leather-covered sales manual calls soldiers with esprit de corps dedicated to a good cause.

RANK PINS

For valor beyond the line of duty Nutri-Bio's good soldiers get rank recognition pins, button-style for the boys, pin-style for the girls.

What lures distributors into promotions such as this, which Better Business Bureau's general manager W. L. Templeton calls an unstable operation where only the company and the early agents will make money?

The possibility of making money is the answer. At the Vancouver organizational meetings, quick-talking, hard-selling salesmen from Los Angeles promised profits up to \$3,000 a month for Nutri-Bio staffers.

Such heady profits, of course, would come out of the \$26 the end customer pays for his package of 728 mineral and 328 vitamin pills.

But after all, as the Nutri-Bio sales manual says, the salesman is playing a role in helping people toward a better life. "He feels, in a positive sense, militant about it," says the manual.

GOOD MONEY?

Yet—even forgetting for the moment the sheer worthlessness of such pills for most British Columbians—is the money for the pedlars that good?

Listen to Frank J. Zeorlin, general manager of the Seattle Better Business Bureau:

"This company started in Seattle two years ago and the company and people who went in early made good money. Some early salesmen made as much as \$1,000 a month.

"However now there are ads everywhere for Nutri-Bio salesmen and there is a big turnover of them."

Nevertheless Zeorlin felt the company and some of the early agents still were making money.

The magazine Consumer Reports recently analyzed a similar sales system for a "food supplement" in the U.S. It said:

"Three-quarters of the consumer's payment is deducted for distribution costs. Only one-quarter finances the making of the product itself.

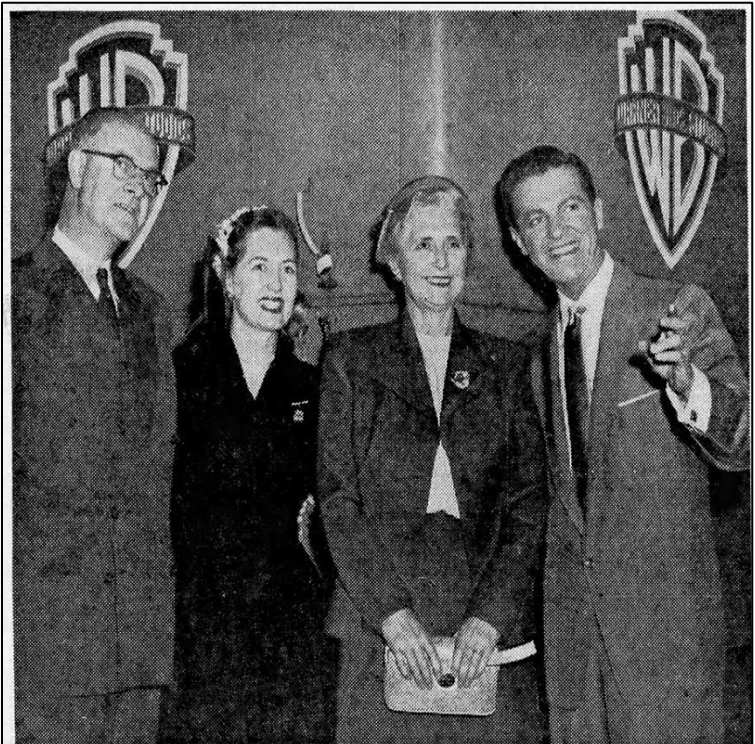
"And from this sum comes the profit for the manufacturer, leaving only a fraction of the fraction for buying and assembling the lengthy list of ingredients to which salesmen refer in explanation of the high price."



BOB CUMMINGS
... linked to company

Murphy had a one percent control in Nutri-Bio of Canada Ltd., which W.C. Mainwaring had a 49 percent share interest in, alongside American promoter Charles W. Young's 49 percent share, and Bob Cummings one percent, the American film and television star who was a "long-time friend of Mainwaring," and Nutri-Bio's executive vice president. Nutri-Bio was being investigated by the Better Business Bureau and the B.C. federal food and drug branch for a pyramid investment scheme, "nothing more nor less than a racket which promises to make the promoters amazing amounts of money." 290

W.C. Murphy died on Friday, October 20, 1961.



BEHIND THE SCENES at Warner Brothers Studios in Hollywood, Mr. and Mrs. W. C. Mainwaring of Vancouver are guided by experts as their close friends, Mr. and Mrs. Robert Cummings, take them on a conducted tour. Pictured in the studio, they are (left to right), Mr. Mainwaring, Mrs. Cummings, Mrs. Mainwaring, and screen and television star, Mr. Cummings. Vancouver Sun, Dec. 19, 1953



SCANNING THE MAP of northern B.C. before taking off from Vancouver airport for a quick survey of the Rocky Mountain Trench are directors of Wenner-Gren B.C. Development Ltd. Left to right are Brig. William Murphy; Birgir K. Strid, chairman of Wen-

ner-Gren Foundation; Mr. Strid's 15-year-old son, Arne; Bernard Gore, managing director of the B.C. project; Einar Gunderson. They flew in a PWA float plane.

The Province, August 16, 1957

Wilfred W. H. Hill-Wood (no photo found): He was the second son of Sir Samuel Hill-Wood, First Baronet, who was a member of British Parliament. In the Second World War, "he stood high in the intelligence service, chiefly in liaison with the Americans and acting under the brilliant Canadian, Sir William Stephenson," and served with the British Purchasing Commission and received the Commander of the Order of the British Empire award in 1946 for his work as director of the Western Area for the Postal and Telegraph Censorship Department. Senior partner and managing director of Morgan Grenfell and Co. Ltd., London (1939 – 1967), the London City merchant banking investment house, an "enigmatic body," which was "controlled by the American firm of Pierpont Morgan, and founded by the American philanthropist, George Peabody."²⁹¹ Director of other financial firms in England, and director of the British Sugar Corporation. Someone praised as a "good cricketer," he was later chairman of the Arsenal Football Club. He died in London on October 10, 1980.²⁹² He was a "personal friend of King George VI and advised the royal family on financial affairs," and "knighted in 1976 as a Knight Commander of the Royal Victorian Order, an order in the personal gift of the Queen."²⁹³

²⁹¹ *Merchant Bankers' Table Talk: The Secret Battle of Bishopsgate*, The (London) Observer, January 11, 1959.

²⁹² *Sir Wilfred Hill-Wood*, The Daily Telegraph, October 11, 1980.

²⁹³ Wilfred Hill-Wood, Wikipedia.

The London Observer newspaper summarized the world of the merchant banks as follows:

The mystery surrounding the merchant banks is well founded; they are deliberately discreet and very complex; even the name eludes definition. Originally, they were nearly all merchants from the Continent who developed into bankers – selling their name instead of their goods – each with a different speciality. Building up international contacts, they found it more profitable to deal with credit than with materials, and made money both by guaranteeing other people's credit (accepting houses), and raising loans (issuing houses). In these delicate operations their name and judgement became, and still is, their main asset – hence their careful prestige.²⁹⁴

Added Directors of the Peace River Power Development Co. Ltd., 1959 - 1960

H. "Farran Akehurst: Began employment with London-based British Insulated Callender Cables Ltd. in 1930, and December 1956 was elected as director and as chairman of British Insulated Callender's Export Ltd. Director of Automatic Electric (Canada) Ltd. (est. March 1953). In 1958, British Insulated laid a 132,000-volt submarine cable from the B.C. Mainland to Vancouver Island. He became a director of Peace River Power on February 20, 1959. Akehurst retired in June 1964.

Horatio Ray (H.R.) Milner: Son of W.C. Milner, lawyer, newspaper publisher, and historian. Appointed Q.C. in 1921 while with the law firm Hyndman, Milner & Mathieson in Edmonton. Began a law firm partnership in 1945, Milner, Steer, Dyde, Poirier, Martland and Bowker, with the arrival of partner Colonel H.A. Dyde, former military secretary to National Defence Minister J.L. Rolston. The partnership name took on revisions, with a later title Milner, Steer, Dyde, Martland & Layton. Law firm partner Ronald Martland, a director of Northwest Utilities Ltd., the Northern Broadcasting Corporation Ltd., and the Trust Company, was appointed to the Supreme Court of Canada on January 20, 1958, by Justice Minister Fulton, replacing Justice Roy L. Kellock who retired from that bench because of the recent passing of Justice Henry G. Nolan.

H.R. Milner was an unsuccessful Member of Parliament candidate for the Edmonton West Riding for the Progressive Conservatives in the February 1950 election. Former controlling interest partner in the Essex Co., which owned the Edmonton Bulletin newspaper, which ended circulation in February 1951 after being taken over by the Southam Family, and Milner split the \$650,000 purchase price two ways. He was a director of Alberta Inter-Field Pipelines [and, Gas Lines] Ltd. Director of the Calgary and Edmonton Corporation Ltd. Chairman of Canadian Utilities Ltd., Northwestern Utilities Ltd. (Edmonton) and Canadian Western Natural Gas Company Ltd. (Calgary). Director of the Royal Bank of Canada. Appointed director of Western Pipelines Ltd. in 1955 (former Alberta Minister of Mines and Minerals, N.E. Tanner, was president). Director of International Utilities Corp. Director of Northwest Industries Ltd. Director of Canada Cement Co. Ltd. Director of Premier Steel Mills Ltd. Director of Keystone Fund of Canada Ltd. Chairman of Trans Canada Freezers Ltd. President of Anglo-Canadian Oil Co., a Delaware corporation, with some 200 producing oil wells and gas reserves in Alberta (1955) and assets in

²⁹⁴ *Merchant Banker's table talk: the secret battle of Bishopsgate*, The Observer, January 11, 1959.

Saskatchewan, Montana, Dakota and Wyoming. In September 1955, Canadian Oil Companies Ltd. bought out Anglo-Canadian Oil. Director of Burns and Co. Ltd. A member of the Canadian Council of the



In conference — planning for development

**The Province
December 13, 1960**

PLANS FOR VAST POWER DEVELOPMENT in northern B.C. were discussed at a meeting here Monday of the board of directors of Peace River Power Development Co. Ltd. Clockwise from left are: George T. Cunningham, Vancouver, chairman of Western Wholesale Drug Ltd.; H. F. Akehurst, London, director British Insulated Callender Cables Ltd.; Ralph Chantrell, London, director Associated Electrical Industries Export Ltd.; Jack Dale, nominee for H. R. Milner, QC, Edmonton, chairman Canadian Utilities Ltd.; E. D. Sutcliffe, Vancouver,

general manager marketing division B.C. Electric; Sen. S. S. McKeen, OBE, Vancouver, chairman Straits Towing Ltd.; R. H. R. McGill, London, director Balfour, Beatty & Co. Ltd.; M. J. Fawcett, Vancouver, nominee for Brig. William Murphy, QC, secretary; Rt. Hon. Lord Tweedsmuir, OBE, London; Sir Andrew MacTaggart, London, chairman, also chairman of Balfour, Beatty and International Power & Engineering Corp.; W. C. Mainwaring, OBE, president; A. Bruce Robertson, QC, vice-president and general counsel of BCE;

Rt. Hon. Lord Polwarth, CA, Edinburgh, director Bank of Scotland; Birger Strid, Stockholm, chairman Wenner-Gren B.C. Development Co. Ltd.; E. M. Gunderson, FCA, senior partner, Gunderson, Stokes Walton & Co. Ltd.; Wallace Haughan, Vancouver, president John Laing & Son (Canada) Ltd.; Arnold F. McAlpine, Vancouver. Absent are Wilfred W. H. Hill-Wood, CBE, London, managing director Morgan, Grenfell & Co. Ltd.; Bernard Gore, London, managing director Wenner-Gren B.C. Development and deputy chairman Peace Power; Brig. Murphy and Mr. Milner.

National Industrial Conference Board. President of the North West Fidelity Trust Company. Director of the Canadian Salt Co. Ltd. Holder of the Calgary Chamber of Commerce's 'coveted' 25-year shield. In February 1957, the highest building in Edmonton, owned by Northwestern Utilities Ltd. and Canadian Utilities Ltd. was named "The Milner Building," after H.R. Milner who had been president of the two companies from 1932 to 1949, and now chairman. Director of the Quebec Natural Gas Corp. Director of Taylor, Pearson & Carson (Canada) Ltd. Director of Page-Hersey Tubes Ltd. Director of North American Life Assurance Co. Director of Peace River Glass Company Ltd. Director of the Alberta and Southern Gas Company Ltd. A member of the board of governors of the Canadian Council of the International Chamber of Commerce. Director of British Columbia Airlines Ltd. Director of Camrose Tubes Ltd. (a new steel mill built in Camrose). A member of the National Productivity Council. Appointed as director of the Peace River Power Development Co. by W.C. Mainwaring on June 10, 1959, some three weeks after Canadian Utilities Ltd. purchased 250,000 shares of Peace River Power.

E.D. Sutcliffe: Former B.C. Electric director of planning and development. Former executive assistant to B.C. Electric's general manager for transportation division. In June 1956, he became executive assistant to the president of Western Development & Power Ltd. He became general manager of B.C. Electric's marketing division.

R.H.R. McGill: London. Director of Balfour, Beatty & Co. Ltd. / Power Securities Corporation Ltd. He became a director on February 20, 1959. Refer above to the narrative on Sir Andrew McTaggart for more on Balfour Beatty.

Henry Alexander Hepburne-Scott, Lord Polwarth: A chartered accountant. Appointed as director of the Bank of Scotland in September 1950. Director of Consolidated Units of Bank Insurance & Investment Trust Securities, and director of Bank Insurance Trust Corporation Ltd. Partner in the chartered accounting firm Chiene and Tait of Edinburgh. Appointed chairman of the Executive Committee of the Scottish Council in October 1955. Chairman of Scottish Bank Insurance and Trust Shares Ltd. At age 43, about three months after being a dinner guest with Lieutenant-Governor Frank M. Ross, the young banker was appointed as director of Peace River Power on June 10, 1959.



WORLD'S LARGEST POWER PROJECT could start with dam Peace River Power Development Com-pany proposes to build across Peace River, near Hudson Hope. Artist's conception shows how dam, more than mile long, would look. Dotted lines show how river would back up.

WENGREN DEVELOPERS PREDICT: Vancouver Sun, February 21, 1959

Peace Power for Vancouver by 1965

Wallace B. Haughan: President of John Laing & Son (Canada) Ltd. (incorporated in 1953), subsidiary of the British constructing engineering firm, John Laing & Son Ltd. which Haughan was director of. John Laing & Son helped rebuild the City of London after the Second World War and for the construction of Britain's first nuclear power station. The Canadian subsidiary was set up to head the 1953 development of the 1,200-acre Annacis Island industrial project, just south of New Westminster City, raising the Island by 9 feet. "The Annacis Island project originated in 1951 when George Ridley, chief agent for the late Duke

of Westminster, and solicitor Thomas Barty-King toured Canada in search of a suitable site for an industrial estate.”²⁹⁵ In February 1956, John Laing & Son Canada Ltd. merged with the Grosvenor Estates under the name Grosvenor-Laing (Holdings) Ltd. to form Grosvenor-Laing Development Company Ltd., which Haughan became chairman of. B.C. Lieutenant-Governor Frank Ross was on the Grosvenor-Laing’s advisory committee, and in November 1960 Ross became its chairman. In January 1957, John Laing & Son was hired to build “the largest parking garage in the British Commonwealth,” the new \$10,000,000, 32-acre, Woodward Stores’ Oakridge shopping centre development at Cambie Avenue and 41st Street in Vancouver. The company was also awarded a contract to finish the building of the new Second Narrows bridge in May 1958. In December 1958, came the announcement that B.C. Power Company’s subsidiary, Western Development and Power Ltd., sold half of the 4,000-acre land development site in Langley to Grosvenor-Laing Development, for developing the Langley Park Estate, to purportedly “house more than \$600,000,000 of industrial plants.”²⁹⁶ The arrangement was made by Western Development’s general manager E. Douglas Sutcliffe, who would later be appointed as a director of Peace River Power Development Company. In August 1960, Haughan aided in the formation of the B.C. Federation of Construction Associations, which he became chairman of, and stick-handled construction union disputes. In December 1960, Haughan became director of Crown Zellerbach Canada Ltd. In March 1961, Grosvenor-Laing and the British South Africa Company (Cecil Holdings) became partners in a 120-acre site in the municipality of Surrey, the \$25 million Guildford Garden City development.

Mr. and Mrs. Haughan were invited, amongst a large host, to witness the opening of the new B.C. Electric high-rise building at Burrard and Nelson Streets on Thursday March 28, 1957. Haughan was appointed as director of the Peace River Power on March 20, 1959.

²⁹⁵ *Island industrial plan taking shape in B.C.*, The Expositor, August 27, 1954.

²⁹⁶ *Grosvenor-Laing will build huge new industrial estate in Langley district*, The Province, December 18, 1958.

The Third Wave:

B.C. Hydro Gas Group's South Surrey Underground Gas Storage Project Proposal

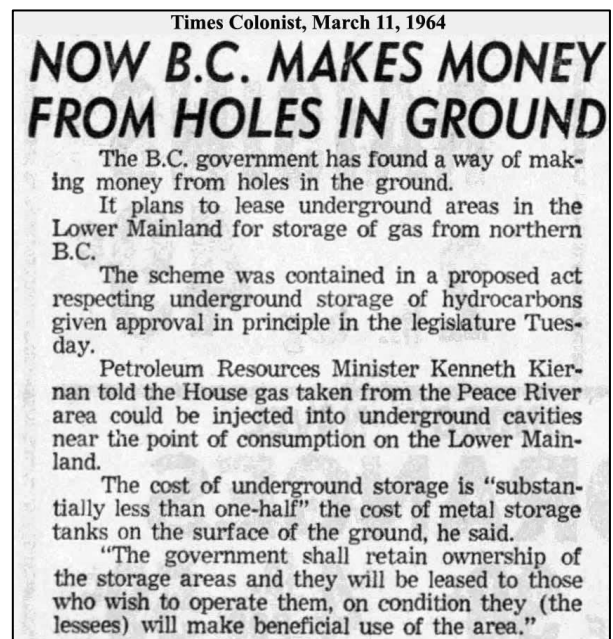
*It is noteworthy that no grassroots group such as the Friends of the Fraser Valley formed to oppose the Hydro proposal in 1978.*²⁹⁷

*From 1974 to 1977, the (then) British Columbia Petroleum Corporation, Natural Gas Division (now B.C. Gas) investigated the potential of the Fraser Valley for underground storage of natural gas. This led to the and purchase of pre-existing geophysical (seismic) data and the acquisition of 322 kilometers of new seismic (Vibroseis) data.*²⁹⁸

On June 3, 1975, the B.C. New Democratic Party (NDP) administration's Attorney General, Alex Macdonald, announced that B.C. Hydro²⁹⁹ was on the prowl for an underground storage area for 'natural gas' eleven years after the Social Credit Party administration passed legislation to enable underground geologic storage of petroleum products.³⁰⁰

Macdonald said there is no danger in using underground sites to store natural gas while awaiting delivery. "It came out of the ground, and it would just be put back in."³⁰¹

The hunt for underground storage began a year earlier in 1974 when Hydro:



... requested the B.C. Department of Mines and Petroleum Resources to investigate the potential for storage of natural gas in the Lower Fraser Valley. In July of that year, the Department issued a report identifying five “potential reservoir areas.”³⁰²

This resulted in Hydro, the B.C. Petroleum Corporation, and the Ministry of Mines and Petroleum Resources establishing a Gas Storage Committee, which in turn hired a geological consulting company to make report evaluations for potentialities and provide recommendations:

As a result of these studies, B.C. Hydro retained geophysical consultants early in 1977 and a seismic field program (Vibroseis) covering over 200 miles of the Lower Mainland was conducted.³⁰³

Though Hydro’s initial area of interest lay underneath and within the South Surrey and White Rock municipal boundaries – geographical areas relatively near the terminus of Hydro’s natural gas pipeline infrastructure – by 1977 Hydro was also investigating all potential geological areas eastward along the Fraser Valley, extending all the way to Chilliwack municipality.³⁰⁴

Gas reservoir eyed for Chilliwack area

B.C. Hydro and Power Authority will launch a study, this month, into a unique proposal for the Chilliwack area – an underground storage site that might someday accommodate from 10 billion to 20 billion cubic feet of natural gas.

Al MacPherson, manager of Hydro’s gas engineering division, stressed that the project is only in the initial study stage. B.C. Hydro has for some time been considering development of a deep underground reservoir for natural gas. That would allow the company to store gas purchased in the summer for use during high demand periods in winter.

Mr. MacPherson said an area just west of Chilliwack has been identified as a possible site. The Fraser Valley is apparently ideally located for the project since it is adjacent to the largest load centre in B.C. and is at the end of the B.C. gas transmission system.

Chilliwack Progress
April 6, 1977

Contrary to fabricated accounts or spins stating that there was insufficient supply of gas to Lower Mainland customers, B.C. Hydro’s 1974 hunt for large underground storage primarily resulted from a shortfall in natural gas export contractual obligations to northwestern United States. During the winter months when Lower Mainland or Fraser Valley customer demand was up and peaking, Hydro was only able to deliver about half of the promised gas south of the border.

and otherwise deal in petroleum and natural gas.” It may build, purchase, lease or otherwise acquire – but not expropriate – operate and dispose of pipelines, gathering systems and **storage facilities**. The agency may also explore for, develop and produce oil and gas itself.” (*Two-price gas sought by B.C.*, Vancouver Province newspaper, October 13, 1973)

³⁰² *Environmental information on proposed exploratory drilling sites for underground storage of natural gas* (S. Surrey Site No. 2), Thurber Consultants report to B.C. Hydro’s Gas Engineering Division, April 1979.

³⁰³ Ibid.

³⁰⁴ *Gas reservoir eyed for Chilliwack area*, The Chilliwack Progress, April 6, 1977.

Since methane was first delivered in 1957 via Westcoast Transmission's new pipeline to the Lower Mainland from northeast B.C. gas processing plants, by October 1970 Hydro had amassed 200,000 customers and laid 3,400 miles of pipe.³⁰⁵ By mid-1978, Hydro's residential and commercial customers in the Lower Mainland had soared to 250,000.³⁰⁶ In 1970, Hydro had built a new, but small, liquified natural gas (LNG) storage facility located on Tilbury Island, with a holding capacity of 600 million cubic feet.

BACKGROUND

Source: "Environmental Information on Proposed Exploratory
Drilling Sites for Underground Storage of Natural Gas,"
by Thurber Engineering, May 1979, File: 15-2-110

In 1974, B.C. Hydro requested the B.C. Department of Mines and Petroleum Resources to investigate the potential for storage of natural gas in the Lower Fraser Valley. In July of that year, the Department issued a report identifying five "potential reservoir areas", and it was subsequently concluded sufficient potential existed to warrant further study.

A Gas Storage Committee representing B.C. Hydro, B.C. Petroleum Corporation, and the Ministry of Mines and Petroleum Resources retained a geological consulting firm to evaluate and integrate information on existing potential for aquifer gas storage, and to recommend an exploration and/or development program. The consultant's study confirmed that porous sandstones of a thickness suitable for storage of gas do exist in the valley.

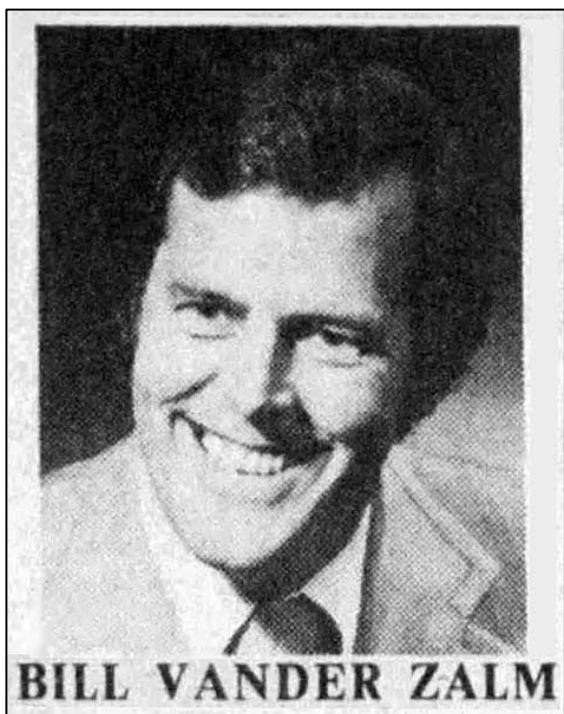
As a result of these studies, B.C. Hydro retained geophysical consultants early in 1977 and a seismic field program (Vibroseis) covering over 200 miles of the Lower Mainland was conducted. Interpretation of this additional seismic data identified several geological structures with potential for storage of natural gas.

In early 1978 Thurber Consultants were retained as environmental and land use consultants for the storage development. An information report was prepared to provide background information on gas storage -- its purpose and planning*. This report gave consideration to the South Surrey prospect as an example of land use and environmental factors that could be associated with a storage development.

It was recognized that special attention would need to be given to environmental protection and planning if a storage development was to be integrated into an urban setting.

³⁰⁵ Gas users reach total of 200,000, Langley Advance, October 8, 1970.

³⁰⁶ Gas price hike opposed, The Province, June 28, 1978.



First learning of Hydro's June 1975 proposal from information provided during an interview with a Vancouver Sun Victoria Bureau reporter, Surrey municipality Mayor Bill Vander Zalm (1969-1975), who "was annoyed by the proposal," said he knew "nothing about the technical implications of underground gas storage or whether it is dangerous:"

"I think it is kind of a kooky idea, but who's to say? I don't really know," he said.

"This seems to be the place where they put all their oddball proposals ... what irks me is that they make all these proposals and never consult us."³⁰⁷

Within six months, Vander Zalm would be elected as the Surrey Riding MLA (Member of the Legislative Assembly) for the Social Credit Party in the December 11, 1975, provincial election and would eventually ascend and be crowned as Party Premier (1986-1991) following the departure of business and privatization-friendly Bill Bennett, the son of former Social Credit Party Premier, W.A.C. Bennett (1952-1972). As Premier in late 1988, Vander Zalm and his Cabinet would controversially authorize petroleum exploration in the Fraser Valley after similar proposals for such were rejected by Surrey Council in 1979 and 1981. Vander Zalm would ultimately become the object of his own 1975 complaint, himself responsible for failing to 'consult' Lower Mainland citizenry.

Vancouver Sun, August 27, 1977

B.C. HYDRO

We are a Provincial Crown Corporation actively involved in the future of British Columbia. A career with us offers a full range of excellent employee benefits and an opportunity to be part of a progressive team.

GAS SUPPLY PLANNING ENGINEER 1

VANCOUVER, BRITISH COLUMBIA

B.C. Hydro is a public utility of over 12,000 employees, serving British Columbia in natural gas, electricity and transportation. B.C. Hydro Gas is responsible for the transmission and distribution of natural gas in metropolitan Vancouver and various other centers in southwest British Columbia.

Duties will consist of conducting studies and preparing reports related to long and short range gas supply planning; the economic analysis of underground gas storage development; preparation of material for use by regulatory agencies.

Qualifications include registration or eligibility for registration with the Association of Professional Engineers of B.C. plus a minimum of four years experience, preferably in the natural gas or related industry.

Salary would be commensurate with experience and qualifications and is in the range of \$2010 to \$2599 per month. A generous fringe benefit package is available. Relocation assistance may be provided.

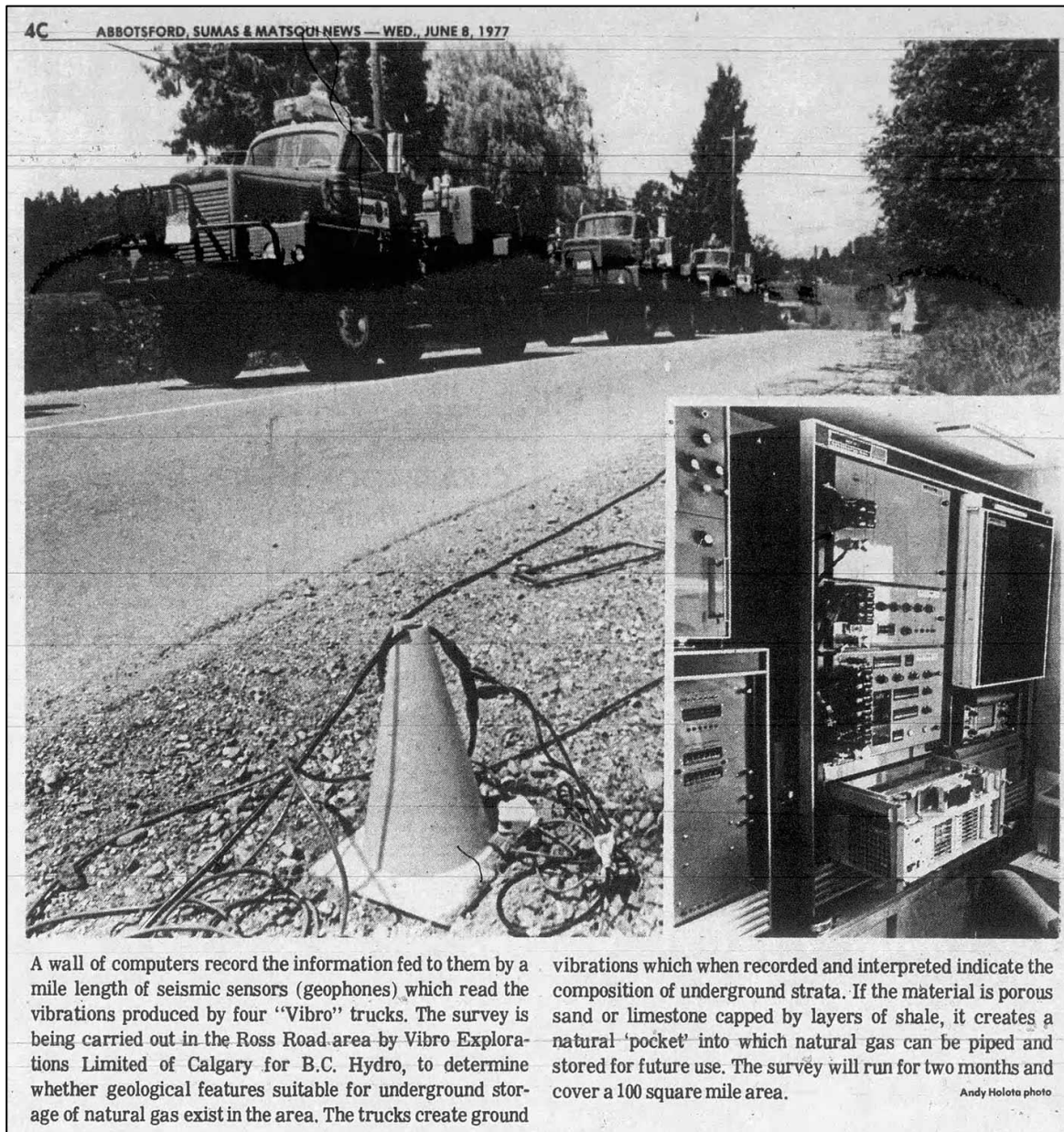
Reply to: Ms. S.E. Matkin, Personnel Officer, B.C. Hydro and Power Authority, 3777 Lougheed Highway, Burnaby, B.C. V5C 3Y3 (604) 298-1311.

³⁰⁷ *Storage area sought for natural gas*, Vancouver Sun, June 4, 1975.

Under the first phase of operations for locating underground storage, in April 1977 B.C. Hydro began a systematic program of seismic testing in the Lower Mainland. W.G. Bierlmeier, B.C. Hydro's manager of gas supply, sent letters of notification to local municipalities:

B.C. Hydro along with environmental and geophysical consultants, will closely supervise the program. The program will be carried out on roads; entry on to private property will only be made if necessary and then with the owner's consent. This program should cause no damage to property or concern to residents.

Our environmental consultants (Thurber Consultants Limited), our geophysical consultants (JLJ Exploration Consultants Limited), and the contractor (Vibro-X Explorations Limited) will be discussing their plans with your staff in the near future.³⁰⁸



³⁰⁸ *Big hole sought for BCH gas pit*, Langley Advance, April 20, 1977.

Hydro also informed the Central Fraser Valley Regional District of its intentions to build a 42-inch gas transmission pipeline “between Huntington and Livingston Stations this summer.”³⁰⁹

The testing would be done with monitoring equipment attached to four “specially equipped seismic” diesel trucks for shaking the earth along short linear intervals, “plus a 25-man survey crew.”³¹⁰

A seismic crew ... is occupying one traffic lane at a time for a distance of 500 feet.

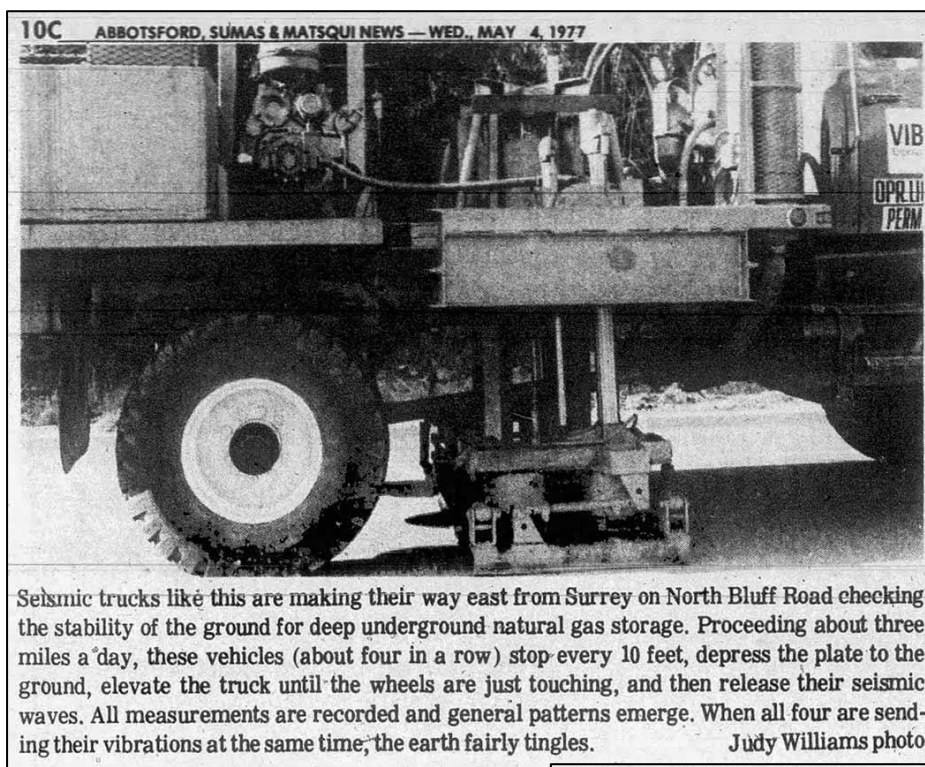
A cable of sensitive detectors or geophones is laid out on the shoulder of the road, and traffic around the area is controlled by flagmen who may at times be assisted by police.

Hydro said the crew moves along at the rate of three or four miles a day so it should be in front of a residence for only a few minutes.³¹¹

In a May 7, 1979, five-page letter to the Ministry of Energy, Mines and Petroleum by A.H. MacPherson, Hydro’s Manager of Gas Engineering Division, MacPherson summarized the results from Hydro’s Lower Mainland extensive seismic program for 1977. It:

discovered seven structural anomalies in the area designated in Order in Council #2735 dated 20 October 1978,” [wherein] “only three of those structures ... have the potential for the development of an underground natural gas storage reservoir. These three prospects include one in South Surrey, one near Cloverdale, and one in the South Aldergrove area.

MacPherson identified that “South Surrey is geologically the best prospect by far,” whereby “the structure covering some 1,000 to



Hydro seeks underground gas storage

B.C. Hydro announced plans Monday for an exploratory drilling program to find a site for an underground natural gas reservoir in south Surrey.

Drilling will take place west of 152nd Street and south of 32nd Avenue.

Public hearings on the proposal will be held and after exploratory drilling a detailed environmental impact assessment will be prepared.

“Safe underground storage of natural gas is common in Canada, the U.S. and Europe,” Hydro said in a statement.

It said it has studied the feasibility of storing gas under the Lower Fraser Valley for the past three years.

Ontario, Saskatchewan and Alberta already have a total of 22 underground storage reservoirs and in the U.S. there are 386 in 26 states. Hydro said some of the reservoirs are below urban areas.

The closest underground storage field of natural gas is at Chehalis, Wash., about 368 kilometres south of Vancouver. It has been operating for 11 years in geologic strata similar to that underlying the Lower Fraser Valley.

The Province, March 21, 1978

³⁰⁹ *Hydro plots gas storage*, Abbotsford, Sumas & Matsqui News, April 20, 1977.

³¹⁰ *Gas reservoir eyed for Chilliwack area*, The Chilliwack Progress, April 6, 1977.

³¹¹ *Still search underground*, Surrey Leader, July 21, 1977.

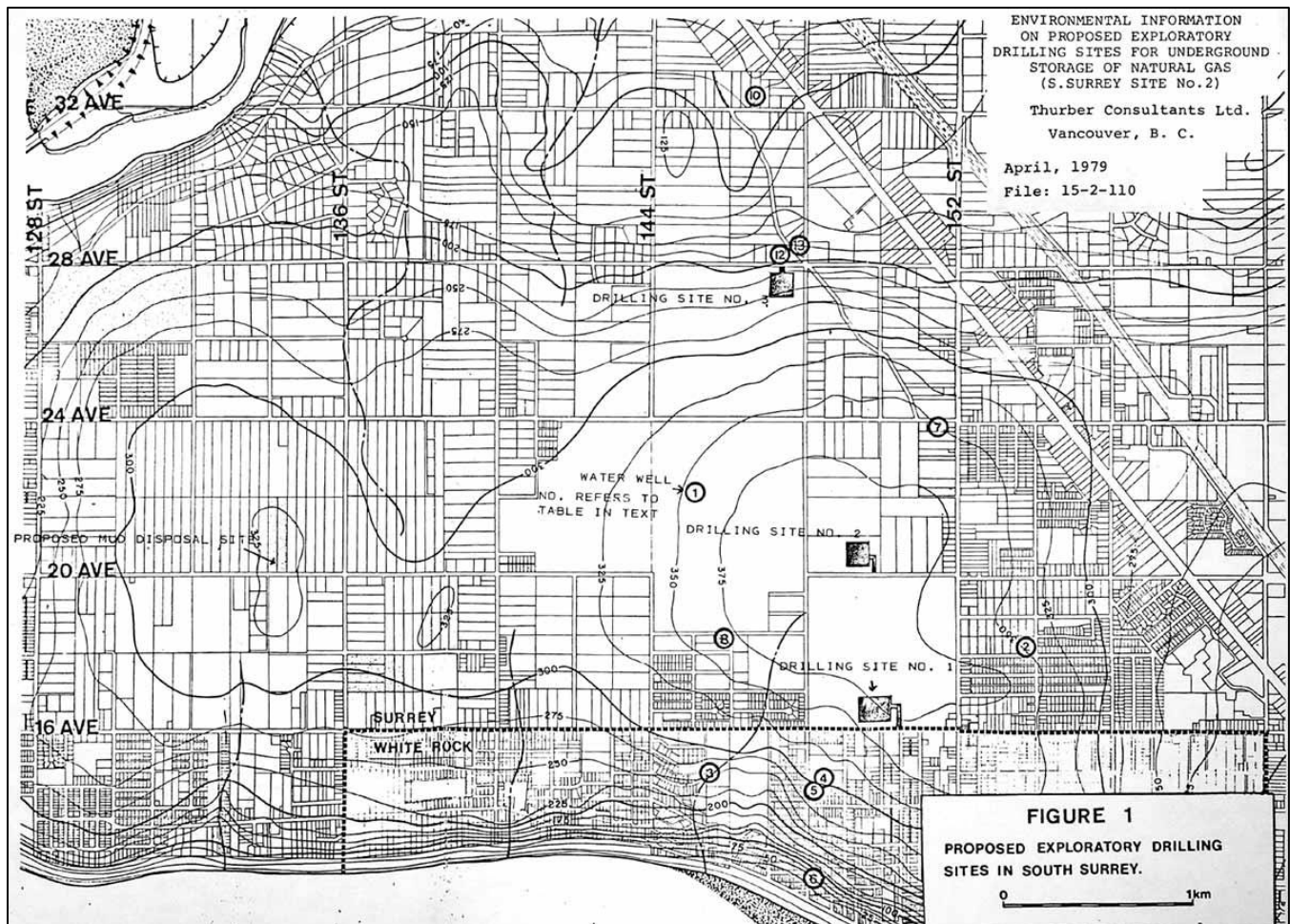
1,500 acres,” and “at a depth of 3,500 feet has potential for 30 to 40 BCF of working storage and potential.”

At the present time, the area is largely undeveloped – mostly bush land and small acreage residential development. It is however, slated in the future for intensive urban development – the most notable being Genstar where clearing the area for development is underway.

If developed for storage, gas would underlie the future urban area as well as underlie some of the existing development in White Rock.

With the exception of a small area to the southwest within the closing contour, all of the mineral rights are owned by the Crown.

Approximately seven exploratory wells would be required to outline the prospect. The first on the Genstar property, the second on property immediately north of Genstar owned by Mr. M. Cruickshank, and the third on municipal property about one mile north of Genstar. The remaining locations to be located when drilling information becomes available.



Explained in Donald Gutstein's amazing 1975 book of real estate intrigue, *Vancouver Ltd.*, in sub-chapter 25, *Who is responsible for the housing crisis? Genstar*, Genstar is described as a powerful "foreign-owned corporation," a "vertically-integrated development company," with its roots in Belgium. It was a:

\$500 million corporation whose subsidiaries – BACM Industries, Inland Cement Industries and Ocean Cement, Con-Force Products, Engineered Homes and many others – are engaged in every aspect of land development in western Canada. ... It obtained its position of pre-eminence solely through buying up existing Canadian companies, making their previous owners millionaires in the process, with the use of Canadian money made available to it because of particularly close ties to the Royal Bank of Canada and the Liberal party.

Although its branches have been nourished by the savings of the Canadian people, its roots lie buried in the darkest colonial Africa, in the Belgium Congo. Genstar's previous name was Sogemines, named after the parent company, Societe Generale de Belgique. Societe Generale de Belgique is one the two or three largest investment concerns in Europe. It is said to control one-fifth of the Belgium economy. The company is intimately connected to the 'august Societe Generale de Banque, the most powerful bank in Belgium.'

... Sogemines was just one of a number of vehicles for investing in Canada. Other Societe Generale-controlled companies include Canadian Petrofina, currently in the \$400 million range, and the Miron Co., a \$50 million Montreal-based cement and construction firm which in 1974 was integrated into the Genstar complex. The Sogemines group had good political connections all along. Louis St. Laurent, the ex-Prime Minister of Canada, was appointed chairman of the Miron Co. in 1959 after his humiliating defeat in 1957.

Along with its Liberal party connections, Sogemines is intimately tied to the Royal Bank of Canada complex. The head of the company is usually a director of the bank, and the president of the bank, currently Earle McLaughlin, in turn is a director of the company. The two are further tied together through F. Campbell Cope, a senior partner in the Royal's law firm, Ogilvy, Cope, Porteous, Hansard, Marler, Montgomery & Renault.

This connection has tangible results for Genstar. When in 1973 Genstar took over Ocean Cement – the largest cement company in western Canada – it was with the aid of a \$2.4 million loan from the Royal Bank of Canada.

Thurber's first report of 1977 identified that Genstar Development Corporation, through its Saratoga Holdings, owned a quarter section of land in south Surrey. That former undeveloped, forested land parcel was zoned suburban residential, land which Surrey Council had approved for "urban development as South Surrey village centre" as "high density commercial, residential and park development," with "initial road development and servicing planned for 1978."

"The problem with this location," wrote David Fenn in a memo to Commissioner David Anderson on October 17, 1990, is that B.C. Hydro's application for underground storage "fell within a 155-acre residential and shopping mall development proposed by the Genstar Development Corporation," and that "according to three individuals who worked for B.C. Hydro during the proposal stage, the strongest opponent of the B.C. Hydro plan as always Genstar development." Anderson was the May 1990 government-appointed Inquiry Commissioner to investigate petroleum exploration in the Fraser Valley, as narrated in Chapter 5-12 of *The Fifth Wave*. Fenn stated:

Genstar provided the local newspapers with misleading information, and several newspapers published distorted articles regarding the dangers of drilling and storage. As well, Genstar lobbied the municipalities, who in turn withdrew their support of the Hydro proposal. This loss of support came as a shock to B.C. Hydro, who always believe they had strong municipal backing.

As a result of the Genstar lobbying effort, the public became somewhat concerned over the inconveniences and possible dangers of gas drilling and storage. This public feeling existed, even though B.C. Hydro employees say they launched an education initiative of their own, and “bent over backwards” to address safety, noise and environmental concerns in their proposal.

It is noteworthy that no grassroots group such as the Friends of the Fraser Valley formed to oppose the Hydro proposal in 1978.

The Peace Arch News reported on January 24, 1979, *B.C. Hydro replies to ‘unanswered questions,’* that B.C. Hydro intended to include a right-of-way to its proposed drilling site through Genstar’s newly planned 1,115 home subdivision, which would cause a loss of about 15 acres of Genstar’s development property. In the Peace Arch News of December 20, 1978, *A tiny piece of land – battlegrounds for two giants*, “two giants are about to battle it out over the tiniest piece of land – 10 acres – in what may become the most interesting fight in the political arena across the waters in Victoria in the new year.” Reporter Graham MacDonell stated that Genstar was “the fortieth largest company in Canada.”

In his May 7, 1979, five-page letter to the Ministry of Energy, Mines and Petroleum A.H. MacPherson also described the “Cloverdale prospect” in the southwest area of Cloverdale where about “13 exploration wells would be needed to outline the prospect.” And the “South Aldergrove prospect,” extending over an area of about 1,700 acres, “is overlain by farms,” where about “11 exploratory wells would be needed to outline the prospect.” MacPherson advised that although the South Surrey data showed the most promise, the South Surrey site however “would have the greatest social impact.”

Thurber Consultants Ltd.		April, 1979
Vancouver, B. C.		File: 15-2-110
<u>INTRODUCTION</u>		
Thurber Consultants Ltd. were authorized by Mr. K.A. Markland by letter dated November 28, 1977 to initiate an environment and land use study of the proposed exploratory drilling program in south Surrey. This report covers the work outlined in our letter dated October 28, 1977 and in the terms of reference provided by B.C. Hydro. Three topics are addressed:		
<ol style="list-style-type: none">1. Land use factors that could influence the selection of suitable drilling sites.2. Qualitative environmental guidelines to minimize disturbance to lands and people near the drill sites.3. Specific studies that are needed to assess and control effects of exploratory drilling at specific sites.		
The review was conducted over the past three weeks by Dr. H.M. Etter, P.Ag. of Thurber Consultants Ltd. A list of outside contacts made or gathered during the study is given in Appendix A. Discussions were also held with members of B.C. Hydro's Gas Group and Properties Division.		

That "social impact" had not only been revealed in concerns raised by Surrey and White Rock municipal councils six months earlier in October 1978 but had been anticipated in a December 1977 Thurber Consultants Ltd.'s report to B.C. Hydro's Gas Group, *Environmental Review of Proposed Gas Reservoir Drilling Project*.³¹² In the 11-page 1977 report, B.C. Hydro's seismic survey data of the South Surrey area required further analysis by way of "six exploration wells in Township 1, Sections 15 and 22 of the District of Surrey." The report stated, "siting of wells within other parts of these sections may represent some difficulty since they are largely subdivided and improved for residential use." The report mentioned "conflict with commercial development."

Clearing and leveling should be kept to a minimum. A 350-foot by 350-foot drilling site is suggested. The access road and drillsite should be selected to avoid large trees with aesthetic appeal. Wherever possible, access routes and drillsites

should not conflict with the layout of planned residential developments in the vicinity.

Another contention in the 1977 Thurber report was described under a sub-heading called "groundwater supplies:"

There are 8 municipal water wells within 1 km (or less) of the proposed drill sites, 5 in Surrey and 3 in White Rock. Their approximate locations are shown on Drawing 15-2-110-1. The Surrey wells have been used only as a supplemental summer supply since the municipality connected its mains to

Plan Early Start Storage Drilling

"Will underground gas storage blow up my neighborhood," was one of the questions South Surrey residents asked B.C. Hydro officials at a public information meeting at Sunnyside Centennial Centre on June 22nd.

A strong turnout of citizens throughout the seven hours of the "open house" meeting was experienced.

B.C. Hydro provided a number of diagrams, photographs and a model to demonstrate their plan to store up to 50 billion cubic feet of natural gas some 1000 metres below the living rooms of Mr. and Mrs. South Surrey.

Method would be to sink a main well with a number of monitoring wells around it.

Natural gas would be pumped into a huge sand layer, roughly the shape of a bell, during summer months and released for consumption in the winter.

WITHSTAND QUAKES

The sediment, Markland assures, is still plastic enough to absorb shocks such as an earthquake without releasing great quantities of gas.

Surrey Leader, June 28, 1978

There are 22 such storage sites in Canada and 386 in the U.S. The U.S. sites are often located underneath cities whereas in Canada they are restricted to locations away from heavily developed areas.

If the tests prove that the ridge is a usable storage site, the B.C. Hydro should know this by late 1979. Then natural gas storage in South Surrey would be a "go situation."

The energy company wants a "storage bin" of at least 10 billion cubic feet (or it will not proceed further) but there is a possible capacity of up to 50 billion cubic feet.

Gas storage wells could be on tap as early as 1981.

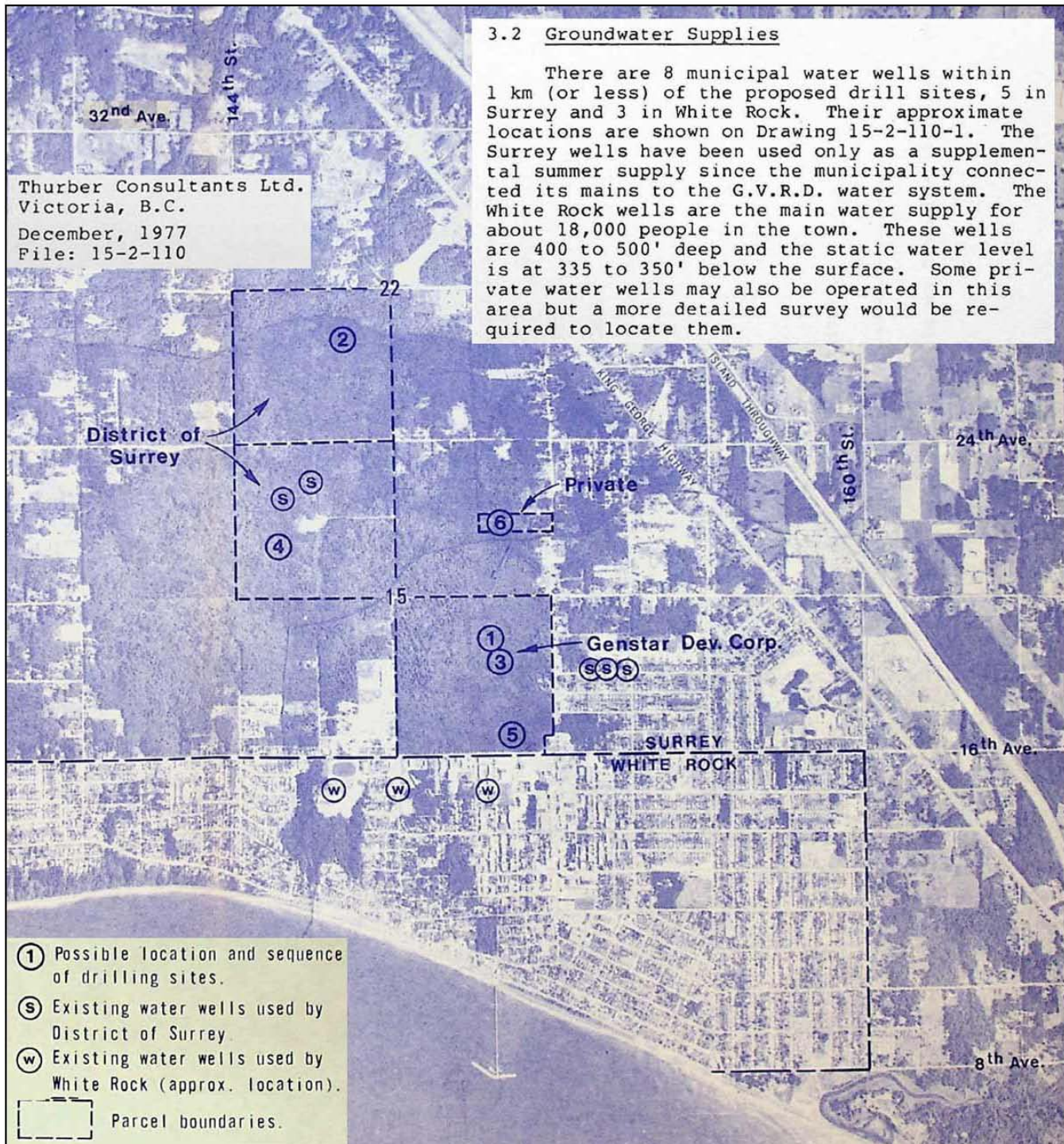
Markland says each storage well would be on a 10 acre parcel with 1½ acre core containing the wells and monitoring lines. As well there would be dehydrating tanks and a pump station.

It is uncertain how many storage well sites there would be in South Surrey.

The rest of the land would be used by the public as an open green park space. There would be no smell from the wells, he claims.

³¹² From the Introduction: "Thurber Consultants Ltd. were authorized by Mr. K.A. Markland by letter dated November 28, 1977 to initiate an environment and land use study of the proposed exploratory drilling program in south Surrey. This report covers the work outlined in our letter dated October 28, 1977 and in the terms of reference provided by B.C. Hydro. Three topics are addressed: 1. Land use factors that could influence the selection of suitable drilling sites. 2. Qualitative environmental guidelines to minimize disturbance to lands and people near the drill sites. 3. Specific studies that are needed to assess and control effects of exploratory drilling at specific sites."

the G.V.R.D. [Greater Vancouver Regional District] water system. The White Rock wells are the main water supply for about 18,000 people in the town. These wells are 400 to 500 feet deep, and the static water level is at 335 to 350 feet below the surface. Some private water wells may also be operated in this area, but a more detailed survey would be required to locate them.



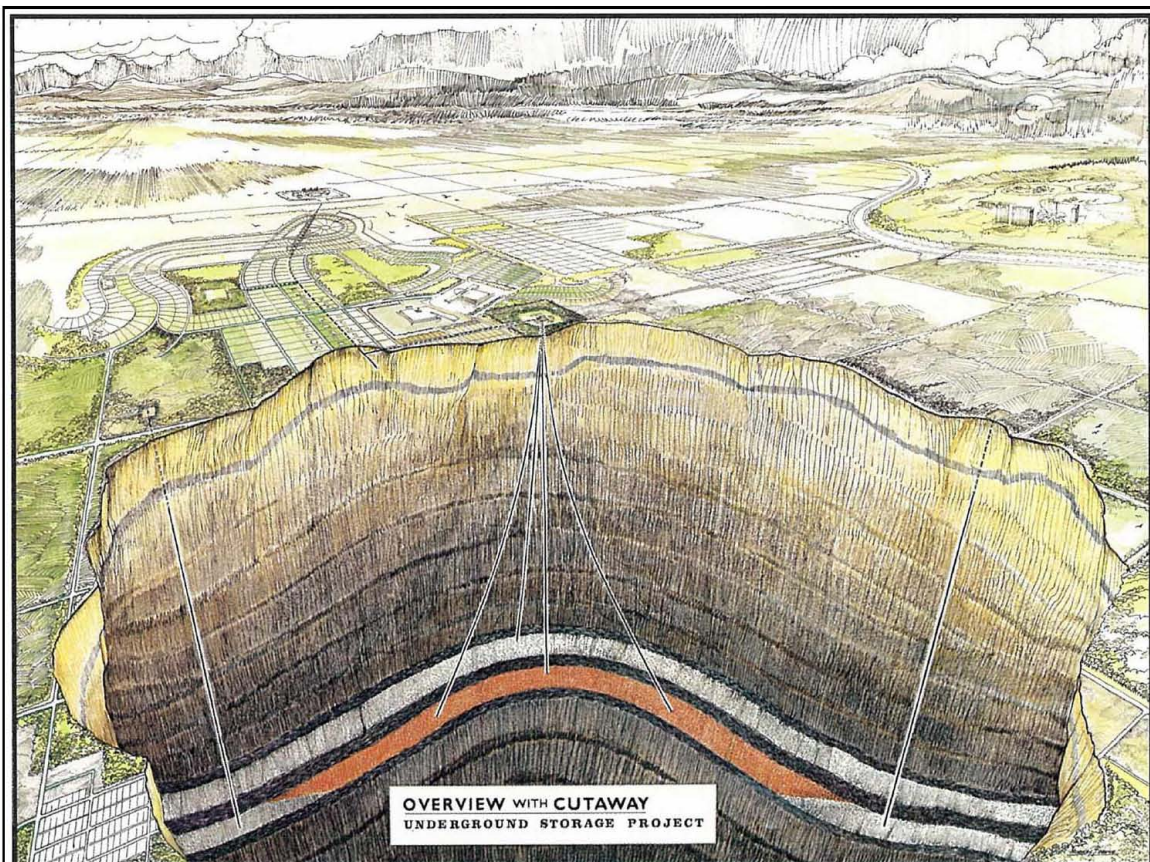
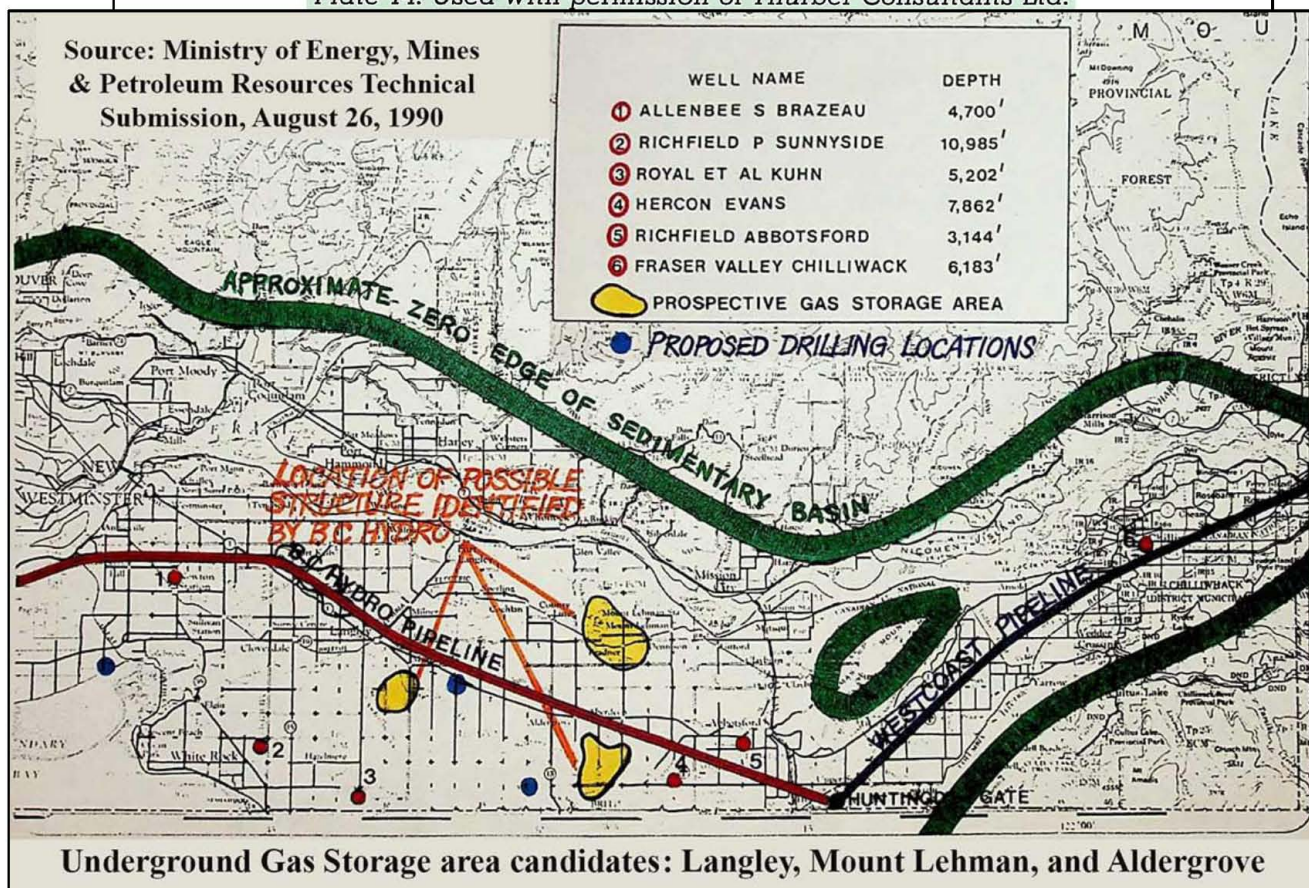


Plate 14: Used with permission of Thurber Consultants Ltd.



Thurber stated that “as in the case of land use it may be difficult to separate the effects of exploration drilling from reservoir development when discussing groundwater supplies with operators or property owners.”

An investigation is recommended to identify the aquifer characteristics in the area surrounding the proposed drilling sites.

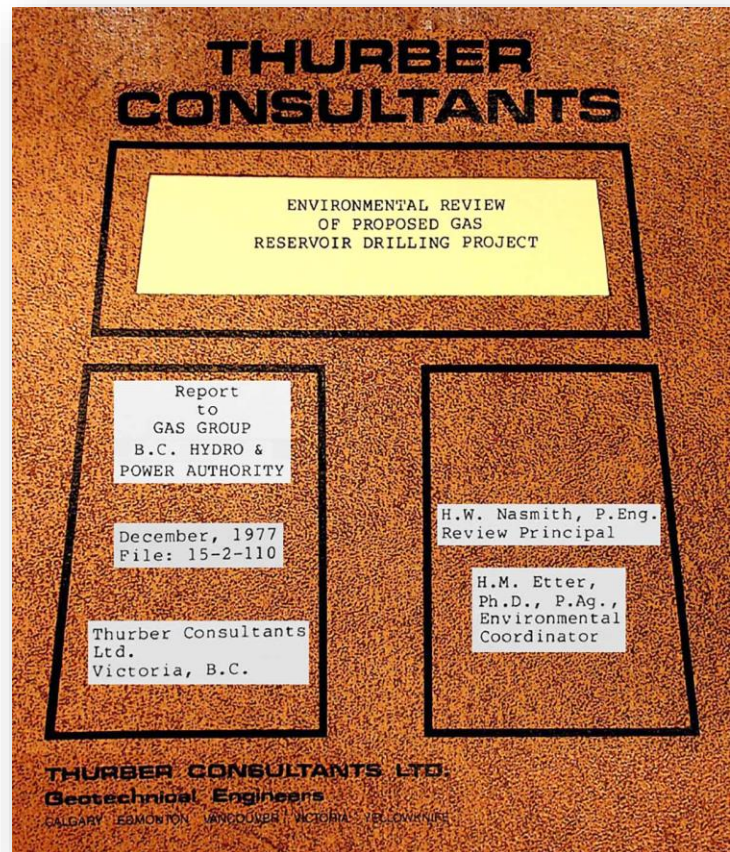
Several agencies and local operators should be contacted, including: B.C. Hydro’s Drilling Consultant; Geological Survey of Canada (Carl Halstead); Municipality of Surrey; Municipality of White Rock (White Rock utilities Ltd); Water Investigations Branch; B.C. Ministry of Environment; Environmental Health Engineering Division, B.C. Department of Health (Val Strijack).

The study would involve field collection of relevant information through the above contacts, geological field assessment of the study area, office correlation and analysis of collected data and reporting of results.

Findings should include a graphic illustration of aquifer and well locations. A water quality monitoring program should be outlined for the drilling period and any drilling problems which may arise should be identified and assessed.

Water quality monitoring as determined in groundwater studies would be carried out at this time. It would be necessary to arrange for samples to be taken and analysed quickly so that results are available while drilling is still in progress. A comparative assessment would be required to determine if results vary significantly from past values for a given well. If gas (methane) analyses are done, special handling of the water samples may be required to prevent dissipation prior to analysis.

Thurber Consultants’ professional engineers were cognisant of the controversial nature of groundwater contamination resulting from petroleum exploration, a topic that would soon become prominent in North America, and world-wide.³¹³ And with that prominence, the emergence of repeated denial and lies by big



³¹³ For instance, coalbed methane exploration experiments and operations in Alabama, New Mexico and south Colorado in the late 1970s through to the present day that polluted, poisoned and ruined groundwater sources.

petroleum, the lies, spins and deflections that the Friends of the Fraser Valley would later research, confront and help expose in 1990.

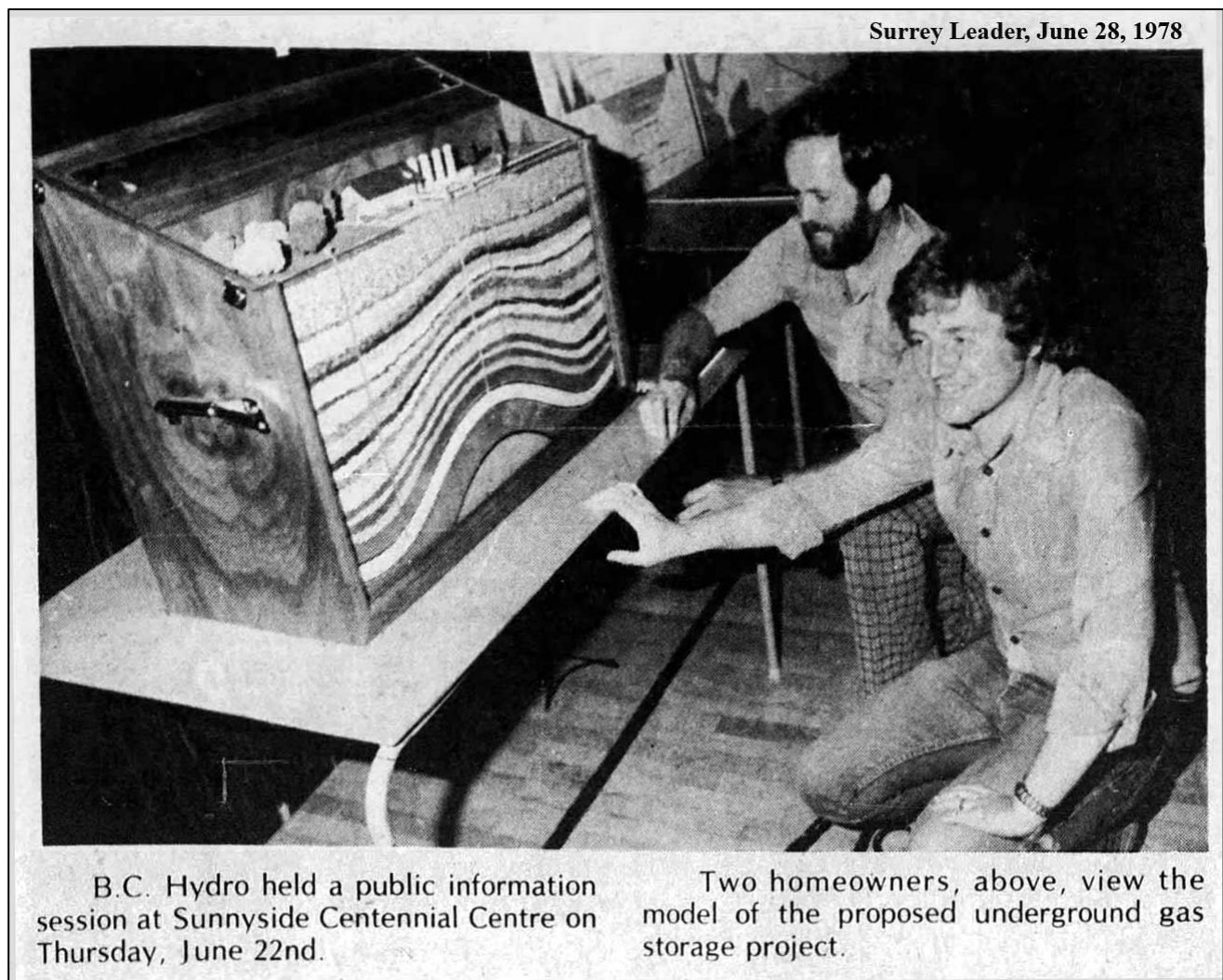
Following the analysis of Fraser Valley seismic data collected in 1977, B.C. Hydro announced on March 20, 1978, the Crown corporation's intentions to drill in the South Surrey area.

Drilling will take place west of 152nd Street and south of 32nd Avenue.

Public hearings on the proposal will be held and after exploratory drilling a detailed environmental impact assessment will be prepared.

"Safe underground storage of natural gas is common in Canada, the U.S. and Europe," Hydro said in a statement.

Ontario, Saskatchewan and Alberta already have a total of 22 underground storage reservoirs and in the U.S. there are 385 in 26 states. Hydro said some of the reservoirs are below urban areas. ³¹⁴



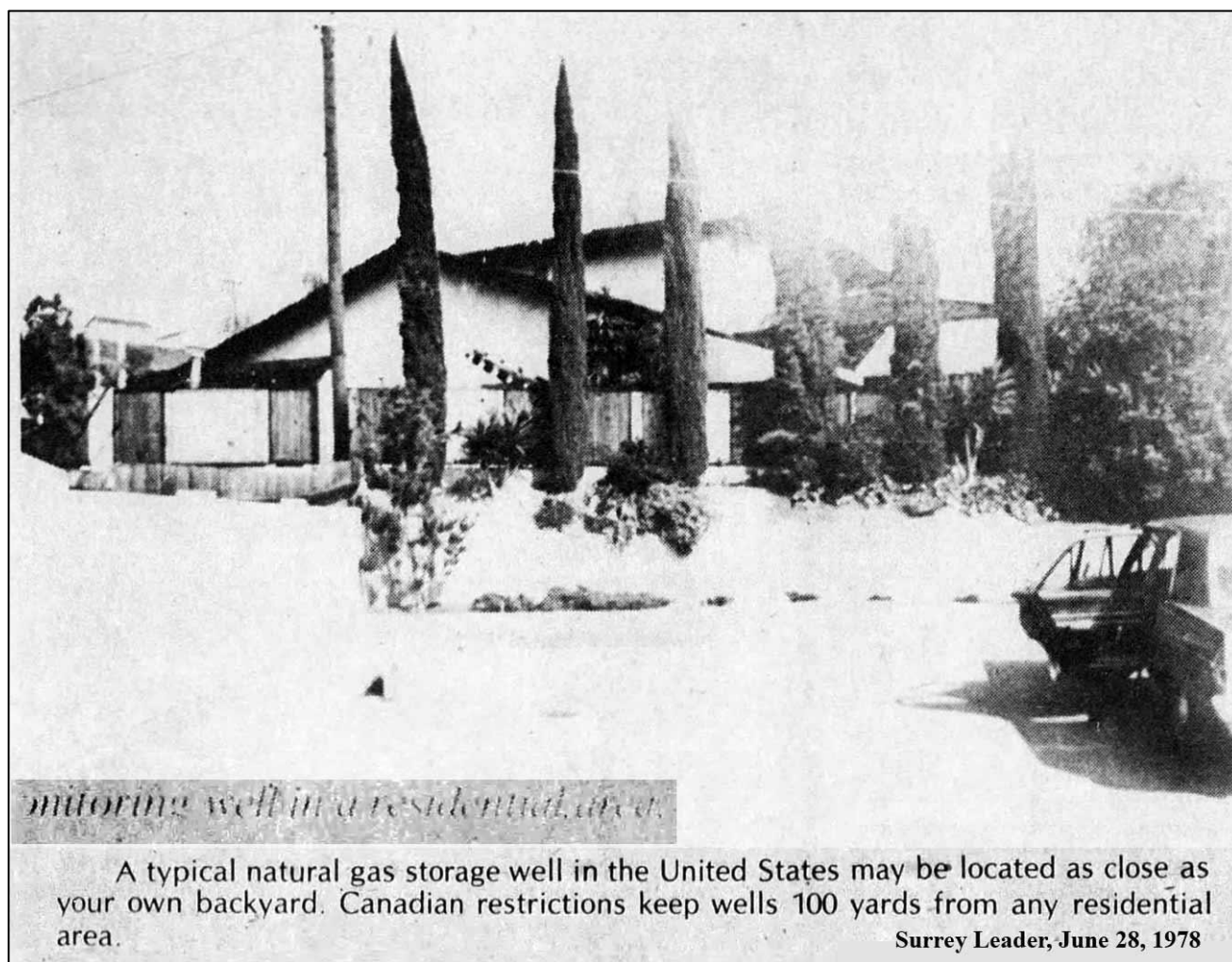
³¹⁴ *Hydro seeks underground gas storage*, The Province, March 21, 1978.

Hydro's spokesmen Al MacPherson and Bill Bierlmeier gave a presentation to White Rock City Council on April 24, 1978. Bierlmeier, cognisant of Thurber Consultants' report of December 1977 regarding advice about upcoming urban conflicts, consoled Council about residential proximity concerns to the proposed exploration operation facilities: "Bierlmeier showed Council a number of pictures of such storage wells in California which are within yards of Churches, schools, residential areas and commercial buildings."³¹⁵

Surrey and White Rock residents and politicians were soon asking hard questions about the impacts to quality of life and groundwater contamination. Much of this was raised at a Surrey Municipal Council meeting on June 5, 1978:

White Rock residents have expressed concern that stored gas could leak and pollute the wells from which White Rock draws most of its water supply. They also were concerned about the possibility of earthquake damage.

Surrey Council wants more information before it decides whether to officially protest a B.C. Hydro exploratory drilling program in search of underground natural gas storage facilities in south Surrey, just north of White Rock.



monitoring well in a residential area.

A typical natural gas storage well in the United States may be located as close as your own backyard. Canadian restrictions keep wells 100 yards from any residential area.

Surrey Leader, June 28, 1978

³¹⁵ *Safety Stressed in Gas Storage*, Surrey Leader, April 26, 1978.

UNDERGROUND GAS STORAGE 'OPEN HOUSE' MEETING THURSDAY, MAY 18

B.C. Hydro will host an "open house" information meeting on Thursday afternoon and evening, May 18, to provide Surrey residents with information about the potential for storing natural gas underground in the South Surrey area.

Studies and surveys conducted to date have identified a promising location for a deep underground storage reservoir in South Surrey in an area generally west of 152nd Street and south of 32nd Avenue. Exploratory drilling and testing is now required to confirm that this location is geologically suitable for gas storage.

Personnel from B.C. Hydro, the Ministry of Mines & Petroleum Resources, the British Columbia Petroleum Corporation, and an environmental consulting firm will be in attendance to provide information and answer questions. Printed information about the proposal will be available and displays and charts illustrating various aspects of the project will be exhibited.

The "open house" meeting will be held:

Thursday, May 18

at

**Sunnyside Centennial Centre
1845 - 154th Street, Surrey**

*Please drop in at your convenience any time between
2 p.m. and 9:30 p.m.*

Surrey Leader - May 7, 1978

†† B.C. HYDRO

Alderman Garry Watkins told council Monday that Hydro's plans were a rape of residential land. But his motion calling on Hydro to halt its program found no seconder.

Council was considering a strong protest from Genstar Development which owns about 150 acres of land near 16th Avenue and 152nd Street, where it plans a multi-million-dollar commercial-residential complex.³¹⁶

"I do not think the storage of natural gas underground will rest well with the people," [Alderman Don] Ross concluded.³¹⁷

Because of the flack and public criticism resulting from Surrey Council meeting of June 5th, Hydro announced it would be holding an "open house" meeting from 2 to 9 p.m. on June 22nd at the Sunnyside Centennial Centre.

On hand at the meeting will be personnel from B.C. Hydro, the Ministry of Mines and Petroleum Resources, the British Columbia Petroleum Corporation and an environmental consulting firm. They will provide information and answer questions.³¹⁸

Amidst "strong turnout of citizens" at the open house, a blunt question put to meeting hosts was, "will underground gas storage blow up my neighbourhood?"³¹⁹

At the August 21, 1978, Surrey Council meeting:

In an opinion to Council, municipal solicitor Morris Soronow stated that the Municipality has no power to halt B.C. Hydro from establishing gas storage underground. And Hydro does not come under zoning regulations.

If Council objects to the storage proposal, the time to make the objections known is when Hydro applies to the Provincial Government for a declaration of Sunnyside as a storage reservoir.³²⁰

THE SURREY LEADER, SURREY, B.C. — WEDNESDAY, JUNE 14th, 1978

Lots of Questions about Gas Storage

Surrey Aldermen have a lot of questions in their minds about possible storage of natural gas underground in the Sunnyside area. But they feel that more information is needed before Surrey Municipal Council makes its decision whether to support the B.C. Hydro proposals.

Discussion on this came up at the June 5th meeting of Surrey Municipal Council.

Ald. Watkins tried to get a motion through that Surrey Municipality will not co-operate with B.C. Hydro Authority on natural gas storage in the Sunnyside area, except under very strict conditions.

He wants the amount of land needed for well heads and above ground buildings to be scaled down. B.C. Hydro is talking about five or six of 10 acres each, plus 14 acres for a pumping station. This would be in the municipally owned Sunnyside Acres.

Another condition is that Surrey must derive full taxation benefits from the well heads and the above ground buildings.

Alderman Watkins referred to the B.C. Hydro proposal to establish in Sunnyside Acres as "the rape of 450 acres of Surrey taxpayers' land."

A letter from Genstar Development strongly opposes the proposal for underground storage of natural gas in South Surrey.

The big development company considers this to be an intrusion into a residential-commercial area like South Surrey/White Rock. They feel it should go into a less populous, non-residential zone, as even drilling is going to raise problems for disposal of large quantities of water, brine and mud, as well as visual pollution.

"The state of the art of underground storage in British Columbia is not in its infancy; it is simply non-existent. Given the lack of information and the lack of experience with this proposal, it is not sufficient for B.C. Hydro to call a few information meetings in the area, give out only selected data, and presume it has satisfied its public obligations."

Alderman Fred Beale termed this "self-interest" on Genstar's part, as the developer owns large acreage in that area.

Recreation use for the clearings which B.C. Hydro would make in wooded Sunnyside Acres was suggested by Ald. Jerry Huot. He expressed faith in B.C. Hydro to make underground storage safe.

Alderman Don Ross said there is a lack of information, and even a lack of Federal Government regulations in regard to underground storage.

Ross stated he is opposed to B.C. hydro drilling in Sunnyside Acres, as that would supercede any Surrey plans to develop the area.

"I do not think the storage of natural gas underground will rest well with the people of the area," Ross concluded.

No motion was placed, with consensus of opinion seeming to be that much more information is needed before Council members will make up their minds on underground storage of natural gas.

³¹⁶ *Surrey calls for facts on drilling*, The Province, June 6, 1978.

³¹⁷ *Lots of questions about Gas Storage*, Surrey Leader, June 14, 1978.

³¹⁸ *Hydro tells drilling plan*, Surrey Leader, June 14, 1978.

³¹⁹ *Plan early start storage drilling*, Surrey Leader, June 28, 1978.

³²⁰ *Council accepts storage of gas*, Surrey Leader, August 23, 1978.

On October 23, 1978, B.C. Hydro & Power Authority's Gas Group, Hydro's natural gas division, handed in an application to the Ministry of Energy and Petroleum Resources for a drilling exploration license within the Surrey and White Rock municipal boundaries to determine a location for proposed underground gas storage. Shortly thereafter, White Rock City Council met to voice its concerns, inquiring "whether the drilling will have any side effect on the city water supply:"

Alderman John Blewett pointed out that the company will be using drilling fluid for the exploratory work and that some of those fluids are toxic.

"We want to make sure that Hydro is not going to use toxic fluids," he said.

Alderman Vin Coyne said that much of White Rock water supply comes from underwater artesian wells deep below the ground surface. The City is one of the few remaining areas not hooked up to the Greater Vancouver Regional District water supply.

Blewett suggested that Council should write to Hydro to ask if damage to the water supply does occur, would the company be willing to assume costs of switching over to GVRD water.

A motion was passed, nevertheless, that White Rock City write to Hydro saying they would agree to exploratory drilling if then can get some assurances in writing that the exploratory work will not damage the White Rock water supply.

321

Concerns about Hydro's underground storage proposal were voiced at a public hearing on Monday night, October 29, 1978, at Surrey Municipal Hall, a hearing "when 300 residents turned out to condemn the municipality's development plans."³²²

After City Council heard the residents, B.C. Hydro's general solicitor Bill Mitchell informed Council that it conducted

Council Wary over Gas Drilling

B.C. Hydro is beginning to take steps towards the storage of natural gas in the Surrey area and have made application for a licence to carry out exploration drilling to determine the suitability of sub-surface storage of natural gas.

White Rock Council was so informed and have until December 8th to make any representation to the Provincial Government.

Main concern of Council was whether the drilling will have any side effect on the City water supply.

Alderman John Blewett pointed out that the company will be using drilling fluid for the exploratory work and that some of those fluids are toxic.

"We want to make sure that Hydro is not going to use toxic fluids," he said.

Alderman Vin Coyne said that much of the White Rock water supply comes from underwater artesian wells deep below the ground surface. The City is one of the few remaining areas not hooked up to the Greater Vancouver Regional District water supply.

Blewett suggested that Council should write to Hydro and ask if damage to the water supply does occur, would the company be willing to assume costs of switching over to GVRD water.

A motion was passed, nevertheless, that White Rock City write to Hydro saying they would agree to exploratory drilling if they can get some assurances in writing that the exploratory work will not damage the White Rock water supply.

* * * SURREY RELUCTANT

Surrey Council took a somewhat stronger position on Monday night. A brief will be prepared for presentation to the hearing. While not necessarily opposed to the exploratory drill-

ing, Surrey wants conditions and safeguards spelled out.

Mayor Bill Vogel wants to know why the application for B.C. Hydro takes in the bulk of Surrey. When Hydro approached Surrey Council early in the year, the emphasis was on the Sunnyside ridge.

"Have they (Hydro) something in the back of their mind they haven't told us about?" queried Ald. Bob Jacobs.

Alderman Rita Johnston is of the opinion that Council really has voiced opposition to any natural gas storage underground in South Surrey. She stated that such storage "just can't be compatible with the Genstar development."

Surrey Municipality's big concern about oil and gas drilling is that it may interfere with the planning and development of the district.

Surrey Leader
November 29, 1978

³²¹ *Council Wary over Gas Drilling*, Surrey Leader, November 29, 1978.

³²² *Surrey residents object to unresponsive council*, Vancouver Sun, October 31, 1978.

seismic tests in the area, data from which indicated “the possibility of suitable strata under the Semiahmoo peninsula.”³²³ Mitchell, who “assured those at the hearing that this type of gas storage is safe,” stated “we’re not going to blow everybody up,”³²⁴ and informed “the hearing that such underground gas storage facilities are used in many places in Ontario and the United States with complete safety even in urban areas.”³²⁵ Mitchell’s statement about “complete safety” was a lie, as water contamination problems from underground gas storage had already occurred in the United States, discussions which are introduced in the Fifth Wave chapter of this report.

Following the municipal elections of November 1978, Surrey’s new council membership changed its tune about Hydro’s underground storage proposal. By year’s end, Surrey Council requested government to exempt two areas in Surrey from Hydro’s proposed drilling locations.

Areas of population density “should not be blighted by underground storage of natural gas.”

The areas are four square miles of Sunnyside, from 16 to 32 Avenue, north from White Rock boundary at 16 Avenue to 32 Avenue. The other area is the Clayton upland on both sides of the Fraser.

“The municipality is well aware of the positions taken by B.C. Hydro that underground storage of gas is not a dangerous procedure and does not in any way blight the surface area, but merely requires a relatively small area for the well heads and pump stations. The question of whether or not it is a safe procedure or otherwise really doesn’t matter if people refuse to reside or carry on business in areas under which natural gas is stored.”³²⁶

In the early months of 1979, three environmental impact reports were completed by consultants on Hydro’s proposed drilling sites in the Lower Mainland.

In early July, Surrey municipal manager Dan Closkey attended a meeting with B.C. Hydro representatives, where “he had taken a strong stand on behalf of the municipality in opposition to

Gas storage tests called off

B.C. Hydro has discontinued its investigation of potential underground storage of natural gas in the South Surrey area following rejection by the Ministry of Energy, Mines and Petroleum Resources of its application for a licence to carry out exploration, including drilling and other exploratory work.

Hydro was advised the application had been denied by a letter from J.J. Hewitt, minister responsible for administration of the Underground Storage Act, 1964, under which the application had been made.

In his letter, Hewitt stated:

“The environmental impact reports prepared at my request of the first three

exploratory test wells proposed for the South Surrey prospect have been carefully considered by my staff. In view of the state of development of surface installations in that area, they have recommended to me that this prospect cannot be considered for drilling.

“I accept this recommendation and consequently refuse the application.”

Meantime, at Surrey Council, Ald. Garry Watkins called the decision of the Ministry of Energy a victory for Surrey but said it could be short lived because B.C. Hydro had also considered the Cloverdale area for gas storage.

White Rock Council received the notice at its meeting but offered no comment.

The Peace Arch News, Wednesday, August 15, 1979

³²³ *Clash at Hearing between Heavies*, Surrey Leader, November 1, 1978.

³²⁴ *Surrey residents object to unresponsive council*, Vancouver Sun, October 31, 1978.

³²⁵ *Clash at Hearing between Heavies*, Surrey Leader, November 1, 1978.

³²⁶ *Natural gas storage plan questioned by Surrey*, Surrey Leader, January 1, 1979.

underground storage of natural gas.”³²⁷ Closkey handed in a report to Surrey Council on July 9, 1979, about his meeting with Hydro officials.

Two weeks later, on July 24, 1979, James Hewitt, Minister of Energy, Mines and Petroleum Resources wrote a two-page letter of notification to R.K. Kidd, B.C. Hydro’s vice president of Gas Operations and Energy Conservation. In it, Hewitt rejected Hydro’s drilling application of October 23, 1978, for underground gas storage:

The environmental impact reports prepared at my request of the first three exploratory test wells proposed for the South Surrey prospect have been carefully considered by my staff. In view of the state of development of surface installations in that area they have recommended to me that this prospect cannot be considered for drilling.

The Vancouver Sun newspaper reported the following about Hewitt’s decision:

Hewitt said an environmental impact report recommended against the drilling due to the proximity of farms and houses in the area west of 132nd Street and south of 32nd Avenue.

Hydro spokesman Sydney Orpwood said it was too early to tell where the company might look for an alternative storage site.³²⁸

Following Hewitt’s official rejection, Surrey Alderman “Garry Watkins called the decision of the Ministry of Energy a victory for Surrey but said it could be short lived because B.C. Hydro had also considered the Cloverdale area for gas storage.”³²⁹

³²⁷ *Council still opposed to natural gas storage*, Surrey Leader, July 18, 1979.

³²⁸ *Hydro gas storage vetoed*, Vancouver Sun, August 10, 1979

³²⁹ *Gas storage tests called off*, Peach Arch News, August 15, 1979.

The Fourth Wave:

Fraser Valley Exploration, LNG Proposals, and Deregulation, 1981-1984

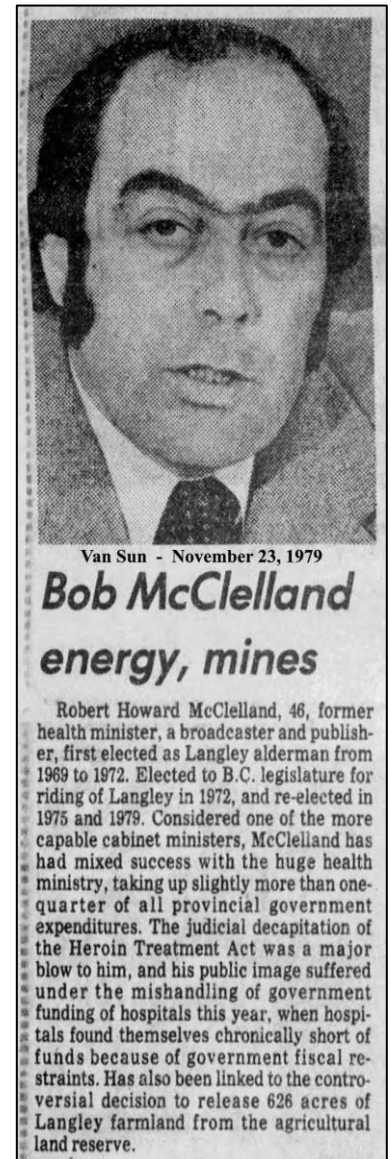
"I can't understand it," one agriculturalist said. "To even talk about drilling for oil and gas in the Fraser Valley is tantamount to a death wish." ³³⁰

I hear that yet another scheme is being bandied about for drilling for gas and oil in the deep subterranean under the Fraser Valley. I've lost count of the number of share-selling promotions for that type of a dream that have come and gone in the last few decades. ... For the newcomers in this area, you are probably interested in learning that some of the earlier promoters of Fraser Valley gas and oil drilling schemes actually spent some of their backers' money on the costs of sinking rather expensive water holes. ³³¹

After the Social Credit government's July 1979 decision rejecting B.C. Hydro's project probe for underground gas storage in an urban setting, Hydro officials were left in a quandary, a state of limbo. What to do, what to do? The Crown corporation's Gas Group was eager to continue its storage objective but faced scrutiny from two quarters: three environmental assessment reports from its hired consultants that pointed out problems for drilling sites; and public opposition. Eventually, Hydro administrators came up with a new strategy under a new Energy Minister.

On Friday March 6, 1981, the Ministry of Energy, Mines and Petroleum Resources made a "surprise announcement." ³³² Oil and gas exploration was "being opened up" in the Fraser Valley within eight designated parcels of real estate encompassing 88,687 hectares. On a map shown to a Vancouver Sun reporter – a map not published in the newspaper, and not found by this report author – the land parcels were described as extending "from Crescent Beach [in White Rock] and Mud Bay east past Chilliwack:"

A map showing areas of potential exploration includes land in or surrounding such areas as Newton, Johnson Heights, Guildford, Port Kells, Panorama Ridge, Barnston Island, most of the southern half of Langley, the north side of the Fraser River in the Mission District, Aldergrove, Matsqui, Abbotsford, Nicomen Island and Chilliwack Mountain. ³³³



³³⁰ *Fraser Valley open to oil, gas drilling*, Times Colonist, March 7, 1981.

³³¹ *Week moments*, by Jiminie, Langley Advance, March 25, 1981.

³³² *Fraser Valley open to oil, gas drilling*, Times Colonist, March 7, 1981.

³³³ *South of Fraser to U.S. Border, Valley opened for gas, oil hunt*, Vancouver Sun, March 6, 1981.

Valley opened for gas, oil hunt

By BRIAN KIERAN
Sun Victoria Bureau

VICTORIA — Sections of the Lower Fraser Valley, stretching from Crescent Beach and Mud Bay east past Chilliwack, are being opened up for oil and natural gas exploration.

The Ministry of Energy Mines and Petroleum Resources announced today that companies interested in exploration should submit tenders by Aug. 26.

Commissioner of Titles Wilf Quinn said some petroleum firms have already expressed interest in the area and he expects they might find natural gas.

"There are geological formations down there," Quinn said. But he would

not reveal what companies are interested in exploring them.

A map showing areas of potential exploration includes land in or surrounding such areas as Newton, Johnson Heights, Guildford, Port Kells, Panorama Ridge, Barnston Island, most of the southern half of Langely, the north side of the Fraser River in the Mission District, Aldergrove, Matsqui, Abbotsford, Nicomen Island and Chilliwack Mountain.

Permits will be issued for about 88,687 hectares.

Energy Minister Bob McClelland said the exploration area — generally north of the U.S. border and south of the Fraser River — is divided into eight parcels.

Tenders may be submitted for the rights to explore the entire area, individual parcels or groups of parcels. Bidding will be on the basis of "work commitment" to ensure an early evaluation of the oil and gas potential of the area, he said.

Should exploration of the valley lead to drilling, the affected communities will be informed well in advance, McClelland said. "In that event our drilling regulations will ensure that the drilling proceeds safely with the least possible impact on the environment or on community life."

Quinn said similar work has been conducted in the vicinity of Fort St. John and "there have not been any problems."

The Chilliwack Progress newspaper, which also failed to publish a copy of the Ministry of Energy's 8-parcels map, provided a more detailed description of the boundaries for the eastern parcel areas of the upper Fraser Valley:

Popkum and Rosedale, Rosebank and Windemere, most of Ryder Lake and the Chilliwack River Valley, and the North-east and North-west slopes of Vedder Mountain are included in the area eligible for exploration.

So are all the Fraser River Islands.

North of the river Hopyard Hill, Cemetery Hill, Harrison Knob and the southern slopes of Woodside are available.

All of Deroche, Nicomen Island, Chilliwack Mountain and Atchelitz are included, and almost all of Sumas Prairie are included.³³⁴

Unlike Hydro's own dedicated pursuit for underground storage, Langley MLA Bob McClelland, the new Energy Minister,³³⁵ was opening exploration for oil and gas in the Fraser Valley to the private petroleum

³³⁴ *Oil, gas exploration possible for Valley*, Chilliwack Progress, March 18, 1981.

³³⁵ On November 23, 1979, during the controversial and rousing Royal Commission on uranium mining hearings, James Hewitt, the Boundary-Similkameen MLA, was shuffled from Social Credit Party Minister of Energy to Minister of Agriculture, and McClelland was shuffled from Health Minister to Minister of Energy, Mines and Petroleum. McClelland was a former radio announcer, a dedicated Premier Bill Bennett loyalist, and someone then unbesmirched by scandal and with no "particular experience in his key portfolio" (*The premier circles his wagons*, by Marjorie Nichols, Vancouver Sun, November 24, 1979). McClelland "becomes a B.C. Hydro director, heads the B.C. Energy Commission and also chairs cabinet's economic development committee. He's also included now on cabinet's two most powerful committees: Treasury board and planning and priorities." (*Three new faces, 11 major changes*, The Province, November 25, 1979.)

sector, with the side benefit of underground storage discoveries legally resting with Hydro as a condition in successful exploration bid agreements.



LAND IS OPENED UP TO OIL-GAS SEARCH

A decision to open up sections of the Fraser Valley to oil and gas exploration, has caught township council by surprise. Most of the southern half of Langley is affected.

At a meeting Monday, members of council said they weren't even sure where or what the exploration was all about. They decided to ask Energy minister Bob McClelland for more information about the program and its effects.

A spokesman for the energy department says a letter is on the way to local politicians advising them technicians will be available to explain the program.

"We have a good viable industry here called farming," said Mayor George Preston. Nor do people want oil rigs in their front yards."

He said he didn't want to see a "takeover job" of the Fraser Valley — "our home."

MOVE CATCHES MAYORS BY SURPRISE

Fraser Valley opened up for oil exploration

A decision to open up sections of the Lower Fraser Valley for oil and gas exploration caught the mayors of affected municipalities by surprise Friday.

"This government seems to be surprising a lot of people these days," Chilliwack city Mayor Wilbur Weld said Friday. The mayors of Mission, Matsqui, Langley city and township, Abbotsford and Mission were also unaware of the action, although Langley township Mayor George Preston said: "They're searching all over North America for oil so why not here?"

The energy, mines and petroleum resources ministry announced Friday that companies interested in exploration should submit tenders by Aug. 26. Commissioner of Titles Wilf Quinn said some petroleum firms have already expressed interest in the area and he expects they might find natural gas.

He did not say which companies are interested in exploring the area.

Energy Minister Bob McClelland said the exploration area — generally north of the U.S. border and south of the Fraser River — is divided into eight parcels. Tenders may be submitted for the rights to explore the entire area, individual parcels or groups of parcels. Bidding will be on the basis of "work commitment" to ensure an early evaluation of the oil and gas potential, he said.

Affected communities will be informed well in advance should exploration of the valley lead to drilling, McClelland added.

It won't be the first time the oil industry has drilled wells in the Fraser Valley.

Abbotsford Mayor George Ferguson said that, when he moved to Sumas Prairie in 1929, certain areas were being explored for oil. "There was thought to be an oil potential there after they drained the lake between 1922 to 1929," he said.

And there was an oil rig at Cottonwood Corners in Chilliwack, Weld said. "It was there for five or six years. They just took it away recently," he said. "We thought it was just a tax write-off for some company because nothing was ever done."

It makes sense to look for oil and gas in the Fraser Valley because it is a sedimentary basin, a formation where oil and gas is commonly found, said Jim Gray, exploration vice-president of Canadian Hunter Ltd. of Calgary.

With the extensive road network in the lower Fraser Valley and the built-up nature of the area, McClelland anticipates that most geophysical work will be carried out by vibroseis trucks on existing road surfaces. Vibroseis equipment is designed for work in populated areas. Soundings in the form of reflected vibrations show the location and

shape of underground formations.

Mission Mayor John Agnew expressed concern for environmental hazards arising out of possible drilling, including threats to farmland and Fraser River salmon stocks.

But the energy minister said B.C. drilling regulations will ensure that the drilling proceeds safely with the least possible impact on the environment.

A map showing areas of potential exploration includes land in or surrounding such areas as Newton, Johnson Heights, Guildford, Port Kells, Panorama Ridge, Barnston Island, most of the southern half of Langley, the north side of the Fraser River in the Mission district, Aldergrove, Matsqui, Abbotsford, Nicomen Island.

A typical seismic exploration program requires about 30 crew members and 15 vehicles and lasts about 20 days.

Vancouver Sun
March 7, 1981

RICHMOND EXCLUDED

Richmond Review - March 27, 1981

Victoria allows oil and gas exploration in Fraser Valley

The ministry of Energy was also keen on discovering new methane gas reserves, as part of the petroleum sector's pressure to introduce new LNG (Liquified Natural Gas) and petrochemical facility projects in 1981.

Fraser drilling program 'disaster'

Vancouver Province

By DAVE TODD March 8, 1981
Province Victoria Bureau

VICTORIA — Alarm is being voiced over a government decision to open about 880 square kilometres of the Fraser Valley to oil and gas exploration.

Energy Minister Bob McClelland announced Friday that 90,000 hectares (224,000 acres) of land between Surrey and Agassiz might eventually be available for drilling. The exploration area includes thousands of hectares within the agricultural land reserve, about 70 islands in the Fraser River and most of Langley municipality.

New Democratic Party agriculture critic Barbara Wallace described the government's call for exploration tenders as "sad, sad, sad."

"Any experience that the farm community has ever had has been the same. When the oil and gas people come in it's just a disaster. Gates are left open, farm animals escape, fields are disrupted and the soil is ruined," she said.

"Surely we're not that desperate for energy right now that we need this kind of activity going on in our agricultural community."

But Agriculture Minister Jim Hewitt

said, "Safeguards are strong enough regarding exploration out there." He predicted "there could be some considerable revenues made by the land owner if a discovery is made."

McClelland said exploration rights in the area "will be subject to energy ministry regulations designed to ensure safety and protect the environment . . . Should this exploration program lead to drilling in the Fraser Valley, the affected communities will be informed well in advance."

He said a method called vibroseis probably will be used for exploration. Designed for work in populated areas, it involves soundings in the form of reflected vibrations that show location and shape of underground formations.

The announcement apparently caught municipal officials by surprise. Most mayors of the areas affected — Langley city and township, Mission, Matsqui, Aldergrove and Abbotsford — were unaware of the plan.

"That's not good news," Langley Township's Ald. Elford Nundal said. "If you had a five-acre residence and some guy wanted to put some oil well in front

of your home, how would you feel? Compensation just won't be enough."

"When I heard about it I was shattered," said Ald. N. H. Wright of Abbotsford District. "I don't like the idea. This has always been farm land and the idea of having oil rigs on it is staggering."

It is not known which oil companies, if any, are interested in exploring the Fraser Valley. Bids are submitted in confidence, often through a purchasing agent. Although normally done to conceal corporate planning from competitors, it also serves to protect companies interested in politically- or environmentally-sensitive land.

Exploration tenders must be submitted to the energy ministry by Aug. 26. B.C. Hydro has been granted first right of refusal for licensing underground gas storage exploration in the permit areas.

Petroleum Titles Commissioner Wilfred Quinn told *The Province*: "The record of the oil and gas industry is a lot better than a lot of people think (but) we want to forewarn anyone in industry that, if necessary, we may have to bring in special guidelines to make sure the environment is taken care of."

B.C. Hydro would no longer be on the front lines to face the proverbial music: that was now a responsibility government vested to the private petroleum industry sector.

Energy Minister Bob McClelland announced that 90,000 hectares (224,000) acres of land between Surrey and Agassiz might eventually be available for drilling. The exploration area includes thousands of hectares with the agricultural land reserve, about 70 islands in the Fraser River and most of Langley municipality.

Exploration tenders must be submitted to the energy ministry by August 26. B.C. Hydro has been granted first right of refusal for licensing underground gas storage exploration in the permit areas.³³⁶

B.C. Hydro has not forgotten its plans for underground storage of natural gas. Nor will oil and gas exploration cancel out those plans — in fact, the drilling may make it possible.

That possibility is mentioned in Hydro's comments on the oil and natural gas exploration bids which the ministry has called for much of the Lower Mainland.

³³⁶ *Fraser drilling program 'disaster'*, *The Province*, March 8, 1981.

"Hydro's access to any underground storage rights is protected in the petroleum and natural gas rights sale documents," utility spokesmen point out.³³⁷

Unlike the Vancouver Sun's newspaper coverage of March 6th, Victoria's Time Colonist interviewed numerous inside and outside sources:

Within minutes of McLelland's announcement environmentalists and farmers were gearing up for major protests.

And in government circles high placed officials in agriculture, tourism and the ministry of environment shuddered at the thought of the tidal waves of protests to come.

"I can't understand it," one agriculturalist said. "To even talk about drilling for oil and gas in the Fraser Valley is tantamount to a death wish."

B.C. Farming Association president Don Knoerr said in a telephone interview the provincial government must ensure that farmers are protected from exploration and drilling activity.

Knoerr said about 2,000 of the federation's roughly 10,000 members live in the Fraser Valley, but he did

not
know at
this time
how
many
farmers
would
be
affected.

Farmers oppose drilling

Nanaimo
Daily News
March 9, 1981

VICTORIA (CP) — British Columbia's farming community is ready to take pitch forks to the Social Credit government over its decision to open up the lush Fraser Valley farmland to petroleum and natural gas exploration.

Energy Minister Bob McClelland said Friday companies interested in exploration in the area, which stretches from Delta to Chilliwack on the south side of the Fraser River, have been asked to submit tenders by Aug. 26.

Oil and gas search could scar farmland

One of Mayor George Preston's biggest concerns over possible oil and gas exploration of southern Langley municipality is that valuable farmlands will be destroyed.

In his capacity as Energy, Mines and Petroleum Minister, Langley MLA Bob McClelland announced last Friday that sections of the Lower Fraser Valley will be opened up for oil and gas exploration. Companies interested in exploration can submit their tenders up to August 26th.

McClelland assured that affected municipalities (between the U.S./Canada border and the Fraser River) will be given advance information should exploration lead to drilling.

Because of the extensive road network in the

Valley and the density of population, most geophysical work will be carried out by vibroseis trucks right on the road surface. Through vibrations, the trucks can show the location and shape of underground formations.

The seismic exploration programme usually lasts about three weeks. Work will be carried out in several parts of Surrey including Port Kells, most of the southern half of Langley and Aldergrove, Matsqui and Abbotsford.

Mayor Preston, in an interview, said that he opposed "indiscriminate searches" for oil and gas. "I'm not looking forward to seeing rows and rows of rigs and pumps working. It wouldn't be a very happy sight -- this is a very liveable area,"

The most important industry Langley has is agriculture "and many of us are trying to preserve it," Mayor Preston said. He pointed out that more people are moving into the food-producing areas of California and the Fraser Valley "and we are on a collision course." "Our food-producing lands are slowly being depleted, and the demand for food is not being equalled by its production."

In Monday's open council meeting, Preston warned that it would not be wise to "carve up the agricultural land with exploration." If the exploration companies wanted to "dig holes in abandoned gravel pits, it would be okay."

Oil and gas findings would enhance the economy, conceded

Preston, "but what good does it do to destroy the area?"

Ald. Bill Blair's suggestion that the Township write to McClelland for assurances that drilling only be carried out after municipal council has had an opportunity to respond to the application, will be acted upon by council.

He said that there are some areas in the Township where drilling would be suitable, but others where harm could be done.

Preston concluded that he didn't want "a lot of foolhardy research leaving scars across the land."

Langley Advance
March 11, 1981

³³⁷ Underground storage will Hydro objective, Surrey Leader, March 18, 1981.

“Our members in the Peace River area have had problems, not so much with exploration, but with drilling sites,” he said.

Knoerr said there had been problems with access roads into drilling sites; pipelines across farmland; livestock fencing; holding ponds which contain impurities, and access roads to these ponds.

He said a Peace River farmer who had experienced some of these problems told him this week that “oil companies don’t bend over backwards to help you” and that farmers don’t often win arbitration disputes with companies.

Meanwhile, a well-placed observer in the agricultural industry said Friday that companies searching for oil and gas in the Peace River area have infuriated some farmers.

“A couple of farmers in the Peace River woke up one morning and found drills in their backyards. It’s a pretty cutthroat business when they find oil or gas.”

The “rush for spoils” in the Peace River area and in Alberta has resulted “in a number of cases where exploration companies have made a real mess of the land.”

McLelland said that “should this exploration work lead to drilling in the Fraser Valley, the affected communities will be informed well in advance.” He also hinted that “special environmental provisions may be required.”

But even with that “may be,” residents of the area are expected to mount stiff opposition to the government’s invitation to oil and gas exploration companies to bring their rigs into the scenic valley.³³⁸

The next day Vancouver Sun opinion columnist Allan Garr followed up on the Time Colonist’s ‘death wish’ theme:

The government with the built-in death wish has struck again.

Most of the land is in the shrinking agricultural land reserve. The Agricultural Land Commission is one agency that must give approval for any exploration but, as of Friday, it hadn’t heard of this latest scheme by Bob McLelland to bless the valley skyline with oil derricks.

Even people in the ministry of agriculture were taken by surprise by McLelland. When I read the details over the phone to one person in the ministry, there was a long pause and then: “340 square miles! You better give me some more details. We’re bound to be getting some phone calls.”

When I finally tracked down Agriculture Minister Jim Hewitt [former Minister of Energy], he said he heard there was a press release. And while he wasn’t involved in the Cabinet decision, he didn’t think there was any problem to worry about as far as farmland was concerned: “Safeguards have to be there, and they are there.”³³⁹

³³⁸ *Fraser Valley open to oil, gas drilling*, Times Colonist, March 7, 1981.

³³⁹ The Province, March 8, 1981.

Vancouver Province Victoria bureau news reporter Dave Todd wrote:

The announcement apparently caught municipal officials by surprise. Most mayors of the areas affected – Langley city and township, Mission, Matsqui, Aldergrove and Abbotsford – were unaware of the plan.

"That's not good news," Langley Township's Alderman Elford Nundal said. "If you had a five-acre residence and some guy wanted to put some oil well in front of your home, how would you feel? Compensation just won't be enough."

"When I heard about it, I was shattered," said Alderman N.H. Wright of Abbotsford District. "I don't like the idea. This has always been farmland and the idea of having oil rigs on it is staggering."³⁴⁰

Sumas Prairie oil, gas rights purchased by Alberta firm

by Lloyd Mackey

Abbotsford News - June 3, 1981

A Calgary firm has been buying up oil and natural gas exploration rights on Sumas Prairie in recent months.

However, Keith McLean of Mutual Resource Management, the firm involved, says the process has been frustrating by Alberta standards. He indicates Mutual may not continue the acquisition process.

Stories about the acquisition process have been circulating by word-of-mouth in recent weeks. Interest has been developing ever since the provincial energy ministry announced a call for bids to explore Fraser Valley land where the crown holds subsurface rights.

Abbotsford alderman Hessel Kielstra told council last week that the Calgary firm had been making offers to land-owners who hold the mineral and oil rights.

Kielstra's comments came during a meeting between Abbotsford council and representatives of the provincial energy ministry. Council had asked the ministry to make an appearance in order to clarify the province's exploration tender call.

He noted that people were being offered front money of \$2 per acre for the right to enter plus a 12.5 per cent royalty in the case of a discovery. Walter Young, chief petroleum resources geologist, who made most of the presentation to council on the energy ministry's plans, said that at first impression the offer sounded like a good one.

McLean confirmed that Mutual Resources Management has acquired a number of Sumas Prairie freehold leases, but he expressed frustration at the process. He said people in the Fraser Valley appear unfamiliar with oil lease procedures. In addition, acreages involved are relatively small by Alberta standards.

"We can get 1,000 acres a day there. In the Fraser Valley, we are lucky if we get 250," he said.

McLean said Mutual Resources Management is a contracting agent which negotiates freehold leases for other firms or groups.

He was reluctant to talk about the matter, noting that lease acquisition is "a very competitive business."

He stressed, though, that his business was obtaining lease arrangements with landowners who hold the exploration rights, so it is not directly related to the energy ministry's tender call.

It was that tender call, which concerns only property where the crown holds the rights, that was the subject of last Wednesday's meeting.

Young cautioned council members that the energy ministry is not overly optimistic that there is oil or natural gas under the Fraser Valley.

He suggested that, if there is any, it is likely natural gas and it is probably very deep... perhaps 12,000 feet or lower (McLean says he believes people who drill would need to be prepared to go at least 20,000 feet).

As background the provincial oil and natural gas scene, Young noted that the only producing wells at present are in northeastern B.C. They produce all this province's natural gas and 25 per cent of its oil, he added.

Other promising areas are offshore, possibly in Hecate Strait, and in the Nechako, west of Williams Lake and Quesnel, where one company is committed to \$27.5 million of drilling in the next few years. \$12 million has already been spent, he said.

He said oil well drilling in the Fraser Valley dates to 1910. Some 50 wells have been drilled, but only eight deeper than 3,000 feet.

The most promising areas are in the floodplain, where sediments have been built up through the years, Young said. He suggested, for example, that it is highly unlikely that there would be oil under Sumas Mountain.

Any plans for exploration must be submitted to the municipality, he said, adding that the nature of the search proposed is such that it would be carried out on roads and rights-of-way, not on private property.

A convoy of four large trucks carrying sensitive seismic transmitting equipment would be used, Young said. He indicated soundless vibrations would be sent into the earth to determine subsurface characteristics.

He assured council that energy ministry environmental standards are "stringent" and that, in cases of entry controversies, a mediation and arbitration process is available.

John Strain of Langley, a man with extensive municipal assessment experience, has been appointed the mediator for such matters relating to the Fraser Valley, he said.

Wilf Quinn, commissioner of the petroleum titles division of the energy ministry, noted his ministry must work closely with the agricultural land commission, which he indicated was a very strong and influential body.

He said such matters as the potential of a spill to affect water supply are part of what interests a mediator.

Quinn said he and others from the energy ministry are prepared to meet with municipal councils.

So far requests have come only from Abbotsford, Langley City and Surrey, he said.

³⁴⁰ Fraser drilling program 'disaster,' The Province, March 8, 1981.

In response, Minister McClelland and other Energy ministry staff made numerous promises to console the public.

Should exploration of the valley lead to drilling, the affected communities will be informed well in advance, McClelland said. "In that event our drilling regulations will ensure that the drilling proceeds safely with the least possible impact on the environment or on community life."³⁴¹

Permits will be awarded on the basis of what the minister feels "are the best work programs for the entire area."³⁴²

Petroleum Titles Commissioner Wilfred Quinn told The Province: "The record of the oil and gas industry is a lot better than a lot of people think (but) we want to forewarn anyone in industry that, if necessary, we may have to bring in special guidelines to make sure the environment is taken care of."³⁴³

'Grove Chamber assured

Energy minister sets drilling record straight

In answer to some of the worries and questions on the proposed oil and gas exploration proposed for the Aldergrove area, the Hon. Bob McClelland, Minister of Mines, Energy and Resources, M.L.A. for Langley to the Provincial Government, was hosted as the guest speaker at the April Meeting of the Aldergrove Chamber of Commerce.

Appearing briefly before the luncheon meeting held in the Smitty's Pancake house on Apr. 8th, McClelland outlined the general purpose of the exploration along with some of its history in the Fraser Valley and what impact that it may have on the municipality.

McClelland stated to the Chamber that oil and gas exploration in the Langley area is not a new idea, as there have been between 50 and 60 wells drilled in the past, dating back as far as approximately 1919 when the first exploration went through the area.

Hydro's interest in the current exploration lies more in the finding of a large underground storage area for natural gas, McClelland explained, than for finding gas and oil.

McClelland told the Aldergrove business men and women at the meeting that, due to the fact that most of the natural gas used in B.C. is consumed in the lower mainland Vancouver area, Hydro has been looking for a means of storing large quantities of gas in an area close to where it would be used.

This would take the pressure off long distance piping of the gases during the peak consumption periods.

What Hydro would be looking for would be a huge underground natural cavity where the gas would be pumped until needed. McClelland stated that such a cavity had been found in Surrey a short while ago but was abandoned due to a housing complex which had been slated to be built over the area.

Drill damage

On the topic of the amount of damage the drilling would create in the Langley/Aldergrove countryside, McClelland explained that a very extensive exploration study would have to be completed before any drilling would take place in the area.

He also assured that, due to the complex road pattern of the Fraser Valley, all exploration work would be done by means of truck convoy on the roadways, eliminating the need for seismic lines which can be seen criss-crossing the remote parts of B.C.

Oil exciting

Following exploration, if a company decided that they had found oil worthy of drilling, McClelland stated that it would be very exciting to all, as to date the only sizeable pockets of oil or gas are located in the far north.

McClelland further explained that any company which wished to conduct drilling in the Fraser Valley would have to first come before the provincial government for approval and, if in fact they were to go ahead with drilling, the area affected by each drill would amount only to an area approximately the size of the meeting room (approximately 25 by 30 feet).

McClelland further explained that the drilling area would only be affected for approximately one year during drilling; after that, all that would remain would be one small stationary pump.



Hon. Bob McClelland

McClelland cautioned that if an oil company decided it they wanted to drill, it could be in the position to bully the farmer when it came to settling of finances for the right to cross private land.

The Provincial government has set up a mediation and arbitration board for the protection of the landowners and McClelland announced that there would be a member from the Fraser Valley appointed to sit on the board. This board would look into any claims of disputes by the landowners affected.

McClelland closed his talk by emphasizing to the chamber that any of these past points were quite away down the road as a considerable amount of time would pass before any mining company would even consider starting to drill.

Langley Advance - April 15, 1981

³⁴¹ Valley opened up for gas, oil hunt, Vancouver Sun, March 6, 1981

³⁴² Fraser Valley open to oil, gas drilling, Times Colonist, March 7, 1981.

³⁴³ Fraser drilling program 'disaster,' The Province, March 8, 1981.

The Langley Advance

VOLUME 56, NUMBER 7.

P.O. Box 3310, Langley, B.C.

Authorized as Second Class Mail by the Post Office Department, Ottawa, under Registration No. 0648, and for payment of postage by cash.

WEDNESDAY, SEPTEMBER 10, 1986.

40¢ per copy.

M.L.A. resigns, goes private

Bob McClelland will not be part of the next provincial election but the former minister for industry and small business development predicts a "huge victory" for Bill Vander Zalm.

McClelland made the comments at a lunch he hosted last week for Langley's media when he announced that he was resigning immediately his seat as Langley's MLA.

On Monday he started his job as vice-president and general manager of Trans Mountain Petroleum Ltd., a wholly owned subsidiary of Trans

Mountain Pipe Line Co. Ltd., which is active in oil and gas exploration in Canada.

"It's a job I've dreams of for about five years ever since I was in energy," he told reporters. So that there would be no possible conflict of interest, he said, "I'm stepping down completely."

McClelland resigned his cabinet post less than two weeks after Vander Zalm's election and had intended to remain a backbencher until the next election. But that was impossible because

of the challenge offered by a new career, he said, "It's a very major career opportunity." He would not say what his salary would be but he will draw an annual government pension of \$40,000. As a cabinet minister, McClelland was earning \$72,000 a year.

McClelland said that the Social Credit government will be returned to power at the next election partly because of the euphoria that built up at the party's leadership convention in Whistler, and because of the strong,

popular personality of Vander Zalm.

McClelland was a Langley City alderman when he was first elected to the Legislature and in 1973 came second to Bill Bennett in the party's leadership convention. He said his interest in politics began when he was CHQM's reporter at Vancouver City Hall.

"I'm going to miss the people I have been involved with, especially in the constituency," McClelland said. "There are a hundred people in the constituency." (Continued on 9a)



Bob McClelland

Upon his sudden retirement as MLA, Minister McClelland would later be rewarded by Inland Natural Gas Company president, and former Canadian Gas Association president, Robert Kadlec in 1986, to be appointed as vice-president and general manager of Trans Mountain Petroleum Ltd., the subsidiary of Inland Gas. Inland Gas would later be renamed as B.C. Gas Inc.

As a Smitty's Pancake House guest speaker at an April 8, 1981, luncheon meeting of the Aldergrove Chamber of Commerce, McClelland said, "it would be very exciting to all" if a petroleum company discovered oil. He seriously downplayed the physical impacts commenting that "the area affected by each drill would amount only to an area approximately the size of the meeting room (approximately 25 by 30 feet)."

McClelland further explained that the drilling area would only be affected for approximately one year during drilling; after that, all that would remain would be one stationary pump.

McClelland cautioned that if an oil company decided if they wanted to drill, it could be in the position to bully the farmer when it came to settling of finances for the right to cross private land.

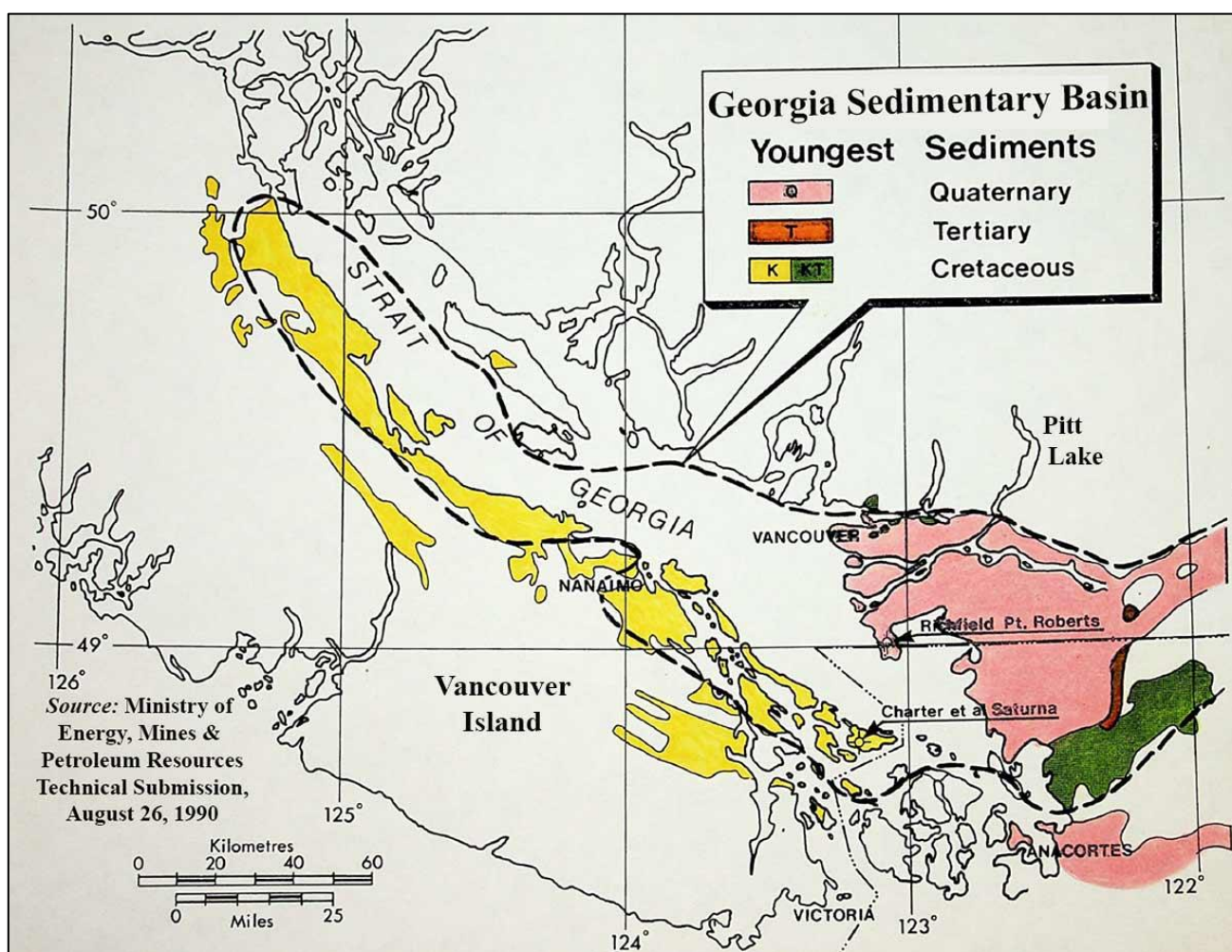
The provincial government has set up a mediation and arbitration board for the protection of the landowners and McClelland announced that there would be a member of the Fraser Valley appointed to sit on the board. This board would look into any claims of disputes by the landowners affected.³⁴⁴

B.C.'s Mediation and Arbitration Board was established in 1974 after an amendment to the *Petroleum and Natural Gas Act* by NDP Minister of Mines and Petroleum, Leo Nimsick. The amendment, which replaced the former Arbitration Board, created "a mediation system for setting leases and payments for damage to land or disruption of the owner's life,"³⁴⁵ and "to mediate in disputes on surface drilling rights throughout the province."³⁴⁶

³⁴⁴ *Energy Minister sets drilling record straight*, Langley Advance, April 15, 1981.

³⁴⁵ *Oil rake-off to aid drivers*, The Province, May 16, 1974.

³⁴⁶ *Mediators named*, Times Colonist, July 13, 1974. The 1974 new Board moved from its office in Victoria to Ft. St. John, with three new board members: Douglas Pomeroy, Board vice-president, an operator of a radiator shop, and former NDP Peace River North MLA candidate in the 1969 provincial election; Patrick Walsh, Board chairman, lawyer, former RCMP



Energy Minister McClelland indicated in statements to the public that in addition to seismic surveys which B.C. Hydro had already conducted in the Fraser Valley in 1977, further seismic surveys with vibroseis trucks and equipment would likely be necessary, to be conducted by successful petroleum company bidders as part of the initial exploration phase.

To take some of the edge off the public backlash and criticism, Hydro pitched two financial benefits to the media and local politicians about its continued intentions for underground storage: annual savings for customers' natural gas bills,³⁴⁷ and petty cash back from selling off its confidential seismic data to interested petroleum company takers.

The crown corporation announced Monday [March 16] it is offering for sale all the seismic information collected over the last few years.

undercover agent who left the force in 1952, 1973 president of the BC School Trustees Association, future Mayor of Ft. St. John (1976 – 1981), future 1981 non-elected Mayor of the new "instant" coal township of Tumbler Ridge; and Cecil Ruddell, the general manager of Ft. St. John Superior Oil Fuel Services Ltd.

³⁴⁷ *Oil exploration may ease gas heat costs*, The Chilliwack Progress, March 25, 1981; *Hydro sees financial benefits in valley oil, gas exploration*, The Abbotsford News, April 8, 1981.

Any oil company interested can bid for the information, a hydro spokesman said, and it can bid for whatever part it wants.

Hydro arranged for seismic data to be collected over 326 kilometres of territory in the Fraser Valley and the approximate value lies between \$500 and \$750 per kilometre.

On that basis, Hydro's seismic information is worth between \$163,000 and \$245,000. But as Hydro spokesman Bill Bierlmeier points out, the information can be sold more than once.

"We have a broker in Calgary working on it," Bierlmeier said. Some companies have expressed an interest in it.³⁴⁸

In his March 1981 statements, Energy Minister McClelland would not share the names of companies that were interested in the bids. Neither would Wilf Quinn, the Energy Ministry's Commissioner of Titles, "say what companies have shown interest."³⁴⁹

It is not known which oil companies, if any, are interested in exploring the Fraser Valley. Bids are submitted in confidence, often through a purchasing agent. Although normally done to conceal corporate planning from competitors, it also serves to protect companies interested in politically - or environmentally sensitive land.³⁵⁰

The only company mentioned in press coverage, indirectly, was Canadian Hunter Exploration. Jim Gray, its vice-president of exploration, commented that "it makes sense to look for oil and gas in the Fraser Valley because it is a sedimentary basin."³⁵¹ Canadian Hunter, a wholly owned subsidiary of Noranda Mines Ltd., in 1981 it ranked at the top of B.C.'s petroleum players with the largest oil and gas holding rights in the province.³⁵² In a few years Canadian Hunter's American subsidiary, American Hunter Exploration Ltd., would be test drilling just across the Canadian border in Whatcom County, hunting for oil and gas in a geological formation that was part of the Fraser Valley sedimentary basin.

Commissioner of Titles Wilf Quinn ... indicated there is a large corridor in effect, following the floodplain from east of Chilliwack into Whatcom County in Washington which geologists have generally viewed as more likely to have oil or natural gas.³⁵³

Canadian Hunter would soon become a partner in one of two petroleum consortiums – with Inland Natural Gas and Trans Mountain Pipeline (both of which would later become part of B.C. Gas Inc.), Epic Resources and Optima Energy Corp. – bidders in yet another government initiative to permit petroleum exploration and drilling in the Fraser Valley, described in Chapter 5, *The Fifth Wave*.

On September 18, 1981, three weeks after the August 26th deadline for petroleum companies to bid on drilling rights in the Fraser Valley, Energy, Mines and Petroleum Minister Bob McClelland "issued a statement Friday saying no offers acceptable to the province had been received."

Energy Ministry Commissioner of Titles Wilf Quinn stated "in a telephone interview:"

³⁴⁸ *Hydro willing to sell data*, Vancouver Sun, March 17, 1981.

³⁴⁹ *Oil interests seeking Fraser Valley data*, Times Colonist, June 5, 1981.

³⁵⁰ *Fraser drilling program 'disaster'*, The Province, March 8, 1981.

³⁵¹ *Fraser Valley opened up for oil exploration*, Vancouver Sun, March 7, 1991.

³⁵² *Noranda bidding to become No. 1*, Vancouver Sun, March 25, 1981.

³⁵³ *Officials explain oil, gas search in the Valley*, Abbotsford News, May 27, 1981.

It seems companies were discouraged by the government's requirement of a five-year program and the cost of operating were too high.

We're looking at the possibility of making the requirements more flexible.

He said one possibility was to invite offers for exploration programs lasting one or two years. The contract would then be cancelled unless the commitment was renewed at the end of the term.

The government did receive some submissions that did not meet this requirement, but Quinn said details on the number and size of bids is confidential.³⁵⁴

VANCOUVER SUN: SAT., SEPT. 19, 1981

Valley drill bids not acceptable

Sun Victoria Bureau

VICTORIA — The provincial government's deadline has passed without a single acceptable bid from companies interested in exploring for oil and natural gas in the Lower Fraser Valley.

Energy, Mines and Petroleum Resources Minister Bob McClelland issued a statement Friday saying no offers acceptable to the province had been received before the Aug. 26 deadline.

Crown oil and gas rights in the area extending from White Rock to Chilliwack were offered publicly March 6. At that time, the ministry's commissioner of titles, Wilf Quinn, said some petroleum firms had already expressed interest in the area and he expected they might find natural gas.

Quinn said Friday that it seems companies were discouraged by the government's requirement of a firm five-year commitment to an exploration program.

"It appears the requirement to commit totally to a five-year program and the cost of operating were too high," Quinn said in a telephone interview.

As a result, he said, "we're looking at the possibility of making the requirements more flexible."

He said one possibility was to invite offers for exploration programs lasting one or two years. The contract would then be cancelled unless the commitment was renewed at the end of the term.

The government did receive some submissions that did not meet its requirement, but Quinn said details on the number and size of bids is confidential.

4 – 1. Hydro's LNG Proposals: Rejected

*"I think public pressure made a big difference. I don't think they were aware of the strength of the feeling of the people in this area against this plant."*³⁵⁵

Three months before Energy Minister Bob McClelland announced that no companies from the petroleum sector had successfully bid on Fraser Valley exploration tenures, B.C. Hydro announced a proposal to construct an LNG (Liquified Natural Gas) storage and processing plant at four possible locations in the Lower Mainland:

- at Tilbury Island on the Fraser River near its existing 27,000 cubic metre LNG facility;
- at the Westwood Plateau near Coquitlam;

³⁵⁴ *Valley drill bids not acceptable*, Vancouver Sun, September 19, 1981.

³⁵⁵ *LNG plant for loco on hold*, The Province, April 18, 1982.

- at Sumas Mountain, east of Abbotsford;
- and near Hydro's Burrard Thermal Ioco plant at the east end of the Burrard Inlet.

Later newspaper accounts from information revealed at a public forum held on April 1, 1982, stated there were two additional site location lists that Hydro had proposed for its LNG project: one with a total of 5 sites, and another with a list of 30.

Hydro planners were frantic. They had forecast in reports that an underground storage facility for pressurized methane should already have been in operation by 1982, a plan that had been rejected by government in 1978. That possibility was quickly fading. In its stead came the only other storage alternative, that is, a more contentious and above-ground visible alternative.

Hydro's proposed LNG facility site for Sumas Mountain, which it rejected, located about 3 kilometres east of Sumas Mountain Road, would have had a

storage tank "able to contain 70,000 cubic metres of liquified gas," a "mammoth" tank measuring "65 metres across and 25 to 30 metres tall, capped by a dome some five to 10 metres high."³⁵⁶



Residents of Sumas Mountain ... have a new hazard on the horizon; liquified natural gas.

Although an LNG storage plant is considered safe, there is a "minor hazard," says [B.C. Hydro project engineer Dan] McGuire.

"After all, you are dealing with an awful lot of combustible material. We like to have about a one-kilometre buffer zone."

One disadvantage with the Sumas Mountain site, McGuire said, is the need for about eight miles of pipeline to connect it to the main B.C. Hydro gas pipeline at Huntingdon.

The tank would have a two-foot-thick reinforced concrete wall, five feet of insulation, and a nickel-steel inner shell.

"A light aircraft would bounce off it," said McGuire. "If a 747 hit it, the fuselage wouldn't penetrate. The engines might. They're heavier."

The office and maintenance buildings would be about the size of a house, the shed using the 5,000-horsepower compressor a little larger: about 4,000 square feet and about eight metres square. ... Electric power would be used for the compressor to keep noise to a minimum, McGuire said.³⁵⁷

Dan McGuire also stated to the Chilliwack Progress newspaper reporter that the Tilbury Island proposal near Delta was "not a good candidate for expanded storage because development – especially industrial growth – is moving large numbers of people into the vicinity." A later article stated that:

³⁵⁶ \$50 million LNG plant proposed, Abbotsford News, June 24, 1981.

³⁵⁷ LNG storage plant for Sumas Mountain? Chilliwack Progress, July 1, 1981.

Project manager Dan McGuire told The Province the Tilbury Island site is no longer favored because revisions have been made to “buffer zone” requirements. The Ioco site complies more closely to these standards, he said.³⁵⁸

Hydro’s preferred location for its LNG project was on four hectares of its own property adjacent to, and directly west, of Ioco, and some 800 metres northwest of Hydro’s Burrard thermal plant. Hydro would later refer to the Ioco site as the Sasamat Liquefied Natural Gas storage facility because of its proximity to Sasamat Lake.

The Ioco location was within Electoral Area ‘B’ of the Greater Vancouver Regional District’s planning boundaries, and would “border the Belcarra regional park, a huge recreational area being developed between Indian Arm and Burrard Inlet” since 1968, which park planners were proudly dubbing “as the Stanley Park of the future.”

Members of the Greater Vancouver regional district’s Parks Committee are furious at the way B.C. Hydro broke the news it was planning to build a liquefied natural gas plant near the north shore of Burrard Inlet.

The are angry because Hydro didn’t break the news to the committee.

They had to learn of the proposal through one of their own members, Dr. Hal Weinberg, the committee’s deputy chairman.

“I got a call last (Tuesday) night,” [Hal] Weinberg said, “from the B.C. Hydro project manager (McGuire) about the LNG plant site Hydro had picked north of the thermal station and he said Hydro wanted to start public meetings about the plant’s construction.”

Weinberg said he told McGuire he knew nothing about the proposal and asked him if he had been in contact with the GVRD. Weinberg said McGuire told him he had been in contact with members of the GVRD for the last two months.

Weinberg, however, said he checked with other GVRD members, and none had heard of the proposal.³⁵⁹

Newspaper accounts reveal that Hydro had been in contact with GVRD planning staff some two or more weeks earlier. A brief June 8th article in The Province newspaper, *Liquid gas a threat for 5 kilometers*,

Hydro project angers GVRD

Vancouver Sun - June 18, 1981

Members of the Greater Vancouver regional district's parks committee are furious at the way B.C. Hydro broke the news it was planning to build a liquefied natural gas plant near the north shore of Burrard Inlet.

They are angry because Hydro didn't break the news to the committee.

They had to learn of the proposal through one of their own members, Dr. Hal Weinberg, the committee's deputy chairman.

The site of the LNG plant is of special concern to the parks committee because, if built, the plant would border the Belcarra regional park, a huge recreational area now being developed between Indian Arm and Burrard Inlet.

The GVRD has been developing and planning the park since 1968.

Weinberg brought the subject up Wednesday afternoon but none of the other members knew anything about Hydro's plans.

Plans call for the LNG facility to be built on a four-hectare site immediately north of Hydro's Burrard thermal plant.

According to D.J. McGuire, a project manager in Hydro's gas division, the LNG plant would consist mainly of a liquefier, revaporizers and a 70,000-cubic-metre storage tank 25 to 30 metres high. The plant would be built about 800 metres from the water's edge on Hydro land.

He said none of the LNG would be produced for export and all would be used solely to produce energy in the Lower Mainland.

Known as a “peak-shave” plant, it would store liquefied natural gas in the summer and then dole it out during the peak winter months to lessen the demand on other Hydro facilities.

McGuire said Hydro hoped to begin construction as early as 1982 and begin storage of LNG in the summer of 1984.

Although McGuire volunteered the information over the phone, none of it had been made known beforehand to members of the parks committee.

“I got a call last (Tuesday) night,” Weinberg said, “from the B.C. Hydro project manager (McGuire) about the LNG plant site Hydro had picked north of the thermal station and he said Hydro wanted to start public meetings about the plant’s construction.”

Weinberg said he told McGuire he knew nothing about the proposal and asked him if he had been in contact with the GVRD. Weinberg said McGuire told him he had been in contact with members of the GVRD for the last two months.

Weinberg, however, said he checked with other GVRD members and none had heard of the proposal.

Surrey Mayor Don Ross, chairman of the GVRD parks committee, said the first he had heard of the plans was at Wednesday's committee meeting.

“I wish I had more information for you but it caught us all off guard. But I am concerned the plant will be bordering the park. Belcarra park is looked upon as the Stanley Park of the future, to be there when all the Lower Mainland will be filled in.”

³⁵⁸ Gas plant fuss confuses oldtimers, The Province, April 4, 1982.

³⁵⁹ Hydro project angers GVRD, Vancouver Sun, June 18, 1981.

states that GVRD senior associate planner Peter George had “been asked by two different” Hydro consultants “for population and employment statistics for several potential sites.” The reason for the information requests was for the consultants to determine accident scenarios “in a five-kilometre (three-mile) radius,” referred to as “the area of influence,” which could ultimately “pose a threat to residents.” “But Dan McGuire, Hydro’s manager of gas plant engineering, said the statistics are needed to assess environmental impact and are not for safety reasons.”

By every means, B.C. Hydro, a public corporation, should have been forthcoming by directly informing and publicizing its LNG plans to GVRD politicians and the public. It may perhaps have considered it unnecessary to properly inform the public given the Social Credit government’s recent change in policy revealed in the new *B.C. Utilities Commission Act*, granting the government “**the power to approve major industrial projects in B.C. without the benefit of a public hearing:**”

The description two weeks ago by Energy Minister Bob McClelland of the hoops a major project must go through makes it clear the province has no intention of letting public input influence any of the major decisions it makes on energy projects.

In short, the government can select or reject an applicant on the flimsiest of reasons without having the embarrassing recommendations of a quasi-judicial board [the BCUC] or even the public testimony before such a board to get in its way.³⁶⁰

Also expected in the [BCUC] legislation are the details of the mechanism by which McClelland hopes to streamline the review of new energy proposals.

The minister was quick to point out that by streamline he does not mean shortcut.

“I’m confident there will be more opportunity for public input than exists at present,” he said. “It’s more a matter that as many of the various regulatory approval processes as possible will be conducted simultaneously. The objective is for projects to be reviewed as expeditiously as possible, but not to shortcut any of the process.”³⁶¹

Elected politicians on the GVRD’s Electoral Areas Committee met on September 9, 1981, at GVRD headquarters to discuss the controversial project proposal near Ioco. There, “consultant Jim Gilmore” informed the committee that LNG is “by no means a harmless substance,” and that “the proposed facility brings with it considerable risks and hazards.” Gilmore stated that “you’re always playing a bit of Russian roulette with these substances.” Gilmore said that Hydro’s site “is within 1.5 kilometres of the residential area of the village of Belcarra,” and “is less than 0.5 kilometres from the Ioco oil refinery.” He said, “an

Liquid gas a threat for 5 kilometres

Province Staff Reporter

Province
June 8, 1981

Lower Mainland officials are concerned that a planned B.C. Hydro plant capable of holding 70,000 cubic metres of liquefied natural gas (LNG) could pose a threat to residents in a five-kilometre (three-mile) radius.

Peter George, senior associate planner with the Greater Vancouver Regional District, says he has been asked by two different consultants for population and employment statistics for several different potential sites. The five-km radius would be “the area of influence” in the event of an accident.

³⁶⁰ *Quiet Energy Policy: Victoria avoids public hearings*, Vancouver Sun, July 2, 1981.

³⁶¹ *Energy policy two weeks away*, The Province, May 28, 1980.

accidental fire at one establishment could spread to the other, compounding the scale of disaster.”³⁶² At the meeting, committee chairman and Anmore Mayor Hal Weinberg recommended the GVRD “spend up to \$10,000 for a study of safety implications of a proposed B.C. Hydro liquid natural gas storage plant on the North Shore.”³⁶³

B.C. Hydro started making its move about three months later. It notified municipalities on November 30th and placed full-page advertisements in local newspapers – *Let’s talk about the proposed Sasamat*

Liquefied Natural Gas storage facility near Ioco – inviting the public to “an Open House review of the proposed LNG facility”³⁶⁴ scheduled for 2 to 9 p.m. on December 2, 1981, at the Kyle Centre, located behind Port Moody City Hall.

In a “Coffee and Liquid Gas” editorial published the day before the open house, even the editor of the Vancouver Sun newspaper had openly advised public concern, concern which stemmed from his review of a series of articles written a year previous in November 1980 by Vancouver Sun staff reporter Alan Daniels, accounts of which no doubt prompted the editor to encourage public scrutiny:

Let’s hope the good people of Port Moody and environs saw the advertisement that B.C. Hydro ran in yesterday’s newspapers ... residents of the area would be wise to get all the information they can about it and then let Hydro – and their elected representatives – know just how they feel.

The Vancouver Sun TUES., MARCH 9, 1982 Port Moody opposing gas storage

Port Moody council has voted not to let B.C. Hydro store liquefied natural gas at Sasamat Lake, “unless there is no increase in hazard to the residents of the city of Port Moody.”

Copies of the motion, which was moved by Ald. Alan Ball and carried unanimously, will be sent to the councils of all surrounding municipalities.

A public hearing on the issue has been scheduled by the Greater Vancouver regional district for April 1 in Port Moody.

At the hearing the results of risk analysis studies conducted by both the

GVRD and Port Moody council will be presented to the public.

In other business, R.D. Insley, chairman of the board of trustees of the Eagle Ridge Hospital and Health Care Centre, has informed council that hospital construction is continuing despite announced government cutbacks to hospital projects.

The first contract phase for \$9.5 million by Cana Construction Ltd. started four weeks late due to bad weather but is now proceeding rapidly.

The second contract phase, involving

the finishing stages of construction, cannot begin until bids are received and reviewed later this month. This contract will involve a sum of \$18 million to \$20 million.

Insley said the provincial ministry of health has set a budget for the second contract phase “which appears realistic in terms of current indicated estimates.”

“We are pleased to confirm that the ministry of health is allowing Eagle Ridge to proceed at this time,” Insley stated.

Let’s talk about the proposed Sasamat Liquefied Natural Gas storage facility near Ioco.

Vancouver Sun
November 28, 1981

You’re invited to an Open House review of the proposed LNG storage facility.

Over light refreshments, we’ll explain the project and answer your questions. You’ll see displays and a model of the project and have a chance to put your comments and suggestions to members of the project team.

Please come and make your views heard.

Open House.

Wednesday, Dec. 2nd, 2pm to 9pm.

Kyle Centre (behind City Hall)

125 Kyle St., Port Moody.



³⁶² *Gas plant ‘Russian roulette,’* The Province, September 10, 1981. Also, the following quote from Peter Nemetz’s journal article, *An Energy Policy for British Columbia*, in BC Studies, Spring 1982: “Some concern has been expressed, for example, about the latitude of cabinet discretion afforded by sections 19, 21 and 24 of the [Utilities Commission] Act. A controversial exercise of this discretion was demonstrated recently by a preliminary, and subsequently reversed, provincial government decision, without the benefit of public hearings, to permit B.C. Hydro to construct a natural gas pipeline to Vancouver Island.”

³⁶³ *GVRD to study Hydro gas plant*, Vancouver Sun, September 10, 1981.

³⁶⁴ I.e., Vancouver Sun, November 28, 1981.

If the potential hazards of an LNG plant are even close to what a lot of people think they are, it seems to us Hydro had better have some awfully good reasons for building one, let alone putting it so close to a heavily populated area.

When transportation writer Alan Daniels researched his award-winning series of articles on LNG storage and transportation a year ago, the one thing everybody seemed to be agreed on was that LNG terminals should never be situated near major population centres.

Of the five feature articles written by Alan Daniels in November 1980, under the theme – *Liquefied Natural Gas: Friend or Fireball?* – ³⁶⁵ the piece published on November 18th was the most salient and relevant:

If the people of B.C. want to do battle with Dome Petroleum ³⁶⁶ and prevent the production and storage of huge amounts of liquefied natural gas in their neighborhood, they could do worse than talk to the occupants at 6218 Amboy Road [Staten Island, community of Pleasant Plains].

It is from this house that one of the most extraordinary battles ever waged by the little guy versus the energy industry has been directed during the past decade.

A 12 The Vancouver Sun TUES., NOV. 18, 1980 *C**



LIQUEFIED NATURAL GAS: FRIEND OR FIREBALL?

Ignored — until 40 men died in an LNG blast

With Monday's announcement by a Vancouver energy firm, there now are three proposals to undertake a natural gas liquefaction plant somewhere on the B.C. coast, at possible sites ranging from Prince Rupert to Britannia Beach. In this third of four articles, Sun Marine Writer ALAN DANIELS examines how one battle was fought over LNG — and a neighborhood tasted victory over big industry.

NEW YORK — If the people of B.C. want to do battle with Dome Petroleum and prevent the production and storage of huge amounts of liquefied natural gas in their neighborhood, they could do worse than talk to the occupants at 6218 Amboy Road.



AFTERMATH . . . New York City firemen recover bodies of 40 men killed in LNG blast at Bloomfield, Staten Island, in Feb. 1973

There is an office of technology assessment in Washington. They were even more surprised when it sent for them. "Imagine that," says Edwina. "We went to Washington to tell them about LNG."

The Cosgriffs are the parents of 14 children, grandparents of nine, who got involved because, they say, they fear for their lives if huge quantities of LNG are stored a mile down the road from where they live.

The tanks, located on the narrow Arthur Kill waterway that separates Staten Island from New Jersey, are already in place and have been since 1974. Each has a capacity of 900,000 barrels, which make them the largest liquid fuel

fact that the tank had been empty for a year and a large vent had been cut in its roof. Every year now, BLAST holds a memorial motorcade and service at the site of the tragedy.

"It's usually snowing and it's usually very cold," says Edwina. "But it helps to remind people what this fight is all about."

The worst LNG disaster in the U.S. happened in Cleveland, Ohio, in the early afternoon of Oct. 20, 1944. According to press reports two mil-

the centre of the death zone temperatures reached nearly 3,000 degrees. Birds were incinerated as they flew and fell back into the blazing streets. Gas in the streets ignited, making them rivers of flame."

When it was over 131 people had died and eighty homes were totally destroyed.

The gas industry claims that such a disaster could not happen today. It says not enough was known then about designing tanks to contain extremely cold

conduits. It exploded when an electrical switch was thrown.

"The force of the explosion blew up a chain link fence hundreds of yards away," says Gene Cosgriff. "If it had occurred closer to the tanks the whole city could have gone. This is what frightens us most about the industry. They tell you accidents cannot happen, that everything is fail-safe. They don't want a disaster. They don't want things to blow up, but they are willing to take

put you down as a bunch of hysterical alarmists.

"Our advice to anyone fighting LNG storage in their neighborhood is this: Get to know the subject thoroughly. Get as much information as you can. Then inundate the press and local politicians. You have to make it a political issue."

The Cosgriffs know they can still lose the battle, depending on ruling by the federal energy regulatory commission, which can overturn local objections.

The gas industry is a powerful opponent.

³⁶⁵ Accident with 'deadly frost' simply a matter of time, and Cargo has a city holding its breath, November 15; Constant hissing like a devil's sigh aboard tanker carrying deadly fuel, November 17; Ignored — until 40 men died in an LNG blast, November 18; LNG tankers to smash through ice, November 19.

³⁶⁶ The day before the article, Dome Petroleum announced plans to build an LNG plant on the BC Coast. Similarly, Carter Energy Ltd. and Petro-Canada had also proposed the construction of LNG plants. *Plans for \$2 billion gas plant bared*, in the Vancouver Sun, November 17, 1980.

Accident with 'deadly frost' simply a matter of time

Vancouver Sun - November 15, 1980

By ALAN DANIELS
Sun Marine Reporter

BOSTON, Mass. — The Algerian supertanker, Larbi Ben M'hidi, loaded with 33 million gallons of liquefied natural gas, moves into the heart of downtown Boston and takes a bearing on the steeple of the old North Church, from where, in 1775, William Dawes signalled to Paul Revere.

Here in the shadow of the tall stone obelisk which marks the site of the Battle of Bunker Hill, history is clashing head on with 20th century technology.

Dubbed "the deadly frost" because it can freeze or asphyxiate all in its path before igniting in a fireball, LNG is arguably one of the most dangerous and feared commodities on earth.

It arrives by the tankerload from Algeria, is shipped through Boston's inner harbor and is pumped into huge tanks on the Mystic River, only 10 kilometres from the city centre.

The gas industry says a disastrous fire cannot happen, that the chance of a massive accidental spill is so remote it defies the laws of probability.

But if a storage tank were to rupture or a tanker suddenly spill its cargo the potential exists here for a holocaust of Hiroshima proportions.

Pay attention B.C. This is no longer a drama unfolding in a foreign port. LNG is going to be shipped from the Arctic in ice-breaking tankers — bigger than any yet built.

And Dome Petroleum of Calgary announced two weeks ago it will build a \$2.8 billion LNG liquefaction plant on the B.C. coast, either at Powell River, Prince Rupert, Kitimat or Britannia Beach, which would put supertankers in Howe Sound.



pressway, crashing to the ground and spilling its contents.

Says commissioner Paul: "I don't even like to think about the possible consequences of something like that happening. You could then have liquid getting into the sewer system or in the subway and it's inevitable it would be ignited."

He said if there were a fire in one of the Distrigas storage tanks there would be no possibility of extinguishing it. Their only chance would be to keep the

This is the fireball of the doomsday nightmares.

The industry claims that in the event of a minor spill LNG can be contained in dykes and blanketed with foam. At sea, where tankers routinely vent small amounts of gas en route to relieve the pressure in its cargo tanks, the gas cloud floats harmlessly away. In the case of a major spill (for example from a tanker collision) the energy generated by the crash itself would immediately ignite LNG vapor and the result would be an intense localized fire, instead of a

The Cosgriffs, co-founders of BLAST (Bring Legal Action to Stop the Tanks) are no long-haired, anti-establishment weirdos trying to stand in the way of technology they barely understand. Over the years they have become experts in the movement and storage of liquified natural gases and have frequently been called on to brief politicians and political aspirants.

The Cosgriffs are the parents of 14 children, grandparents of nine, who got involved because, they say, they fear for their lives if huge quantities of LNG are stored a mile down the road from where they live.

The tanks, located on the narrow Arthur Kill waterway that separates Staten Island from New Jersey, are already in place and have been since 1974. Each has a capacity of 900,000 barrels, which make them the largest liquid fuel tanks in the world. But because of public pressure, which began in a church hall in Pleasant Plains in 1972 and slowly gained state-wide political momentum, the tanks have never been used.

They remain empty – monuments the size of stadiums – towering tributes to ordinary folk who stood up to industry and said: “Not in our neighborhood you don’t.”

“We are not against LNG,” says Gene. “We are against it being stored in populated areas. A facility that size in a crowded metropolitan area like Staten Island is nothing short of insane.”

On February 10, 1973, a tragedy happened that took 40 lives.

A supposedly empty LNG tank at Bloomfield, Staten Island, blew up, lifting off the 70-ton roof and reducing the tank to rubble. Forty workmen who had been repairing its liner were killed. According to the Cosgriffs, residual fumes in the tank’s insulation had seeped back into the tank and ignited, despite the fact that the tank had been empty for a year and a large vent had been cut in its roof. Every year now, BLAST holds a memorial motorcade and service at the site of the tragedy.

“It’s usually snowing and it’s usually very cold,” says Edwina. “But it helps to remind people what this fight is all about.”

Because of public concerns on Hydro’s LNG project, Port Moody Council “voted unanimously to budget \$2,000 for a professional study of the liquified natural gas storage plant.”³⁶⁷

On Tuesday night, February 2, 1982, “just one day after Port Moody council authorized \$2,000 to be spent on a risk analysis study on a liquid natural gas plant,” “a pilot light in Imperial Oil’s Ioco refinery went out and the waste hydrogen sulphide gas that normally is burned off at the top of the stack was simply released.”

Downtown Port Moody was thick with the rotten-egg smell that characterizes the gas, as the pocket moved around with the air currents.

The police department was swamped with calls from worried citizens.

The foul-smelling and poisonous cloud drifted across Burrard Inlet and when it got to the Barnet Highway it hit the slow-moving rush hour traffic. Two drivers lost consciousness and their cars wobbled off into the ditch.

Another drove madly to the Port Moody police station and collapsed inside the front door, saying, “What the hell hit me?”


All three were treated in Royal Columbian Hospital in New Westminster and later released.

³⁶⁷ *Gas plant study approved*, Vancouver Sun, February 2, 1982.

The incident has left authorities and environmentalists intensely concerned about the potential for further trouble in the little city ringed by refineries, chemical plants and sulphur loading docks.³⁶⁸

Gas cloud KO's Port Moody drivers

Province - February 3, 1982
By DON HUNTER



Ambulance and fire crews remained on the alert this morning in the wake of a cloud of potentially lethal gas that hit Port Moody Tuesday evening.

The leak was from a refinery waste-burning stack and was triggered when a pilot light went out.

Two people were knocked out while driving on the Barnet Highway and ran their cars off into the ditch.

Another drove madly to the Port Moody police station and collapsed inside the front door, saying, "What the hell hit me?"

All three were treated in Royal Columbian Hospital in New Westminster and later released.

The incident has left authorities and environmentalists intensely concerned about the potential for further trouble in the little city ringed by refineries, chemical plants and sulphur loading docks.

Tuesday's trouble started at about 5:15 p.m. when a pilot light in Imperial Oil's Ioco refinery went out and the waste hydrogen sulphide gas that normally is burned off at the top of the stack was simply released.

The foul-smelling and poisonous cloud drifted across Burrard Inlet and when it got to the Barnet Highway it hit the slow-moving rush hour traffic. Two drivers lost consciousness and their cars wobbled off into the ditch.

Several other drivers pulled their cars off to the side of the highway because they felt ill.

Port Moody police immediately barricaded the Barnet Highway, called in emergency crews and sought help from Burnaby RCMP and fire department.

Burnaby assistant fire chief Ken Gurr headed a breathing-equipment unit that arrived within minutes.

"We weren't needed, but we could have been," he said.

For some time the source of the problem was unknown, and the highway remained closed until 7 p.m.

Downtown Port Moody was thick with the rotten-egg smell that characterizes the gas, as the pocket moved around with the air currents.

The police department was swamped with calls from worried citizens.

Greater Vancouver Regional District pollution control officials were on the scene from the start, as were Worker's Compensation Board people.

The mishap once more alarmed local officials who see a growing potential for danger to Port Moody from chemical spills and gas leaks.

The leak came just one day after Port Moody council authorized \$2,000 to be spent on a risk analysis study on a liquid natural gas plant (LNG) proposed for B.C. Hydro's Burrard thermal generating plant.

"That's within spitting distance of the Imperial refinery," said Port Moody Ald. Ann Hulbert Tuesday night. She heads council's standing committee on pollution.

She said the committee will be asking GVRD officials if Tuesday's incident involved any permit violations.

"We don't like people passing out on our streets."

Seeking the cause. Page A6

Province photo by Wayne Laidlaw

Police and ambulance wait on Barnet Highway in Port Moody.

The highly toxic sour gas escape incident immediately 'sparked' public concern linking it to dangers of Hydro's LNG project. So much so, that Port Moody council passed a conditional motion on March 8th against the LNG project, a motion "sent to the councils of all surrounding municipalities."³⁶⁹

At the beginning of February, the GVRD announced it was hosting a public hearing on March 8, 1982, regarding the LNG proposal, a hearing date later changed to April 1st, April Fools Day. Over that time period, citizens and public interest groups became better armed and ready to take on B.C. Hydro. Public concern was accelerated with the advanced publication of a full-page article in the Vancouver Sun two days prior on March 29th by former Sun columnist and Greenpeace founder Robert Hunter, titled, "*A time-bomb in Ioco?*"

At the top of the article was a sketch drawing of downtown Vancouver, showing the recognizable or landmark high rises such as the Vancouver Hotel, the big clock tower near Georgia and Granville, and the Sheraton Landmark hotel with its rotating restaurant at the top. Looming behind the high-rise structures was a gigantic mushroom cloud formation generated by an enormous LNG explosion, and in the middle of the cloud was an image of a human skull. Inset in the middle of the long article was a summary statement in large italic font:

It is all very well for the executive of B.C. Hydro to arbitrarily decide where they are going to set down this titanic time-bomb, but the people who have to live with the plant, and take the risks, haven't been consulted.

Bob Hunter's reference to the public not being "consulted," which he referred to as "a couple of little coffee parties," was rebutted by Hydro's Dan McGuire in his April 1st piece in the Vancouver Sun, the day of GVRD's public hearing. McGuire wrote that Hydro had mailed 6,000 brochures in

³⁶⁸ Gas cloud KO's [Knocks Out] Port Moody drivers, The Province, February 3, 1982.

³⁶⁹ Port Moody opposing gas storage, Vancouver Sun, March 9, 1982.

A time-bomb in loco?



ROBERT HUNTER ... writer, environmentalist, and former Sun columnist.

Vancouver Sun - March 29, 1982

December 1981 to "residents of the area and advertisements appeared in local newspapers," along with a March 16, 1982 "display describing the project and including a scale model in the Port Moody public library."³⁷⁰ McGuire's idea of consultation was mismatched to Hunter's, namely full disclosure and consultation through a public hearing process.

400 protest gas-plant plan

Province - April 2, 1982

By DAMIAN INWOOD

About 400 angry residents gathered at a Port Moody school Thursday night to protest a proposed B.C. Hydro liquefied natural gas (LNG) storage plant they say is a "time bomb" in their own backyards.

They claim a major accident at the plant could blow the communities of Ioco, Anmore, Belcarra, Alderside, Barber Street, East Hill, College Park and Port Moody off the map.

Residents say they just don't trust Hydro's explanations of why the massive 70,000-cubic-metre (2.5 million cubic feet) storage facility is needed in their communities.

"Asking Hydro if it's safe is like asking the wolves to guard the chickens," said Anmore resident Bob Hunter, spokesman for 1,400 residents in the area.

Hydro representatives were at the meeting, called by the Greater Vancouver Regional District, to answer concerns.

Residents say they're terrified about the effects that a cloud of natural gas would cause if released.

Hunter estimates that such a cloud would cover an area of up to 96.5 kilometres (60 miles) long, 12.8 kilometres (eight miles) wide and 1.5 kilometres

Explosion danger seen

(one mile) deep. Hydro counters that the cloud would be about 800 metres (2,620 feet) by 300 metres (980 feet) by 30 metres (98 feet).

Hunter said that although Hydro is providing information about the effects of a possible disaster, figures are based purely on computer projections. "LNG is like the nuclear power industry was 20 years ago. They can say what they want and we don't have any way of knowing the truth."

Hydro says the site at Sasamat Lake, west of Ioco, was among 30 other sites studied. The plant would involve 2.5 to four hectares (six to 10 acres) and the main storage tank would be 38 metres (125 feet) high and 65 metres (213 feet) in diameter.

Natural gas will burn but not explode in the open air, says Hydro, adding that Hydro would fight and control any fire on its own property. The tank itself would be made of nine-per-cent nickel-steel, insulated and surrounded by a

dike and earth mound. The worst that could happen would involve a large airplane crashing on the tank but Hydro said the maximum distance that burning gas would travel wouldn't take it to residential areas.

Residents claim, however that in California, U.S. standards forbid LNG plants closer than 6.4 kilometres (four miles) from homes. The planned Sasamat site is half that distance, said Hunter.

Residents also fear the effect of an earthquake, which they say is more likely than a plane crash. Hydro says that a direct hit by a large aircraft is the worst accident that could happen at the plant, and that if it happened residents would not be endangered.

Keith Kidd, vice-president of Hydro's gas group, told the hostile crowd he expects the utility's proposal to go before B.C.'s Public Utilities Commission.

"If the evidence shows that there is an unreasonable risk, we don't want to build it and we won't build it," said Kidd.

But the standing-room-only crowd didn't appear convinced and Hydro officials were heckled as they tried to explain their reasons for going ahead.

The main concern appeared to be safety and why the plant had to be built in Ioco and not at an existing site on Tilbury Island in the Fraser River.

A poor bamboozler

When it comes to the art of sneaking it past the public, B.C. Hydro is a rank amateur. Its risk analysis of the Sasamat site for a liquid natural gas storage plant in Port Moody is a classic example. The report has more than 30 mathematical and typographical errors. It considers only one risk variable (air hazards) and uses an inappropriate mathematical model to determine the behavior of released gas.

But it is to Hydro's credit that it did not write the report, instead paying a U.S. company a lot of money to do it.

B.C. Hydro is bush league when it comes to the art of writing reports. It cannot bamboozle British Columbians with mathematics done on a broken calculator.

J. MICHAEL CLARKE

2150 Maple

Vancouver Sun - March 9, 1982

³⁷⁰ LNG at Ioco: just how great is the risk? Vancouver Sun, April 1, 1982.

Hydro officials jeered, booed

By TED TOWNSEND

More than 400 angry residents jammed a Greater Vancouver regional district public information meeting in Port Moody Thursday to condemn a proposal by B.C. Hydro to build a liquefied natural gas storage plant in nearby Ioco.

B.C. Hydro officials ignored jeers and catcalls and waded calmly through dozens of pointed questions from residents and local officials as they presented their case for building the 70,000-cubic-metre plant.

The meeting was kicked off with a presentation by three B.C. Hydro officials, who spent an hour discussing their reasons for building the plant at the Sasamat site in Ioco and what risks are involved.

Using a dual screen slide presentation, the Hydro officials told the crowd that they want to build the storage tank to store LNG for use during winter months when usage peaks beyond the normal capacity of Hydro's system.

Hydro vice-president Keith Kidd told the audience that the risks involved were minimal and that the probabilities of an accident were so low as to be insignificant.

Throughout the meeting Kidd insisted that, "if the factual evidence showed that there was a risk to nearby citizens involved in building the plant, we wouldn't be building the plant."

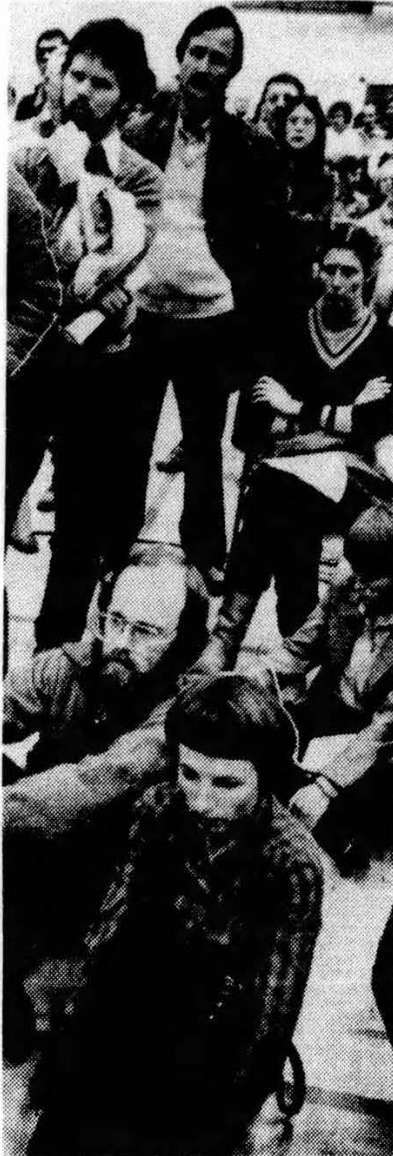
For the most part, Hydro's comments were jeered or laughed at by the capacity crowd. The audience roared its approval each time one of the many local municipal politicians and spokesmen for residents groups dished out criticism of the plan.

MLA Stu Leggatt (NDP—Coquitlam-Moody) asked why the plant had to go in Ioco.

"People don't want to establish their homes next to an LNG plant," Leggatt said. "That alone should mean it's an inappropriate site."

Hydro project manager Dan McGuire said the Sasamat site was one of five possible sites but is considered the best because it provided a good buffer zone between the plant and nearby homes and businesses and it was the most economically suited.

"We believe the hazards to be nil,"



ANGRY RESIDENTS
... jeers and catcalls

he said, to jeers from the audience.

He said the plant site exceeds Canadian standards for being a safe distance from its neighbors. He said it is also geographically blocked off from its neighbors, meaning that, if there was an accident causing a spill, the liquefied gas would vaporize and disperse to safe levels in the atmosphere within the plant boundaries.

In addition, McGuire said, if there was a fire, the gas would be contained on site.

But Port Moody Ald. Russ Smith presented the GVRD with a report on the hazards of an accident at the plant prepared for Port Moody council by Professor James Fay of the mechanical engineering department of the Massachusetts Institute of Technology.

Fay said that, should the LNG tank collapse, a dense, flammable gas plume could travel four kilometres, reaching both the Burrard thermal station and the Ioco oil refinery. With a westerly wind, he said, the flammable vapor might be carried as far as Port Moody.

Fay was critical of a Hydro-commissioned risk analysis report that cited a "worst case" accident as the possibility of a large aircraft crashing into the plant. He said it was more likely the three-level LNG tank could be ruptured by an earthquake.

Smith said Fay was also concerned that not enough had been done to assess the effects of an ignition of a vapor cloud near the oil refinery at Ioco.

But McGuire said the tank has been structured to withstand an earthquake registering 7.5 on the Richter scale. He said that strong an earthquake could be expected once in 10,000 years.

Each of the municipal councils in the area had representatives on hand to criticize the project.

Ald. Les Garrison of Coquitlam, Mayor Ted Baxter of Belcarra and Ald. Doug Vater of Port Coquitlam all said they were confused by the conflicting reports surrounding the proposal and thought more study and public hearings were necessary to, in Garrison's words, clear up the fear of the unknown.

"I'm not upset with what we have heard said and have read," added Baxter. "But I'm worried about what hasn't been said."

Spokesman for several residents' groups also lambasted the project and presented the GVRD with petitions signed by more than 2,500 residents from Belcarra, Ioco, Anmore and Port Moody who opposed the plan.

The public anger and annoyance with B.C. Hydro's LNG project's proximity to population centres, concerns witnessed at the April 1st meeting and transmitted on front page newsprint and coverage on radio and television, was undoubtedly responsible for provoking Energy Minister McClelland and Industry and Small Business Development Minister Don Phillips to invoke a new energy project policy.

B.C. gas plants must 'go north'

Vancouver Sun - April 6, 1982

By DON WHITELEY
Sun Business Reporter

VICTORIA — The provincial government wants the oil industry to concentrate on developing a petrochemical industry in northern or central B.C., Energy Minister Bob McClelland announced today.

And he has decided there is not enough natural gas in B.C. to support any of the three multi-billion-dollar liquefied natural gas plants put forward.

In a joint announcement with Industry and Small Business Development Minister Don Phillips, McClelland said the resources are located in the north and the people who live in the north should benefit from their development.

The announcement appears to dash any hopes of development for towns

such as Powell River, which had hoped to get a \$670 million fertilizer plant built there, although McClelland refused to rule out Powell River specifically, saying he considers it a "central" town.

There are now eight proposals for processing natural gas, ranging from fertilizers to petrochemicals to LNG.

There is enough gas to meet the needs of at least one of the non-LNG projects, McClelland said.

"This newest phase of our provincial economic development strategy complements northeast coal to build a solid industrial base for B.C.," McClelland said.

He urged those companies with projects aimed at southern locations (they include B.C. Resources and Westcoast Transmission) to re-submit their projects with northern sites in mind.

The announcement means that the province's natural gas-based industries of the future will be based in places such as Kitimat and Prince Rupert on the north coast; near northeastern towns such as Dawson Creek and Fort St. John, or possibly central Prince George.

Companies with plans for LNG plants (Petro-Canada, Dome Petroleum, Carter Oil and Gas) have been told there isn't enough gas in the province to support them, but the door hasn't been closed entirely.

An LNG plant could be approved if it gets a gas supply from outside the province, but any such project will have to go through the federal approval process at the National Energy Board before getting any provincial permits.



Don Phillips
industry

Van. Sun
November
23, 1979

Donald McGray Phillips, 50, former economic development minister, minister of industry, tourism and small business development. A car dealer, he was first elected to B.C. legislature for riding of South Peace River in 1966. Not a candidate in 1969, he was re-elected in 1972, 1975 and 1979.

LNG 'restricted' to interior, north

Province
By KEN BELL
and SHANE McCUNE
April 7, 1982
Province Staff

VICTORIA — The B.C. government says it wants development of natural gas processing industries restricted to the interior and north of the province.

Energy Minister Bob McClelland and Industry Minister Don Phillips announced the new policy in Victoria Tuesday.

As well as announcing the geographical restrictions on the industry, the two announced:

- The province is in favor of a liquefied natural gas project, although gas for such a plant will have to come from outside B.C.

- The government endorses development of an ammonia-urea fertilizer industry or a petrochemical industry.

- Powell River has not been ruled out as a site for a natural gas project, but its fate will depend on hearings into a proposed natural gas pipeline to Vancouver Island.

- The Canterra Energy Ltd. petrochemical-fertilizer project proposed for Annacis Island in the Fraser River will not be allowed to proceed. Canterra officials in Calgary, still waiting to see a transcript of McClelland's announcement, refused to say whether they will reapply using a more northerly location.

- A Dome-Westcoast petrochemical proposal for Port Mellon, on the north shore of Howe Sound, is also out of contention, but the project's sponsors have already said they will consider a site near Prince Rupert. (In fact, the Howe Sound location was advanced only at the insistence of the consortium's Japanese partners.)

Phillips said the policy reflects the government's commitment both to create investment and jobs at a time when they are needed and to process resources where they are located.

Gas upgrading projects in the in-

terior and north will provide major stimulation to the economic activity already generated by northeast coal, he added.

McClelland said the two consortia which had proposed natural gas projects in the Lower Mainland and at Port Mellon have been invited to resubmit their applications.

The ammonia-urea plant considered for Powell River is tied to Westcoast Transmission's proposal for a natural gas pipeline to Vancouver Island, with the Sechelt community as its eastern terminus. That proposal faces competition from a B.C. Hydro pipeline proposal using a more southerly route with its eastern terminus in Delta.

McClelland said the provincial cabinet has approved preliminary terms of reference for public hearings into the pipeline to be conducted by the B.C. Utilities Commission.

"I expect that within the next

week or 10 days, the final approvals will be given and we will be announcing both the terms of reference and the makeup of the commission which will hear the pipeline applications," he said.

He said it appears there would be sufficient surplus gas in B.C. to meet one of the non-LNG projects proposed under the allocation process.

"The number of projects which can be accommodated will depend upon the amount of surplus gas identified by the recent inquiry conducted by Dr. George Govier," McClelland said, adding that he expects the report from Govier to be ready shortly.

McClelland said he expects the government to make a decision based on the Govier report by the end of summer.

However, he warned that while the government now endorses an LNG plant, ultimately such a plant would require approval from the

National Energy Board because the liquid gas would be exported.

Dome Petroleum Ltd. last Friday submitted an application to the NEB for an export licence based on its proposed \$3 billion LNG project proposed for Grassy Point, about 25 kilometres north of Prince Rupert.

Dome's project would require 170 billion cubic feet of gas a year, and would involve the construction of a pipeline, liquefaction and shipping facilities as well as the construction of LNG tankers.

Carter Energy Ltd. of Vancouver submitted a similar NEB application earlier last week for the LNG side of its \$5.6-billion proposal, which includes a petrochemical plant.

McClelland said LNG project applicants would have to prove to the government that they have arranged supplies of feedstock gas from outside the province.

However, B.C. would reserve the

right to "back in" as a gas supplier to the province depending upon the future supply situation. McClelland said he anticipated the level of supply of B.C. gas could range from 15 to 25 per cent of the total requirements of an LNG plant.

Both Phillips and McClelland believe a spin-off from Tuesday's announcement will be an increase in gas exploration activity in the province. In the past year the level of oil and gas exploration in B.C. has dropped because of the inability to find new markets for B.C. gas.

"Gas companies now can be assured that they have a market for any gas they find, and this should be an incentive to drill," Phillips said.

He said the response to the gas allocation process has shown that proponent companies and the investment community clearly see a bright future for the development of industries using the resource.

The Ministers' April 6th joint announcement imposed new location restrictions on existing and future petrochemical and LNG project proposals. **No projects would be permitted in the Lower Mainland and/or near its seaports, and all project proposals would be shifted and confined to location sites in the northern half of British Columbia!** Though the sudden announcement may have greatly pleased Lower Mainland residents, where B.C.'s majority voters resided, it undoubtedly worried and mortified northern residents who would become targets of future petroleum developments, a new northern firing line.

[McClelland] urged those companies with projects aimed at southern locations (they included B.C. Resources and Westcoast Transmission) to re-submit their projects with northern sites in mind.

The announcement means that the province's natural gas-based industries of the future will be based in places such as Kitimat and Prince Rupert on the north coast; near northeastern towns such as Dawson Creek and Ft. St. John, or possibly central Prince George.³⁷¹

The B.C. government says it wants development of natural gas processing industries restricted to the interior and north of the province. ... The Canterra Energy Ltd. petrochemical-fertilizer project proposed for Annacis Island in the Fraser River will not be allowed to proceed.³⁷²

By March 1985, following a new federal / provincial energy agreement that would reduce and eventually abolish the federal Petroleum and Gas Revenue Tax, rumours were afoot that the government seemed "likely to reverse its decision not to allow new projects to be located in the Lower Mainland."³⁷³

4 – 2. The Privatization / Deregulation of B.C.'s Natural Gas

While staff representatives were smiling and comforting visitors at B.C. Hydro's Ioco LNG open house on December 2, 1981, with "coffee and sandwiches," "assuring Port Moody residents they will not be in danger,"³⁷⁴ Canterra, a Calgary oil and gas company, was preparing a

press conference for December 3rd at the Four Seasons Hotel in downtown Vancouver. Canterra was "formerly known as Aquitaine Canada Ltd.," and was now "owned by Canada Development Corporation." Canterra, with "two partners Enterprise Miniere et Chimique of France and Sumitomo of Japan," proposed a massive "\$1.6 billion petrochemical and fertilizer complex" on 659 acres of industrial land to be situated either in the eastern part of Richmond municipality or on Annacis Island.³⁷⁵

Canterra's project package immediately aroused public concern and anxiety for Lower Mainland residents and politicians. The project involved three major components: "an extraction plant in Taylor, B.C. for producing ethane and other liquified gases; a [new 700-mile] pipeline to transport the liquid natural gas to Lower Mainland site; the [\$1.2 billion Richmond] plant itself, producing about 350,000 metric tonnes per year (MTY) of ethylene-based petrochemicals and 400,000 MTY of potassium sulphate and sodium

Coffee and liquid gas

Vancouver Sun - December 1, 1981

Let's hope the good people of Port Moody and environs saw the advertisement that B.C. Hydro ran in yesterday's papers, inviting one and all to an open house at Kyle Centre on Wednesday for light refreshments and discussion of Hydro's latest project.

Whatever their first impressions of plans for a rather large liquefied natural gas storage plant on their doorstep at Ioco, residents of the area would be wise to get all the information they can about it and then let Hydro — and their elected representatives — know just how they feel about the idea.

If the potential hazards of an LNG plant are even close to what a lot of people think they are, it seems to us Hydro had better have some awfully good reasons for building one, let alone putting it so close to a heavily populated area.

Even though there are no plans to export the gas — Hydro wants to store it during the summer and use it to supply Lower Mainland customers during periods of peak demand in the winter — the storage of 70,000 cubic metres of liquid gas (half the capacity

of a large LNG tanker) at minus 106 degrees celsius is not something to be regarded lightly.

The visual impact has to be considered as well. A tank as high as a 10-storey building, and twice as wide, doesn't sound like the most esthetic thing to put next door to the Belcarra regional park.

How risky the plant would be is arguable. Not enough is known about LNG to say who is right — those who claim it is one of the safest forms of energy or those who believe it is the most dangerous thing next to a nuclear bomb. Probably it is somewhere in between.

But when Sun transportation writer Alan Daniels researched his award-winning series of articles on LNG storage and transportation a year ago, the one thing everybody seemed to be agreed on was that LNG terminals should never be situated near major population centres.

Does Hydro really need a storage facility of that size? If so, why couldn't it be built in some more remote spot? Good questions to ask over the coffee and doughnuts at the Kyle Centre in Port Moody.

³⁷¹ *B.C. gas plants must 'go north,'* Vancouver Sun, April 6, 1982.

³⁷² *LNG 'restricted' to interior, north,* The Province, April 7, 1982.

³⁷³ *Energy pact puts projects back on track,* Vancouver Sun, March 29, 1985.

³⁷⁴ *Hydro discusses LNG plans,* The Province, December 3, 1981.

³⁷⁵ *Billion-buck gas plant mooted here,* Richmond Review, December 4, 1981.

sulphate.” Public opposition led to the formation of The Concerned Citizen Action League in Richmond.³⁷⁶

Billion-buck gas plant mooted here

Richmond Review - December 4, 1981

By ALEX ROSE

Richmond is in line to be the site of a \$1.6 billion petrochemical and fertilizer complex if Canterra, a Calgary-based oil and gas company, is given the go-ahead by the B.C. government.

The company wants to build on a 104 hectare (250 acres) parcel of industrially-zoned waterfront land east of Nelson Road in South Richmond. This land, now owned by the Fraser River Harbor Commission would house Canterra's seven processing units, rail loading facilities, marine terminals and storage area.

Canterra's proposal is one of 11 natural gas projects being reviewed by Bob McClelland, B.C. minister of energy, mines and petroleum resources.

Annacis Island is another potential site Canterra is considering.

At a press conference held Thursday at the Four Seasons Hotel in Vancouver, Canterra president Bernard Isautier said the proposed project would require about 3,000 workers during construction and a technical staff of 660 to keep the plant in operation.

Isautier said his company's proposal was unique because it was a combination fertilizer and petrochemical plant. He said this added about 250 more jobs.

"Employment during construction would generate an estimated \$350 million in wages and salaries, mostly in the Lower Mainland area," Isautier said.

He said the company investigated several B.C. locations before choosing the Richmond and Annacis area.

Richmond is a good site because the complex would require road and rail access to major transportation systems to receive raw materials, access to pipeline rights-of-way, ocean access and an urban work force.

The project comprises three components:

- An extraction plant in Taylor, B.C. for producing ethane and other liquified gases;

- A pipeline to transport the liquid natural gas (LNG) to Lower Mainland site;

- The plant itself, producing about 350,000 metric tonnes per year (MTY) of ethylene-based petrochemicals and 400,000 MTY of potassium sulphate and sodium sulphate.

Both sodium sulphate and potassium sulphate are fertilizers.

These products would be exported to the northwestern U.S., and the Pacific Rim countries, especially Japan.

If the Canterra proposal is accepted, construction would begin in late 1981; operation would begin in 1986.

Canterra, formerly known as Aquitaine Canada Ltd., is owned by Canada Development Corporation and will have two partners — Enterprise Minière et Chimique of France and Sumitomo of Japan.

The French company has fertilizer expertise; the Japanese will provide petrochemical knowledge and marketing.

Isautier said his company has already undertaken several environmental impact studies and would continue studies relating to the social and environmental aspects of the project while the proposal is being studied in Victoria.

"We are well aware of the high quality of life enjoyed by residents of the Lower Mainland and of the need to encompass that quality in all areas of operations," he said.

"Our project will use the best available technology to meet or exceed government standards for health, safety and environmental quality in all operations."

Isautier said the public will be invited to a series of open houses at which various aspects of the project will be discussed.

LNG and ethane are considered to be severe fire risks if exposed to sparks or open flame.

In Port Moody, B.C. Hydro is currently having an open house to explain their proposed Ioco LNG plant. Residents and environmentalists are concerned about potential hazards from leaking LNG. The gas is compressed and changes to liquid at minus 160 degrees Fahrenheit and then takes up 1/600 of its regular volume. The most dangerous time is during "cool-down" when the LNG is being loaded onto tankers.

Controversy continues with experts from both sides arguing about the safety of LNG.

The December 4, 1981, Richmond newspaper article reported that Canterra was but "one of 11 natural gas projects being reviewed by Bob McClelland, B.C. minister of energy, mines and petroleum resources" in 1981, declared under the government's Natural Gas Allocation Program (NGAP).

Last July [17th, 1981], in what was either a bankruptcy sale or a clever marketing ploy, the B.C. energy ministry placed ads in newspapers around the world inviting the petrochemical industry to make use of B.C. natural gas. This super, natural B.C. gas campaign paid off, attracting 15 offers to

³⁷⁶ Protest grows over LNG plant, Richmond Review, March 24, 1982.

build everything here from small fertilizer factories to huge liquified natural gas export terminals.³⁷⁷

The other major project proposals included four LNG terminals, five petrochemical plants,³⁷⁸ and two export pipelines:

- Dome Petroleum Ltd. and partners TransCanada Pipelines Ltd. and Nova, for a \$3.3 billion LNG terminal near Prince Rupert. Dome Petroleum, with partners Canadian Occidental Petroleum Ltd., Westcoast Transmission, and Mitsubishi's accompanying proposal for a \$1.4 billion ethylene and ethane-based petrochemical plant near Prince Rupert.
- Petro-Canada, Westcoast Transmission Ltd., and Mitsui and Co. of Japan (the Rim Gas Group), for a \$2.3 billion LNG terminal near Kitimat.
- Carter Energy Ltd., for a \$5.6 billion combined LNG terminal and petrochemical plant near Prince Rupert. Carter has the backing for future additional gas from Noranda's subsidiary, Canadian Hunter Exploration.
- Westcoast Transmission Ltd., British Columbia Resources Investment Corp. (BCRIC), Union oil of California, and Chieftain Development Co. proposal for a \$630 million ammonia-fertilizer plant.
- Ocelot Industries Ltd. proposal for a \$446 million methanol and ammonia plant.
- Mitsui Chemicals Ltd. proposal for an ammonia plant.
- Canadian Methanol Ltd. proposal for a methanol plant.
- Wainoco Oil and Gas Ltd., with support from Czar Resources Ltd. and Aquitaine Co. of Canada, proposal for increased gas pipeline export to the United States.

Protest grows over LNG plant

Richmond Review
March 24, 1982

By BRIAN MacDONALD

Canterra Energy Ltd., the Alberta-based, Canadian Development Corporation-owned company which launched a campaign for a \$1.6 billion petrochemical and fertilizer plant in Richmond last December is coming up against a well-organized opposition.

The Concerned Citizens Action League, which blossomed from concern over chemical products, transportation problems and plant safety raised at open houses held by the company in Richmond and other Fraser River communities, met Friday with Richmond-Delta MP Tom Siddon and South Vancouver MP John Fraser to present their fears about the project, and met Tuesday with council's environment and health committee.

A public interest research group at Simon Fraser University, headed by former Richmond South Delta NDP candidate Mercia Stickman, may also oppose the project.

Details of the Tuesday meeting were not available at pretime; however, Siddon said Monday he would look seriously at the group's mounting evidence against the plant.

Siddon is on record as supporting the Canterra proposal, one of 14 submissions (for 11 projects) being considered by an energy, mines and petroleum resources ministry committee for use of an anticipated oversupply of natural gas.

"Given our serious situation in terms of unemployment and given our (Conservative Party) long standing position that we should upgrade our resources and produce products in Canada wherever they are consistent with environmental standards, I support it," Siddon said. Canterra has proposed to employ a construction workforce of 3,000 people and about 650 industry and 800 indirectly created new jobs once the plant is built, either in east Richmond or on Annacis Island.

Ald. Harold Steves, who has been attending the group's meetings, said most, if not all of the workforce will come from Alberta and the permanent technical staff will come from Alberta and Ontario, because those provinces have the trained workforce, and B.C. does not.

Steves also said he was concerned that such a capital intensive industry would locate on 650 acres of industrial land, committing almost half of the remaining Richmond industrial land to one industry almost in perpetuity.

"We are looking at this taking up a lot of land and providing perhaps 1/10 of the jobs of standard industry," he said.

Continued on p. 2
SEE: SIDDON

³⁷⁷ A determined Dome ... pushes toward an LNG site in B.C., untroubled by the hazards involved, Vancouver Sun, March 17, 1982.

³⁷⁸ "Some of them combine LNG and petrochemicals, while others combine fertilizers and petrochemicals." 3 major energy projects offered, Vancouver Sun, August 31, 1981.

- Westcoast Transmission Ltd. proposal for a 10-year extension to its end of 1989 contract of its existing gas pipeline export to the United States.

One source stated that the total “surplus” gas supply project proposals from northeast B.C. gas source facilities amounted to a whopping “750 billion cubic feet [bcf] a year (more than the annual Canadian export total to the U.S.),”³⁷⁹ a figure five times greater than what British Columbia customers consumed annually in 1981! According to gas statistics presented by the Canadian Petroleum Association to the provincial Govier Commission on January 20, 1982, “at present, about **230 bcf** a year is allocated for sales [from British Columbia] to the United States, while B.C. itself consumes just over **150 bcf** a year.”³⁸⁰

E2 EDMONTON JOURNAL, Monday, June 22, 1981

The tide is turning, say resource chieftains

By TOM CAMPBELL

VANCOUVER — Alberta and B.C. gas producers, having wavered between feast and famine for a quarter of a century, seem about to enter the upside of their business cycle.

There seemed to be grounds for optimism during the recent 74th annual meeting of the Canadian Gas Association (CGA).

Despite ample gloom about the national energy program, falling export sales and gas surpluses, many of the 500 delegates seemed to share the view — expressed by retiring CGA president Robert Kadlec — that the current difficulties will pass.

The current oversupply promises to give way to another bullish market as the international community attempts to make use of this resource.

The U.S. gas industry, battered by recession and sharply higher Canadian export prices, has been curtailing its demand, but the

chairman of the American Gas Association suggests this situation will turn around.

B.C. has received industrial proposals which would consume 900 billion cubic feet of gas annually, compared to a currently proven surplus of 75 billion cubic feet, said B.C. Energy Minister Bob McClelland in announcing a new program to ensure B.C.'s gas is used to maximum provincial benefit.

Three-quarters of that new demand comes from three liquefied natural gas ventures, representing a total investment of \$7.5 billion.

These projects would be geared to serve export markets and as such might never be approved by the federal government. Mr. McClelland said his government would also have to assess the benefits of such ventures, including stimulus to West Coast shipbuilding, before granting permits.

B.C., like Alberta, is also anticipating new gas demand

developing from a rapidly expanding petrochemical industry. B.C. has opportunities for residential and industrial sales in areas not yet being served.

Mr. McClelland said he expects B.C. Hydro to start construction of an undersea gas transmission line to Vancouver Island next spring.

He said up to 40 million cubic feet of gas can be sold on the island, provided a major petrochemical venture proceeds, which is expected to absorb 24 million cubic feet daily.

Four firms, including publicly-owned B.C. Hydro, are competing for gas distribution rights on the island.

For the moment, Hydro's gas rates are less than those charged by other utilities because the B.C. government has told it not to collect Ottawa's gas excise tax. Mr. McClelland said the B.C. government's position is that provincial Crown corporations



Robert Kadlec: a believer

should not have to pay the tax.

Canada's domestic market is expanding and export markets should recover, said Mr. Kadlec, retiring president of the CGA. “The potential new market resulting from new uses of the product is promising for this decade and the next.

Another estimate reported in March 1982 was 100 million bcf higher:

The forthcoming 10 proposals for 12 projects proved to be a consultant's cornucopia, with combined gas requirements approaching 859 billion cubic feet (bcf) annually, and a combined capital investment of more than \$14 billion.³⁸¹

The March 1982 estimate was closer to what Energy Minister McClelland originally stated to the Canadian Gas Association meeting in his July 17, 1981, address, a figure six times B.C.'s annual consumption:

“If all of these proposals were approved, they would require more than 900 billion cubic feet of gas a year. ... we do not have near that surplus of gas. “We estimate — based on National Energy Board criteria — that we have a surplus in the range of 50 to 75 billion cubic feet a year.”³⁸²

³⁷⁹ *Victoria withholds gas project details*, Vancouver Sun, September 16, 1981.

³⁸⁰ *CPA wants B.C. to stop new gas exports*, The Calgary Herald, January 21, 1982.

³⁸¹ *Gas inquiry leaves many loose ends*, by Dominic (D.A.) Watson, Financial Post, March 20, 1982.

³⁸² *Program designed for gas surplus*, Abbotsford News, July 18, 1981.

The 'surplus natural gas' argument was an ambitious ploy used by some petroleum companies to create new foreign markets with two aims in mind: to stimulate investor and political frenzy for the project proposals, and secondly to ramp up petroleum exploration drilling while unleashing access to recently capped petroleum wells in western Canada. That objective was summarized by Inland Natural Gas president Robert Kadlec in his careful choice of language:

The National Energy Board, in its most recent report, foresaw no gas surpluses for export at the time of their research. We hope this will be rectified by added incentives for exploration and development, and by a reassessment of the formulas used for calculating exportable surpluses.³⁸³

Aside from the aims of some petroleum companies, the Canadian Petroleum Association stated in a brief to the government's upcoming Govier Commission that its collective members were opposed to a foreign or an offshore gas export scheme, recommending that any generated surplus gas should be entirely reserved for the American export market.

In a surprise move, the Canadian Petroleum Association (CPA) has advised the British Columbia government to hold off on approving any new natural gas exports from the province.

In a direct slap in the face for the would-be sponsors of three LNG terminals who want to sell to Japan and Korea, the CPA recommends that if there is a gas surplus in B.C., it should be used for increased pipeline exports to the United States. ... The association suggests that without dramatic improvements to the economics of drilling in B.C., gas supplies will gradually decline from 1986 onwards.³⁸⁴

The surplus gas markets scheme began in October 1980 when Dome Petroleum testified before the newly created B.C. Utilities Commission. Dome's president Bill Richards stated on October 3rd that "there's a vast potential in Europe, Japan, Sweden, and others ... the potential markets are legion ... but

McClelland: Vancouver
Sun
June 15, 1981
**Surplus gas
study slated**

A program to find the best use for B.C.'s surplus natural gas was announced today by Energy Minister Bob McClelland.

Under the program, the provincial government will hold public hearings to pinpoint surplus and, simultaneously, invite development proposals for its best use.

McClelland said the government has received a number of inquiries from companies and associations interested in liquefied natural gas or petrochemical processing.

"We cannot afford to authorize the development of that resource base on a first-come, first-served criterion," he told the Canadian Gas Association annual meeting in Vancouver.

He said if all the proposals made to the government were approved they would require more than 900 billion cubic feet of natural gas a year.

"We estimate — based on National Energy Board criteria — that we have a surplus in the range of 50 to 70 billion cubic feet a year," he said.

McClelland said the government will attempt to determine through the inquiry just how much gas is, in fact, surplus. It must also decide what proposals involving natural gas return the greatest benefits to the province.

He stressed that the government will ensure that adequate natural gas supplies remain available for domestic use before any is committed to new petrochemical projects or export.

The results of the inquiry will likely be available in six months, he added. While this process is under way, the government will invite proposals for use of surplus gas.

Guidelines for the proposals will be released shortly and detailed submissions must be made to the government by Dec. 1.

³⁸³ *Where the action will be*, by Robert Kadlec, President, Inland Natural Gas Co. Published in The Financial Post, November 7, 1981. Kadlec was chairman of the Canadian Gas Association from June 1980 to June 1981.

³⁸⁴ *CPA wants B.C. to stop new gas exports*, The Calgary Herald, January 21, 1982.

you can't develop new markets without the supply." ³⁸⁵ Some three months later B.C. Premier Bill Bennett and his train were off to Japan, in part, to sing to Dome's new fiddle:

Coal will again be on the agenda when Mr. Bennett and party hit Tokyo on the last leg of this proposed 16-day, six-country tour, but the suspicion grows that the Premier will be dealing in a substance considerably cleaner than coal on this tour: liquified natural gas. ³⁸⁶

Dome keeps the lid on details of plans for Britannia acreage

Province - November 8, 1979

By BASIL JACKSON

Dome Petroleum Ltd. of Calgary has bought 500 acres of land at Britannia Beach on Howe Sound, 27 miles north of Vancouver, for an undisclosed purpose.

The land was sold to Dome by Copper Beach Estates Ltd., which bought the assets of the Anaconda Co. of Canada's copper mine at Britannia Beach. The mine was closed down Nov. 1, 1974, basically due to low copper prices.

Dome president Bill Richards said the firm bought the site for an undisclosed price for "future offshore shipments." He refused to elaborate on the nature of the shipments or confirm reports the land may be used for a liquified natural gas (LNG) port, saying only that Dome considers Britannia Beach "an excellent location" and one of the few "suitable port sites" still available in B.C.

"The acquisition was made on the contingency of future port-type facilities," he said. "but we don't want at this time to give our competitors knowledge of what we're not yet ready to divulge."

Industry sources say that Dome, an oil and gas exploration and processing company, has expressed interest in developing an LNG port on the West Coast.

Other reported possible uses for the land included a base for tankers destined for the Beaufort Sea off the MacKenzie River delta, once Dome's wells there are in production.

Richards' assistant D.P. Dome would not



disclose the price, nor did Copper Beach Estates.

"Dome gave no indication of what it intends to use the land for," said Art Alexander, Copper Beach Estates' president.

"We bought the assets of Anaconda on Nov. 1. We own another 1,800 acres of the property, but have no immediate plans to sell it. We are studying the various alternatives," Alexander said.

Barney Heskin, regional director of the federal environmental protection service, said that if an oil port or LNG terminal

were in Dome's mind "we would be taking a very hard look at it."

Any proposal for a tanker port on Howe Sound is likely to meet opposition from environmental groups, who value the sound as a recreation area and want to protect the wildlife and salmon spawning ground in the Squamish estuary at the end of the sound.

Such a proposal would also have to be approved by the federal department of transport.

"Any company intending to build a port to handle dangerous materials would have to make application to the department under the so-called Termpol Code for the carriage of these materials," said Herbert Buchanan, regional director, marine services, department of transport.

"It would be closely examined for the impact on the environment and the socio-economic impact of such a port."

J.T. Fyles, deputy minister of B.C. department of energy, mines and petroleum resources, said, "I find it a little surprising," when asked about the idea of an oil port or LNG terminal in Howe Sound.

Dome Petroleum is active in oil and gas exploration in B.C., Alberta and particularly in the Canadian Arctic. It has become a major operator in offshore Arctic drilling since its discoveries in the Beaufort Sea in 1977. It has a proposal to build ice-breaker tanker ships to bring Arctic oil to southern markets. The plan includes ice-breaking LNG tankers.

The company also has ethane and propane recovery plants, pipelines, and produces other petroleum derivatives.

Dome was most likely the primary mover and instigator behind the B.C. 'surplus gas' shenanigans because of what it unsuccessfully attempted to pull off one year previous in November 1979. Dome, which bought the assets of Anaconda Co. of Canada on November 1, 1979, had negotiated with Copper Beach Estates for the purchase of "about 500 acres at Britannia Beach," the Howe Sound dock and lands of the infamous copper mine just south of Squamish, for "future off-shore shipments."

Informed sources in the oil industry say that Dome – Canada's largest producer and marketer of natural gas liquids – has expressed an interest in developing a liquified natural gas port on the West Coast. And, given South Korea's interest in purchasing more LNG, possibly from Canada, Dome

³⁸⁵ *Europe and Japan gas sale potential vast*, Dome says, Vancouver Sun, October 4, 1980.

³⁸⁶ *At least the pretence of work*, by Marjorie Nichols, Vancouver Sun, January 21, 1981.

might well be planning to build an LNG port at Britannia Beach, the first of its kind on the B.C. Coast.³⁸⁷

"It was very stupid of us to have registered the land in Dome's name," [Dome president, Bill] Richards said. "It should have been done through a trust company."³⁸⁸

Groups fight Howe Sound port possibility

Province - November 9, 1979

Province Staff Reporter

Environmentalists are grouping to defend Howe Sound, which they say is threatened by an apparent plan to build a port on its shores.

Dome Petroleum Ltd. of Calgary has purchased 500 acres at Britannia Beach near Squamish "on the contingency of future port-type facilities."

Dome would not say what it would use the port for, but speculation is that it would handle liquefied natural gas tankers.

Doreen Wakely, chairman of the Save Howe Sound Committee, said a port would ruin the sound as a recreational area.

"I think it's a horrible blunder. The tanker traffic would just ruin the area for people," said Wakely, adding that she has been flooded with calls from Howe Sound residents who want to fight the port idea.

"Howe Sound is unique in that it is a fiord only 20 miles from downtown Vancouver. It belongs to the whole Lower Mainland for people's recreation."

The Scientific Pollution and Environmental Control Society said in a prepared statement that it also opposes a port on Howe Sound.

But the manager of Squamish Terminals at the head of Howe Sound,

which handles 80 freighters a year, said he did not think the introduction of tankers would cause any serious traffic problems.

"There's plenty of water for more freighters," said F.W. Collard. "We get 80 a year and it doesn't seem to bother anybody. People hardly notice them."

A watch supervisor at Vancouver's vessel traffic centre said the centre takes special precautions when a liquefied petroleum gas tanker arrives at the port about every two months.

He said the port clears its radio channels, clears the First Narrows of

Burrard Inlet of other vessel traffic and requires that tankers only arrive in daylight and when there is good visibility. Tankers must also display a sign with the letters LPG and must not anchor in the harbor, he said.

B.C. Energy Minister Jim Hewitt said any environmental problems with the port would have to be weighed against energy needs.

"We're all concerned about the potential disaster that could occur," Hewitt said. "But if you don't have heat for the home, what do you do? And people will ask the government, 'Why are we cold? Why didn't you do anything?'"

Public opposition was instantaneous and gained momentum, led primarily by the Save Howe Sound Committee which had successfully fought in 1972 against a coal loading facility in Squamish, and had recently battled against an open copper pit mining proposal on Gambier Island, a large mountainous island in Howe Sound just north of Bowen Island. By mid-November, B.C. Environment Minister Rafe Mair announced that Cabinet agreed to conduct a land use study of the area through the government's Environmental Land Use Committee. Dome's Britannia Beach proposal was overturned despite B.C. Energy Minister Jim Hewitt's open and feeble support of the project.

The LNG and petrochemical projects' race began after Dome filed a pre-application to the Ministry of Energy on April 21, 1981, for its multi-billion-dollar proposal.

Preliminary engineering is under way on a new pipeline to carry gas to the coast and on the liquefaction, storage and shipping terminal facilities. Three sites on the B.C. Coast are being studied and the terminal will be located at one of those sites.³⁸⁹

In between lobbying for their project and dangling the economic carrot of an LNG shipyard before the government's eyes, Dome has indulged in grassroots politics in attempting to gather support from the Port Simpson people.

In early 1981, before their proposal was made known to the general public, Dome officials started turning up in the small coastal town, bringing with them a raft of presentations, slide shows, and speeches. "At one point there," a Port Simpson resident recalled recently: "it

³⁸⁷ *Sound eyed for tanker port: Dome buying land at Britannia Beach*, Vancouver Sun, November 7, 1979.

³⁸⁸ *Britannia plant may process gas for South Korea*, The Province, November 9, 1979.

³⁸⁹ *LNG project takes a step*, Times Colonist, April 22, 1981. In a January 21, 1981, article in the Vancouver Sun, Dome had four port locations in mind: Port Alberni, Britannia Beach, Kitimat and Prince Rupert.

INVITATION FOR PROPOSALS DISPOSITION OF BRITISH COLUMBIA SURPLUS NATURAL GAS

The Government of British Columbia is seeking competitive proposals for the use of natural gas, surplus to domestic requirements, for natural gas-based (or natural gas liquids-based) industries, such as petrochemicals or fertilizers, or for export (via pipeline or as LNG). This call for proposals will lead to negotiations between the government and all potentially interested parties with respect to the conditions of sale of natural gas and/or natural gas liquids. It should be noted that strong consideration will be given to those companies whose proposals may include measures for proving up additional natural gas reserves. All parties interested in submitting a proposal are requested to identify themselves through a letter of intent by August 31, 1981. Detailed proposals must be submitted by December 1, 1981. Details as to specifications for the preparation of proposals and the letter of intent may be obtained by contacting:

E.R. MACGREGOR
ASSISTANT DEPUTY MINISTER
ENERGY RESOURCES BRANCH
MINISTRY OF ENERGY, MINES AND
PETROLEUM RESOURCES
PARLIAMENT BUILDINGS
VICTORIA, BRITISH COLUMBIA
CANADA
V8V 1X4 TELEX: 049-7135



Province of British Columbia
Ministry of Energy, Mines
and Petroleum Resources.
Hon. Bob McClelland, Minister.

seemed like there were zillions of [Dome] consultants around here. Every plane that landed was full of them."

Dome then began distributing a "project newsletter" to residents, with headlines that reflect its content: "Careful Planning and Detailed Study Make Safe LNG Operations Possible." It also passed out a risk analysis study purporting to show that safety was not a problem. "Because the large distances involved," the study states (referring to the 2.5 km distance between the town and the plant site), "there would be no public consequences" from an LNG vapor spill or fire. Prepared for Dome by a U.S. consulting firm, the study is oddly at variance with U.S. federal regulations.

In response to all this corporate attention, the Port Simpson Indian Band formed an LNG Committee, hired a lawyer, and asked Dome for \$265,000 to conduct its own independent risk analysis studies. Negotiations for funding are still underway, but to cap their public relations program, Dome recently flew a number of Port Simpson people to Alaska, where they toured an LNG facility on the Kenai Peninsula.

Still, the gloves came off last spring at a town public meeting when one band councillor asked the Dome executives directly: "What if the people of Port Simpson don't want this thing?"

A Dome spokesman said the company wanted Port Simpson's cooperation, but that the project would go ahead regardless.³⁹⁰

QUIET ENERGY POLICY

Vancouver Sun - July 2, 1981

Victoria avoids public hearings

By DON WHITELEY
Sun Business Writer

While no one was looking, the provincial government quietly slipped in a new policy for assessing major energy projects without the inconvenience of going through a public hearing process.

Ever since the introduction last year of the new B.C. Utilities Commission Act, the province has had the power to approve major industrial projects in B.C. without benefit of a public hearing.

Few people thought the government would actually use that power. When it did, in the case of the Vancouver Island gas pipeline project (awarded to B.C. Hydro), "special case" was pleaded.

The description two weeks ago by Energy Minister Bob McClelland of the hoops a major project must go through makes it clear the province has no intention of letting public input influence any of the major decisions it makes on energy projects.

The rules work like this:

A determination will be made on how much natural gas B.C. has available for upgrading into petrochemicals, or other industrial uses.

Applications will then be requested from interested companies, and should be submitted no later than Dec. 1 this year. Once the government has examined the proposals, those "in the best interests of the people of B.C. will be selected, taking into account the volume of surplus gas determined by the public hearing process." Those are McClelland's words.

Cleverly, the announcement put out by the government uses the phrase "public hearing" four times in 2½ pages of text, leading one to feel comfortable that there will be some public examination of all of this.

Not so. The public hearing McClelland refers to is simply to determine how much natural gas is surplus to B.C.'s requirements. There will be no public hearing into selection of the projects themselves.

"Backers of the selected proposals will then be required to apply for a project certificate under the Utilities Commission Act," McClelland says.

Simply stated, five companies bidding for an LNG plant will all submit applications to the government. The government will pick one, or two, or

ANALYSIS

maybe three, and tell them to apply to the commission. The commission will then decide on what terms the plant will proceed, and if there is more than one applicant with provincial approval, which should go ahead.

There will be no opportunity for a public challenge of the following:

- The advisability of any projects either proceeding or not proceeding.
- The criterion on which some applicants are selected, and others rejected.
- The pros and cons of all the private companies who have an interest in proceeding with a plant.

How will the system work in practice? The recent decision to award the Vancouver Island gas pipeline to B.C. Hydro must now be seen as much more than an isolated case based on expedience. The government had three applicants, and it chose one of them.

In short, the government can select or reject an applicant on the flimsiest of reasons without having the embarrassing recommendations of a quasi-judicial board or even the public testimony before such a board to get in its way.

The government's new policy makes it unique. Alberta's Energy Resources Conservation Board lets all applicants for energy use slug it out in a contested hearing. When the cabinet makes its decision, it releases the board recommendations at the same time. The National Energy Board has a similar policy.

Consider how nervous companies operating in B.C. are about this.

Westcoast Transmission, about 35 per cent owned by the hated (by the So-creds) federal oil company Petro-Canada, may never get another project approved.

Petro-Canada itself must wonder if it has a future in this province.

Dome Petroleum is rapidly becoming a corporate octopus of MacMillan Bloedel stature, and might suffer with the Bennett government because of its immense corporate power.

³⁹⁰ A determined Dome ... pushes toward an LNG site in B.C., untroubled by the hazards involved. Vancouver Sun, March 17, 1982.

Victoria withholds gas project details

Vancouver Sun - September 16, 1981

By DON WHITELEY
Sun Business Writer

The provincial government announced Tuesday it has letters of intent for 15 major natural gas fed industrial projects in B.C., but released no details of the projects.

The government said it had 13 letters of intent covering 15 projects. Of the 15, three are LNG plants, three involve pipeline gas sales, and nine are petrochemical projects.

Among the companies listed were Aquitaine, Dome Petroleum, Canadian Occidental, Westcoast Transmission, Mitsubishi Corp., Carter Oil and Gas, Noranda Gas Industries, Sumitomo Corp., Marubeni, Ocelot Industries, Petro-Canada, Mitsui, B.C. Resources, Chieftain Development, Union Oil (California), Norcen Energy Resources, and C. Itoh.

A press statement put out by the ministry of Energy, Mines, and Petroleum Resources, provides no information on the following points:

- Which companies are involved in which projects.

- How much natural gas is needed by each project, and how much capital investment each project represents.

- Where the specific projects will be located, and what specific products each will produce.

Requests for additional information were turned down with the argument that because all these projects are just at the letter of intent stage, there is no need to release details.

"You'll have to get any additional information from the companies," a spokesman in the communications branch said.

Pat Hrushowy, outgoing communications director for the energy ministry, said some companies had asked that their names not be revealed at this time. There are, therefore, companies with projects the provincial government is not mentioning.

The press release did say that the total capital investments for all the projects is about \$12 billion, and the total gas requirement is 750 billion cubic feet a year (more than Canada

exported to the U.S. last year).

Tuesday was the deadline for anyone interested in building a gas-fired project in the province to let the provincial government know of its intentions. Detailed proposals must be filed by Dec. 1, after that the cabinet will decide which projects should proceed. There will be no public hearing into the project selection.

Several companies have already released specific details of their projects, among them:

Carter Oil and Gas: A combined LNG-petrochemical project in the Prince Rupert area. Noranda is participating in studies, and Canadian Hunter has farmed out some exploration rights for \$500 million to find the gas to feed it.

Dome Petroleum: An LNG plant at Grassy Point near Port Simpson, and a propane-butane extraction plant in the Interior. Canadian Occidental is a partner in the LNG plant and Westcoast Transmission is a partner in the liquids plant.

Petro-Canada: An LNG plant, in partnership with Westcoast, to be built

in the Kitimat area or near Prince Rupert. It is also involved in a proposal for a fertilizer plant on the coast.

Westcoast Transmission: Leader of a four-company consortium (including B.C. Resources, Union Oil, and Chieftain Developments) proposing a fertilizer plant either on Vancouver Island or at Powell River.

Ocelot Industries: Proposing a fertilizer plant at Kitimat, adjacent to a methanol plant already under construction.

Norcen Energy Resources: Proposing a combination LNG and petrochemical plant in the Prince Rupert area. Japanese trading company C. Itoh is a partner.

Aquitaine Canada Ltd.: Hopes to build a combination fertilizer and petrochemical plant in the B.C. Interior.

Any further details about other proposals will likely have to wait for the individual companies to decide they are ready to tell the public what they want to do.

\$12 billion ready for gas projects

Province
September 16, 1981

By SHANE McCUNE

Following a two-week extension to allow last-minute entries, the race for rights to develop B.C.'s gas surplus has been narrowed to a baker's dozen.

As Tuesday's deadline for gas development proposals expired, B.C. Energy Minister Bob McClelland said his ministry has received 13 letters of intent for liquefied natural gas exports, petrochemical and methanol plants.

The letters cover 15 proposed projects of which three deal with LNG projects, three with pipeline sales and nine with petrochemical projects.

The total gas requirements of the projects under construction would be 750 billion cubic feet (bcf) annually.

Total capital investment involved for the projects outlined would exceed \$12 billion.

Aquitaine Co. of Canada Ltd., Dome Petroleum Ltd., Canadian Occidental Petroleum Ltd., Westcoast Transmission Co. Ltd., Mitsubishi Chemical Industries Ltd., Carter Oil and Gas, Noranda Gas Industries, Sumitomo Corp., Marubeni Corp., Ocelot Industries

Ltd., Petro-Canada, Mitsui and Co. Ltd., B.C. Resources Ltd., and C. Itoh and Co. Ltd. are among the interested companies and consortia.

The three contenders for LNG projects — of which only one is likely to be approved and built at a cost of more than \$3 billion — are:

- Carter Oil and Gas, in association with Noranda, the Japanese companies Sumitomo and Marubeni, and a Korean partner, Daewoo Industrial.

- Rim Gas Project, headed by Petro-Canada and Westcoast in partnership with Mitsui.

- Dome Petroleum, in partnership with ~~Mitsubishi~~ *Nissho-Iwai Corp.*

Absent from the list was Norcen Energy Resources Ltd. of Toronto, which had earlier indicated its intention to compete for the LNG project.

Norcen's bid had lain fallow for months, however, and the company never announced Japanese trading partners or even a preliminary site selection.

Norcen officials were not available for comment Tuesday.

Due to failing U.S. markets, sales of surplus B.C. gas over the

last two years have dwindled mightily. But now it looks as though there won't be enough to go around.

The 750-bcf combined demand of the projects — not including present domestic and U.S. export demand — compares with a total B.C. gas production of 1,028-bcf for domestic and export use in 1980.

Total provincial reserves are estimated by the B.C. Petroleum Corp. at slightly more than 10 trillion cubic feet.

In order to validate the major projects to be tapped from provincial 'surplus gas,' and before final gas export details and licenses would be certified by the National Energy Board, government was first obligated to wait upon the B.C. Utilities Commission (BCUC) to conduct an inquiry on how much surplus gas the province had and how much more might be required. Stating that the BCUC "is too busy,"³⁹¹ therefore preventing it "from holding the hearings as planned,"³⁹² Cabinet instead bypassed the BCUC and appointed Dr. George Govier through an executive decision on November 30, 1981, to head a special one-man commission under the provincial Inquiry Act, the *Inquiry on British Columbia's Requirements, Supply, and Surplus of Natural Gas and Natural Gas Liquids*.

It was unusual for B.C. Cabinet to bypass BCUC's responsibilities by setting up the Govier Commission under the separate authority of a legal provincial inquiry. Given the early international momentum stage of privatization and deregulation mechanics taking shape at that time under the functionary heads of State British Prime Minister Margaret Thatcher and U.S. President Ronald Reagan, and the concurrent spirit of embrace of that tentacled momentum by the Social Credit Party inner ring,³⁹³ there are grounds to speculate that there were likely hidden objectives behind Cabinet's decision for the Commission. This likelihood becomes apparent with the government's subsequent internal contract with Govier on August 2, 1982, and follow-up public announcement in September 1982 for Govier to chair a small in-house study group. In its February 1983 *Report on the Marketing of British Columbia Natural Gas*, the four-man Govier group would recommend deregulation of natural gas marketing policies and a new royalty scheme for the collective benefit of private industry, all necessary steps for Social Credit Cabinet's eventual dismantling of the B.C. Petroleum Corporation and the sale of B.C. Hydro's gas division. The February 1983 Govier study group report, which government controversially withheld from the public for seven long months until its release in September 1983, was later referred to by one of its study group members, Mark M. Moseley, as a "seminal document with respect to natural gas deregulation in British Columbia."³⁹⁴

Consultant will study B.C. natural-gas reserves

ENERGY MINISTER R. H. McClelland has bypassed the B.C. Utilities Commission in favor of a private consultant for an inquiry into the province's natural-gas reserves.

George W. Govier of Calgary, energy resources consultant to Royal Bank of Canada, will conduct the inquiry, which opens Jan. 26 in Vancouver.

Last week, the B.C. Energy ministry received detailed proposals for 11 projects (Western Business, Sept. 26), with combined requirements for 830 billion cubic feet (bcf) of natural gas annually — most of which would be exported to Japan. Current estimate of the province's annual surplus is 75 bcf.

— Jack Danylichuk, Victoria

National Post, December 12, 1981

TEXACO DIRECTOR

Calgary Herald, October 3, 1979



DR. GEORGE W. GOVIER

The appointment of Dr. Govier as a Director of the corporation is announced by the Board of Directors of Texaco Canada Inc.

Dr. Govier served for two years as Chief Deputy Minister of the Department of Energy and Natural Resources of the Province of Alberta and is a former Chairman of the Alberta Energy Resources Conservation Board. He is President of Govier Consulting Services Ltd., Calgary.

³⁹¹ McClelland sets up gas export inquiry, The Province, December 2, 1981.

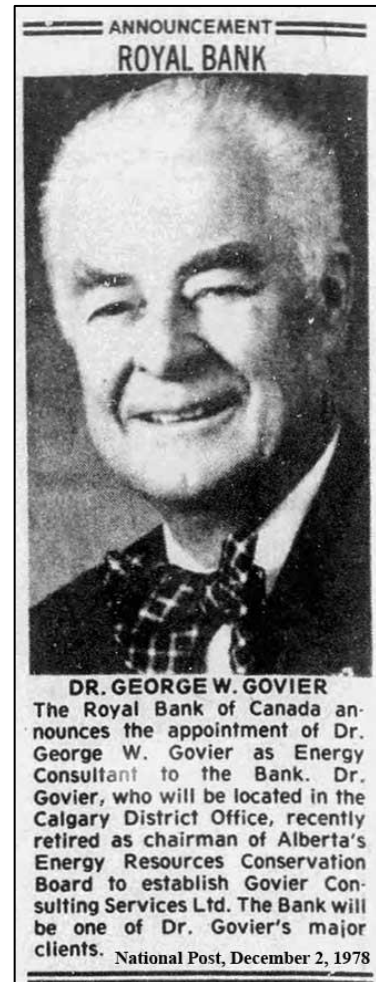
³⁹² Energy consultant to study gas reserves, Vancouver Sun, December 2, 1981.

³⁹³ I.e., in 1980, the Fraser Institute, a Canadian think-tank created in 1974 and which obtained U.S. status in 1978, published "Privatization: Theory and Practice," by Ted Ohashi. In 1981, Canadian economist Verne Atrill "completed a study for the federal government called *Privatization is the Way Out* and said he favors moves by the former Progressive Conservative government in Ottawa and the existing British Columbia government, who both espoused a return of government-held assets either to the private sector or to individual citizens." (Source, *Huge debts by Canada, U.S. enough to turn off bankers*, in Nanaimo Daily News, December 3, 1981.). In February 1982, when Atrill toured Canada promoting his new book, *The Freedom Manifesto*, in a Vancouver speech he wanted "governments to engage in a massive sale of assets and "privatization" of services on a scale undreamed of by the most conservative." Source: *Verne's inflation cure would force Ottawa to stop 'stealing assets'*, The Province, March 1, 1982.

³⁹⁴ *Natural Gas Deregulation in British Columbia: A 1987 Perspective*, Alberta Law Review, Vol. XXVI, No. 1.

Govier's Background

Dr. George Govier, a chemical engineer and former professor of chemical engineering at the University of Alberta (1940-1963), had served with the Energy Resources Conservation Board (ERCB), * Alberta's energy regulator, for 30 years (1948 – 1978), 16 years of which he served as its chairman (1962 – October 1978). He took leave for two years during his position as ERCB chairman to serve as Alberta's Chief Deputy Minister of Energy and Natural Resources (1975-1977). In 1976, Govier received the Order of Canada. In 1975, Govier became chairman of the World Petroleum Congress' Scientific Program Committee. As Govier retired from the ERCB in late 1978, and as Oilweek Magazine celebrated him as its 1978 "Oil Man of the Year," Govier established his own private energy resource consultancy business – Govier Consulting Services Ltd. – with an office on the 24th floor of the Royal Bank building in Calgary. In December 1978, the Royal Bank coincidentally appointed Govier as its energy resource (oil and gas) consultant. He was soon appointed as director of Texaco Canada Inc. (October 1979), as a director of Bow Valley Resource Services Ltd. (February 1981), and a director of Canadian Foremost Ltd. In January 1979, Govier became vice-president of the Coal Mining Research Centre, involved in upgrading western coal mining. In February 1979, Petro-Canada Ltd., the federal crown corporation, hired Govier for advisement on its national research program, programs which included the development of Alberta's tar sands and an LNG export proposal in the Arctic. In 1981, Petro-Canada's petroleum wells in northeast B.C. accounted for 43% of natural gas production. In March 1980, Govier became an associate in the Foster Research Partnership, "a partnership of Canadian consultants" serving "both industry and government in the fields of supply/demand price analysis, project feasibility assessment, economic impact evaluation, industrial analysis, business valuations, planning and regulatory economics." ** By 1985, some three years after his role as one-man commissioner in B.C., and his appointment in August 1982 to chair a Study Group on the Marketing of British Columbia Natural Gas, Govier became chairman of The Canadian Major Projects Association, an "exclusive new club, which is quietly bringing together corporate and government elites," setting up "jobs by the thousands and investments on an astronomical scale as its targets." The new Association "was born after a private meeting last year with leaders of a similar British group in the Toronto boardroom of the Royal Bank," "a select group of about 40 planners," "deputy ministers from both the federal and provincial governments," **** and "top executives of leading oil companies, chartered banks, utility and power companies, and insurance and investment firms." *****



* On June 1, 1971, the Alberta government extended the function of the Oil and Gas Conservation Board by launching the new Energy Resources Conservation Board. This occurred when government introduced the *Energy Resources Conservation Act*, a new Ministry of Environment, and amendments to other energy legislation and regulations.

** Announcement in the Calgary Herald, March 3, 1980.

*** *New business 'club' ready to flex muscles*, Calgary Herald, May 14, 1985.

**** *Large-scale energy projects seen possible*, Calgary Herald, April 13, 1985.

***** *New business 'club' ready to flex muscles*, Calgary Herald, May 14, 1985.



National Post, October 1, 1983

Comment/by Dominic Watson

DOMINIC WATSON is a Vancouver economic consultant.

Gas industry needs bigger shot in the arm than this

VANCOUVER

THE RECENTLY released study by George Govier on marketing British Columbia's natural gas sends some welcome signals. It shows the province is willing to take steps to reduce the role of government in the economy in ways more meaningful than the controversial changes to human rights and other social legislation. But more policy refinements are necessary to enable the energy companies to realize their full potential.

As had been expected, the major initiatives put forward involve replacing the existing system for marketing and taxing natural gas production with something that closely resembles the system in Alberta.

That is:

- Instituting an explicit royalty system to replace the British Columbia Petroleum Corp. as the main revenue collector
- Tying the wholesale price of natural gas to the price of crude oil
- Allowing producers to sell gas directly to customers, bypassing the utilities
- Introducing an "export flowback" mechanism, whereby earnings from exports of B.C. gas are rebated to producers.

Three Calgarians honored

Calgary Herald
December 24, 1982

(Herald staff-CP)

George Govier, former chairman of Alberta's Energy Resources Conservation Board, has been named an officer of the Order of Canada.

Two other Calgarians, artist Illingworth Kerr and petroleum specialist George Furnival, will be appointed members of the Order of Canada, Governor General Edward Schreyer announced today in Ottawa.

The three are among 63 Canadians named to the order, including author-playwright Morley Callaghan, Canada's ambassador to the U.S. Allan Gotlieb and singer Bruce Cockburn.

Govier, who was appointed a member of the order in 1976, served as chairman of Alberta's energy board from 1962 to 1978. He also served as chief deputy minister of energy and natural resources in the provincial government.

Born in Nanton, Govier graduated from the University of Michigan with a doctorate in science in 1949. Later, he was appointed dean of the faculty of engineering at the University of Alberta.

He is currently a fellow of the Engineering Institute of Canada, vice-president and director of the Petroleum Recovery Research Institute and the chairman of the board and chief executive officer of Alberta Helium Ltd.



Dr. George Govier

Socreds fear release of far-reaching report on natural gas policies

By DON WHITELEY
Sun Energy Reporter

ANALYSIS

The recommendation that the provincial government get out of the natural gas marketing business and turn it over to private enterprise is one of several points contained in the still-secret Govier report on the B.C. gas industry.

Chevron Canada president Gerry Henderson did little more than reiterate that suggestion last week when the Canadian Petroleum Association's B.C. division held its annual meeting. Henderson is the new chairman of the B.C. division.

But when Opposition leader Dave Barrett later said such a move would be accomplished "over my dead body," he virtually guaranteed that the report, prepared by Alberta energy expert Dr. George Govier, will remain secret until after an election.

Govier's recommendations are so far-reaching, according to both industry and government sources, that the government is scared to death about the impact of public release.

Barrett's sabre-rattling will convince the Socreds that making the report public now will simply provide the NDP with a campaign issue.

Govier, the former chairman of Alberta's Energy Resources Conservation Board, concluded, the sources say, that B.C.'s gas pricing and marketing system needs a major overhaul.

Under the current arrangement, the B.C. Petroleum Corp. buys the gas for a set price from the producers. It then sells it to both domestic and export customers.

In good times, that means the bulk of the "profit" from gas sales flows directly to the government through BCPC. In bad times, and that's what we're having now, it means all the loss is borne by the government.

As well, the current system puts all the marketing pressure on the petroleum corporation and West-coast Transmission Ltd., the company that operates the pipeline that moves all B.C.'s gas.

Govier recommends B.C. adopt a royalty system for gas pricing. That way, the industry produces and markets the gas, and the government collects its revenues through a royalty, or a set percentage of the price.

A royalty system would mean the government has to share a bit more of the profit in the good times so it can spread more of the losses in the bad times.

Marketing, Govier has recommended, should be left to producers. Let them line up their own sales and, if they choose, accept a discount (costing the government nothing) to move their gas.

If the recommendations are accepted, it could mean the end of BCPC. All the corporation really does now is collect money for the government, and if that role is removed there isn't anything else to do.

Neither Govier nor Energy Minister Brian Smith were available for comment Monday.

Vancouver Sun - March 29, 1983

Major study

National Post, October 1, 1983

Releasing a major study of the B.C. gas industry, headed by Calgary consultant George W. Govier, British Columbia Energy Minister Stephen Rogers said he was offering the industry a new deal. The government has accepted almost all the report's recommendations and will move quickly to implement them.

Private producers will now be allowed to sell gas directly to eligible buyers without going through B.C. Petroleum Corp. This applies only to future-contracted gas and will eliminate BCPC's monopoly on purchase and sale of natural gas.

This all fits into a connect-the-dots chronology of events revealed, for instance, in the January 26, 1982, Vancouver Sun provocative news article, *To the Pawnshop in Tough Times*, on the provincial government's controversial plans to sell off B.C. Hydro's natural gas division. The article was coincidentally published by reporter Marjorie Nichols on the very first day of the Govier Commission hearings which were all convened at Vancouver City's Century Plaza Hotel from January 26 to March 12, 1982, each Tuesday to Friday.

The urbane Ed Phillips, chairman of Westcoast Transmission, confirms that during a meeting a few days ago with Energy Minister Bob McClelland the issue of the sale of Hydro's gas division was discussed.

A highly placed business source says that the most likely buyer of Hydro's gas division assets would be Inland Natural Gas, which is now the province's largest private utility. He says that even though such a purchase would be "like a mouse swallowing an elephant" he is confident that Inland could raise the money.

The businessman obviously believes that gas users would be best served if Hydro gas business were returned to private hands, but that decision won't be unanimous by a long shot.³⁹⁵

In Marjorie Nichols' follow-up article on January 27th, *A Showdown on Hydro's Future*:

In the speech from the throne that opened the new session of the legislature last fall, there was a curious line that was never adequately explained by the government. It talked about "privatizing" certain government operations in the near future.

A highly placed energy department official told me last night that it is Hydro's own legal department that has prepared the legislation to affect the separation of the corporation's electric and gas operations. ... One potential buyer that has been mentioned is Inland Natural Gas, which first approached the provincial government eight years ago with a proposal to buy Hydro's gas operations.³⁹⁶

Davis advice: Sell, sell, sell

By Jim Hume

Social Credit backbencher Jack Davis told the government Tuesday how to avoid a deficit this year.

- Sell the government air fleet;
- Sell Crown rights to Hat Creek coal;
- Sell B.C. Hydro's natural gas operations to private enterprise.

Times Colonist - October 6, 1982

'Privatization' word adds air of mystery

Times Colonist - November 24, 1981

The mystery word in Monday's Throne Speech was "privatization" and government officials showed no inclination to clear up the mystery.

It was tucked in a section of the speech dealing with economic management and what the government intended to do to improve the situation.

"Inflation and high interest rates have affected my government's budget as they have the budgets of our people," Lieutenant-Governor Henry Bell-Irving read. "Recently announced federal cut-backs for health and educational programs will only worsen the situation.

Prudent fiscal management, privatization of select government activities, wage restraints and greater efficiencies are required and will form the central underpinning of the budgetary measures you will be asked to approve."

The "privatization of select government activities" could mean anything from the return of some government owned business like bus lines to the private sector to the contracting out of government work to hold staff hirings down.

As of late Monday it was a word game anyone could play.

³⁹⁵ *To the pawnshop in tough times*, by Marjorie Nichols, Vancouver Sun, January 26, 1982.

³⁹⁶ *A showdown on Hydro's future*, by Marjorie Nichols, Vancouver Sun, January 27, 1982.

It would take some five long years of Social Credit Party Cabinet politicking, eventually endorsed through future Energy Minister Jack Davis, before Inland Natural Gas president Robert Kadlec would take home his new, and long-awaited, prize.

The outcome of the \$850,000 government funded Govier Commission of Inquiry was a 400-page technical report published by the Queens printer in May 1982. It was a straight-forward, lengthy review of natural gas marketing mechanics in B.C.: maps, colored charts, facts and figures, statistics on exploration, production, reserves, operational domestic (residential, commercial) and export transmission use, projections on annual growth rates, market prices, taxes, and controlling forces. The information was digested from testimonies and documents from five ministry consultants, B.C. Hydro, the B.C. Association of Professional Engineers, the B.C. Council of Forest Industries, the Solar Energy Society of Canada, lawyer Andrew Thompson, and the major players, the 22 petroleum corporations / companies.³⁹⁷

Even though there was no other comparable report on this topic published previously by the provincial government, the findings of the Commission were predictable because they more-or-less matched the Energy Ministry's existing data. Hence, it merely confirmed there was not enough 'surplus gas' to feed the frenzy of major project proposals submitted by industry for government's deadline at the end of 1981, with barely enough surplus for even one "LNG facility without supplemental supplies."³⁹⁸ For instance, Dome Petroleum's LNG project would require "450 million cubic feet of gas per day – about equal to B.C.'s current consumptions."³⁹⁹

Govier made economic projections that favored the interests of the petroleum sector.

In the absence of an adequately favourable economic environment for industry, the Commissioner forecasts that the level of drilling activity in British Columbia will be in the order of 100 wells per year. Under favourable conditions, as anticipated, **the Commissioner forecasts that drilling activity will be in the 300 to 500 wells per year range.**⁴⁰⁰

In his May 1982 report, Govier recommended that if government endorsed a dramatic expansion of exploration drilling, say in the order of 300 to 500 wells a year, alongside contributions of Alberta's surplus gas reserves, there would eventually be sufficient "surplus of marketable natural gas" to warrant

Three big words

Vancouver Sun - June 26, 1982

There was sobering news for the provincial government in the report it commissioned from energy specialist George Govier on the state of British Columbia's natural gas reserves.

Only a few months ago the government was still gung-ho about the future of natural gas. Energy Minister Robert McClelland was flying high, soliciting applications from industry for all kinds liquefied natural gas plants, fertilizer plants and petrochemical plants to make profitable use of the gas surplus to the province's needs.

But Mr. McClelland had to come down to earth in a hurry after reading Mr. Govier's report. Forget about any LNG plants using B.C. gas at least until the 1990s: at best, the province will have only a modest surplus — sufficient, according to Mr. McClelland, to support a small petro-

chemical industry and one fertilizer plant.

The problem is not a lack of gas underground: Mr. Govier says it is there in abundance, with an ultimate potential of more than 30 trillion cubic feet — enough to supply domestic needs far into the future. Rather, the problem is in drilling for it.

The key to finding and developing a surplus, it seems, is in three big words — "favorable economic conditions." Without them, says Mr. Govier, the province could actually run short of gas.

Mr. McClelland says the government "will strive to achieve" the favorable conditions, but there is not a great deal it can do. Until there is a general improvement in the global economic climate, it sounds as if Mr. McClelland would be unwise for the next year or so to count on having enough spare gas even to feed that fertilizer plant.

³⁹⁷ Summarized in the Govier report, Appendix 1-E, "participants and representatives."

³⁹⁸ *Natural Gas Allocation Process, Technical Analysis*, Staff Paper, Province of BC, October 1982, page 17.

³⁹⁹ *More B.C. gas considered for LNG plant*, Vancouver Sun, March 4, 1983.

⁴⁰⁰ *Commissioner Inquiry on British Columbia's Requirements, Supply and Natural Gas and Natural Gas Liquids, Technical Report*, recommendation and finding #7, page 8.

international export. And by way of a separate government working committee opinion, “without new firm marketing opportunities such as offered by the LNG project, it was unlikely that the [300-500 wells] target exploration activity would take place.”⁴⁰¹ More drilling, more pipelines, more facilities, more investments, more jobs, more gas!

As a former and long-experienced chair of Alberta’s energy regulator (ERBC), surplus gas Commissioner Govier well-understood that increased oil and gas drilling operations would, in turn, increase environmental degradations and increase existing land use conflicts on agricultural and first nation lands within the vast boundaries of Peace River and Fort Nelson Regional Districts.⁴⁰² The long-term social and cumulative environmental costs were not accounting objectives the government should have mandated for consideration in the Govier Commission’s Terms of Reference.

Japanese win nod for Dome

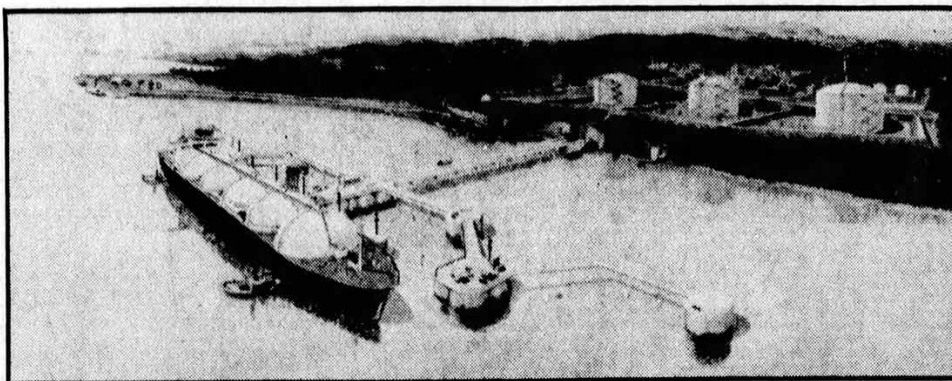
By SHANE McCUNE

Dome Petroleum Ltd. of Calgary will build a \$1.7-billion liquefied natural gas facility somewhere on B.C.’s north coast, Energy Minister Bob McClelland announced Thursday.

The project must obtain approval from the National Energy Board before construction can begin next year.

At least one of the two losers in the bid for provincial approval to operate an LNG plant plans to fight Dome’s application when it comes before the NEB.

Contrary to a report published in *The Province* Wednesday, Dome’s proposal was selected over one proposed by a consortium headed by Petro-Canada and Westcoast Transmission Co. Ltd.



Artist’s drawing shows proposed liquefied natural gas plant to be built on the B.C. coast by Dome Petroleum consortium.

After the release of the late May 1982 Govier surplus gas Inquiry report, government had to decide which of the three LNG project proponents would wear the LNG crown. On July 15, 1982, Energy Minister Bob McClelland gave the nod to Dome Petroleum’s \$4 billion Western LNG Project that would market 3 trillion cubic feet of gas – a decision given despite public knowledge the “nearly bankrupt oil and gas behemoth”⁴⁰³ was in debt to the tune of \$8 billion.

The B.C. government is so excited that it may declare a new provincial holiday in honor of natural gas. Under the package announced by Mr. McClelland, the B.C. treasury stands to take in an extra \$8 billion over the next 20 years. ... Even filthy rich Alberta has to be pleased. Seventy-five per cent of the total three trillion cubic feet will come out of the ground in Alberta. That means jobs and money for the down-at-the-heels Alberta oil patch.⁴⁰⁴

⁴⁰¹ *Natural Gas Allocation Process, Technical Analysis*, Staff Paper, Province of BC, October 1982, page 39.

⁴⁰² An account of these conflicts is featured in The Fifth Wave chapter of this report, summarized by Margaret Ormston’s farm property evacuation from northeast BC in 1988.

⁴⁰³ *McClelland’s choice of Dome: how sweet it is – for some*, Vancouver Sun, July 16, 1982.

⁴⁰⁴ *McClelland’s choice of Dome: how sweet it is – for some*, Vancouver Sun, July 16, 1982.

[Dome president Bill] Richards said that Dome's financial problems have been "a little bit overblown and exaggerated" by the media. The LNG project will have little impact on Dome's financial position, he added.⁴⁰⁵

"We tried to divorce ourselves in some way from Dome's present financial situation and look at this project as a stand-alone project," McLelland said.⁴⁰⁶

McLelland said the LNG project will earn B.C. more than \$400 million a year.

Richards added that the total sales from the project over 20 years will be "something in the order of \$100 billion" and equal to twice the value of all of Canada's coal exports to Japan.⁴⁰⁷

The British Columbia government, which had been lobbied relentlessly for many months, officially endorsed Dome's multi-billion-dollar gas scheme in July 1982, at which moment Dome would have had difficulty in financing, from its own pocket, the purchase of a Coleman lamp stove!⁴⁰⁸

"What we need to do is find new markets."⁴⁰⁹

Vancouver Sun
March 17, 1982
JOHN FAUSTMANN
... a Vancouver writer.

A determined Dome . . .

. . . pushes toward an LNG site in B.C., untroubled by the hazards involved

LAST JULY, in what was either a bankruptcy sale or a clever marketing ploy, the B.C. energy ministry placed ads in newspapers around the world inviting the petrochemical industry to make use of B.C. natural gas. This super, natural B.C. gas campaign paid off, attracting 15 offers to build everything here from small fertilizer factories to huge liquified natural gas export terminals.

Soon after, the energy ministry set up the Govier Commission Inquiry into B.C. natural gas, charging it to ask two basic questions: How much gas is there and what should be done with it?

Although hearings have begun and the commission's findings are due in the spring, answers to those questions are already foregone conclusions: B.C. has a lot of natural gas. The best thing to do is sell it.

Nothing new or startling there. The province has been extracting and selling natural gas to the U.S. since the 1950s. In 1979, B.C. produced 318 billion cubic feet of gas, kept 49 per cent for domestic use, sold the rest south of the border, and earned a tidy \$380 million in government revenues.

But with recent federal price hikes and a failing U.S. export market, the province and the petroleum industry have been left out-of-pocket. In the past year these two groups have been tripping over each other to declare the unsold gas a surplus. Choosing Dr. G. W. Govier to head the commission will likely prove helpful in this, considering his previous post as chairman of the Alberta Energy Resources Conservation Board, a rubber stamp outfit that has yet to refuse a major petroleum development project.

Still, it now appears to be a race to declare the gas as surplus before it is actually sold.

With some sort of deal inevitable, and with promises from Energy Minister Bob McClelland for a "streamlined review process" for industry projects, concern over B.C.'s emergent petrochemical industry is hardly premature. There are some 26,000 known uses for natural gas and by the end of 1982 B.C. will likely be locked economically and environmentally.

LNG accident is roughly equivalent to our understanding of the hazards of nuclear reactors 25 years ago."

Apparently untroubled by such hazards, the provincial government, PetroCan, Carter Energy Ltd., and Dome Petroleum have been selecting LNG export terminal sites along the B.C. coast.

Yet none of these sites could be used for LNG facilities in the United States, where public protest has made LNG siting an important political issue. After 20 years of experience with liquified natural gas — including two explosions that killed hundreds of people — the Americans have rightly concluded that LNG is safe, at a distance. Accordingly, tough state and federal laws have been enacted to buffer the public from LNG's dangers.

Those dangers cannot be overstated. LNG is produced by chilling and condensing natural gas using cryogenic (extreme cold) technology. Once chilled to minus 160 degrees the gas becomes liquid, shrinking to a six-hundredth of its original volume and facilitating its storage in specially designed tanks and ships.

Accidentally spilled LNG presents a truly insidious threat. At its low temperature it freezes human tissue and can crack rocks. In an escape from a land-based tank, LNG forms a deadly white vapor cloud that moves with prevailing winds, hugging the ground. Replacing the oxygen in the air, it asphyxiates anyone in contact with it. Mixed with the right amount of air it becomes flammable, exploding at the first spark it meets and burning back to the source.

Water-based spills are more unpredictable, since water temperature causes a heat exchange that brings LNG to its boiling point.

Recognizing LNG's holocaust potential, the U.S. department of transport established federal safety standards for the LNG industry in February 1980. Eight costly sections were included in the final ruling.

square mile within one mile of an LNG site or vessel route, and no more than 60 people per square mile within four miles of a site.

In 1978, when Washington state was considering LNG facilities (a proposal that generated a wave of anti-LNG petitions), the state Oceanographic Commission produced a report for the legislature. Noting that "there is a large disagreement among risk analysts and researchers as to the maximum travel distance of flammable [LNG] vapor clouds," the report nevertheless concluded that LNG could be managed safely.

One of the commission's major recommendations, however, was that any LNG site should have a vapor dispersion buffer zone three to seven miles from any population centre.

In direct contrast to such protection, Canada has no LNG siting laws. Thus, PetroCan's plant near Kitimat, Carter Energy's plant near Prince Rupert, and Dome Petroleum's plant near the Port Simpson Indian reserve could be built right next to those towns.

Because they would be exporting gas, all three companies would have to sit through National Energy Board hearings. As well, PetroCan and Carter, because they would use B.C. natural gas, would likely have to go through B.C. Utilities Commission hearings.

But although Dome is presently testifying before the Govier Commission, most of the gas for its project will probably come from Alberta. In short, Dome could build an LNG plant on the B.C. coast without having to go through B.C. public hearings.

Despite the fact it is the least accountable, the Dome Grassy Point site (2.5 kilometres across the bay from Port Simpson), may have the leading edge toward final government approval. "Those Dome guys phone us all the time," said one coordinator at the provincial government's natural gas project analysis branch.

⁴⁰⁵ B.C. backs Dome bid to use gas, Vancouver Sun, July 15, 1982.

⁴⁰⁶ Japanese win nod for Dome, The Province, July 16, 1982.

⁴⁰⁷ Japanese 'role' in Dome project raises questions, Vancouver Sun, July 16, 1982.

⁴⁰⁸ Dome Petroleum: The Inside Story of its Rise and Fall, by Jim Lyon, 1983, page 210.

⁴⁰⁹ BC Energy Minister Bob McClelland quote in, B.C. raps natural gas excise tax, Calgary Herald, June 19, 1982.

Behemoth Dome's assets included a "three-quarters interest in Siebens Oil and Gas Ltd. for \$300 million plus; \$100 million to \$200 million in a 1979 venture for the Canadian assets of Mesa Petroleum Corporation; control of TransCanada Pipelines for \$244 million in 1979; all of Kaiser Resources Ltd.'s on-shore Canadian oil and gas properties for \$700 million in 1980; the Hudson's Bay Oil and gas deal in 1981; investments in Dome Canada [Dome's Canadian subsidiary]; Canadian Marine Drilling (for the company's Beaufort Sea operations); purchase of Davie Shipyards in Quebec and such other minor items as the company's interest in Alsands [the Alberta Tar Sands]." ⁴¹⁰

After the federal government and four big banks – Bank of Montreal, Toronto-Dominion, Royal Bank, and Canadian Imperial Bank of Commerce – bent over backwards in September 1982 to accommodate Dome with a temporary refinancing concession on its huge \$7.4 billion debt load, on February 22, 1983 Dome filed an application with the National Energy Board "for permission to build a \$2 billion natural gas liquefaction plant and export terminal near Prince Rupert" ⁴¹¹ a month after the NEB granted the seriously wounded company a conditional export permit. On May 2, 1983, the big banks granted Dome a fourth and final repayment extension for June 1, 1983, which was then extended again to July 1, 1983. On July 5 is when the National Energy Board began its public hearings into Dome Petroleum's LNG project.

All these severe financial bailout tribulations to keep Dome afloat unfolded as the Social Credit government prepared for a May 5, 1983, provincial election. The provincial election saw the return of Social Credit Party Premier Bill Bennett, and not too long afterwards Dome Petroleum's filing for bankruptcy – a vagary of capitalism. The Markets God was unkind!

Business

The Sun

SPORTS/6
CLASSIFIED/11

★★★★★ TUESDAY, JANUARY 28, 1986

C

\$2 billion LNG proposal shelved

The \$2 billion liquefied natural gas plant proposed for the northern B.C. coast has been shelved, Mobil Corp. said today.

In a statement released from New York, Mobil said negotiations between Western LNG Corp. and four Japanese utilities have been broken off.

Mobil and Petro-Canada are the lead companies in the Western LNG consortium.

The confirmation from Mobil came after the Japanese news agency, Kyodo, reported the collapse of the project.

Western LNG had been negotiating to sell 2.35 million tonnes a year for 20 years of liquefied natural gas to Japan.

The B.C. gas industry was to have supplied half the LNG plant's requirements, or about 70 billion cubic feet a year.

Alberta gas producers were to have supplied the other half.

Both provincial governments had issued energy removal certificates.

Canadian officials in Japan, who had been pressing for a successful conclusion to more than five years of difficult negotiations, could not be reached for comment on the report. But Kyodo said the decision to pull out of the deal had already been taken.

Mobil said irreconcilable differences over pricing and loan guarantees to the Canadian suppliers forced their decision.

Mobil spokesman Gary Steen said in an interview from New York that falling oil prices were the "final nail in the project's coffin."

The project, aimed at supplying Chubu Electric Power, Toho Gas, Chugoko Electric Power and Kyushu Electric Power with LNG, was first sponsored by Dome Petroleum more than five years ago. It has gone through a long series of ups and downs, many precipitated by Dome's own financial problems.

After Dome finally withdrew about two years ago, a short-lived consortium of Canadian oil companies, known as Canada LNG Corp., tried to take over the Canadian end of the deal and it, in turn, was replaced by the group led by Mobil and Petro-Canada.

Only a few months ago, during federal Energy Minister Pat Carney's visit to Japan, the two sides expressed optimism the project was finally going to be signed and construction of pipelines and a liquefaction plant near Prince

Rupert was expected to begin early this year.

But, according to the Kyodo report, the slackening of oil prices and a Canadian decision to ask for higher prices to ensure profitability of the project, forced the utilities to exercise their option to cancel the deal.

Oil prices have been sliding in recent weeks with spot prices slumping below the \$20 U.S. a barrel mark for the first time.

The Japanese said increased LNG imports from Indonesia would replace the lost Canadian LNG.

Japan also wrapped up a massive agreement to buy LNG from Australia earlier this month.

And the country is negotiating with the Soviet Union for future LNG supplies.

On October 31, 1985, the Brian Mulroney Conservative Party federal administration deregulated the export of natural gas, thereby completing the Western Accord, an agreement between the western provinces of British Columbia, Alberta and Saskatchewan and the federal government.

The basic agreement ... calls for Canada to move from government-administered prices to a market-oriented regime on both the domestic and export fronts during the next year.

⁴¹⁰ 'Smiling Jack' Gallagher Quits – Dome Pete loses founder, Vancouver Sun, February 23, 1983. Other assets not stated include Dome Mines Ltd. and Denison Mines Ltd.

⁴¹¹ Dome seeks go-ahead for Rupert gas project, The Province, February 23, 1983.

The key for B.C., however, was to get Alberta's agreement on connecting its Nova pipeline system with B.C. pipelines — thus opening eastern markets for B.C. gas.

"This is of prime importance to B.C.'s gas industry [Energy Minister Stephen] Rogers said in Vancouver. "The plumbing has always been in place in our northeast fields but the gate (to eastern markets) has never been opened before," he said.

Business

HYDRO
PLUGGED

Page 49

BEST COPY
AVAILABLE

The Province

Friday,
November 1, 1985

Page 47

Pact benefits B.C.

By BRIAN LEWIS
Business Reporter

B.C. came out a winner in yesterday's announced agreement between the federal government and producing provinces on natural gas pricing and deregulation.

That's because with the simple stroke of a pen the size of our export market increased dramatically and so did our competitive position.

For the first time ever B.C. will be able to market its gas in the eastern Canadian and U.S. markets and that, says energy minister Stephen Rogers, should enhance development of the province's large northeast gas fields over the long-term.

The basic agreement, reached after long and difficult negotiations only 48 hours before today's deadline, also calls for Canada to move from government-administered prices to a market-oriented regime on both the domestic and export fronts during the next year.

The key for B.C., however, was to get Alberta's agreement on connecting its Nova pipeline system with B.C. pipelines — thus opening eastern markets for B.C. gas.

"This is of prime importance to B.C.'s gas industry," Rogers said in Vancouver. "The plumbing has always been in place in our northeast fields but the gate (to eastern markets) has never been opened before," he said. Rogers added this takes on even more significance when you consider that B.C. has more unexplored natural gas fields than Alberta.

"Natural gas is this province's top revenue producer and brings in more than forestry or mining," he said. In the 1984 calendar year, energy ministry statistics show that total petroleum revenue to government was \$320.5 million of which more than half was from natural gas.

"This is certainly good news for producers because now they get a shot at the Atlantic seaboard market," said Bob Kadlec, president of inland Natural Gas Co. Ltd. "It increases the potential in the northeast such as the Elmsworth field tremendously," he added.

The producing provinces also become more competitive in the U.S. export market immediately since Canadian natural gas export prices will no longer be tied to the price paid in Toronto for Alberta gas.

Under the old system B.C., Alberta and Saskatchewan could not sell gas to the U.S.



Energy Minister Pat Carney defends gas pact in House of Commons debate.

CP photo

at a price below what Toronto paid. This was called the Toronto City Gate price — but it included costs of transporting the gas from the West to Ontario which amounted to as much as 25 per cent of the total price.

But under the new agreement export prices will now be linked to domestic wholesale prices where the exports take place. In other words export prices of B.C. gas to the U.S. will not be lower than the price B.C. consumers pay — but may be lower than the price paid in Toronto.

"This is really significant," said Mike Phelps, a Westcoast Transmission spokesman. "It will help us increase volumes in our pipeline." Until now Westcoast was running well under capacity on its pipelines.

While export deregulation is effective immediately, the new agreement also calls for deregulation of the entire pricing system by Nov. 1, 1986. After that any domestic or export contracts are strictly a matter between buyer and seller with no government interference. B.C., however, began moving towards deregulation more than a year ago.

"Gas prices are expected to stay at current levels for residential consumers in B.C.," Rogers also said. "As deregulation takes place lower prices become possible for all classes of customers."

The gas agreement completes the Western Accord signed between Ottawa and the three producing provinces last spring. The

initial pact covered oil deregulation.

Alberta Energy Minister John Zaozirny, haggard but smiling after two days of intense negotiations, praised the new gas deregulation agreement with the federal government.

Zaozirny said the deal "closes an important chapter in Alberta and Canadian energy history" and ensures the province's oil and gas industry will be an engine for growth.

The agreement is a positive step because it opens more market opportunities for Alberta gas, especially in the huge United States market, he told reporters in Calgary.

Producers, Zaozirny said, can finally compete in the export market "without their hands tied behind their backs."

TAKING STOCK

THE MARKETS, Pages 52-54 and 75

VSE	1234.05
↓	off 5.42

TSE	2674.84
↑	up 5.49

Dow Jones	1372.36
↓	off 3.21

U.K. pound	\$1.9747
↑	up 1.34¢

Canadian \$	73.13¢(U.S.)
↔	steady

Gold	\$324.00 (U.S.)
↓	off \$2.00

BCRIC	\$2.11
↓	off 7¢

"This is certainly good news for producers because now they get a shot at the Atlantic seaboard market," said Bob Kadlec, president of Inland Natural Gas Co. Ltd. "It increases the potential in the northeast such as the Elmsworth field tremendously," he added.⁴¹²

Manitoba Energy Minister Wilson Parasiuk said the agreement should be thrown out. It will not lead to deregulation, he said, but only replaces "a government-administered pricing system with one which is industry controlled."⁴¹³

A month following the finalization of the Western Accord agreement, Inland Natural Gas and Trans Mountain Pipe Line Co. Ltd. "entered into a joint venture oil and gas exploration program with Canadian Hunter Exploration Ltd.," to drill "for oil and gas in B.C., Alberta and Saskatchewan."⁴¹⁴ This marks the beginning of Inland Gas ceo Bob Kadlec's business relationship with Canadian Hunter, a subsidiary of Canadian giant corporation Noranda Mines, a partnership that would surface in three years time in the controversial consortium bid for petroleum exploration in the Fraser Valley when Island Natural Gas took on a different name.

If it's good for oil, it's good for all

Times Colonist - February 6, 1985

OTTAWA (CP) — The Canadian Petroleum Association says that what's good for the oil patch is good for the rest of the country.

The association wants the oil and gas industry deregulated. It told a Senate committee Tuesday that would give Canada its best opportunity to eventually achieve energy self-sufficiency.

The brief to the energy and natural resources committee, reviewing all aspects of the national energy program, said continued government regulation will only delay the industry's economic recovery and endanger the goal of self-sufficiency.

CPA president Arne Neilsen, who is also chairman of Canadian Superior Oil Ltd., said the basic

problem with current energy policies is that the total government take is too large.

The oil and gas industry has recovered well from the recent recession and could post record net revenues for 1984. But Neilsen said the industry needs an even greater cash flow, both to rekindle small investor confidence and to generate the funds needed to look for new oil reserves.

Among the association's chief demands are that taxes and royalties be reduced. The group is especially upset with the Petroleum Gas Revenue Tax. It wants the PGRT eliminated, although it has no specific recommendations on how the government could replace the billions of dollars the special levy adds to the federal treasury.

The demands are not self-serving in the eyes of the association.

Neilsen said the association sought regulatory and taxation changes "because they would be not just beneficial to us — if they were, we would have hesitated in asking for them. We believe they are beneficial to the whole country."

Ted Best, president of British Petroleum Explorations Canada, said the best security for oil supply is a vital and viable industry.

Deregulation would involve the reduction or elimination of government incentives for new exploration as well as taxation changes, but the association welcomes that prospect as well, claiming schemes such as the Petroleum Incentives Program should never have been implemented.

⁴¹² *Pact benefits B.C.*, The Province, November 1, 1985. Inland Natural Gas had just purchased petroleum drilling stakes in the Elmsworth gas field, a partnership agreement with Esso Resources.

⁴¹³ *Western grin greets gas pact*, Vancouver Sun, November 1, 1985.

⁴¹⁴ *Three to seek Western energy*, Vancouver Sun, December 11, 1985.



Ministry of
Energy, Mines and
Petroleum Resources

Technical Submission to the
Commission on Fraser Valley
Petroleum Exploration

August 27, 1990

5.1 Question:

Why does the B.C. Government not have a low price natural gas policy for domestic consumers?

Answer:

The October 31, 1985 Agreement on Natural Gas Markets and Prices, to which the Government of British Columbia was a signatory, recognized that "... a more flexible and market-oriented pricing regime was required for the domestic pricing of natural gas" (Clause 1). Since that time the Province has pursued a policy of deregulation toward that stated goal. The government adopted this policy to insure that the resource would be produced and consumed in the most efficient manner.

When a resource is valued at a price below its value as determined in the market place, a distorted signal is sent to both the producer and the consumer. The consumer sees a lower price and is thus encouraged to use more of the resource. The producer receives less for the resource and therefore produces less. This combination of discouraging conservation on the part of the consumer, while at the same time discouraging production, is wasteful and can result in supply shortages.

British Columbians consume approximately 60 % of the gas produced each year in the Province, with most of the remainder exported to the United States. The signing of the Free Trade Agreement (the Agreement) has helped to foster an atmosphere of fair and equitable trade relations between Canada and the United States. In particular, for natural gas, the Agreement has solidified our presence in United States export markets so vital to the health of British Columbia's natural gas industry. Institution of a two price system with a made-in-B.C. price would contravene the intention of the Agreement and jeopardize these essential markets.

The Province supports the use of natural gas, the cleanest of all fossil fuels, but recognizes that only by allowing the market place to function can the resource be utilized in the most beneficial manner.

4 – 3. Prelude to the Fifth Wave: Petroleum Exploration on Vancouver Island

*“To complete the record of geological or geophysical activity, I would like to mention that in 1986, B.P. Canada drilled two onshore wells in the north central portion of the Georgia [Sedimentary] Basin on Vancouver Island. These wells were drilled at locations just south of Nanaimo and reached total depths of 1,400 metres and 1,574 metres respectively. These wells were both abandoned after failing to encounter sufficient development of reservoir rock. Reservoir rock is one of the precursors to an oil and gas reservoir development, or at least commercial development.”*⁴¹⁵

MR. MacADAMS: *Were the ones on Vancouver Island designated as special by reason not of the probability or possibility of sour gas, but by reason of proximity of population?*

MR. JOHNSON: *That’s correct, yes.*

MR. MacADAMS: *What inspection program was set up on those wells on Vancouver Island? Was it a more intense inspection program than for the run-of-the-mill drilling program in the northeast?*

MR. JOHNSON: *Yes, it was. As a matter of fact, for the two wells at Vancouver Island, there was an inspector there from the day the operation started to the day it finished, and that was for both wells.*

MR. MacADAMS: *Was the coverage a twenty-four-hour coverage or was it eight hours with standby the rest of the time?*

MR. JOHNSON: *The inspector was housed close to the drilling sites. He was at the sites essentially twice a day. He was there in the morning and the afternoon, and he also had a telephone answering machine.*

MR. MacADAMS: *What level of inspection has the Ministry decided would be appropriate in the Fraser Valley if indeed the Ministry has turned attention?*

MR. JOHNSON: *If the wells are drilled, we have proposed that they could be inspected on a weekly basis.*⁴¹⁶

MR. MacADAMS: *Now, was that the procedure followed on Vancouver Island in the drilling of the two wells, or was there a more extensive or different form of public consultation?*

MR. JOHNSON: *The type of public consultation was ongoing before the emergency response plan came into place. And might I also add in the case of Vancouver Island there was not a planning zone as such. We were actually in the infancy of emergency response plans at that time.*⁴¹⁷

⁴¹⁵ *Proceedings of the Commission on Fraser Valley Petroleum Exploration*, Technical Hearings, Volume 1, August 27, 1990, page 97. Statement by John MacRae, Director of Petroleum Geology in the Petroleum Geology Branch of the BC Ministry of Energy, Mines and Petroleum Resources.

⁴¹⁶ *Proceedings of the Commission on Fraser Valley Petroleum Exploration*, Technical Hearings, Volume 2, August 28, 1990, page 301. Commission Counsel Doug MacAdams questioning Dave Johnson, Manager of Field Operations, Ft. St. John, BC Ministry of Energy, Mines and Petroleum Resources.

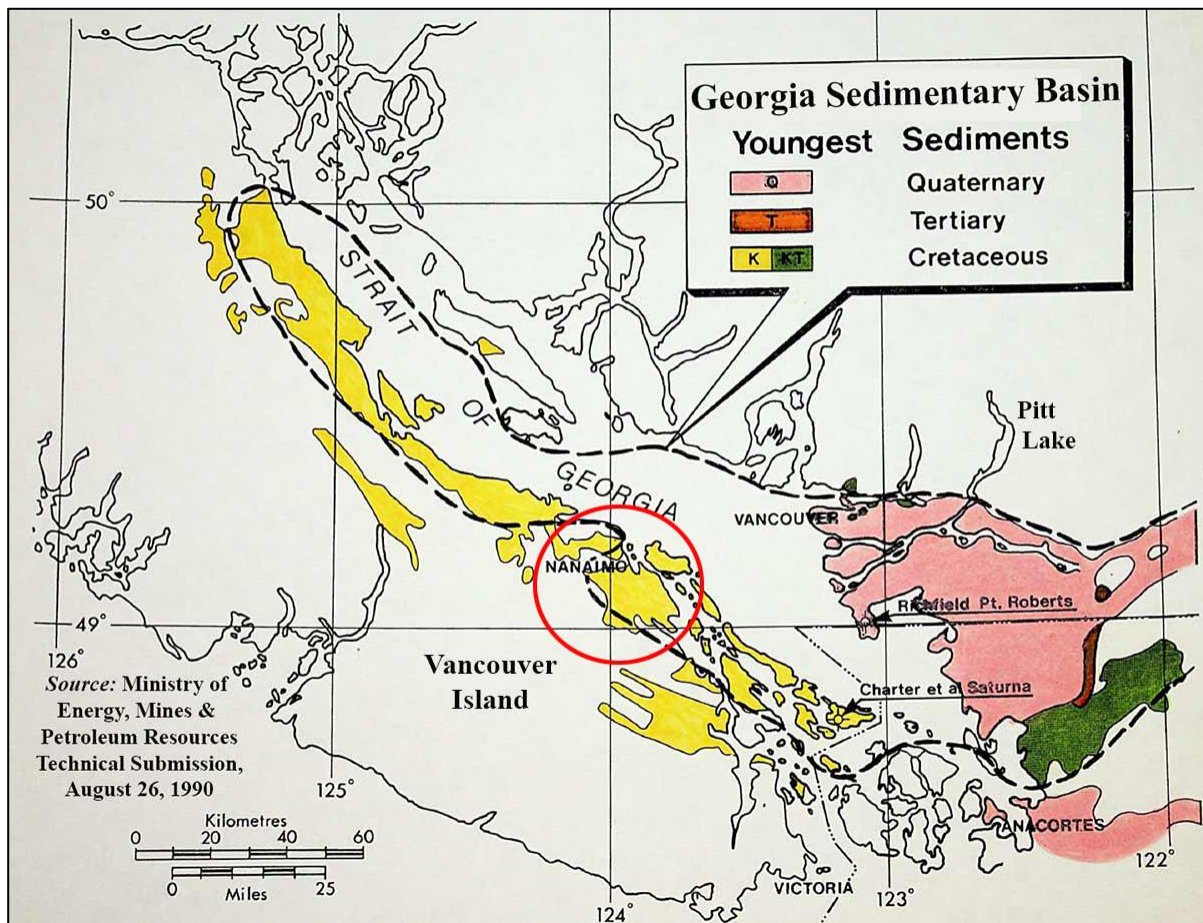
⁴¹⁷ *Proceedings of the Commission on Fraser Valley Petroleum Exploration*, Technical Hearings, Volume 2, August 28, 1990, page 307. Commission Counsel Doug MacAdams questioning Dave Johnson, Manager of Field Operations, Ft. St. John, BC Ministry of Energy, Mines and Petroleum Resources.

Shaken and Stirred

The Nanaimo Daily News reported on December 16, 1981, that the Great Western Petroleum Corporation was planning “to conduct seismic tests in a 7,104-hectare area, nine miles south of Nanaimo,”⁴¹⁸ in the community of Cassidy.

The Vancouver-based company is planning a half million-dollar seismic program which should last a few weeks in the summer. “We will be running a number of regional seismic lines from the northwest end of Ladysmith Harbor to an area extending north of Cassidy airport, in a diagonal direction,” [Great Western vice-president Jim Murray] said.⁴¹⁹

“The process is like a big hammer thumping on the ground and then recording the sound waves,” said Murray, adding that the tests won’t disturb property in any way.⁴²⁰



The president of Great Western was Angus MacDonald. Other Great Western management team members included former B.C. Ministry of Energy, Mines and Petroleum Resources geologist Nick Carter, former Home Oil Company exploration vice-president Robert Humphreys, and former Dome Petroleum exploration geologist Alan Bryant.⁴²¹

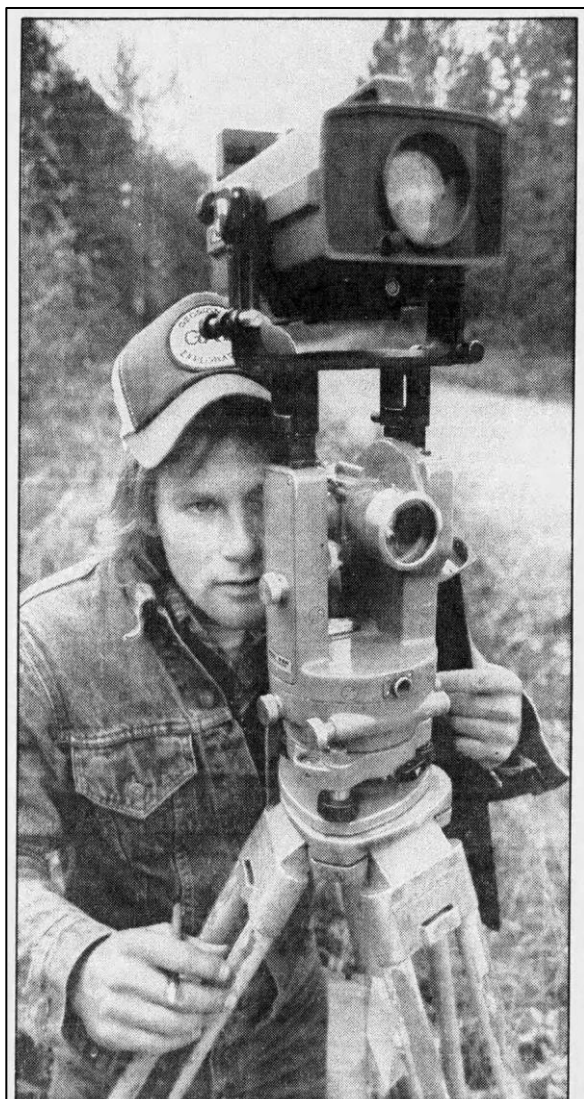
⁴¹⁸ Cassidy gas exploration: aiming for a bonanza, Nanaimo Daily News, December 16, 1981.

⁴¹⁹ Gas exploration for Cassidy, Ladysmith Chemainus Chronicle, December 30, 1981.

⁴²⁰ Gas exploration for Cassidy, Ladysmith Chemainus Chronicle, December 30, 1981.

⁴²¹ Odium Brown begins penny stock trade, Vancouver Sun, August 31, 1982.

Western's proposed \$500,000 - 1982 seismic program would be delayed for two years due to two reasons: the economic recession and low company cash flow. The program would begin in late May 1984 and was then extended into 1985, after British Petroleum,⁴²² under a partnership agreement with Great Western Petroleum, first hired Calgary-based Veri-Test Geophysical and then Calgary-based Petty Ray Geophysical to conduct the \$750,000 to \$1,000,000 seismic tests.



Vancouver Sun - Oct 24, 1984

—George Le Masurier photo

SEISMIC SURVEYOR Jerry Graham of Petty Ray Geophysical sets up instrument as search for natural gas continues near Courtenay. Seismic program is the first stage of oil and gas exploration, which locates rock structures that indicate whether hydrocarbons could be present.



Nanaimo Daily News - May 29, 1984

Gus Thomson photo

Doug Wasmuth of Terra Nova Consulting looks over some of the seismic data in the mobile unit. See also Page 3.

Good vibrations in Cedar

Cedar has been getting the shakes and the result may be some future test holes being drilled for oil and gas.

Four vibrator units were due to finish operating in the Cedar-Cassidy area today and owner Veritas Geophysical of Calgary will know within about a month whether to return in July for future testing.

Passersby along Yellow Point Road Monday couldn't help notice the big machines used to create ground vibrations used in testing sub-surface rock and earth formations.

Veritas vice-president Owen Stephenson said on-site Monday that the machines — manufactured in Ponca City, Oklahoma and worth \$400,000 each — are hooked up to seismic and computer equipment and operate like radar would above ground.

The vibrations from the machines reflect off subsurface rock layers and "echo" back to the surface where the vibrations are picked up by equipment laid over a three-kilometre stretch of roadway. Equipment then measures the distance from different rock layers to the surface and that will help determine if the ground below Cedar has the potential to yield enough gas or oil for potential drilling.

Veritas is conducting the tests for British Petroleum and Vancouver's Great Western Petroleum Corp.

The tests, scheduled to end today, will determine whether the vibrating method of testing will work in the Cedar area, Stephenson said.

"If we have success, we'll do a larger program in July," he said.

⁴²² BP Canada, under control of London-based British Petroleum Company. The Canadian subsidiary, Calgary-based BP Exploration Canada Ltd., was involved in the Vancouver Island partnership. In the early 1980s Margaret Thatcher began privatizing government ownership of BP.

Valley looks down for future

By Lon Wood
Special to the Times-Colonist

Natural gas? 'There's something there'

Times Colonist - Oct 24, 1984

COURTENAY — The recession-racked Comox Valley is abuzz with talk of a natural gas boom.

"They figure there is gas down there — an excellent supply — and they are very excited about it," said one Headquarters Road resident, who has considered taking the for-sale sign down from his farm.

"They said only a few months are needed to get things together and that drilling could start within a year."

Down the road, another farmer said he has granted permission for seismic

testing on his acreage until Nov. 20.

"Everybody is pretty tight-lipped, but if you talk to any of those survey guys who don't have any axe to grind, they'll tell you there's something there," he said.

"Besides, look at all the money they're pumping in."

Speculative hopes for an economic hook on which to hang the valley's recovery sprang up last week, when a 40-member Alberta survey crew working for British Petroleum (Can-

ada) Ltd. checked into Courtenay's Sleepy Hollow Motel.

By mid-week they had placed thousands of wire-mounted plastic markers — alternating blue and orange — every 16 metres alongside nearly 100 kilometres of Island Highway, rural backroad and logging routes immediately north of here.

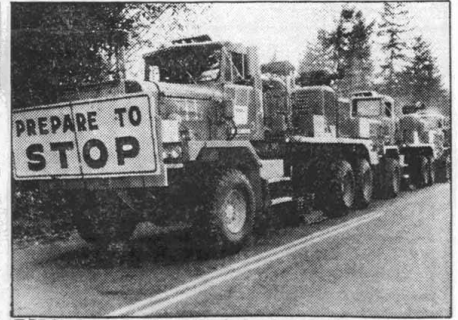
This week and for the next three weeks, four huge Kenworth tractor-trailer diesels and a host of smaller trucks carrying seismographic equip-

ment will slowly criss-cross a grid superimposed on the exploration area.

BP's intentions were made clear to Courtenay businessman Neil Woodrow, who lives on an eight-hectare farm that has been in the family for generations.

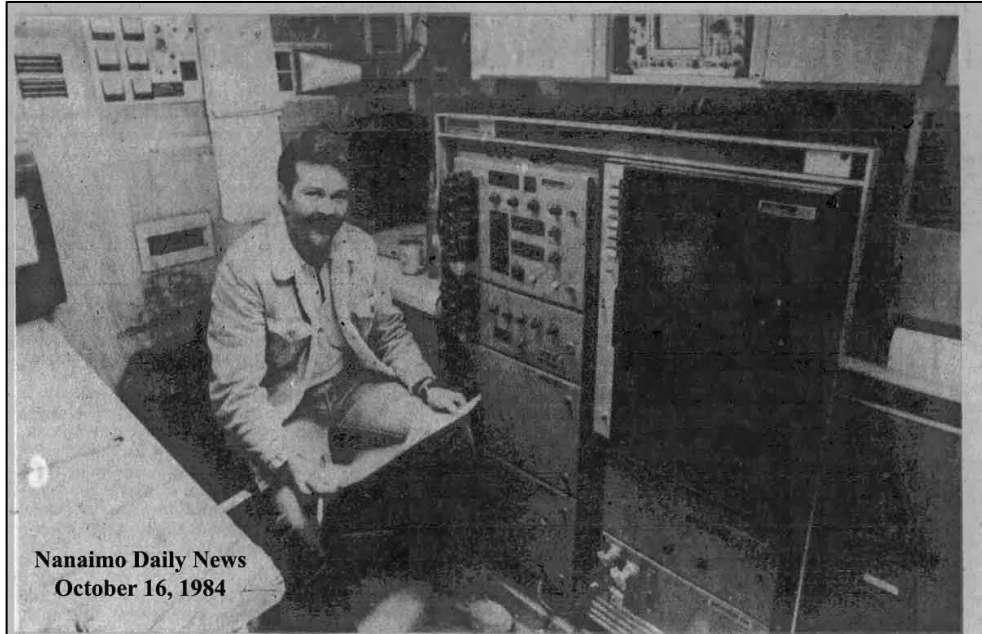
"These guys knocked on the door and said, 'You own the mineral rights to your property.'"

"I said I don't think so, and one said, 'Page A-2 — GAS HUNT'



SEISMIC-sounding fleet of trucks to criss-cross Comox Valley.

B.P.'s seismic testing was also conducted in late 1984 to 1985 farther north in the Comox Valley, just north of Courtenay, in the quiet farmland area, including tests along Headquarters Road. "The house really shook when those trucks went by," said one bystander.⁴²³ In total, B.P.'s seismic surveys would eventually extend along "three hundred kilometres of the Island's east coast."⁴²⁴



Nanaimo Daily News
October 16, 1984

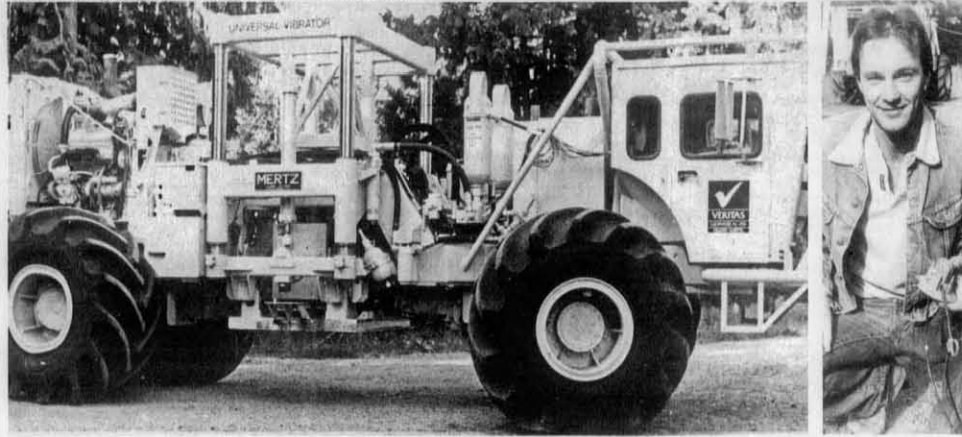
Dennis Bald, of Calgary, works with modern technology inside the back of a truck, recording seismic data.



Huge trucks laden with equipment roll toward Courtenay, but they will be back in Cedar shortly.

⁴²³ Valley looks down for future, Times-Colonist, October 24, 1984.

⁴²⁴ BP gas exploration on Island will continue, pay dirt or not, Nanaimo Daily News, July 12, 1986.



A lot of shakin'

Yellow Point Road residents had a bit of excitement during the past few days as a 30-man crew from Veritas Geophysical Ltd. of Calgary conducted seismic tests along a three-mile stretch of road from Yellow Point Lodge. Veritas contracted the work from British Petroleum which is in partnership with Great Western Petroleum on a natural gas exploration project in the area. At far left is a vibrator truck which, through use of a 2,000-pound hydraulic ram, sends shock waves through the road bed. At left, Doug Wasmuth holds a microphone-type device which picks up sound waves from rock formations. The data is recorded and printed out in a van housing computers and other equipment. It will be analyzed in the next few weeks and crews are expected to return this summer for more detailed testing.

Government initiatives boost energy sector

Vancouver Sun - December 29, 1984

THE END of the National Energy Program and a restructuring of B.C.'s natural gas marketing system were highlights of a year in which the energy industry began to climb out of recession.

Federal Energy Minister Pat Carney and her counterparts from the producing provinces — B.C., Alberta and Saskatchewan — have been working on a new energy pricing agreement and are expected to wrap it up by the end of January.

Carney has already said Canada will move to the world price of oil — not such a big step, because the recent reduction in the benchmark price by the Organization of Petroleum Exporting Countries means Canadians are currently paying 90 per cent of the world price.

But in B.C., the implementation of the recommendations of energy consultant George Govier — the so-called Govier Report — to rejig the province's natural gas marketing system has much of the gas industry worried.

A key recommendation is to peg natural gas prices at 65 per cent of the Vancouver city-gate price of oil by 1990. Early in 1985, the natural gas price will rise from about 44 per cent to about 48 per cent of the price of oil.

However, the gas marketing companies warn that if the government continues with this pricing policy, many of their industrial customers will switch to other fuels.

But B.C. Energy Minister Stephen Rogers says the government is sticking with its gas pricing policy.

Another key change in gas policy this year was the break on royalties given to petrochemical producers. So far, only two producers benefit: Cominco Ltd.'s Trail fertilizer plant and Ocelot Industries Ltd.'s ailing methanol plant at Kitimat. The break on royalties was designed to help Ocelot's spanking new plant, which is selling the methanol it can produce but at too low a price to be profitable.

Ocelot got another early Christmas present. The government gave it a \$40 million line of credit because it couldn't pay its gas bills to the B.C. Petroleum Corp. Victoria bumped the Royal Bank down the list of Ocelot's creditors and took the \$300 million plant as collateral for the loan.

However, one policy change has made B.C. gas producers happy. They are now



TRUCKS IN TANDEM DURING SEISMIC SURVEY . . . BP spending \$1 million on Vancouver Island work

free to negotiate directly with customers. And changes at the federal level allowed gas exporters such as Westcoast Transmission Co. Ltd. a lot more flexibility in pricing. The export price of gas, long fixed at \$4.95 U.S. a thousand cubic feet by Ottawa, is now negotiable as long as it doesn't drop below the Toronto city-gate price of just over \$3 U.S.

There is considerable optimism that the U.S. gas market will pick up steam in a year or so and that Canadian gas producers will be able to sell all the gas they can produce.

It was a tough year for B.C. Hydro. The crown corporation slashed \$200 million in future capital expenditures and cut staff as it effectively switched from being a project development company to an operating

company. With the completion of the Revelstoke Dam, for the first time in decades Hydro finds itself without any major project under development.

Sharply curtailed electric power growth estimates by both the provincial energy ministry and Hydro indicate there won't be any need for new generating capacity until the mid-1990s at the earliest. The lack of projects threatens Hydro's world class engineering team.

There was some good news for Hydro. The provincial government reversed a long-standing policy and allowed the utility to export power to the U.S. on long-term contracts instead of on an interruptible and spot basis only.

The government now appears eager for

Hydro to build new facilities to feed the export market, but Hydro chairman Bob Bonner has ruled that out. It's a fact of life that without guarantees from the Bonneville Power Authority which would "wheel" the power down to electricity-hungry Southern California, Hydro cannot take the risk of building a new dam costing several billion dollars.

The big question mark is the status of the \$2 billion liquefied natural gas plant proposed for Port Simpson on the B.C. coast. In a province without any major projects under way, the plant assumes even greater importance to the government.

But as negotiations go down to the wire, it has become apparent that the key to the

project is a commitment by the Alberta government on gas supply and price. Alberta will supply the gas but has fixed stiff pricing conditions so that the Japanese won't pay less than U.S. companies.

Ocelot Industries is also considering adding an \$80 million ammonia plant to its methanol facilities at Kitimat. However, that depends on financing from a U.S. group led by Devco of Tulsa, Okla.

The big "if" is the four oil refineries in the Vancouver area. A recent ruling by the National Energy Board forcing Trans Mountain Pipe Line Co. Ltd. to carry refined petroleum products from Alberta to Kamloops for Gulf Canada is a dark cloud on the horizon. Although the ruling is only for 1985, a policy decision by the NEB forcing Trans Mountain to carry refined petroleum products for other companies could result in the closing of one or all of the four refineries.

The oil companies operating the four refineries all have bigger and more efficient refining capacity in Alberta. Victoria, aware of the impact of shipping petroleum from Alberta to Vancouver, has requested the NEB to hold public hearings.

In the meantime, Trans Mountain still hopes to construct a \$30 million refined petroleum products distribution terminal at Kamloops but needs the green light from the NEB.

Westcoast Transmission also has a small project under way. It is constructing a \$65 million gas liquids plant at Taylor in northeast B.C. to produce propane, butane and other gas liquids.

Perhaps the brightest spot in the energy industry is the mini-oil drilling boom in the Desan area of northeast B.C. Gulf Canada is tight-lipped but it has discovered oil in the area.

And BP Resources is spending almost \$1 million dollars on a seismic program looking for gas on Vancouver Island.

Which brings us to the proposed \$800 million natural gas pipeline to the Island. While still officially provincial policy, the federal government hasn't yet come through with the required subsidy of about \$500 million. The job was awarded to Hydro, which beat out Westcoast Transmission.

—Rod Nutt

Hunt for natural gas on Island going full bore

By ROD NUTT
Sun Business Reporter
Vancouver Sun
Oct. 23, 1984

BP Canada Ltd. is pushing ahead with its search for natural gas on Vancouver Island while the B.C. government still holds out hope for a federal subsidy to build a pipeline to the Island.

BP is conducting a seismic survey in the Courtenay area to determine whether the rock structure is likely to hold hydrocarbons.

BP, ultimately controlled by the United Kingdom oil giant, British Petroleum, is operating on permits owned by Laurel Explorations and Great West Petroleum, both of Vancouver. In return, BP will acquire an interest in the properties.

Doug Webber, president of Vancouver-based Laurel, said the seismic program is the first stage in oil and gas exploration. "It's a way of locating rock structures,

which indicate that hydrocarbons could be present," he said. "Then drilling can start."

According to Webber, the procedure involves huge trucks with outriggers that hit the ground to create vibrations. These are monitored by sensors. "It's a refinement on creating vibrations by using explosives," he said.

The survey comes at a time when the B.C. government still hopes to build the Vancouver Island pipeline. This is despite an apparently negative response by federal Energy Minister Pat Carney earlier this month after meeting with provincial Energy Minister Stephen Rogers.

After the meeting, she told reporters that the federal government didn't have \$500 million to subsidize the pipeline. "If you are asking if I came with a \$500 million cheque in my pocket, the answer is no."

Subsequently, Rogers has said the province and the

federal government are still looking at ways to go ahead with the pipeline. But a significant gas find by BP would make the economics of a pipeline even more questionable.

However, Bill Bailey, BP manager for explorations, said it will be several months before the data from the seismic survey is interpreted and a decision made to start drilling.

Veritas Geophysical carried out a seismic survey for BP in June and July. Currently, Petty-Ray Geophysical is doing a second survey in the same area north of Courtenay.

Bailey said the two seismic programs will cost a total of \$600,000.

"It's early days yet," Bailey said Monday in a telephone interview from Calgary. "We're looking for the presence of gas . . . the seismic surveys are trying to determine drilling prospects. But it will be months be-

fore we interpret the data and make a drilling decision." To make the Island self-sufficient, BP would have to find a field with at least five billion cubic feet of gas.

In their submissions to the B.C. Utilities Commission's hearings into the pipeline, B.C. Hydro and Westcoast Transmission Co. Ltd. estimated the combined industrial and domestic market on the Island would range from 75 million to 85 million cubic feet of gas a day.

As a measure of the Island's gas needs, the proposed liquefied natural gas plant on the B.C. coast requires 450 million cubic feet of gas a day. And Westcoast's contract with the U.S. calls for a maximum of just over 800 million cubic feet of gas a day, although Westcoast isn't shipping close to that volume because of depressed U.S. gas markets.

The province's existing proven gas reserves are about eight trillion cubic feet.

CASSIDY DISTRICT

Nanaimo Daily News
June 16, 1984

The hunt for gas is on

A natural gas exploration program will soon be started with "the seismic shooting" of an area between Ladysmith and Nanaimo by BP Canada Inc. Two company spokesmen from Calgary told Mayor Frank Ney Friday at Nanaimo city hall.

BP Canada is indirectly controlled by the large British Petroleum Company of London, England. The company spokesman, Dr. R. J. Bailey, manager, oil and gas exploration frontiers (BP Exploration Canada Ltd.), and Bill Cunningham, manager, land, oil and gas division, BP Canada, paid a day-long visit to Nanaimo to assure local governments and the public "that we are a responsible company. We want to tell people ahead of time what we want to do."

The two officials earlier met with representatives of the Regional District of Nanaimo. Bailey said the seismic exploration is done with a Vibroseis unit which is environmentally acceptable. He said "It's like echo sounding in water." No dynamite is used to create shock waves to analyze rock formations.

Cunningham said his company has agreements with Great Western Petroleum Ltd. and Laurel Explorations Ltd., which hold acreage in the vicinity of Nanaimo. Doug Webber, president of Laurel Explorations of North Vancouver, who was also at the meeting, said his company has granted BP Canada an option to earn ownership of some of the permits by performing exploration, drilling and maintaining of the permits in good standing, subject to a net profits' interest."



Daily Free Press photo

Mayor Frank Ney, left, with R.J. Bailey, next to him, and Bill Cunningham

Cunningham said BP Canada has a \$1 million commitment to Great Western to carry out explorations in the next three years. Bailey said it is thought that the right combination of geological circumstances exist for natural gas. It is hoped to find a gas reservoir with gas produced by rocks other than coal and trapped mainly in sandstone.

"But we have to know more about the rock structure," Bailey said.

It is possible to find a relatively small quantity of gas to serve an initial market area, which would be Nanaimo, and then further drilling would take place, Bailey said. While a find of oil is always a possibility, the current program is being treated as a gas exploration project, he said.

Great Western Petroleum was interested in exploring the western geological zone of the Nanaimo Basin, an area "beneath the waters of Georgia Strait between Quadra Island in the north and the Gulf Islands in the south,"⁴²⁵ within the Georgia Sedimentary Basin, an area identified in a 1982 Geological Survey of Canada report, *Hydrocarbon Potential of Offshore British Columbia*. The young company aimed to "supply natural gas to industrial and residential consumers from Victoria to Campbell River," as Vancouver Island at that time was not connected to the B.C. mainland methane gas pipeline grid.

The company believes gas development in the Cassidy area could help the local economy. [Vice-president Jim] Murray said the company expects to drill at least three wells in 1983 at a cost of \$350,000 per well, of which 75 per cent will be spent locally. ... If successful, this will be the first commercial gas exploration and development project on Vancouver Island. ... Murray, a former full-time petroleum geology professor at the University of British Columbia ... concluded in 1977 that 40.3 billion cubic feet of natural gas could be under a parcel of land to which the company now has drilling rights.

Nanaimo Daily News - Oct 16, 1984

Cedar gas hunt still on

They loom in the roadway like something out of the Return of the Jedi movie.

For Cedar residents though, the four seismic test vehicles now being used near the Cedar Community Hall are a common sight.

This is the third time the big-wheeled machines have visited the Cassidy-Cedar-Yellow Point area. Only the names have changed.

Veritas Geophysical of Calgary did the first two tests. Another Calgary firm — Petty Ray — is undertaking the current project.

Crew supervisor Bob Clark said Monday that the seismic testing currently under way is a follow-up to the earlier underground "mapping."

Petty Ray was the low bidder on the current project.

The four seismic testing machines use vibrating pads to put energy into the ground. That vibrating energy reflects off different densities of the earth's surface and is recorded on computer tape that is played back and processed in Calgary. Geologists can then determine whether mapped areas have the potential to hold gas or oil reserves.

"It's like sawing off a log and seeing the rings," said Clark.

The present mapping project started last Thursday and is scheduled to be finished by Wednesday. The four machines and a crew of 26 then leaves for three weeks of work in the Courtenay area.

Petty Ray is working for British Petroleum. BP is undertaking the tests under a partnership deal signed in June with Great Western Petroleum Corp. of Vancouver. Great Western has agreed to option an interest in any future profits from a possible Cedar-Cassidy strike. BP is investing \$1 million in the project.

⁴²⁵ Ladysmith area opened to oil and gas exploration, Vancouver Sun, February 5, 1982.

The gas deposits may run into two other parcels of land. The company has applied for drilling rights in a second 7,104-hectare parcel to the north and includes part of Nanaimo. The other parcel currently, a Crown reserve, adjoins to the east and stretches to Yellow Point. Bidding for the third parcel is expected to take place in early 1982 and Great Western Petroleum is one of several companies interested in land, Murray said.

The company is also interested in drilling rights in the Comox area, where other large deposits of gas are believed to exist.

Great Western Petroleum Corporation is about 95-per-cent Canadian owned, Murray said. The company was incorporated in B.C. in 1978 and has since been involved in gas exploration in Texas⁴²⁶ and mining in B.C. ... The company expects to be listed on the Vancouver Stock Exchange in early 1982 and will later apply for listing on the Toronto Stock Exchange, Murray said.⁴²⁷

Give Us Gas

“MacDonald said a natural gas strike at Cassidy could save Vancouver Island gas users money on their gas bill and make a proposed natural gas line to Vancouver Island redundant.

*“If we find enough, it could save us a billion,” he said. “Savings on fuel bills would be phenomenal. But right now we have no idea how much gas or oil is down there. The only thing I can say is BP is one of the world’s largest companies and it doesn’t drill holes for the hell of it.”*⁴²⁸

In 1981, when Great Western began tooting its horn, B.C. Hydro was still investigating a gas pipeline route to Vancouver Island, an expensive and difficult proposition as the final chosen route would have to travel under the wide tidal waters of the Georgia Strait. Premier Bill Bennett promised a gas pipeline route in April 1979. When government gave directives to B.C. Hydro in 1981 to build the pipeline, it “was withdrawn after protests from gas and oil companies competing for the pipeline.”⁴²⁹ B.C. Utilities Commission hearings for the Vancouver Island pipeline began in September 1983. In July 1984, the Commission awarded B.C. Hydro the contract to conduct the pipeline crossing, later built by Pacific Coast Energy (51% owned by Westcoast Energy) and Chieftain Development Ltd. of Alberta, completed in October 1991.

The [Vancouver Island] pipeline project was completed by Pacific Coast Energy last month following more than three decades of debate, reviews and delays.

The entire project, including distribution systems, cost almost \$500 million.

Company officials and local dignitaries marked the pipeline’s completion at a luncheon Thursday.

“It’s possibly the most difficult and unusual pipeline ever built in North America,” said Harvey Permack, Pacific Coast president.

⁴²⁶ “Great Western has been involved in extensive exploration and drilling operations in Oklahoma, Texas, Colorado and the Bay of Biscay in off-shore Spain.” Source: *Gas tests in summer*, Ladysmith-Chemainus Chronicle, March 31, 1982.

⁴²⁷ *Cassidy gas exploration: aiming for a bonanza*, Nanaimo Daily News, December 16, 1981.

⁴²⁸ *Cassidy gas probe likely in late fall*, Nanaimo Daily News, August 11, 1984.

⁴²⁹ *Island natural gas line hearings open at last*, Times-Colonist, September 28, 1983.

The 533-kilometre pipeline, which serves more than 20 communities along the Sunshine Coast and Vancouver Island, crosses mountainous regions, watersheds, Georgia Strait and populated areas of many communities, he said.⁴³⁰

Natural gas drilling could start new era on Island

By Stephen Hume
Times-Colonist staff

Times Colonist
August 29, 1985

Drilling could begin this December in the Nanaimo-Qualicum Beach area, where oil and natural gas rights to 12,270 hectares were auctioned off Wednesday by the provincial government.

The sealed bids will be opened today by the B.C. Ministry of Energy, Mines and Petroleum Resources in Victoria.

The company that will get sole drilling rights to the parcel is expected to be Calgary-based BP Canada Inc., which has been doing extensive geological studies in the Comox Valley.

If BP Canada is successful, the company could start drilling for natural gas in December, Bill Bailey, manager of the company's frontier exploration division, said Wednesday in an interview from Calgary.

"Our plans would very much depend on our seismic surveys," he said. "We have another crew that will be working in Parksville at the end of next week and we intend to work on a permit we have in Duncan."

"We're still processing the results of our June survey on possible prospects or further seismics. When we wrap it together, we'll have an idea in the late fall of what our drilling program will be, and if the prospects warrant it, we'll be looking at drilling in December."

Bailey said the company has spent more than \$1 million exploring for natural gas on Vancouver Island. The seismic surveys indicate the presence of possible trap structures that could hold gas.

The major shareholder in BP Canada is The British Petroleum Co. PLC, based in London, Eng.

The Island parcel was just one of 165 parcels, or 199,136 hectares, auctioned off by the ministry, said Wilf Quinn, commissioner of the petroleum titles branch.

The others are 163 parcels in northeast B.C. and one bordering on Boundary Bay, near the Tsawwassen ferry terminal on the Lower Mainland.

Walter Young, director of petroleum resources' geological branch, said it is believed that natural gas wells may be established on Vancouver Island, and oil wells are not being ruled out.

"We don't feel there will be that much natural gas found that would affect the proposed (\$528-million) natural gas pipeline to Vancouver Island," said Young.

Natural gas discovered on the Island could be used to augment Islanders' needs, he added.

"No one has ever drilled for gas or oil on the Island. The nearest well that was drilled for petroleum or natural gas was on Saturna

Island in 1957 — they didn't find anything," said Young.

"There are other companies that have filed for oil and gas rights on Vancouver Island, but this is the first time that oil and natural gas rights have been posted for disposition by sealed tender."

Companies may file with the government for petroleum and gas rights, but when the rights revert to the Crown, they are sold only by sealed tender.

The Courtenay-Comox Chamber of Commerce has said a natural gas supply in the Comox Valley could be the needed impetus for a major economic boost.

The Times newspaper reported that "McKenzie Reid-Bicknell Land Company of Calgary, Alberta" was in charge of Great Western's "local approaches" for land lease and grant contracts.⁴³¹ 'Landmen' are notorious for one-sided and shady cutthroat land deals that favor petroleum companies. I.e., "local farmer Melvin Sabey says he would not let Great Western through his gate "even twice" for the small amount they are offering to compensate him for the disruption of his farm."⁴³²

By early February 1982, the government "opened 5,212 hectares in the Oyster Land District for oil and gas development,"⁴³³ a bid won by Great Western Petroleum and its partner North Vancouver-based Laurel Explorations Ltd.

By July 1982, Great Western became listed on the Vancouver Stock Exchange as a penny-stock junior, beginning at \$0.75 cents per share, a 73% drop in shares from August 1981 when brokerage market speculator Odium Brown Ltd. underwrote 800,000 shares of Great Western for \$2.73 a share.

In August 1985, Laurel Explorations signed an agreement with British Petroleum Resources which acquired "75 per cent of its exploration property in Parksville-Qualicum," a 29,000-acre area farther south of the Cassidy community petroleum properties.⁴³⁴

In December 1984, majority partner Novacorp Engineering Services Ltd. (a subsidiary of Nova Corp.) and its partners – Vancouver-based Scotia Resources, Asitka Resources (a western Canada gas company) and Logan Mines – initiated a separate exploration venture, test drilling for coalbed methane gas from east Vancouver Island's coal deposits. East Vancouver Island coal mining ended in the 1950s.

Supervising geologist Peter Proudlock says Novacorp is the only company in Canada involved to any major extent in the coal demethanation process.

⁴³⁰ *Natural gas on Vancouver Island*, Nanaimo Daily News, November 29, 1991. Refer to originating article on Westcoast Energy's interest in the Vancouver Sun, *Westcoast looks at island gas pipeline*, October 31, 1987.

⁴³¹ *Leases Bought: Gas search on in Cedar*, The Times, December 24, 1981.

⁴³² *Leases Bought: Gas search on in Cedar*, The Times, December 24, 1981.

⁴³³ *Ladysmith area opened to oil and gas exploration*, Vancouver Sun, February 5, 1982.

⁴³⁴ *Oil deal reached*, Nanaimo Daily News, August 12, 1985.

Test holes drilled in [the community of] Cedar to a depth of 2,000 feet have given the company information on rock density and permeability. Those results, as well as those from an on-site gas detection unit, determine whether a site is a good one.

If the results are good, Proudlock says a 1986 start to production is a possibility.

Proudlock says the demethanation process is commercially viable under certain conditions, including the presence of sufficient gas within the coal, adequate prices, and lack of a local supply for natural gas.

Gas produced by demethanation has the same heating value as conventionally-produced natural gas.

Novacorp began development of the demethanation processes in 1977 with a surface demethanation project in the Rocky Mountains near Canmore, Alberta. It now has three methane extraction projects – two in Nova Scotia and one in Alberta.⁴³⁵

By June 1986 “the [coalbed methane] partnership spent half a million on exploration and analysis.”⁴³⁶

If the wells prove profitable, more will be drilled in the Port Alberni and Courtney areas.

Last fall, Novacorp, a subsidiary of Nova, and Alberta corporation, drilled test holes in Nanaimo, Port Alberni and Courtney in search of methane gas.

Novacorp, meanwhile, has asked Husky Oil of Calgary to take over the project slated for Nanaimo. Husky Oil, another subsidiary of Nova, is the “drilling arm” of Novacorp.

Samples taken from coal beds in all areas were tested at the company’s lab in Calgary.⁴³⁷

BP to sink two wells on Island

By ROD NUTT
Sun Business Reporter

Vancouver Sun - June 10, 1986

BP Canada says it will start drilling two natural gas wells later this month on Vancouver Island.

The two wells will be drilled near Nanaimo at a combined cost of \$2.5 million, company spokesman Graham Sterry said Monday from Calgary.

Sterry also said BP Canada intends to drill a third well as soon as it has “established a location.”

The drilling program is the first on Vancouver Island.

The first well, named BP Laurel, will be located 300 metres south-west of the junction of Barnes Road and Brightman Road. It’s scheduled to reach a depth of 1,400 metres and will take about 25 days to drill.

The second well, BP Yellow Point, will be drilled 2.5 kilometres south of Flewett Point and 200 metres north of Yellow Point Road. It will be drilled to a depth of 2,100 metres and take about 38 days to complete.

Two small B.C. companies have interests in the wells.

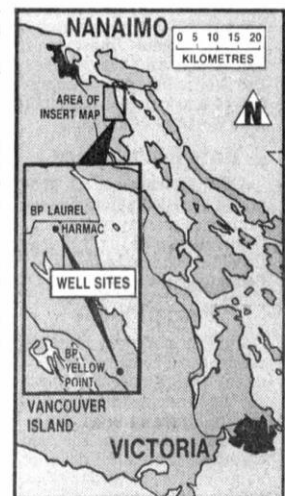
Laurel Explorations of Vancouver has a 15-per-cent interest in the BP Laurel well. Cassidy Resources Ltd. has an 85-per-cent share of a 12.5 per cent net profits interest in BP Yellow Point and Laurel has the remaining 15-per-cent share.

Doug Webber, president of Laurel Explorations, which trades on the Vancouver Stock Exchange, said: “I’m very pleased and gratified that BP Canada has seen fit to continue explorations on Vancouver Island.”

BP Canada has contracted Brinkerhoff Drilling Canada Corp. to drill the wells.

BP Canada said it will open an office in Nanaimo to provide information on the drilling. It will also arrange guided tours of the well sites.

The provincial government cleared the way for BP to drill on Vancouver Island in April when it passed the Petroleum and Natural Gas (Vancouver Island Railway Lands) Act, which removed the un-



certainty over the rights to petroleum reserves on the island.

There is a large potential demand for natural gas from residential and industrial customers on the island.

Victoria and Nanaimo already have gas distribution systems in place and there are several large forest products mills that now burn coal but could switch to natural gas.

“Gas has been found in Washington state on an extension of the same sediments,” said Stephen Semeniuk, director of research at Brink, Hudson & Lefever.

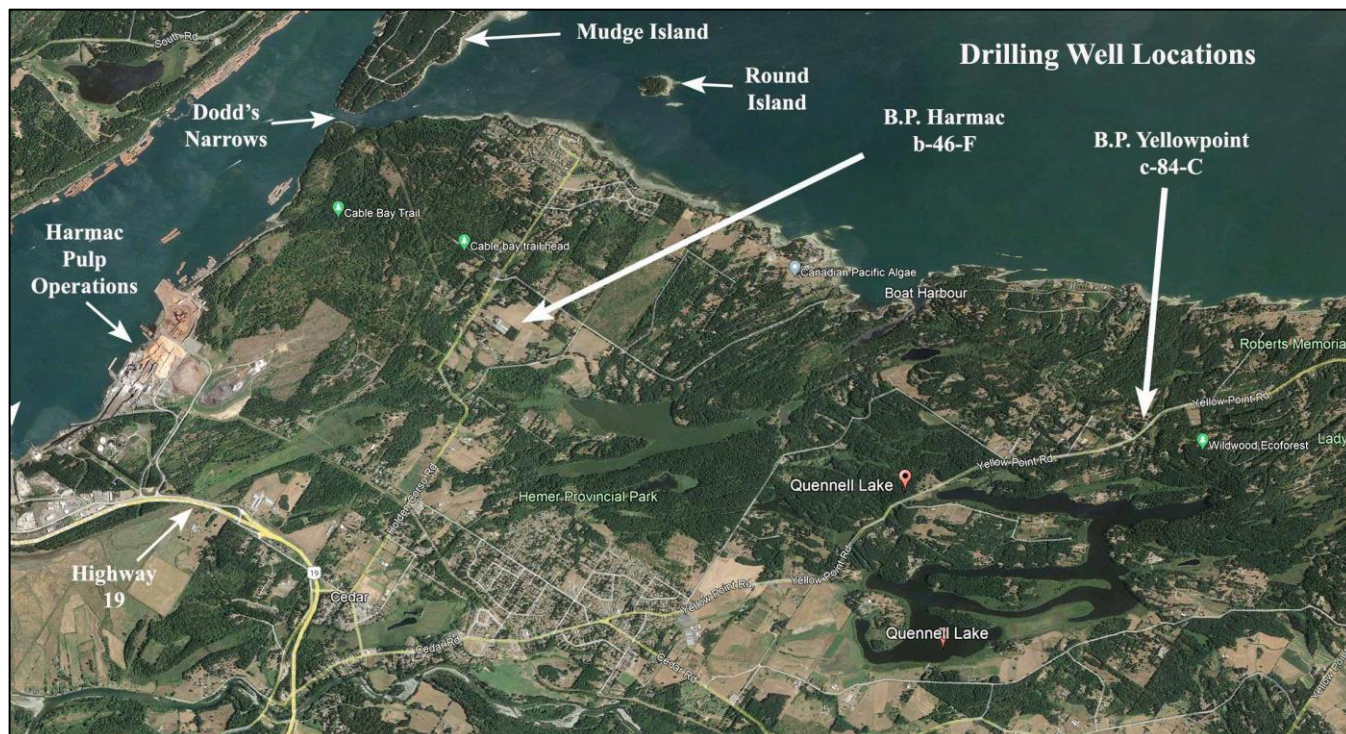
But Semeniuk cautioned there are still negatives. “If you find gas in any quantity you still have to get it to the mainland, which means a pipeline to Vancouver Island.”

⁴³⁵ Searching for coal and oil – and gas of our own, Nanaimo Daily News, March 28, 1985.

⁴³⁶ Drilling slated for methane gas, Chemainus Chronicle, June 26, 1985.

⁴³⁷ Novacorp to drill gas wells, Alberni Valley Times, August 14, 1985.

British Petroleum's Two Wells



In June 1986, B.P. announced that it was proceeding to drill two wells at an estimated cost of \$2.5 million.

The first well, 300 metres southwest of the intersection of Barnes and Brighton roads, will be drilled to 1,400 metres and is expected to take about 25 days.

The other well, 2.5 kilometres south of Flewett Point and 2.2 kilometres north of Yellowpoint road, will go down 2,100 metres and take about 28 days to complete.

If BP is successful, it would mark the first time commercial quantities of natural gas had been discovered on Vancouver Island.⁴³⁸

For public relations and related development concerns, in June 1986 B.P. and Laurel Explorations set up an office in the City of Nanaimo. In early July, B.P. invited some 30 stockbrokers from the Vancouver City area for a promotional tour of its Cedar community area drilling rig. On the same day, B.C. Minister of Lands, Parks and Housing Tony Brummett, “with some 30 local officials and B.C. executives,” including Nanaimo “Mayor Graeme Roberts, Ted Schellenberg (Nanaimo-Alberni

Drilling office opens

The Citizen Sun - July 13, 1986

A provincial government agency is opening an office in Nanaimo to handle questions regarding ownership of oil and natural gas drilling rights on Vancouver Island.

The Mediation and Arbitration Board, which normally deals with land issues in British Columbia's northeast oil patch, is opening a new facility at 55 Front Street, Nanaimo.

The move follows passage of legislation designed to remove legal uncertainties regarding

ownership of drilling rights on land once held by the Esquimalt and Nanaimo Railway.

The E & N transferred its subsurface rights to the province years ago, but in certain cases the current owners of those lands may have some claim to the oil and gas rights.

The Petroleum and Natural Gas (Vancouver Island Railway Lands) Act protects the interests of all those who may have a possible legal claim, while still allowing exploration to proceed. British Petroleum is expected to

start drilling for natural gas in the Nanaimo area later this month.

Any landholder whose property is targeted for exploration, and who feels he or she may have a legal interest in the oil and gas rights, should contact the Mediation and Arbitration Board at its Nanaimo office.

The Board will review the situation and determine the legal position. If the claim is valid, the Board will determine the amount of compensation.

Notices will be placed in local newspapers to identify the areas affected.

⁴³⁸ Gas drilling beginning, Nanaimo Daily News, June 10, 1986.

Drilling firms taking \$2.5 million gamble

By GUS THOMSON
Staff Writer

Is it just a dream? Or is gas or oil resting below Vancouver Island's surface, ready to be extracted and marketed?

BP Canada thinks so and it's costing the Calgary-based company \$2.5 million to drill two wells this summer in hopes of striking pay-dirt.

The high pitched squeal of metal against metal and the dull throb of machinery signals the start of a summer-long exploratory drilling program south of Nanaimo.

BP Canada and Laurel Explorations of Vancouver have leases for drilling rights on 12,270 hectares of Nanaimo-area land.

The two companies have been in partnership since May, 1984, exploring lease-land covering about 40,000 hectares from Duncan to Campbell River.

A potential source of oil and natural gas is known to exist below the Strait of Georgia but there is currently a moratorium on drilling. Exploratory drilling on land will determine whether it extends under Vancouver Island.

The Cedar venture is a first for Vancouver Island and BP, working in a region where no wells have been drilled, faces high odds against finding any oil or gas. The

odds are even higher against finding commercial quantities.

The BP Laurel Harmac well is located off Brightman Road. Drilling started at the end of June and is to take 25 days, boring to a depth of 1,400 metres. The second site — BP Yellow Point — will reach down 2,100 metres and take 38 days to drill.

WHERE IS THE GAS AND HOW DID IT GET THERE? — Eighty million years ago, the Island's climate was humid and similar to modern-day Southern California's. Swamps and bogs were filled with lush vegetation and when those plants died, they were compacted with peat. Over millions of years continued pressure and heat turned those peat bogs into coal fields. Coal, which the early economy of Nanaimo was built around, is the source rock for natural gas. Explosions underground during the mining years occurred when the gas was disturbed. When the gas seeped from the coal naturally, it migrated to porous sandstone. It's lain there ever since, trapped in underground reservoirs by barriers of non-porous rock.

HOW DOES THE DRILLING RIG WORK? — The initial step in

setting up a rig is called spudding in. A wide hole is drilled and steel pipe is cemented into place. This prevents the walls of the well from caving in. It also controls the return of drilling mud. The well is drilled with a bit attached to drill pipe, which is suspended from a hook and kelly drive in the derrick. The pipe goes through a rotary table on the rig floor. To drill, the rig's engines rotate the table, which rotates the drill pipe and bit. Using a travelling block, the driller lowers the hook to apply some of the weight of the pipe to the bit to make progress. As the well gets deeper, 90-foot lengths of pipe are added. When the bit becomes dulled, the entire string of drill pipe is pulled from the hole and racked on the rig floor. The new bit is attached and the pipe is made up and lowered again, section by section.

HOW IS THE CUT ROCK REMOVED? — Mud is a driller's best friend. Even though it's kept warm at 42 degrees C, the mud keeps the bit cool. It's mixed with silicate, when the occasion warrants, to keep the mud at a proper consistency. Mud flushes cuttings to the surface. There the cut rock is separated out for examination by a geologist. The mud is continuously recirculated. As well, it's used to control pressure down the hole.

WHAT ABOUT SAFETY EQUIPMENT? — The most important piece of safety equipment on the well is the blowout preventer, designed to control down-hole pressures. It is placed over the well at the surface and consists of a series of valves attached to the well casing. They can close off the well if an unexpected pressure build-up occurs. The blowout preventer can be activated mechanically or hydraulically by remote control.

HOW IS THE WELL'S PROGRESS MONITORED? — Constantly. A record is kept of the formations drilled through and there are several tests used to evaluate the oil or gas potential of each formation. Electric logging is a wire line measurement method. Instruments attached to an electric cable are lowered down the hole and transmit data on depth, thickness, fluid content and other characteristics. Core samples — lengths of solid rock — can be examined for detailed information on the rock and any petroleum it may contain. Another method of assessing the potential of the formation is with a drill-stem test. A bit is replaced with a system of valves and ports which allow any fluids to flow up the well.

WHAT HAPPENS WHEN THE DRILLING PROGRAM FINISHES? — On a commercially viable well, tubular steel pipe is lowered down the hole and cemented into place over its entire depth. The next step is to lower production tubing down the casing and attach it to a wellhead assembly on the surface. The unobtrusive wellhead would replace the three-storey-high rig. The wellhead equipment consists

Nanaimo Daily News

Saturday, July 5, 1986 3

City Scene

City Editor: Dave McGee



Daily Free Press photo

Randy Schneider, Brinkerhoff Drilling derrickman, tests the gas drill's mud supply for viscosity.

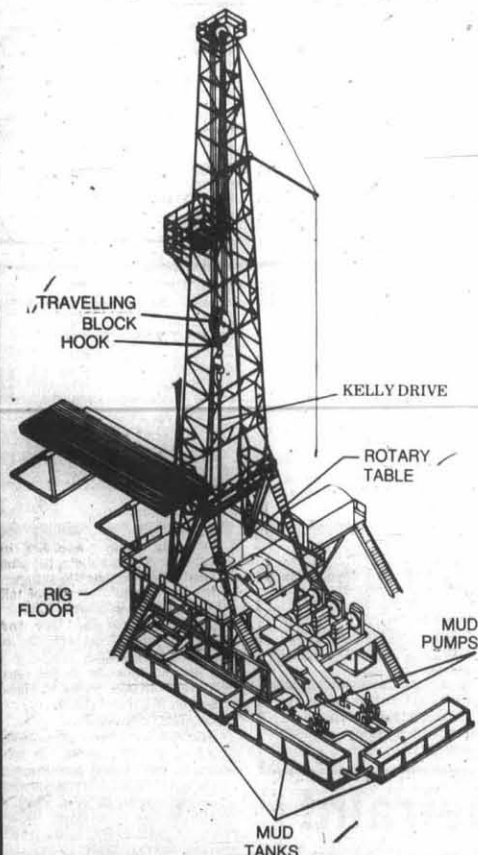


Daily Free Press photo

Cedar's Tammy Lassam is benefiting from the gas well drilling venture. She's got a job as a lease hand in the pump house.

of a series of chokes and valves to control output. It, in turn, is connected to a pipeline to move the product to consumers. If the well is a dry hole, it's plugged with cement and abandoned.

Components of a drilling rig



That would also lead to a distribution pipeline system on Vancouver Island.

In order for the operation to be viable the find would have to be in the range of 800 billion cubic feet. That would be about a 10-year supply for the needs between Nanaimo and Victoria, Mr. Sellars said.

The Yellowpoint well currently being drilled could bring in as much as a quarter of that total need. Additional wells would naturally follow if a successful strike is made. That would naturally lead to offshore drilling, he said.⁴⁴⁰

Sellars' controversial remark about "offshore drilling" was deliberately thrown in to challenge the provincial government's offshore drilling moratorium for the Strait of Georgia that was re-established in 1970.⁴⁴¹

The Province Thursday, July 17, 1986 ★27

Gas well flares on Island

By BRIAN LEWIS
Business Reporter

BP Canada Inc. has completed its drilling on the first of two exploratory natural gas wells near Nanaimo on Vancouver Island, the Calgary-based company said yesterday, and testing is under way.

There has been speculation that BP Canada has hit gas, but the well is a "tight hole" which means the drill site is a restricted area and all information is confidential.

A flare was seen at the site earlier this week, but BP officials said yesterday such a flare is part of the normal process.

"We can confirm there was a flare," said drilling technician Jackie Pare in an interview from BP's Nanaimo office, "but that doesn't mean it was natural gas."

Pare said total drill depth was reached Monday and the fluids, which may or may not contain gas and other hydrocarbons, are being tested. Part of the tests include separating the fluids in laboratory-type equipment which will tell BP whether or not there's gas and — more importantly — whether there's gas in commercial quantities.

If the latter were the case it would be the first such discovery on Vancouver Island, where the Nanaimo area was a major coal-producing centre for many years.

Propane is used to produce a flare at the drill site, Pare said, so that if there is gas in unused fluid, it would be burned off for safety reasons. "We can't allow any gas to escape into the atmosphere," she said.

The well, BP Laurel Harmac c-36-F, has been drilled to a depth of 1,040 metres by Edmonton-based Brinkerhoff Drilling Canada Corp. Its rig is being powered by electricity rather than by conventional diesel engines to cut down noise levels. The well site is about 300 metres from the junction of Barnes and Brightman roads.

Vancouver-based Laurel Explorations Ltd. has a 15-per-cent working interest in the Harmac well.

A second well will be drilled further south near Yellow Point Road to a depth of 2,100 metres. Cassidy Resources Ltd. has an 85-per-cent share of a 12.5-per-cent net profits interest in BP Yellow Point d-84-C while Laurel has the remaining 15-per-cent share.

BP said the "down hole testing" will be completed by the end of this week.

On July 21, 1986, B.P. announced that its "\$1 million" Laurel Harmack c-36-F "test well failed to find worthwhile quantities of gas," calling it "a disappointment." B.P.'s "drill found potential "reservoir intervals" where they had been expected, but these contained only water and "minor gas shows." BP's immediate plans were "to move equipment to the Yellow Point site," its Yellow Point d-84-D test well some 5 kilometres southeast that "will take an estimated 38 days to drill, at a cost of about \$1.6 million."⁴⁴²

Before the drilling began at the Yellow Point site,

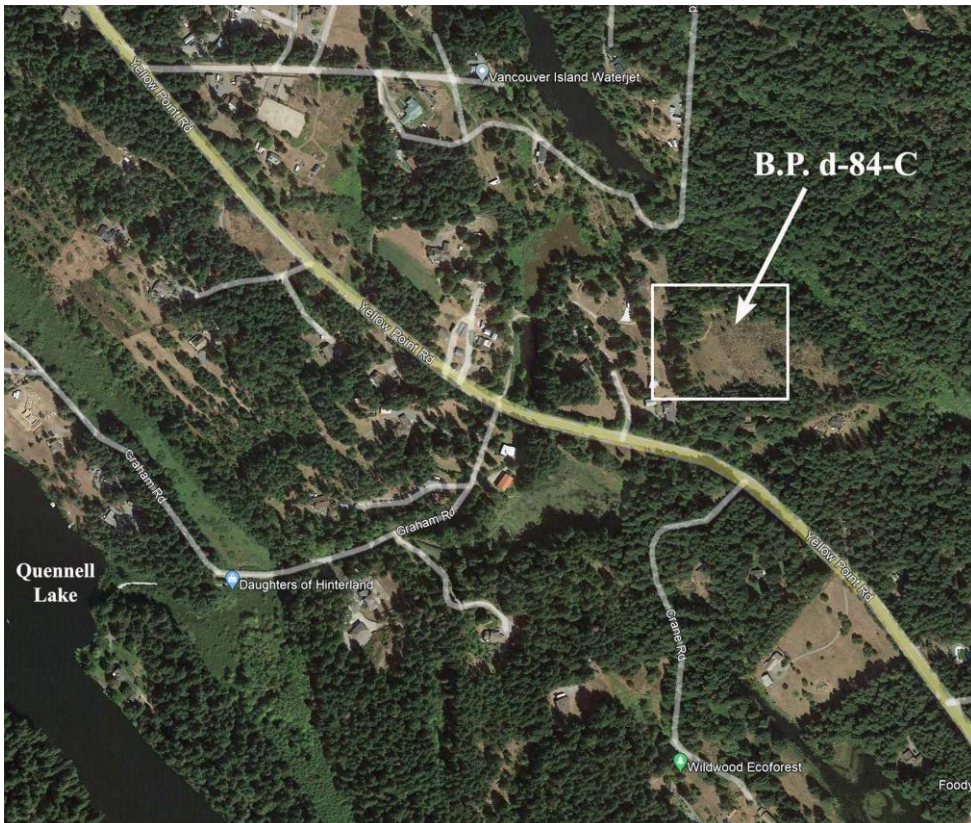
The company talked to each household with a three-kilometre radius of the well. "They came around to the house and checked for cracks in the walls," says Marilyn Maxwell whose new house is a few hundred metres from the well. "They also tested the water."

But Marilyn Maxwell says since BP started drilling in the early hours of Monday July 28, she keeps the windows closed at night.

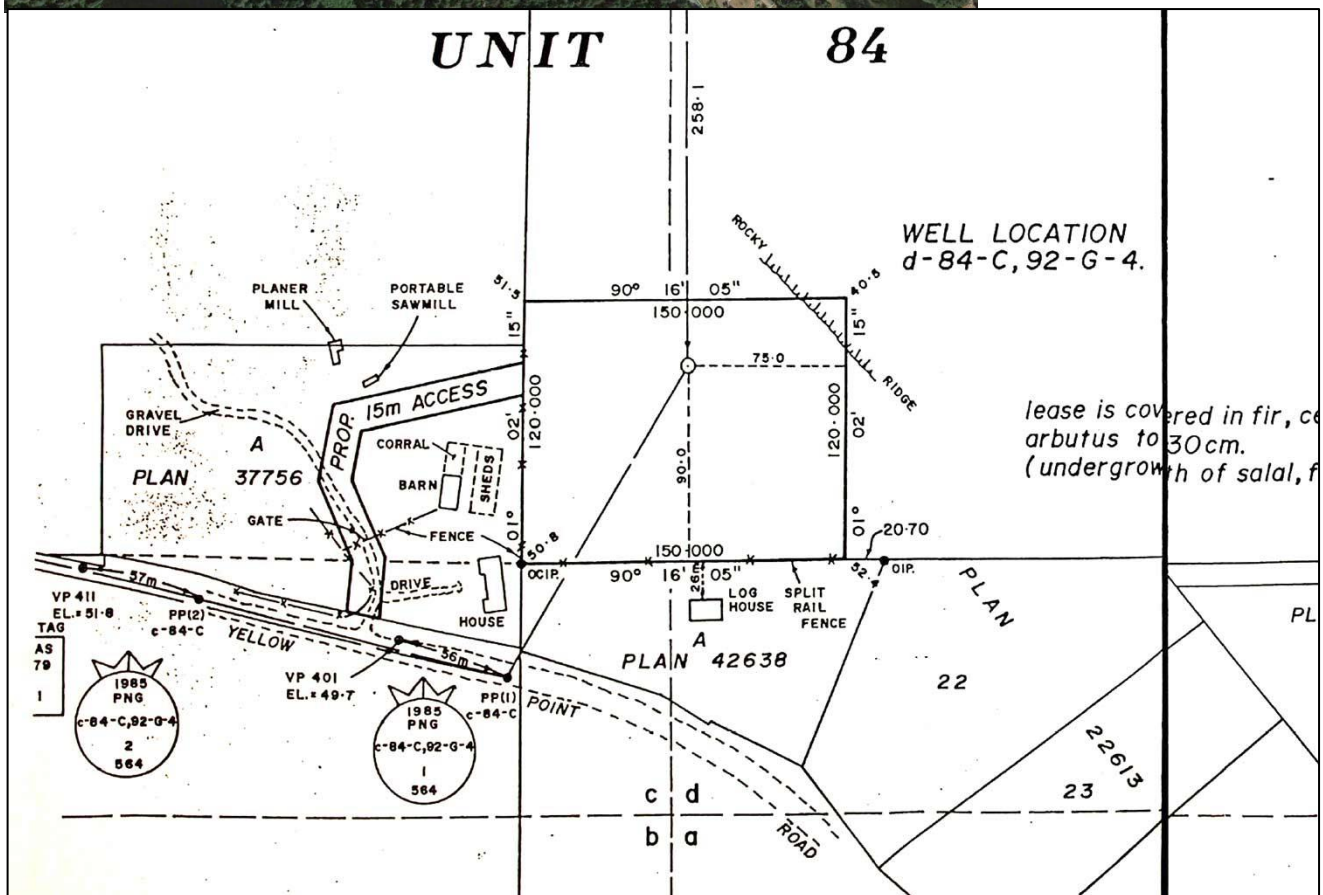
⁴⁴⁰ *Offshore drilling not ruled out*, Nanaimo Daily News, July 10, 1986.

⁴⁴¹ "In 1970, British Columbia re-imposed its moratorium on oil and gas exploration in the Juan de Fuca and Georgia Straits." Source, Alberta Law Review, 101, 2003 CanLIIDocs 152, *British Columbia Offshore Oil and Gas Law*, page 105.

⁴⁴² *BP stops drilling at first test well*, Nanaimo Daily News, July 22, 1986.



Referring to BP's noise-prevention efforts, [drilling supervisor Al] Waddel throws terms around like "Cadillac system" and "a lot of dollars on sound abatement."⁴⁴³



⁴⁴³ Nanaimo gas quest continues bit by bit, Vancouver Sun, August 11, 1986.

Nanaimo gas quest continues bit by bit

Vancouver Sun - August 11, 1986

BP explorers find the going gets rocky

By ROD NUTT
Sun Business Reporter

Before the end of this month, Al Waddel will have gone through \$100,000-worth of drill bits.

Not your average handyman drill bits but 444 mm jobs that cost \$9,000 a pop.

Waddel is drilling through rock — very hard rock — in the quest for natural gas on the outskirts of Nanaimo on Vancouver Island.

If gas is found in commercial quantities, the on-again/off-again half billion dollar gas pipeline to the Island would probably be off again — perhaps permanently.

But Waddel isn't looking that far ahead. Nor is it his concern.

As drilling supervisor for BP Canada Resources, his immediate concern is a safe operation.

The Yellow Point well is the second of at least two planned by BP Canada on the Island.

The first well, in the same area, was dry and BP abandoned it last month.

Waddel is more used to harsher conditions in northern B.C. and Alberta than the gentle countryside around Nanaimo.

But this time there are people living close by. "It's a wildcat," says Waddel. "There's been no previous drilling in the area. We have no information so we are prepared for the worst at all times."

The worst is a blowout if the rig strikes gas under high pressure. So BP has carefully alerted the neighborhood to what it is doing.

First, the company talked to each household within a three-kilometre radius of the well. "They came around to the house and checked for cracks in the walls," says Marilyn Maxwell whose new house is a few hundred metres from the well. "They also tested the water."

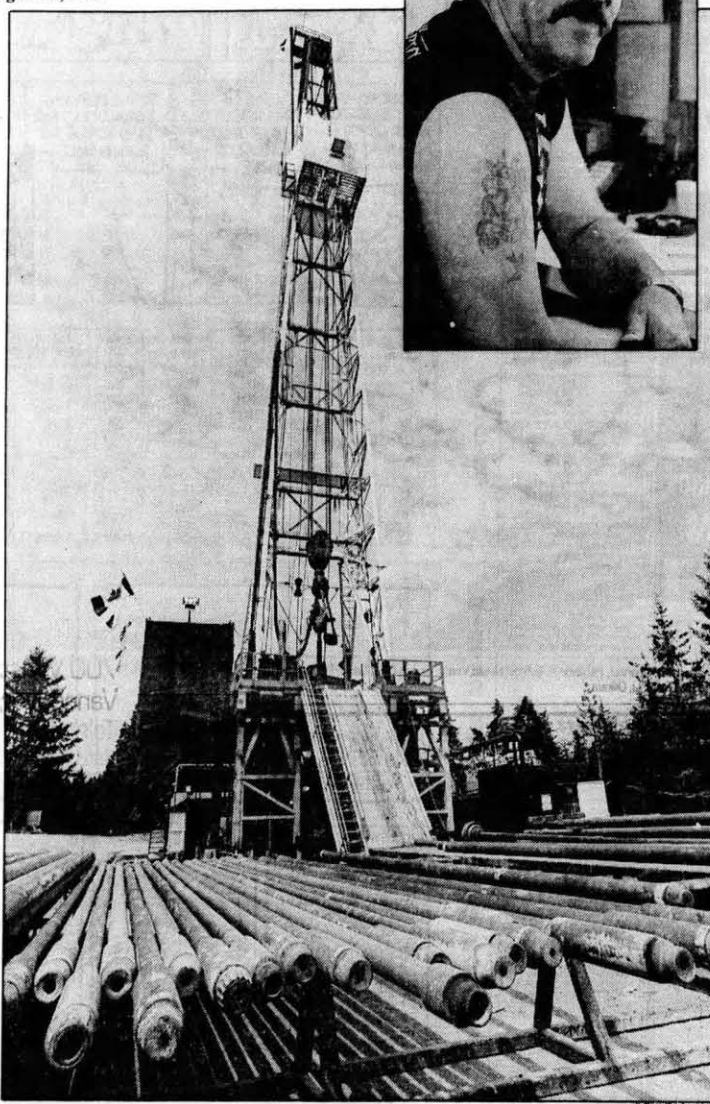
Before starting to drill, BP blasted a pad from the rock and the company was concerned that the houses around weren't disturbed.

"They even found a cracked cup in my cupboard," says Maxwell. Her mother-in-law, who lives in a separate house on the same five-acre property, said the blasting "wasn't any worse than the time Hydro put in the poles for power lines. It's all rock here."

Waddel has a sheaf of papers on his desk listing all the people residing in the area. It's a necessary precaution in case of a blowout.

"We would contact everyone of them," says Waddel. "Either by phone or by knocking on the doors."

Not that Waddel expects a blowout. The Brinkerhoff Drilling Ltd. rig crew, under contract to BP Canada, is well experienced.



DENI EAGLAND

YELLOW POINT: Al Waddel (inset) is prepared if the rig strikes gas under high pressure

"We've worked with them in the past," says Waddel. "They are professionals."

But just in case there's a huge, \$200,000 blowout cap on the well in case the rig hits gas under high pressure.

And because there are houses close by, BP Canada has also gone to great lengths to keep the noise level as low as possible.

The rig has a couple of diesel engines which generate electricity to drive the rig. The diesel engines are sound-proofed. Usually, noisy diesels drive the rigs direct.

Referring to BP's noise-prevention efforts, Waddel throws terms around like "Cadillac system" and "a lot of dollars on sound abatement."

"Noise isn't a problem," says

Neil Roine. "BP put the work huts between the rig and the house so they act as a noise barrier," says Roine whose house a couple of hundred metres away is the closet to the rig.

"There's also a barrier of trees which acts as a sound buffer and diffuses the light," adds Roine. "Besides, I work for Finning Tractor so I'm used to logging camps."

Adds 10-year-old Robert Roine: "It doesn't keep me awake at nights... it's sort of exciting." The rig works 24-hours a day.

But Marilyn Maxwell says since BP started drilling in the early hours of Monday July 28, she keeps the windows closed at night.

William Maxwell, a flight controller at Nanaimo airport, has one concern if BP does find gas.

"I just hope the nature of the area doesn't change," says Maxwell who was transferred from Castlegar about five years ago.

"It's a beautiful spot we live in... what I would describe as half agricultural and half residential. I hope it doesn't become an industrialized zone."

BP says it won't. If the rig does find commercial quantities of gas, it will be simply piped to a processing or gathering point.

Waddel says the pipe would be underground and the site of the drilling returned to its previous state.

B.P. announced on August 29, 1986, that it capped its second test well site “with no gas or other hydrocarbons being found.”

Meanwhile Jackie Pare, BP representative, has closed her office on Dunsmuir Street in Nanaimo and returned to Calgary. Neither she nor any other company representatives could be reached for comment this morning.⁴⁴⁴

About a week after B.P.’s abandonment of further petroleum exploration on Vancouver Island, Cedar community resident Steve Heizer ‘blasted’ B.P. about noise pollution originating from its Yellow Point drilling rig. Very little criticism of petroleum exploration, particularly the later drilling stages in 1986, had appeared in the newspapers, as almost all news coverage and information were promotional. Heizer wrote the following as a warning to the public:

Let BP know you want to be part of the decision making from now on. Tell the regional district and mines and petroleum minister that you want firm assurances that the quality of your life is not going to suffer if and when gas is found. Don’t wait until it’s too late – write some letters now.

And don’t be fooled – if they find gas there will be the most awful amount of digging and other activity and it won’t be restricted to a low density rural area – it will be in your back yard.⁴⁴⁵

Some two weeks later, the newspaper published B.P.’s oil and gas division president Jim Symington’s letter of response to Heizer’s criticisms, to which Heizer in turn responded in his second letter to the editor:

The [BP] author of this letter felt I had made unwarranted accusations against BP.

Acoustic pollution is like other kinds of pollution. At certain levels or over certain periods of time, it becomes intolerable.

Firm stops gas drilling in Nanaimo

Nanaimo Daily News
August 30, 1986

By NEIL MACMILLAN
Staff Writer

BP Canada has capped its second of two wells in the Nanaimo area with no gas or other hydrocarbons being found.

The company announced Friday both the Laurel-Harmac 1,400 metre well and the Laurel Yellow Point 1,574 metre well, have produced nothing. The company, in a news release, said a detailed appraisal of the results from both wells is continuing.

“Further exploration activities on Vancouver Island will depend on the outcome of this appraisal and the initial results justify retention of the exploration permits at this time,” said the release.

Meanwhile Jackie Pare, BP representative, has closed her office on Dunsmuir Street in Nanaimo and returned to Calgary.

Neither she nor any other company representatives could be reached for comment this morning.

BP Has been seeking natural gas on Vancouver Island for over two years and has spent \$1 million on seismic surveys in the Nanaimo and Comox Valley areas.

The company started drilling in the Cedar area last June.

A flare seen last month at the first well fueled speculation that the company had found gas, but BP explained that this was part of the normal drilling process and did not necessarily indicate the presence of gas.

⁴⁴⁴ *Firm stops gas drilling in Nanaimo*, Nanaimo Daily News, August 30, 1986.

⁴⁴⁵ *Noisy drilling rigs*, Nanaimo Daily News, September 5, 1986.

BP and its drilling rig, on the other hand, made continuous noise at all hours of the day or night. If this noise is acceptable to the author of this letter, I wish him a happy life of drilling sounds in his living room.

BP claims to have statements from residents who were not disturbed by the drilling. My guess is that it wasn't from the residents I know, who had rocks blown onto their house by blasting at the site, and who told me they were kept awake at night by the noise. It also was not from the people who live next to me who said, "Yes, it is annoying, but what can you do?" And it is simple untrue that I was the only person to complain to B.C. about the noise.⁴⁴⁶

At B.P.'s northern exploratory well at Harmac, a local newspaper reporter asked Brinkerhoff Drilling Canada Corp.'s drilling supervisor Al Waddel questions about the drilling procedure:

He says a water well is drilled at each site to check and ensure [if / whether] the local water supply is being contaminated.

He says some fluids produced by the drilling process may be slightly toxic.

"There might be a little acid in it. But in Alberta (the company's base) we treat this fluid all the time, and after that we can drink it," he said.

Waddel does not anticipate problems from local residents if a natural gas refinery is required.

"Hopefully it's straightforward, but we're prepared for anything. So far, people in the area have been very good to us."

He says the Laurel-Harmac drilling apparatus is outfitted with sound abatement equipment.

This, he says, is unique as most drilling operations are located in isolated areas.

"But there are residents in the area, so we've added this equipment. We've had very, very few complaints about the drilling. We go out of our way to make the locals happy."

If the wells come up empty, Waddel says the equipment will be packed up and the land levelled.

"All this ugliness will be gone," he said.⁴⁴⁷

According to a February 18, 1983, newspaper article, Great Western Petroleum vice-president Jim Murray said his company's:

officials had pored over government data of gas contamination of water wells in the [south of Nanaimo, Cassidy] area, and found high incidents of contamination along the geological structure where the gas reserves are believed to be located. "It's very similar to the Edmonton area," Murray says.⁴⁴⁸

⁴⁴⁶ *More about noise and BP ...*, Nanaimo Daily News, October 9, 1986.

⁴⁴⁷ *BC Canada starts drilling Laurel-Harmac gas well*, Ladysmith-Chemainus Chronicle, July 2, 1986.

⁴⁴⁸ *Hold off gas pipeline, says energy firm*, Nanaimo Daily News, February 18, 1983.

Chapter 5. The Fifth Wave:

Fraser Valley Petroleum Exploration, the Methane Storage Revival, and the rise of The Friends of the Fraser Valley

There is no precedent in this province from halting the petroleum industry in its tracks. ⁴⁴⁹

Surrey MLA (Member of the Legislative Assembly) Bill Vander Zalm was acclaimed the new leader on July 30, 1986, following the Social Credit Party's leadership convention in Whistler, B.C.

Under a new captain, ardent Vander Zalm supporter MLA Jack Davis was subsequently awarded and re-assigned to his powerful Cabinet post as Minister of Energy, Mines and Petroleum Resources.

News

THE VANCOUVER SUN, THURSDAY, JULY 31, 1986 ***



BRIAN KENT

OLD AND NEW: Outgoing Premier Bill Bennett (right) raises premier-designate Bill Vander Zalm's arm in salute Wednesday night

Cabinet, vote timing face new leader

By GARY MASON
Sun Staff Reporter

WHISTLER — Bill Vander Zalm will be facing several problems as British Columbia's next premier, not the least of which is when to call a general election.

The flamboyant former cabinet minister has two obvious choices: Go to the polls soon or wait until next year or even 1988.

He will be under extreme pressure to go early to capitalize on his current wave of popularity and the party's apparent lead in popularity over the NDP.

Polls done by Decima and Environics Research Ltd. put Social Credit ahead of the NDP by as much as seven percentage points.

Others will quietly push Vander Zalm to go now, fearing that his knack for becoming embroiled in controversy might wipe out any lead the party enjoys.

But there are some obvious reasons why Vander Zalm might be hesitant to jump soon. Most obvious are the experiences of former Ontario Tory leader Frank Miller and federal Liberal leader John Turner whose early election calls ended in their defeat.

One thing is obvious. If Vander Zalm hopes to beat the NDP he will need a lot more sophisticated campaign organization than the one he had to win the leadership.

If he maintains his decision to avoid polls and the high-tech political techniques now used intensively by the NDP, a Social victory would appear to be in serious jeopardy.

Bud Smith, who jumped to Vander Zalm and gave him the momentum needed to win, may urge him to look at the types of things being used to win elections these days.

The Social Credit party also needs time to replenish its coffers. The costly convention has left the party short of cash and several candidates in debt.

It is too soon to guess which way Vander Zalm is leaning on an election date, but meetings with advisers, members of the party and caucus, over the next few weeks should be revealing.

More serious problems immediately facing Vander Zalm are the dispute with the B.C. Government Employees Union and the threat to the province's lumber exports to the United States.

Convention delegates expressed concern over the possibility of a confrontation between Vander Zalm and the BCGEU. Union president John Shields has said he wants an indication soon of the new Social premier's plans to solve the dispute.

During the campaign, Vander Zalm also offered few ideas to counter protectionist sentiments building in the U.S. Senate.

Over the next few days, Vander Zalm will also be faced with decisions on the makeup of his cabinet.

Speculation abounds that Surrey MLA Bill Reid and North Vancouver-Seymour MLA and former cabinet minister Jack Davis have secured themselves cabinet posts.

Both individuals declared their support early for Vander Zalm, as did Surrey MLA Rita Johnston. Vander Zalm has said he cut no deals with MLAs for their support.

Leadership candidate John Reynolds, MLA for West Vancouver-Howe Sound, is also expected to wind up in a cabinet seat. His decision to go to Vander Zalm after the third ballot was seen as shrewd if not opportunistic.

Rounding out speculation is the person to whom Vander Zalm probably owes the most for his victory — Bud Smith. But Smith won't be an immediate concern because he doesn't yet hold a seat.

ANALYSIS



REID DAVIS

⁴⁴⁹ Gas moves from an area of high pressure, Mike Youds, Abbotsford Times, June 27, 1990.

The NEW TEAM



McCARTHY:
economic dev.



SMITH:
attorney-general



McGEER:
international trade



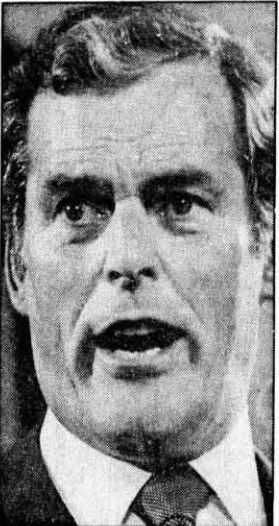
RUSS FRASER:
post-sec. educ.



ALEX FRASER:
transport, roads



REID:
tourism



GARDOM:
intergov. relations



CURTIS:
provincial sec.



JOHNSTON:
mun. affairs, transit



GARDOM:
intergov. relations



NIELSEN:
health



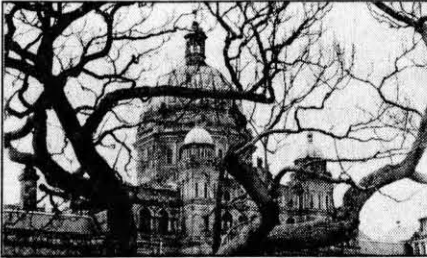
RICHMOND:
social services



KEMPF:
forests, lands



SEGARTY:
labor



PELTON:
environment, parks



DAVIS:
energy, mines



BRUMMET:
education



VEITCH:
corp., cons. affairs



HEWITT:
agriculture, fish

Two members, Pat McGeer and Garde Gardom, were former B.C. Liberal Party MLA colleagues of party leader David Anderson, who both jumped ship in 1975 to join up with the Socreds

Eighteen years previous, Social Credit Party Premier Bill Bennett had abruptly fired and stripped Jack Davis from his Cabinet and Energy Minister portfolios on April 3rd, 1978,⁴⁵⁰ later to be “charged with fraud for exchanging first-class air tickets for economy seats and pocketing the difference.”⁴⁵¹ It was said that Davis was “never forgiven by Bennett.”⁴⁵² Davis, who had been consistently re-elected in his North Vancouver Riding seat since December 1975, patiently resided in the Legislature sidelines as an outsider following his excommunication, a notable backbencher and irritating critic of the Bill Bennett Social Credit Party Cabinet.



The Vancouver Sun

TUESDAY, APRIL 4, 1978 VANCOUVER, BRITISH COLUMBIA ***** 20 CENTS

BENNETT TAKES OVER ENERGY PORTFOLIO

Firing of Jack Davis shocks legislature



Sea Victoria Bureau
VICTORIA — Premier Bill Bennett today took over the energy and transportation portfolio in his cabinet, less than 24 hours after he told a shocked legislature he had fired Jack Davis from the post.
Bennett also announced today that Davis has been stripped of his directorships in B.C. Hydro, the B.C. Harbors Board and the B.C. Petroleum Corporation.
But the premier remained silent about the reasons for his actions, refusing to elaborate on a terse announcement to the legislature Monday in which he said he had asked for Davis' resignation after learning last weekend of an investigation touching the minister.
Bennett formally took over Davis' job as energy, transport and communications minister at a swearing-in ceremony con-

ducted at Government House at 10:35 a.m. by Lt.-Gov. Walter Owen.
Asked by reporters after the ceremony how long he intends to keep people of the province in the dark about his reasons for the sudden and mysterious firing of Davis, Bennett would only say the legislature was informed of his intentions at the earliest opportunity.
Bennett said the people of the province will get to know what is happening as events unfold and said their right to know is not being denied.
“Nothing is being denied them,” he said, and added cryptically: “My first move was for the propriety of government.”
Bennett said Finance Minister Evan Wolfe has been appointed to replace Davis as a Hydro director and Recreation and

Conservation Minister Sam Bowif has replaced him as a director of the B.C. Harbors Board. Bennett said no replacement is necessary on B.C.P.C. because Mines and Petroleum Minister James Chahot is a director and represents the cabinet on the B.C.P.C. board.
Bennett's announcement in the legislature Monday caught both opposition and government members by surprise. Some members stared at the premier in open-mouthed disbelief as he read the statement.
There was no explanation or even a hint about what the investigation was about, who was conducting it, who had made allegations against Davis or the nature of the allegations.
Davis, saying the allegations had come as a complete surprise to him when the

“Davis” page A2

‘MIGHTY MICE’ FAT ON POISON

MEMPHIS, Tenn. (UPI) — A new breed of mouse, unfazed by traditional rodent poisons, has taken up residence in a number of homes and exterminators are scratching their heads in dismay.
Nicknamed “Super-Rodent” or “Mighty Mouse,” those who deal with them say the mice constitute the worst rodent infestation in a decade.
Don Schultz, a rat control specialist for the health department, said the mutant mice are offspring of common house mice that have developed a resistance to poisons used routinely by exterminators and homeowners.
“In recent years, we’ve been hearing people say they put down the stuff and the mice are just getting fat off it,” he said.
One rat control specialist with the health department offers a solution.
“I know I’m not supposed to say this,” he said, “but I’ve had friends that had problems and as a last resort I’ve recommended a cat.”

CLC compromise avoids unity split

By GEORGE DOBIE
SUN LABOR REPORTER
QUEBEC (CTV) — The Canadian Labor Congress policy on national unity was adopted by a wide majority of some 2,000 delegates Monday after a surprisingly short one-hour debate.
The policy backs the principle of political self-determination for both English and French-speaking segments of Canadian society.
The vote came quickly after Louis Laberge, president of the Quebec Federation of Labor, intervened in the debate just when it seemed English and French-speaking unionists were split.
The split was over whether the document was strong enough on the question of self-determination for Quebecers.
Laberge said it was strong enough and that was what it took for retiring president Joe Morris to call for the vote while more

that 50 delegates still waited at microphones to have their say.
Laberge, a member of a special committee that prepared the policy, had fought in the committee with English-speaking members who wanted to limit the report to the question of Canadian unity.
In his speech he denied the policy is wishy-washy, adding:
“I’m as true a Quebecer as anybody in this hall and represent certain principles that down in our guts we have the right to determine our own future.”
Laberge said Quebec will vote in a referendum on independence “when the time comes. It is stated clearly in the document that our two peoples respect the fundamental right of each to decide clearly what their future will be.”
Laberge said the labor movement has to devote its time to “defending the rights of working people” and there was a danger of “CLC” page A1H

CYPRUS VERDICT

2 Palestinians must hang for editor's murder

NICOSIA (AP) — A Cypriot court today found two Palestinians guilty of premeditated murder in the assassination of a prominent Egyptian newspaper editor and sentenced them to die by hanging.
The execution of Samir Mohammed Khadar, 25, and Zayed Hussein al-Ali, 26, was set for June 1.
Defence lawyer Lefcos Clerides said he would appeal both the verdict and the fixing of the execution date.

Dollar value rises slightly as bank rate hits 8.5 pct.

OTTAWA (CP) — The Bank of Canada raised its trend-setting interest rate Monday to 8.5 per cent from eight per cent as federal money managers acted to counter downward pressures on the Canadian dollar.
The increase, the second since March 9 and effective today, was cited by opposition critics as evidence of mismanagement of the economy by the Liberal government.
Monday for the first time since mid-1983, the worst year of the Depression.
Today in New York it rose to 88.11 U.S.
The bank rate announcement came after Finance Minister Jean Chretien said the government will have a budget this month. A date will be announced Thursday, he told the Commons.
Chretien also said Monday that the government.

TRANSPORT MINISTER JACK DAVIS . . . faces reporters at door to office —CP Wirephotos

Jack Davis is finally coming out of the cold. Frozen out of Bill Bennett’s regime for years, the erudite backbench Socred MLA has a warmer reception awaiting him in Bill Vander Zalm’s government.

⁴⁵⁰ *Bennett takes over Energy portfolio: Firing of Jack Davis shocks legislature*, Vancouver Sun, April 4, 1978. *Davis stripped of power, but Bennett keeps mum*, Times Colonist, April 4, 1978. *Davis locked out as dismissal mystery deepens*, The Province, April 5, 1978.

⁴⁵¹ *Minister finds crack in dam, pipeline plans*, Vancouver Sun, August 15, 1986.

⁴⁵² *Jim Hume*, Talk Politics, Times Colonist, August 14, 1986.

Davis, a one-time federal Liberal fisheries minister [and the federal government's first Environment Minister], was at Vander Zalm's side in his Richmond garden business when the nurseryman announced he would run.

And if premier-designate Vander Zalm follows through with his theme of "renewal" and rewards those loyal to him, Davis's face will reappear when cabinet ministers play musical chairs.⁴⁵³

The Canadian Petroleum Association – later renamed, the Canadian Association of Petroleum Producers – warmly greeted Davis's return to the powerful provincial portfolio:

"We've got a minister who has knowledge of the industry," said John Ludgate, the manager of the B.C. division of the Canadian Petroleum Association.

"He has considerable background from his previous tenure in the job," added Ludgate. "We would also have been happy to stay with (former energy minister) Tony Brummet, who had a good feeling for the industry because his riding was in the Ft. St. John area."⁴⁵⁴

Not long afterwards in four months time came the controversial ministerial move. Davis announced on October 31, 1986, his ministry's invitation to "the petroleum industry to come forward with exploration and development proposals for the Fraser Valley:"

"We're interested in attracting conventional oil and gas exploration to the valley as well as developing an underground natural gas storage facility," Energy Minister Jack Davis said.

Davis said this would offset the province's current reliance on the Jackson Prairie underground storage facility at Chehalis, Washington [State].

"An underground gas storage facility located so close to Vancouver would guarantee security of natural gas supply for the city," said Davis.

He added that any successful bidders for exploration rights in the Fraser Valley would have to operate within the strictest environmental guidelines.

The petroleum industry has been asked to submit proposals by year-end with exploration rights expected to be posted for bidding in the Spring of 1987.⁴⁵⁵

It is important to note the Minister's statement referred to both "oil and gas exploration," as later statements by government and industry in 1990 would emphasize "gas" exploration as the single or primary objective. Secondly, the Minister's misleading statement about the "current reliance on the Jackson Prairie underground storage facility," because there was no return gas pipeline from the Jackson Prairie facility in southwest Washington State back to British Columbia.

As another indicator of gifts to the petroleum lobby forces, by June 1987 Jack Davis and federal energy Minister Marcel Masse would favor lifting the offshore oil and gas exploration moratorium on the west coast of Canada under the proposed Pacific Accord, the moratorium that Chevron Canada Resources Ltd. and Shell Canada Resources Ltd. were pushing to remove for their interests "during the high-charged

⁴⁵³ *Davis is ready for thaw*, The Province, August 3, 1986.

⁴⁵⁴ *3 Vander Zalm backers smiling over cabinet posts*, Vancouver Sun, August 14, 1986.

⁴⁵⁵ *Province pleads for petroleum development in Fraser Valley*, the Province, November 2, 1986.

1985 environmental public hearings,"⁴⁵⁶ proposals discussed before the West Coast Offshore Exploration Environmental Assessment Panel.

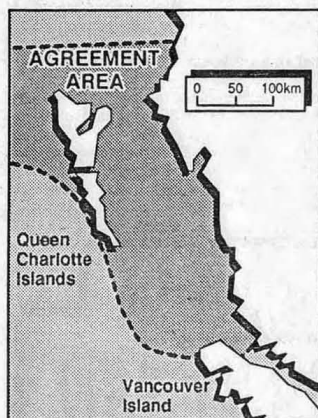
Business

BUSINESS
ON BILL 19
Page 33

The Province

Tuesday,
June 9, 1987

Page 21



B.C. energy hunt nearer



By BRIAN LEWIS
Business Reporter

A formal Pacific Accord between B.C. and Ottawa on West Coast offshore oil and gas exploration should be in place by year-end with initial seismic surveying beginning as early as next summer, Energy Minister Jack Davis said yesterday.

Davis outlined the time frame in Vancouver yesterday where he and federal Energy Minister Marcel Masse jointly announced their governments' approval of most recommendations in an environmental study.

Once the formal Pacific Accord is reached, that will end a B.C. offshore oil and gas exploration moratorium that was established in the early 1970s.

"One of the world's greatest unexplored sedimentary basins lies off our West Coast," Davis said. "If it lives up to its potential for petroleum production, it will bring major economic benefits." If the seismic surveying shows oil and gas potential, drilling could begin in 1989 or 1990, he added.

The exploration area is essentially between the northern end of Vancouver Island and the Alaskan Panhandle. It includes waters around the environmentally-unique Queen Charlotte Islands and is roughly the same size as North Sea oil fields.

The West Coast Offshore Exploration Environmental Assessment Panel, which held public hearings in 1985, released its report last year. It contained 92 specific recommendations that assessed potential environmental/socioeconomic effects. It also outlined terms and conditions for

seismic surveys, exploratory drilling, oil blowout contingency plans, compensation as well as environmental protection.

Davis and Masse said yesterday that both governments support and accept the intent of 80 of the panel's recommendations. These include no drilling within 20 kilometres (12 miles) of shore.

"Should exploration lead to the discovery of oil or gas in commercial quantities off our coast, then there will be a further public review process before production can take place," Davis added.

The last seismic exploration programs in B.C.'s offshore were carried out in 1972, but no commercial hydrocarbon quantities were found. "Recent progress in geological science, however, suggests that the potential for oil or gas in the area may be significant," added Masse.

Now that Ottawa has offshore agreements with Newfoundland and Nova Scotia "we will now begin work on a Pacific Accord," he said. Davis added that he's looking for an agreement "as least as good as Newfoundland" which received about \$300 million from the federal government.

Most of the offshore area has been leased out for exploration and the major leaseholders are Chevron Canada Resources Limited and Shell Canada Resources Limited.

The federal government placed the original moratorium on the area in response to environmental concerns raised by proposed tanker traffic carrying Prudhoe Bay oil from Alaska to the continental U.S.

Staff photo
Energy ministers Marcel Masse and Jack Davis spell out details of West Coast exploration.

⁴⁵⁶ *Moratorium to end*, The Province, June 5, 1987.

5 – 1. Enter Dynamic Oil

The earliest newsprint media promotional attention on the first petroleum company bidders for exploration rights in the Fraser Valley appeared in the Surrey Leader news on February 25, 1987. It featured a lengthy article, in anticipation of which Dynamic Oil had procured a full-page advertisement for its accompaniment. The ad led with a quote in large font by Wayne J. Babcock,⁴⁵⁷ the president of Dynamic Oil Ltd.: “Looking under the surface of the earth to find something that’s been hidden there 40 to 50 million years ...”

Dynamic Oil’s four-year geological and geophysical study of the Fraser Valley indicates the type of environment which could be suitable for major hydrocarbon deposits. The next step in its oil and gas exploration program: a seismographic survey to be conducted this spring. Exploratory drilling could begin by autumn.

Search for oil in farmland is nothing new for Dynamic Oil. The company has working interests in 22 producing oil wells in the prairie provinces. And, with sophisticated oil-drilling technology, environmental impact is minimal. Farming continues around the rigs.

The province thinks it is time for modern oil-finding techniques to be used to explore the Fraser Valley. So do the Fraser Valley people we’ve talked to. It could mean we’ll start harvesting what’s *under* the ground, as well.

When oil and gas companies want to befriend farmers by claiming “environmental impact is minimal” – beware!

Oil, gas exploration crews to return to Fraser Valley

⁴⁵⁷ Dynamic Oil Ltd. was later renamed as Dynamic Oil & Gas, Inc., and was listed on the Toronto Stock Exchange as “DOL”, and on the NASDAQ exchange as “DYOLF.” In Dynamic Oil & Gas Inc.’s 2005 2nd Quarter Report, “we own working interests in producing and early-stage exploration properties located in various areas of southwestern and northeastern British Columbia, central Alberta and southwestern Saskatchewan.” In 2005, Dynamic sold its Alberta assets to Sequoia Oil & Gas Trust. In 2005 it changed its name to Shellbridge Oil & Gas Ltd. for remaining assets in British Columbia and Saskatchewan. The new TS exchange name became “Shellbridge.” In the 2005 filing, Babcock was president and ceo, and Donald K. Umbach was vice president and coo. In 2003, Babcock earned \$2.644 million, “good for 13th spot” on the “highest paid executive of public companies in B.C. in 2003,” “followed closely by Dynamic’s vice-president and chief operating officer, Donald Umbach, 14th at \$2.634 million.” (Source, “Casino boss among top-earning executives,” Vancouver Sun newspaper, May 29, 2004.) In Dynamic Oil’s early petroleum ventures, it had partner agreements with Gulf Oil, Westburne Petroleum, and Aberford Resources, and mineral interests in the West Hemlo gold property of Ontario and in Carmi Molybdenum in BC’s Okanagan.

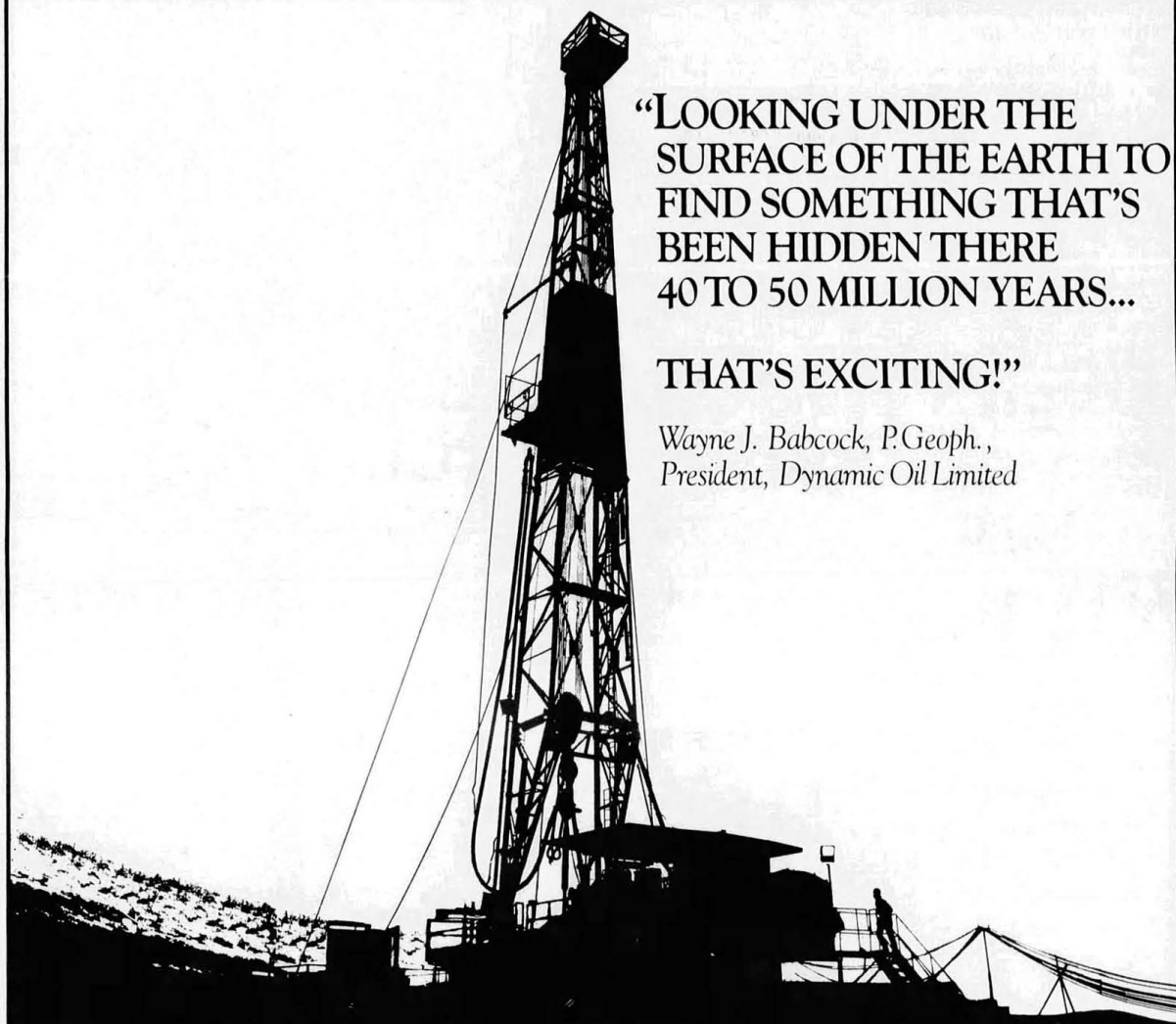
THE FORGOTTEN DELTA

Could this be North America’s last great natural gas discovery ... and right here in the Fraser Delta?

Seismic test results strongly indicate this — and drilling will start within a few weeks.

To learn more about this surprising story, and the unusual investment potential, visit Dynamic Oil’s booth 312, at The Money Show.

Vancouver Sun - January 28, 1988



"LOOKING UNDER THE
SURFACE OF THE EARTH TO
FIND SOMETHING THAT'S
BEEN HIDDEN THERE
40 TO 50 MILLION YEARS...

THAT'S EXCITING!"

Wayne J. Babcock, P.Geoph.,
President, Dynamic Oil Limited

The British Columbia Ministry of Energy, Mines and Petroleum Resources has called on the petroleum industry to look under the surface of the Fraser Valley. Dynamic Oil is ready.

Dynamic Oil's four-year geological and geophysical study of the Fraser Valley indicates the type of environment which could be suitable for major hydrocarbon deposits. The next step in its oil and gas exploration program: a seismographic survey to be conducted this spring. Exploratory drilling could begin by autumn.

Searching for oil in farmland is nothing new for Dynamic Oil. The company has working interests in 22 producing oil wells in the prairie provinces. And, with sophisticated

oil-drilling technology, environmental impact is minimal. Farming continues around the rigs.

The province of British Columbia thinks it's time for modern oil-finding techniques to be used to explore the Fraser Valley. So do the Fraser Valley people we've talked to. It could mean we'll start harvesting what's *under* the ground, as well.

If you'd like to know more about Dynamic Oil's Fraser Valley exploration program, write to us:

262 - 2025 West 42nd Avenue
Vancouver, B.C. V6M 2B5
Telephone: (604) 266-3318

Or contact: Henry Huber Doug Corrigan
Continental West Coast
Carlisle Douglas Securities Ltd.
(604) 682-4450 (604) 681-1286



Dynamic Oil Limited
The Energy Finders

Surrey Leader - February 25, 1987

In 2002, the Edmonton Journal newspaper examined Dynamic Oil and Gas' operations at the community of St. Albert and at Big Lake, Alberta. In the article, Babcock revealed his company's strategy in dealing with communities:

[Wayne] Babcock said ... Dynamic bought out various companies to hold 75 per cent of a partnership holding the rights to what is left.

Drilling and operating wells in or near residential areas presents special challenges for oil companies.

"We [Dynamic Oil] certainly try to be part of the community. About a week and half ago we held a barbeque and gold tournament at Sandpiper that borders on some of our pumping wells. It gives you a chance to meet the people in the community and find out if there are any concerns.

Dynamic's previous experience in residential areas was drilling four wells in B.C.'s Fraser Valley.

Babcock feels it's easier for a smaller company to come into a community.

"The people perhaps are more put off by a multinational, for instance. They don't feel they can get as much attention or matter as much. But with a smaller company we can meet with people quicker and make decisions on the spot, which perhaps a larger company can't." ⁴⁵⁸

Babcock's public relations strategy – to pose as the 'little' company – he learned first-hand when experimenting with the citizenry and municipal governments of the Fraser Valley from 1987 to 1994. And this is precisely what the bigger fish, the larger petroleum companies and a private corporation utility company, took advantage of during the early phase of Fraser Valley petroleum skirmishes, hiding beneath the skirt of Dynamic Oil, letting Dynamic handle the early dirty promotional work.

In 2003, the Edmonton Journal ran another, but different, story about Dynamic Oil, countering Babcock's rosy picture of junior-oil-company community relations.

St. Albert residents and their city council are at odds with an oil and gas company operating in their area.

City council, earlier in the month, approved sending a letter to Alberta Environment outlining concerns about the long-term health effects on residents and the environment after Dynamic Oil and Gas applied to renew the licence of a nearby sour gas plant. The plant has operated since 1984.

St. Albert upset about nearby oil, gas activity

Edmonton Journal - February 20, 2003

HANNEKE BROOYMANS
Journal Staff Writer
ST. ALBERT

St. Albert residents and their city council are at odds with an oil and gas company operating in their area.

City council, earlier in the month, approved sending a letter to Alberta Environment outlining concerns about the long-term health effects on residents and the environment after Dynamic Oil and Gas applied to renew the licence of a nearby sour gas plant. The plant has operated since 1984.

The residents, worried about a new oil well to be drilled two kilometres west of St. Albert, plan to voice their concerns at a public hearing scheduled for March 19 before the Alberta Energy and Utilities Board.

See DYNAMIC / back of section

⁴⁵⁸ *Oil and gas urban sprawl*, Edmonton Journal, September 30, 2002.

The letter requested a review of regulations, standards and monitoring requirements after gas released last December “generated concerns and questions from residents.”

While Dynamic could not identify the causes for such incidents, their number has steadily increased between 1995 and 2002, stated the letter signed by Mayor Richard Plain.

Louise Horstman, president of the Big Lake Environmental Society, said the group has met with Dynamic to discuss the gas plant licence renewal because “any development in that area potentially affects the water quality of the lake.”⁴⁵⁹

An aggressive junior company president Wayne Babcock got the early spotlight in the media in February to March 1987 promoting prospects for oil and gas production in two western Fraser Valley municipalities, Delta and western Surrey. Most of the hype was aimed at attracting investors.

Dynamic Oil has been examining the lower Fraser Valley for the past four years, and the company claims a geophysical study so far has revealed similarities between the Fraser River delta and prolific oil and gas producing deltas in other parts of the world. ... “there’s room in here for something large,” Babcock said. More likely, he said, is something of “average Alberta size, something that could be quite commercial.”

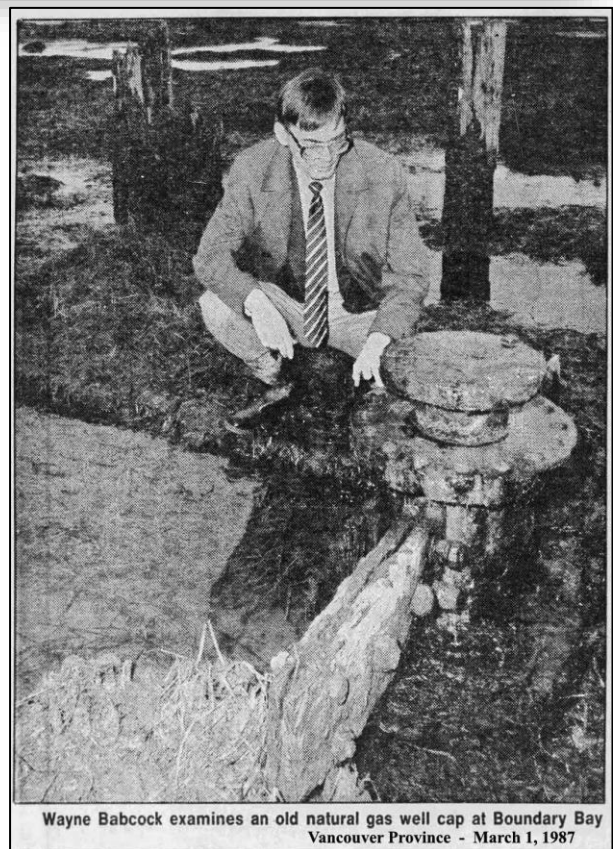
He said the company will begin its seismographic survey of Delta and western Surrey in late April or May, using a technique called vibroseis.⁴⁶⁰

Before founding Dynamic Oil in 1981, Babcock spent a dozen years with Amoco Canada, the exploration and production subsidiary of Standard Oil, working in areas from the Gulf Coast to the Grand Banks.

Dynamic has exploration rights

VANCOUVER-based **Dynamic Oil Ltd.** has acquired 54,332 acres of oil and gas exploration rights in the Fraser Delta, covering an area south of Vancouver to the U.S. border, including some offshore territory. The cost: \$54,500 and 100,000 Dynamic shares to the vendors, businessmen who have had the rights since 1957. Dynamic trades around \$2.80.

National Post
April 18, 1988



Wayne Babcock examines an old natural gas well cap at Boundary Bay
Vancouver Province - March 1, 1987

⁴⁵⁹ *St. Albert upset about nearby oil, gas activity*, Edmonton Journal, February 20, 2003.

⁴⁶⁰ *Oil exploration to begin on Surrey / Delta farms*, Surrey Leader, February 25, 1987.

Environmental impact of Dynamic Oil's Fraser Valley program should be minimal. Farming can continue as usual. "Incongruous as it seems," says Wayne Babcock, "cows can graze next to drilling rigs."⁴⁶¹

A Vancouver-based oil company is currently conducting work in the Fraser Delta area west of 168th St. that "could be the start of a new major industry in B.C.," says Wayne Babcock, president of Dynamic Oil Limited.

The economics of an oil industry in the Fraser delta are "just fantastic," Babcock said.⁴⁶²

The Dynamic Oil president said local reaction to news of the exploration plans has been favorable.

The municipality of Delta has been "helpful," he said, adding that a presentation he gave to a meeting of the Delta Chamber of Commerce was well-received.

"The response was very vigorous and very positive," he said. "The business community likes it."⁴⁶³

Vancouver Sun - June 15, 1987

BUSINESS CALENDAR

Week of June 16 - 22

Thursday

Canadian Institute of Energy: luncheon meeting. Hyatt Regency Hotel, 11:30 a.m. Members \$11/non-members \$15. Reservations 666-5705 (Gretchen Harlow). Topic: Oil and Gas Explorations in the Fraser Valley (Wayne Babcock).

A2 THE LEADER, SURREY, B.C. — WEDNESDAY, FEBRUARY 25, 1987

Oil exploration to begin on Surrey/Delta farms

A Vancouver oil company has announced plans to explore parts of Delta and western Surrey for oil and natural gas this spring.

In a news release issued last week, Dynamic Oil Ltd. said it has committed \$85,000 toward a seismic exploration program to be done by early summer, with drilling possible as early as autumn.

In a telephone interview last Wednesday, company president Wayne Babcock said the firm has acquired freehold mineral rights on farm land in "three or four" main areas of Delta and Western Surrey, where it plans to begin seismographic surveys to determine if they contain reservoirs of oil or gas underground.

However, he would not say where in Delta or Western Surrey the company plans to conduct its possible explorations.

"Because of the competitive nature of what we're doing, I don't want to be any more specific about the exact areas," he stated.

Asked when his company would make public the exact locations, Babcock said it probably would do so in the fall, when explorations are completed.

Babcock said his company's plans to explore the area for production possibilities came in response to the provincial government's invitation last fall to the petroleum industry for proposals for exploration and development in the Fraser Valley.

The energy, mines, and petroleum resources ministry called for the proposals to attract commercial exploration and development to the area.

In addition, the ministry hopes companies will find an underground reservoir for the storage of natural gas. Gas would be stored in the reservoir during the summer for use in the winter, to reduce the Lower Mainland's reliance on the Jackson Prairie natural gas underground storage facility in Chehalis, Washington.

Interested in petroleum

Dynamic Oil is more interested in petroleum production than in finding a location for a natural gas storage facility.

"Any storage possibility is a secondary objective for us," Babcock said.

He added that he believes the potential for underground storage of natural gas is greater farther up the Fraser Valley.

"Where we're working, we feel that the potential for oil and gas production is higher," he said.

Dynamic Oil plans to conduct explorations for both oil and natural gas, but Babcock believes its chances of discovering gas are better than chances of finding oil.

"Gas is what's been seen most in the area," he said.

No other companies are currently involved in Dynamic's plans to explore the local area.

Babcock's belief that parts of

Delta and Surrey could be productive for gas and oil exploration is based on two factors.

First, most deltas worldwide produce petroleum, he noted. Second, the lower Fraser Valley has been explored for petroleum in the past.

For example, Babcock said Frank McMahon, currently chairman of West Coast Transmission, discovered gas during an unsuccessful attempt to find oil in a well drilled in 1923 in Boundary Bay at the foot of Delta's 96 Street.

Tests encouraging

More recently, about 25 years ago, Richfield Oil Company conducted a stratigraphic test in the Sunnyside area as part of three tests in Surrey, Tsawwassen and Abbotsford to establish a geographic cross-section of the Fraser River delta. Babcock said the Sunnyside area test was conducted just southwest of the intersection of 24 Avenue and 168 Street.

Test results were encouraging, Babcock said, but the oil company

(continued on page B16)

⁴⁶¹ Valley exploration program announced by oil company, Abbotsford News, February 25, 1987.

⁴⁶² Oil could be new industry in B.C., Abbotsford News, March 25, 1987.

⁴⁶³ Oil search has begun, Surrey Leader, June 28, 1987.

The spectre of petroleum exploration, however, didn't sit well with the municipality of Surrey, which quashed Dynamic Oil's seismic survey location proposals within its municipal boundaries. When B.F.R. Geophysical Consultants, "that coordinates geophysical testing and sells the results to oil companies," sought approval from Surrey municipality to "conduct tests using equipment that sends vibrations into the ground from trucks travelling mostly on municipal roads in South Surrey and Cloverdale," Mike Jones, Surrey's municipal manager, presented a report to City Council in August 1987 which "recommended that the firm not be given that approval."

[Jones] said the future of Sunnyside Acres, 485 acres of municipally owned land in South Surrey that is being planned for development, could be "compromised" by any explorations and that the environment could be adversely affected.

"We would be loading the gun against our own interests," he stated in his report to council.

Council members agreed.

Alderman Paul Easton said that as a growing, urban municipality that will become a "metropolitan" area in the future, Surrey should not be interested in allowing any explorations that could result in an underground natural gas storage facility being developed in the area.⁴⁶⁴

Geophysical tests are not permitted

Surrey Leader

August 23, 1987

A Calgary-based firm that coordinates geophysical testing and sells the results to oil companies can't do tests in Surrey, council has decided.

B.F.R. Geophysical Consultants had requested approval from Surrey to conduct geophysical tests using equipment that sends vibrations into the ground from trucks travelling mostly on municipal roads in South Surrey and Cloverdale.

But council voted in committee against issuing permits to allow the tests.

Ald. Paul Easton said that as a growing, urban municipality that will become a "metropolitan" area in the future, Surrey should not be interested in allowing any explorations that could result in an underground natural gas storage facility being developed in the area.

Roads proposed for the tests were: 24 Avenue, between 128 Street and 192 Street; Zero Avenue, between roughly 188 Street and the Langley border; Highway 10, between 168 Street and the Langley border; roughly along the B.C. Railway south of Highway 10, between the Delta border and 168 Street; 168 Street, between 96 Avenue and 8

Avenue; and 152 Street, between 24 Avenue and 16 Avenue.

B.F.R. needed Surrey's approval before commencing the test, and municipal manager Mike Jones recommended that the firm not be given that approval.

In a report to council, he pointed out that Surrey would be unable to share "directly and meaningfully" in any economic benefits to be gained by explorations by others within its boundaries.

In addition, he said the future of Sunnyside Acres, 485 acres of municipally owned land in South Surrey that is being planned for development, could be "compromised" by any explorations and that the environment could be adversely affected.

Jones said further that Surrey should not consent to exploratory testing if it did not intend to approve actual drilling in the municipality.

"We would be loading the gun against our own interests," he stated in his report to council.

Council members agreed.

Assured Surrey could gain no direct economic benefit from private explorations, Ald. Judy Higginbotham asked, "Then why are we going through this exercise?"



Dynamic Oil president Wayne Babcock surveys a Fraser Valley area where exploration this spring may identify significant oil and gas reserves. The

Vancouver-based company has planned an \$85,000 seismicographic survey, to be followed by a drill program. **Abbotsford News - February 25, 1987**

PERSPECTIVE 5 PHOTO

⁴⁶⁴ *Geophysical tests are not permitted*, Surrey Leader, August 28, 1987.

In April 1987, Wayne Babcock began spotlighting another development proposal in the media. Babcock's Dynamic Oil was now a "consortium" member of a new company, Island Gas Transmission Ltd., promoting the construction of a 140-kilometre natural gas pipeline route from the U.S. mainland in western Washington

State to Vancouver Island. No information was published in the B.C. news press (that the author could find) which identified the other company consortium members, with only one reference citing "a group of five engineers."⁴⁶⁵ The consortium's proposed route would tap into Westcoast Transmission's tributary distribution

pipeline, south of Huntington at B.C.'s border, in Washington State just north of Seattle City at Lake McMurray.

From there, the proposed pipeline would travel westward over the top end of Camano Island, under Skagit Bay to the middle of Whidbey Island, under Puget Sound to the north end of Port Townsend on

Group plans gas line

By ANNE FLETCHER
Business Reporter

B.C. Hydro says it's going to ignore the province's latest call for proposals to pipe natural gas to Vancouver Island.

But a group of five engineers says it will take advantage of yesterday's announcement from the Department of Energy, Mines and Petroleum Resources to submit its plan for a pipeline from the Olym-

pic peninsula across the Juan de Fuca Strait to Victoria.

The pipeline would carry B.C. natural gas.

Wayne Babcock of Island Gas Transmission Ltd. said the 140-kilometre line would carry gas from Vancouver to Washington state over existing pipelines before crossing to the peninsula and then to the island.

Preliminary costs are estimated

The Province - October 6, 1987

at \$112 million to land gas on the island and \$268 million to include a distribution system, Babcock said.

"We will not be submitting a fresh proposal," said Hydro spokesman Peter McMullan.

A B.C. Hydro proposal for a 74-km line from Tilbury Island on the Fraser River across Georgia Strait to Cedar south of Nanaimo was approved in principle by the provincial cabinet several years ago.

H10 The Vancouver Sun, Saturday, April 25, 1987 ★★★★★

Consortium planning gas line to Island

By ROD NUTT
Sun Business Reporter

The latest proposed route for a natural gas pipeline to Vancouver Island would island-hop through the U.S. to a point near Port Angeles and then go underwater to Victoria.

Wayne Babcock, president of Vancouver-based Dynamic Oil Ltd., said Friday a consortium is being formed to build the pipeline at a cost of just over \$100 million.

Babcock declined to reveal other members of the consortium but Dynamic is a small, junior oil and gas company which is currently looking for natural gas in the Fraser Valley.

"The pipeline would island-hop from McMurray (which is connected to Westcoast Transmission's main pipeline) in Washington State to Green Point about five to six kilometres from Port Angeles on the Olympic Peninsula," said Babcock.

"From Green Point it's about 35 kilometres to Victoria."

Premier Bill Vander Zalm revealed this week that a consortium was proposing a gas pipeline to the Island in return for a monopoly on distribution rights, but declined to give more details.

Vander Zalm said the consortium

"We have approached the provincial government but we were caught off guard when the premier made the announcement."

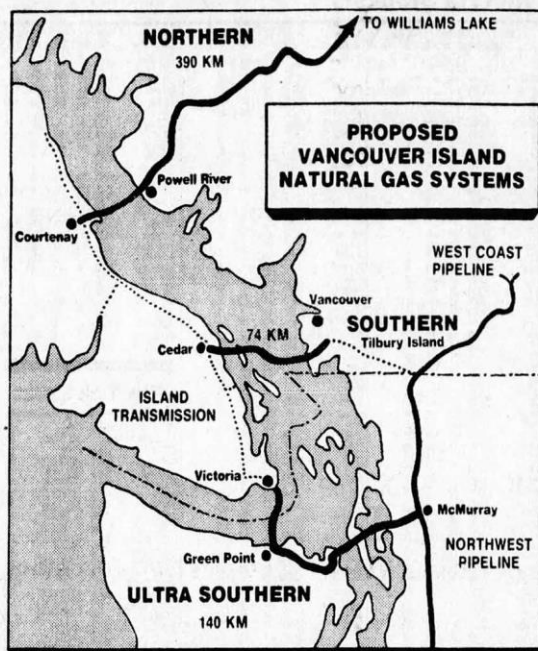
—Wayne Babcock

had "an eight out of 10" chance of getting final provincial approval, indicating the government doesn't oppose a pipeline passing through the U.S.

"We have approached the provincial government but we were caught off guard when the premier made the announcement," said Babcock.

He said an initial technical feasibility study has been completed by J.R. Britton and Associates, a consultant to Dynamic Oil. But he said potential environmental opposition in the U.S. hadn't been addressed.

"Until we see who is in the consortium, we have to question the credibility of the proposal," said Stephen Semeniuk, manager of research at Odum Brown. "It's not clear how they arrived at the cost



CONSORTIUM proposes Ultra Southern route to Vancouver Island rather than the two earlier proposed gas pipeline routes.

estimates and whether they have the technical expertise."

In the early 1980s, B.C. Hydro was chosen by the provincial government to build a \$500-million Island pipeline from Roberts Bank to Cedar (the so-called southern route), beating out a competing proposal by Westcoast Transmission Co. Ltd. which favored a northern route from Powell River to Courtenay.

But construction of Hydro's pipeline has been stalled for several years because the federal govern-

ment hasn't agreed to provide the financing as requested by Victoria.

Babcock said the consortium would also like the federal government to contribute to the proposed new pipeline through the U.S.

Babcock defended the new proposal because of the shorter distance and fewer technical problems.

The Island's market is estimated at 30 billion cubic feet of gas a year which would be supplied by B.C. producers through Westcoast Transmission.

⁴⁶⁵ *Group plans gas line*, The Province, October 6, 1987. A lone Washington State newspaper named Jim Britton (of J.R. Britton and Associates) as president of Island Gas Transmission Ltd. (*Canada pipeline brings reaction, but not much of one*, Morning News Tribune, October 10, 1987.) On February 28, 1990, the Langley Advance newspaper identified Jim Britton as Dynamic Oil's vice-president of operations. Babcock stated to the media in April 1987 that Britton was the consortium's "consultant."

the northeast tip of the Olympic Peninsula, then westward overland to Green Point, then northward under the Salish Sea (Juan de Fuca Strait) toward Victoria City, B.C.

Babcock stated that:

An initial technical feasibility study has been completed by J.R. Britton and Associates, a consultant to Dynamic Oil. But he said potential environmental opposition in the U.S. hadn't been addressed.⁴⁶⁶

Washington State's Port Angeles' citizens were dumbfounded by the proposed route:

"It's sort of pie in the sky," said Norma Turner of Port Angeles, former president of No Oilport, a coalition that fought the proposed Northern Tier oil pipeline in the late 1970s.

"It doesn't look real logical," she said. "It doesn't stand to reason why Canada should ship gas across the U.S. and back again, over two waterways."

Leslie Aickin, a member of the currently inactive Save the Resources environmental group, said she expects word of the possible pipeline to open the floodgates of public comment.

"I'm really disappointed to hear that the idea has resurfaced," she said. "I would expect the resource-conscious population on the (Olympic) Peninsula will be responding rapidly to the proposal."⁴⁶⁷

The B.C. government eventually rejected Babcock's consortium proposal at the end of 1987, being one of five bidders for the new undersea gas pipeline crossing to Vancouver Island.

The first scheme to feed Vancouver Island by an underwater pipeline was announced by the B.C. Electric Company in May 1952, a route almost identical to the proposed Babcock consortium route. The second proposal some five years later by Magna Pipeline Co. and Charter Oil Co. Ltd.'s partnership contract with Westcoast Transmission estimated in January 1957 that the investment costs to build the pipeline was as high as \$12.5 million.

⁴⁶⁶ *Consortium planning gas line to Island*, Vancouver Sun, April 25, 1987.

⁴⁶⁷ *Canada pipeline plan brings reaction, but not much of one*, Morning News Tribune, October 10, 1987.

While Dynamic Oil made headlines in British Columbia in 1987, behind the scenes a “consortium of Canadian companies,” were “preparing to start drilling for natural gas” on February 22, 1988 “near Birch Bay in Whatcom County, Washington,” “eight kilometres from the Canadian border.” In preparation for the drilling, American Hunter Exploration conducted seismic surveys in the Birch Bay area from 1986 to 1987. The drilling site was legally identified as Birch Bay No. 1.

Birch Bay site of test gas well

Vancouver Sun, June 11, 1988

A consortium of Canadian companies is preparing to start drilling for natural gas Monday near Birch Bay in Whatcom County, Wash.

Frank Donis, president of Epic Resources Ltd., one of the five companies involved, said Friday the drilling program will last about 30 days and will explore at the 1,500- to 2,100-metre depth.

“It’s a wildcat exploratory well,” Donis said.

The drilling follows 18 months of seismic and geophysical exploration and acquisition of drilling rights.

The consortium includes: American Hunter Exploration Ltd., a sub-

siary of Canadian Hunter which is owned by Noranda (63 per cent); Inland Natural Gas (13.5 per cent); Trans-Mountain Pipeline (13.5 per cent); Epic Resources (7.5 per cent) and Optima Energy Corp. (2.5 per cent).

Donis said the drilling area is part of the Georgia basin, which is similar to the Los Angeles and Ventura basins in California, which have produced trillions of cubic feet of natural gas and billions of barrels of oil.

The consortium’s first well will be located just east of Birch Bay, eight kilometres from the Canadian border.

The consortium has leased

between 20,000 and 24,000 hectares in Whatcom County and an additional 6,000 hectares in Delta, but most of the initial drilling is expected to take place in the U.S.

Preliminary work and land acquisition costs have totalled about \$1.5 million.

This spring, Dynamic Oil Ltd., of Vancouver, is scheduled to explore for oil and gas in the lower Fraser Valley.

In 1986, the ministry of energy, mines and petroleum resources called for exploration development in the valley, which is a former petroleum producing area.

The five-company consortium – “American Hunter Exploration Ltd.,⁴⁶⁸ a subsidiary of Canadian Hunter which is owned by Noranda (63 per cent), B.C.’s Inland Natural Gas (13.5 per cent), Trans-Mountain Pipeline (13.5 per cent),⁴⁶⁹ Epic Resources (7.5 per cent), and Optima Energy Corp. (2.5 per cent)” – had “leased between 20,000 and 24,000 hectares in Whatcom County and an additional 6,000 hectares in Delta,” B.C.⁴⁷⁰

A Spokane Chronicle newspaper article stated:

The risk of the project is illustrated by the fact that Washington [State] has no producing oil or gas wells. All that comes to Washington is shipped or piped in from elsewhere.

⁴⁶⁸ American Hunter Exploration was based in Denver, Colorado.

⁴⁶⁹ Trans Mountain Pipe Line Co. was, at the time, a subsidiary of Inland Natural Gas Co.

⁴⁷⁰ *Birch Bay site of test gas well*, Vancouver Sun, February 20, 1988.

Canadian Hunter's effort is "particularly significant in that it's the first well in Western Washington based on real scientific information," [William] Lingley [state Department of Natural Resources] said.⁴⁷¹

Birch Bay No. 1 is being drilled into just the kind of "structure" gas seekers look for: a kind of underground hill with a cap rock on top, buried in a thick sedimentary basin, said Jim Chaput, vice president of land for Canadian Hunter.⁴⁷²

Other petroleum parties, Shell Western Exploration & Production Co. (which was about to conduct separate petroleum exploration near the community of George in Grant County, located in the northern interior of Washington State) and the Carbon River Energy Partnership (test drill exploring in Pierce County) were hoping to change the disappointing fact that "Washington has no producing oil or gas wells".

The American Hunter consortium had international help from the London-based Financial Times in a grandiose 'pushing the limits to the hilt' promotional article, "*B.C. delta area eyed by oilmen*," which the Calgary Herald and the Vancouver Sun were quick to copy-publish. Calgary is western Canada's home base city for big oil players, and Vancouver City the home base of the Vancouver Stock Exchange.

After years of neglect, geologists are taking seriously the idea that 6,475 square kilometres of the Fraser Delta, two-thirds of it lying within British Columbia, may contain one the world's last great river-delta hydrocarbon deposits.

Observers believe last month's spudding of the Hunter Birch Bay No. 1 wildcat well in Whatcom County, Wash., eight kilometres from British Columbia, may be the opening salvo in an oil and gas play that could rock the Canadian energy industry. The well is arousing keen interest over the B.C. border.

Rooting from the sidelines is Wayne Babcock, a 44-year-old geophysicist and veteran of Amoco Canada's exploration and production system. As president of Vancouver-based Dynamic Oil Ltd., the major leaseholder in adjacent B.C. real estate, Babcock is betting that the Fraser holds trillions of cubic feet of natural gas.

Epic director and geological consultant Robert Curr says that "deltaic units" similar to the Fraser "exist in every great river system that has produced a major oil and gas field – the Mackenzie, the Irrawaddy (in Burma), the Mississippi, you name it." Epic, a Vancouver junior, estimates the Hunter group's land alone could contain seven trillion cubic feet of gas.

Hunter has already spent \$12 million in seismic work and drilling rights at Birch Bay, which means, according to traditional industry ratios, it may be ready to spend millions more on drilling.

Analyst Jim Bartlett of [brokerage firm] Odlum Brown Ltd. in Vancouver is impressed that Canadian Hunter, which discovered Alberta's vast Elsworth gas field, is in the Fraser hunt.

"They're not going to quit if the first holes are dry. But they want this hole down before the [British

⁴⁷¹ Read Glen Breaks complaint below of the Anderson Commission's choice of Lingley, over two other candidates, for technical witness testimony.

⁴⁷² *ARCO seeks gas near Ferndale*, Spokane Chronicle, March 21, 1988.

Columbia Crown] land sale [up for auction in the summer]. And if it's successful, they'll be looking to buy everything from Hope to Vancouver Island.⁴⁷³

Corporate information presented in the Financial Times article may have helped to identify some of the mysterious consortium partners in Wayne Babcock's Island Gas Transmission Ltd., the proposed venture for a new gas pipeline route to Vancouver Island. That proposed pipeline route would, coincidentally, branch off just south of American Hunter's exploration lands at Birch Bay: "Babcock's Dynamic is eyeing Hunter's progress eagerly."

A paragraph in the Financial Times article revealed Canadian Hunter Exploration's key strategy meant to spearhead petroleum exploration in the Fraser Valley.

The company [Canadian Hunter] is keen on both sides of the border, but for now, says Jim Chaput, the firm's vice-president of land acquisition, it is exploring on the south side because "you go where it's best to work, and **Washington state is more conducive to drilling than the Canadian side.**" [Bold emphasis.]

SAMPLE LOG			
D.T. COSGROVE, P.Geol.			
CONSULTING GEOLOGIST			
NAME <u>AMERICAN HUNTER et al BIRCH BAY #1</u>			
ON <u>NW/SW</u>	<u>Sec. 32</u>	<u>T40N R1E MB&M</u>	CO. & STATE <u>Whatcom, WA</u>
DINATES <u>2310' north, 660' east of SW corner sec. 32</u>			
<u>90.0'</u>	GRD.	<u>77.0'</u>	AREA OR FIELD <u>Birch Bay area</u>
LLER <u>9126'</u>	TD LOGGER	<u>9125'</u>	T.D FORMATION <u>Chuckanut</u>
G LICENSE <u>Permit #420</u>		API NUMBER <u>46 - 073 - 00095</u>	
) <u>22 Feb. 1988 2145 hours</u>		DRILLING CONTRACTOR <u>Taylor, Rig #4</u>	
) DRILLING <u>11 May, 1988 1845 hours (78 days, 21 hours from spud)</u>			
EASED <u>19 May, 1988 1800 hours (86 days, 20-1/4 hours from spud)</u>			
<u>Potential gas storage well</u>		PERFORATIONS	<u>Plug back T.D.: 6350</u>

Exploration drilling in the Fraser Valley was already understood by industry as a confirmed public relations quagmire. Given the companies' access to tap into the otherwise restricted southern perimeter of the Fraser Valley geological sedimentary formation, the Canadian Hunter consortium found permit favor in northwestern Washington state.⁴⁷⁴ If the Washington State Birch Bay drilling results proved favorable, they might become a marketable beacon and lever to better help persuade government and the public to drill the Fraser Valley. A clever strategy.

⁴⁷³ *Hopes ride high on Fraser Delta oil and gas*, Calgary Herald, March 10, 1988.

⁴⁷⁴ Northwestern Washington State political support was later noted in Whatcom County executive Shirley Van Zanten's letter of October 26, 1990 to the David Anderson Commission, stating that the County "want to go on record as supporting it," it being "gas exploration" and "storage of natural gas" "north of our border."

However, the Province newspaper reported on May 22, 1988, that the consortium's wildcat Birch Bay No. 1 well "has come up dry." The results, consistent with drilling exploration since 1914, were both a disappointment and an investor embarrassment for the Birch Bay consortium.

38 The Province Sunday, May 22, 1988

Well drill a bust

Business Reporter
A wildcat natural gas well drilled at Birch Bay, Wash., has come up dry, says a spokesman for Canadian Hunter Exploration Ltd.
But Canadian Hunter, which along with Inland Natural Gas and Trans Mountain Pipe Line Co. make up the major partners, will continue to work on the site to determine whether it has potential as a major underground gas storage facility.
"We've found nothing in that hole and we're really disappointed," said Jim Chaput, senior vice-president of land for the Calgary-based company.
Chaput said the well was drilled to 2,743 metres (9,000 feet) and has been "plugged back" to the 1,524-metre (5,000-ft.) intermediate level for now.
Canadian Hunter is assessing the data collected from drilling and expects to consult with experts in the gas storage field before any more on-site activity takes place.
Finding a large gas storage area would be significant for Washington and the Greater Vancouver area. It would mean the main gas pipeline from B.C.'s north-eastern fields could be better utilized during the low-use summer period to store gas for the winter period.
"We've never worked in looking for gas storage before," said Chaput, "so we'll have to get experts in that field to look at our data and tell us what to do. We expect it'll mean more drilling, but we think if there is a storage area it would be fairly shallow."

"We've found nothing in that hole and we're really disappointed," said Jim Chaput, senior vice-president of land for the Calgary-based company.

But Canadian Hunter, which along with Inland Natural Gas and Trans Mountain Pipe Line Co. make up the major partners, will continue to work on the site to determine whether it has potential as a major underground gas storage facility.

"We've never worked in looking for gas storage before," said Chaput, "so we'll have to get experts in that field to look at our data and tell us what to do."⁴⁷⁵

Stated in the March 1988 Financial Times article, corporate consortium member Inland Natural Gas had a "fallback" motive in the event of unfavorable drilling results at Birch Bay.

Patrick Lloyd, Inland's vice-president of corporate development, says that his firm has a fallback objective: "Development of a major gas storage capacity."

In an April 12, 1988, press release, Inland Natural Gas announced that it and its subsidiary, Trans Mountain Oil Pipe Line, were "severing their agreement with Canadian Hunter Explorations Ltd., their exploration joint-venture partner in a drilling program in North Dakota, Washington State, California and Montana." Inland had cut its ties and would be going it alone: "Further expenditures in the Fraser Delta area of Washington State by Inland are possible to develop potential underground storage facilities," said Inland president Robert Kadlec.⁴⁷⁶

By April 1988, Inland's Board of Directors were quite busy re-organizing all of Inland's assets, preparing to purchase a gigantic operating arm of B.C. Hydro.

⁴⁷⁵ *Well drill a bust*, Vancouver Province, May 22, 1988.

⁴⁷⁶ *Inland, Trans Mountain swallow U.S. asset losses*, Vancouver Province, April 13, 1988.

5 – 3. The Transformation of Inland Natural Gas Company to “B.C. Gas Inc.”: The New Giant Player

After information was leaked in January 1982 that the Social Credit Party Cabinet was considering selling off the Mainland Gas Division of the publicly owned B.C. Hydro, in March 1988 Energy Minister Jack Davis made it official.

The British Columbia government has put out a worldwide call for bids on B.C. Hydro’s natural gas division.

It will be the largest single sale in the Social Credit government’s program to privatize some of its operations.

The gas division serves more than 380,000 residential, commercial and industrial customers in the Vancouver and Fraser Valley areas using more than 8,400 kilometres of transmission and distribution lines.⁴⁷⁷



Inland Natural Gas was one of five companies that government short-listed for the purchase of the Mainland Gas Division. The others:

- Pacific Gas Inc.,⁴⁷⁸ a subsidiary of Hong Kong and China Gas Ltd.;
- British Columbia Energy Inc., a consortium of Sam Balzberg, chairman of First City Financial Corp.;
- West Kootenay Power & Light Co., a subsidiary of Missouri-based UtiliCorp United Inc.;
- Pan Pacific Utilities Corp. a Hydro management-led employee group in partnership with Great Lakes Group Inc., a company controlled by Peter and Edward Bronfman.⁴⁷⁹

Inland won the bid for the Gas Division in July 1988 for a total price of \$785 million, a sale finalized on September 30, 1988. Prior to the sale, Inland was ranked 215th in the Financial Post’s 1987 listing of Canada’s 500 largest companies.

⁴⁷⁷ *B.C. issues call for bids on Hydro’s gas division*, National Post, March 25, 1988.

⁴⁷⁸ “Another interesting aspect of the Mainland Gas Division short list is the Li Ka-shing connection. Pacific Rim Gas Inc. is a subsidiary of Hong Kong and China Gas Company Limited. The controlling owner of NKCG is Lee Shau-kee. He was a minority partner with Li Ka-shing in the Concord Pacific consortium which purchased the Expo land for \$320 million.” (*Forces muster for Hydro fight*, The Province, May 22, 1988)

⁴⁷⁹ *Bidders facing Inland ‘muscle,’* Vancouver Sun, 1988.

Inland chief executive [Robert] Kadlec engineered the biggest acquisition in B.C. corporate history. ... It is also the largest privatization in North America to date, outstripping Air Canada.

When the two companies are merged sometime in the new year, B.C. Gas (as it will then be called) will have combined assets of \$1.3 billion and a total of 1,500 employees, tripling the size of Inland. (The figures also reflect a controlling interest in Trans Mountain Pipe Line Co. Ltd.)

In terms of the number of customers it serves, B.C. Gas will be the third largest natural-gas distribution company in Canada. Inland has 140,000 customers and Hydro's gas division 380,000.⁴⁸⁰

Biggest selloff in U.K.

Associated Press

LONDON — Prime Minister Margaret Thatcher yesterday submitted to Parliament legislation to sell Britain's electricity monopoly.

The sale will be much larger than previous steps in her campaign to dispose of the nationalized industries.

Financial analysts have said the sale of the power generating and distribution system in England and Wales, to be completed

by mid-1991, may be worth anywhere from the equivalent of \$35 billion to \$60 billion Cdn. Two separate companies will be set up in Scotland while Northern Ireland is not affected.

The largest previous sale of shares, in British Gas in 1986, earned the government the equivalent of \$17 billion. The electricity sale is apt to equal the proceeds of all previous sales, including those of British

Petroleum, Rolls-Royce, Jaguar and British Airways.

Electricity and the privatization of the English and Welsh water supply are the two main flotations set to go through Parliament in the coming year.

"The proposals in this bill are radical, but they are evolutionary," Energy Minister Cecil Parkinson said at a news conference introducing the Conservative government's legislation.

The Province Friday, December 2, 1988 51

Inland's new name, B.C. Gas Inc., became official on May 9, 1989, when shareholders voted in favor of the merger. Inland's subsidiaries — Squamish Gas Co. Ltd., Grande Prairie Transmission Co. Ltd., Peace River Transmission Company Ltd., Inland Development Co. Ltd., Inland Gas & Oil Ltd., Inland Gas & Oil Corp., Inland Natural Gas Marketing Ltd., Inland Energy Corp., Inland Pacific Energy Corp., and BC Gas International Inc. — were rolled or consolidated into the new corporate name.⁴⁸¹ "In mid-1989 ... the Company amalgamated "Fort Nelson Gas, Columbia Natural Gas and Inland Natural Gas together with the Coastal Division under the name of B.C. Gas."⁴⁸² "Upon the [July 1, 1989] amalgamation, Inland Natural Gas Co. Ltd., became the Interior Division; B.C. Gas Inc. the Coastal Division; Columbia Natural Gas Limited, the Columbia Division; and Fort Nelson Gas Ltd., the Fort Nelson Division."⁴⁸³

The Vancouver Sun, Wednesday, May 10, 1989

Inland's name history as merger approved

By RODNEY NUTT
Sun Energy Reporter

One of B.C.'s better known corporate names was voted into oblivion Tuesday.

Inland Natural Gas Co. Ltd. shareholders overwhelmingly approved a merger with a company holding the assets of the former B.C. Hydro natural gas division to form BC Gas Inc.

Apart from creating the fourth largest natural gas utility in Canada, the vote also eliminated the Inland Natural Gas name — synonymous with natural gas distribution in the Interior since the early 1950s — and its subsidiaries, Fort Nelson Gas Ltd. and Columbia Natural Gas Ltd.

Inland successfully bid \$743 million last September for Hydro's Lower Mainland gas division, the largest in a series of privatization

moves by the B.C. government.

Bob Kadlec, previously the president and chief executive officer of Inland Natural Gas, takes over the same position at BC Gas. Ron Cliff, former Inland chairman, becomes chairman of BC Gas.

"Before the acquisition, Inland was reaching the peak of its growth curve as a utility," Kadlec told shareholders. "Our markets had matured with the end of the long post-war economic expansion. Further growth would only have come from in-filling of existing distribution areas."

He said there had been no major problems merging Inland and Hydro's gas division.

Although BC Gas will discontinue investment in high-risk oil and gas exploration, Kadlec said the company expects capital spending in 1989 to total \$130 million.

In the first quarter of 1989, Inland and Hydro's gas division had combined revenues of \$119.8 million, up from Inland's \$41.7 million in the year-earlier three months.



KADLEC

⁴⁸⁰ Bob Kadlec, *Inland Natural Gas, B.C. Gas*, Vancouver Sun, December 31, 1988.

⁴⁸¹ BC Gas Inc., Annual Report, 1989, page 35.

⁴⁸² Ibid., page 6.

⁴⁸³ Ibid., page 35.

THE PROVINCE, Tuesday, May 24, 1966

INLAND NATURAL GAS CO. LTD. APPOINTMENTS



Robert Kadlec, P.Eng.

Mr. J. A. McMahon, President, Inland Natural Gas Co. Ltd., is pleased to announce the appointment of A. F. Kent as Project Manager; Robert Kadlec, P.Eng., as Chief Engineer; D. F. Blane as Residential Sales Manager; and Clement A. Haziza, C.G.A., as Controller.

Mr. Kadlec graduated from the University of Toronto in Civil Engineering and is a registered Professional Engineer in British Columbia and Ontario. Formerly Superintendent of the Engineering Department of Consumers' Gas Company, he has been associated with the gas industry for eight years.

INLAND NATURAL GAS



ROBERT E. KADLEC

Vancouver Sun - November 10, 1972
Mr. John A. McMahon, Chairman of the Board and Chief Executive Officer of Inland Natural Gas Co. Ltd., is pleased to announce the appointment of Mr. Robert E. Kadlec as President and Chief Operating Officer of the Company. Mr. Kadlec was also elected to the Company's Board of Directors. Mr. Kadlec was previously the Vice-President, Engineering, of Inland Natural Gas Co. Ltd. He joined the Company in 1964. Prior to joining Inland, Mr. Kadlec held management positions with Consumers' Gas Company of Toronto for seven years. He is currently Chairman of the Managing Committee of the Operating Division of the Canadian Gas Association. He is also an active member of the Canadian Standards Association. Mr. Kadlec is a graduate of Civil Engineering from the University of Toronto.

Bob Kadlec Inland Natural Gas, B.C. Gas

Vancouver Sun
Dec. 31, 1988

Born: Calgary, Alta., 1933
Education: Bachelor of Civil Engineering, U. of Toronto
Net earnings: Inland Natural Gas Co. Ltd. earned \$4.6 million in the nine months ended Sept. 30; in the same period in 1987, the profit was \$5.5 million.

Inland chief executive Kadlec engineered the biggest acquisition in B.C. corporate history earlier this year when Inland bought the Lower Mainland gas division of B.C. Hydro for \$741 million. That surpassed Noranda's purchase of controlling interest of MacMillan Bloedel.

It is also the largest privatization in North America to date, outstripping Air Canada.

When the two companies are merged sometime in the new year, B.C. Gas (as it will then be called) will have combined assets of \$1.3 billion and a total of 1,500 employees, tripling the size of Inland. (The figures also reflect a controlling interest in Trans Mountain Pipe Line Co. Ltd.)

In terms of the number of customers it serves, B.C. Gas will be the third largest natural-gas distribution company in Canada. Inland has 140,000 customers and Hydro's gas division 380,000.

B.C. Gas will have estimated revenues of \$545 million and income of \$21.6 million in 1989.

Ambitious Inland president and chief executive officer Bob Kadlec had been salivating the sale and purchase of B.C. Hydro's Gas Division for a least a decade, and longer. And, now with the emergence of a new western Canadian junior empire, Kadlec would also form a new subsidiary, Pacific Energy Corp., in May 1988 to develop proposals to B.C. Hydro for "private power generating plants to export electricity to the U.S.," one proposal which included a "55-megawatt plant in Williams Lake



R.E. Kadlec

The Board of Directors is pleased to announce appointment of the senior executive team who will manage the corporate development and customer service operations of BC Gas Inc., the new utility formed through the merger of B.C. Hydro mainland gas operations with Inland Natural Gas Co. Ltd.



W.R. Powell

Robert E. Kadlec heads the team as President and Chief Executive Officer, continuing the leadership role he has held at Inland since 1972.

Reporting to him will be W. Randall Powell, Executive Vice-President Operations; Clifford I. Kleven, Senior Vice-President Finance; Maurice A. Favell, Senior Vice-



C.I. Kleven



M.A. Favell



P.D. Lloyd

President Corporate Services, and Patrick D. Lloyd, Senior Vice-President Corporate Development, Gas Supply and Secretary. The combined operations will make

BC Gas the fourth largest gas utility in Canada based on number of customers, serving 535,800 or 95% of the home, business and industrial gas users in British Columbia.

Abbotsford News, November 16, 1988

that would use wood waste and natural gas.”⁴⁸⁴

With his new empire consolidated, Kadlec joined a group of 16 other businessmen, each of which paid a whopping \$10,000, “for the privilege of accompanying Premier Vander Zalm to the [prestigious] world economic forum in Davos Switzerland” in late January 1989.⁴⁸⁵

14 Tuesday, January 24, 1989

FINANCIAL POST

FOCUS ON BRITISH COLUMBIA AT DAVOS

Inland Gas looking for deals to fuel development

PRIVATIZATION in British Columbia has enabled Robert Kadlec's Inland Natural Gas Co. to emerge as the province's largest gas utility and the fourth-largest in Canada.

At this week's World Economic Forum in Davos, President Kadlec will be comparing notes with and looking for tips from his European colleagues who run recently privatized companies. But Kadlec will also be looking for business deals, now that he's running a company big enough to attract international partners.

Inland, a gas-distribution utility formed in 1952, paid \$741 million last July to purchase a Vancouver-area gas-distribution system from B.C. Hydro, the province-owned electrical utility. The purchase tripled Inland's assets to \$1.1 billion, and increased its customer base from 139,000 to 539,000.

Inland bought the Hydro gas system after winning a competition that attracted bids from several international parties. The key to Inland's successful bid — besides price — was its commitment to invest another \$1 billion in B.C. over the next 12 years.

JOHN SCHREINER



Inland President Kadlec: Expansion strategy

Parts of that promise calls for third-party involvement. And the response to the opportunities, which range from petrochemicals to manufacturing products required in marketing more natural gas, has been enthusiastic.

“The deals are coming in like you wouldn't believe,” Kadlec says.

Underground caverns

The firm is also looking into petrochemical investment in the Vancouver area, based on natural gas. Recent oil and gas exploration in the Fraser Valley near Vancouver has pinpointed underground storage caverns. Inland believes these can be filled cheaply in the summer, using underutilized pipeline capacity, and the gas then could support year-round production of methanol or other petrochemical products.

“There's no other Canadian utility on tidewater that can do that,” Kadlec says.

Inland is familiar with the oil industry through its 47% interest in Trans Mountain Pipe Line Co. (Trans Mountain also owns 23% of Inland's common shares.) It also plans an \$80-million expansion of its oil pipeline from Vancouver to Edmonton. Also, it has begun a study on doubling the line in order to carry export-bound crude oil to Vancouver.

Businessmen pay \$10,000 for Swiss trip with premier

By Les Leyne
Legislature staff

Times Colonist
Jan. 13, 1989

Seventeen B.C. businessmen will ante up \$10,000 each for the privilege of accompanying Premier Vander Zalm to the world economic forum in Davos, Switzerland next week.

About 900 people will attend the event, billed as the world's premiere meeting of business leaders.

Vander Zalm said B.C., invited to make a presentation for the first time, will have an opportunity to entice some of the world's most influential business people to invest in the province.

Other businessmen attending include Michael Phelps, of Westcoast Energy; Larry Bell, chairman of B.C. Hydro; Ian Donald, head of Fletcher Challenge Canada; Don Hudson, president of the Vancouver Stock Exchange; Robert Kadlec, head of B.C. Gas; and Darcy Rezac, managing director of the Vancouver Board of Trade.

The conference ends Feb. 1, but the premier won't return to B.C. until Feb. 12.

Stated in The Province newspaper, “a key to the Inland bid was that it contained something for everyone ... developing underground gas storage in the Fraser Valley ... and development of a petrochemical plant in the Lower Mainland.”⁴⁸⁶ Contingent upon Inland's successful bid was a government proviso that Inland would pursue development of underground gas storage, a proviso consistent with Energy Minister Jack Davis's August 31, 1986, controversial invitation to the petroleum industry for exploration rights over the Fraser Valley.

On July 11, 1989, B.C. Gas Inc. forwarded an application “to the Lieutenant-Governor in Council for an Order or Orders Relating to Preliminary Surveys and Investigation for the Potential Development of

⁴⁸⁴ All systems go for gas merger, The Province, May 10, 1988.

⁴⁸⁵ Businessmen pay \$10,000 for Swiss trip with premier, Times-Colonist, January 13, 1989.

⁴⁸⁶ Gas assets to stay in B.C., The Province, July 21, 1988.

Underground Natural Gas Storage in the Fraser Delta," "pursuant to Sections 28 and 56 of the Utilities Commission Act." The Lieutenant Government in Council signed Order in Council No. 1223 on August 24, 1989, approving B.C. Gas' application.

42 The Province Sunday, August 27, 1989

B.C. Gas plan passed

Business Reporter

B.C. Gas Inc. has been given the go-ahead by Victoria to spend \$18 million on further exploration for what could be a major underground natural gas storage area in the Fraser Valley.

"We've been looking for a gas storage area in the Fraser Valley for some time now and yes, we've found some encouraging areas," said Maurice Favell, B.C. Gas senior vice-president.

"It's always been in our interest to find a good underground storage area near the Lower Mainland but whether we'll find storage, or natural gas as well, I just don't know right now."

Energy Minister Jack Davis has given B.C. Gas the government's OK to undertake a four-phase, \$18 million exploration program. Favell said this program could include some drilling as well as acquiring mineral rights to unidentified Crown and freehold properties in the Fraser Valley.

"The program should be completed by the end of next year and by that time we'll know for sure whether we've got valid storage or not," he added.

B.C. Gas was recently formed through the

merger of Inland Natural Gas and B.C. Hydro's Gas Division. Inland purchased the Gas Division for about \$700 million under the provincial government's largest privatization to date.

Finding an underground gas storage area close to the Lower Mainland could "substantially reduce or hold down" the costs of natural gas for consumers in the Lower Mainland, says George Lechner, B.C. Gas vice-president for gas supply.

An underground storage area in the Fraser Valley would mean that B.C. Gas could purchase larger amounts of gas from B.C.'s north-eastern fields during the summer when prices are lower and extra capacity exists on Westcoast Energy Inc.'s major pipeline.

Currently B.C. Gas buys about two billion cubic feet during the off-peak summer period and stores it at the Jackson Prairie, Wash., underground facility which is about 320 kilometres south of Vancouver.

Lechner points out that the underground facilities B.C. Gas is exploring could have a potential of storing about 10 billion cubic feet which would mean that larger volume purchases could be made with producers at better

prices. However, an underground storage facility must meet specific geological criteria such as sufficient cap rock so that the gas doesn't dissipate.

"We can't have any long-term confidence with our storage at Jackson Prairie because we're only renting space there," he points out. A Fraser Valley storage area would also give B.C. Gas increased security of supply in the event that the service by the Westcoast pipeline from northern B.C. were ever interrupted.

In its application, B.C. Gas said it will contribute 80 to 90 per cent of the costs of the exploration program, with private industry contributing the balance.

The company will report to the B.C. Utilities Commission at the conclusion of each stage.

Then, if the BCUC decides underground storage is feasible, B.C. Gas will apply for an energy project certificate. However, the company must halt the project at any stage if BCUC rules it shouldn't proceed.

Lechner also said B.C. Gas will take part in the bidding when the provincial government puts Crown land in the Fraser Valley up for exploration in October.



JACK DAVIS
government green light

Tuesday, August 1, 1989 5

ANNOUNCEMENT BC GAS INC.



MAURICE A. FAVELL

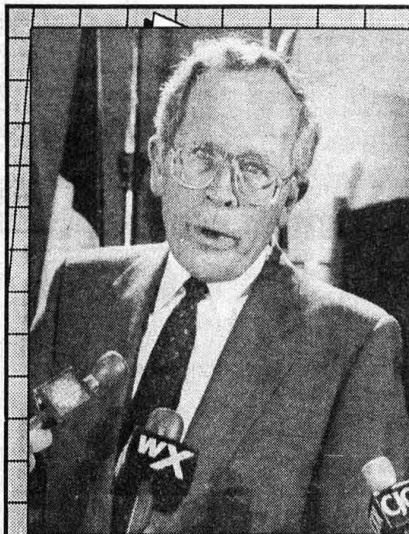
BC Gas Inc. is pleased to announce appointment of Maurice A. Favell as Senior Vice-President Executive Services.

In his new role, he will assist President R.E. Kadlec in the operation of the office of the President, with specific responsibilities for special projects and environmental issues.

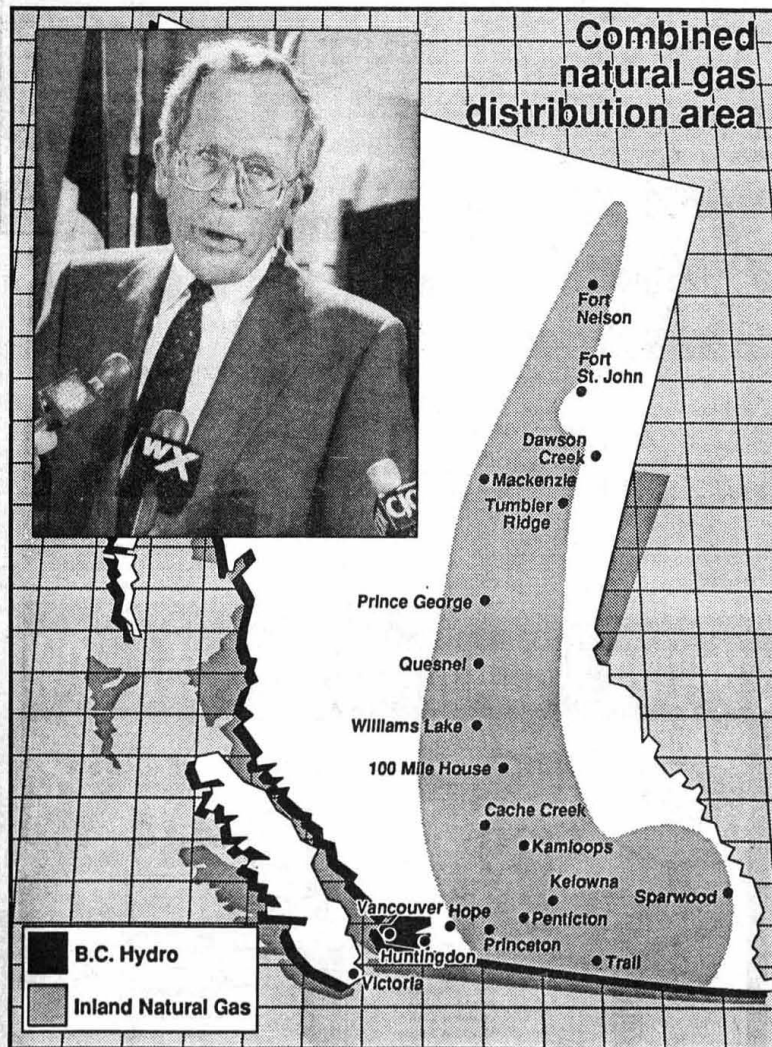
Mr. Favell has worked in the energy industry in the United Kingdom and Western Canada and was Vice-President, Gas Operations at B.C. Hydro before its acquisition by BC Gas. He is a Director of BC Gas, past Chairman of Canadian Gas Research Institute and a Director of Canadian Gas Association.

BC Gas is Western Canada's largest gas utility, expanding its range of services to communities in British Columbia.

Gas assets to stay in B.C.



Combined natural gas distribution area



Inland Gas president Bob Kadlec (inset) announces acquisition of B.C. Hydro Gas Division. Staff map by Nick Murphy

By BRIAN LEWIS
Business Reporter

The \$785-million deal for B.C. Hydro's Gas Division looks like a good one.

First — and foremost — ownership of the Gas Division, with assets of just over \$400 million and approximately 760 employees, stays in B.C.

That's a far cry from Premier Bill Vander Zalm's first major privatization where the Expo lands were sold offshore to Hong Kong's Li Ka-shing for \$320 million.

The Gas Division's new owner is Vancouver-based Inland Natural Gas Co. Ltd. which has been delivering natural gas in the B.C. Interior for more than 30 years.

On the labor front, the International Brotherhood of Electrical Workers represents employees in both companies and Local 213 spokesman Rick Dowling says: "Labor relations with Inland have been livable, there have been no major conflicts."

And on the business front, chief executive Bob Kadlec says Inland has made 100 consecutive dividend payments over the past 25 years.

It won over three short-listed bidders and was the only all-B.C. submission. The sale will be finalized on Sept. 30.

However, a key to the Inland bid was that it contained something for everyone:

■ The government had guaranteed Hydro's 380,000 customers a freeze on Gas Division rates for three years when the bidding opened but Inland extended that to its 140,000 Interior customers.

■ Inland also identified \$1 billion in proposed B.C. capital expenditures of which \$400 million is already under serious consideration. This included expansion of the Inland pipeline system, developing underground gas storage in

ANALYSIS

the Fraser Valley, linking its system to Alberta to give it both a north-eastern B.C. and prairie supply option, and development of a petrochemical plant in the Lower Mainland.

■ Gas Division employees immediately receive 50 free shares in the new, merged company and will participate in an employee stock purchase plan. There will be no layoffs.

■ Public investors will be able to participate in a \$150-million three-year convertible bond issue.

■ About \$432 million goes toward Hydro's \$7.5-billion debt, while \$309 million is slated for provincial coffers.

Energy Minister Jack Davis said the Gas Division sale represents only about one-fifteenth of total Hydro assets.

The sale will not increase Hydro's electricity rates, he said, and in fact he says he expects power rates to decline.

However, Office and Technical Employees Union president Anne Harvey — the OTEU also represents workers in both companies — said the total purchase should have gone to Hydro's debt which would have guaranteed no electricity increases.

The other bidders were: Pan Pacific Utilities Corp., formed by a Gas Division management employee group and Great Lakes Group Inc. of Toronto; British Columbia Energy Inc., a partnership of Sam Belzberg (First City Financial Corp.) and UtiliCorp United Inc., owners of West Kootenay Power and Light Company; Inter-City Gas of Winnipeg.

SALE DETAILS, Page 38

TAKING STOCK

THE MARKETS, Pages 43-47

VSE
1070.30
off
0.69

TSE
3420.84
up
5.14

Dow Jones
2110.60
up
13.34

U.K. pound
\$2.0434
up
0.40c

Canadian \$
83.44 US
off
0.09c

Canadian \$
111.37 yen
off
0.14

Gold
\$444.50 US
up
\$7.50

As soon as the B.C. government awarded the sale of B.C. Hydro's Gas Division to Inland Natural Gas in July 1988, Dynamic Oil Ltd. coincidentally:

... signed a joint venture letter of agreement with [Calgary-based] Conoco Canada Ltd. to explore for oil and gas in the Fraser Valley and delta area of southwestern B.C. In return for two-thirds of Dynamic's interest in the plan, Conoco will pay \$950,000 in cash and pay up to an additional \$560,000 for proprietary and non-proprietary seismic data to be acquired.⁴⁸⁷

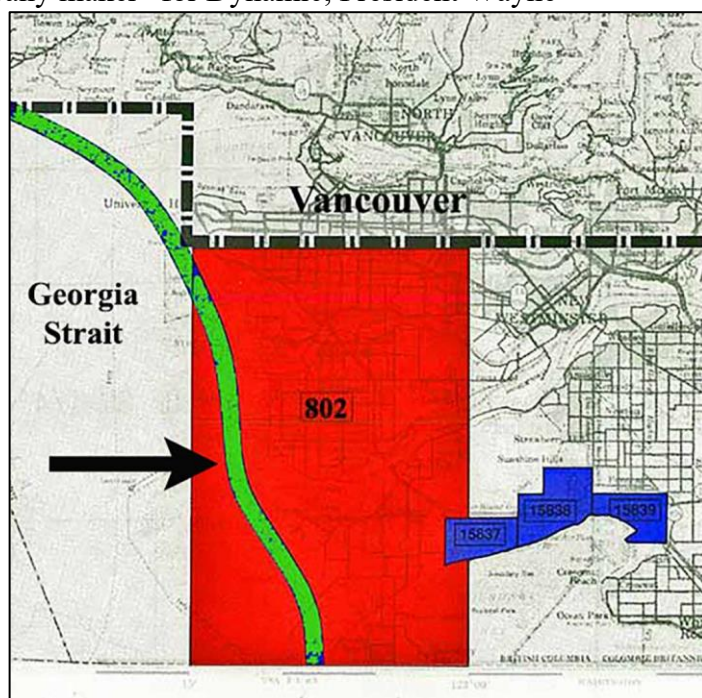
Conoco Canada Limited is a wholly owned subsidiary of Conoco Inc., one of the largest oil and gas exploration companies in the world. Conoco is known for its pioneering work in developing new oil and gas plays in remote or untested areas of the world. Conoco Inc. is a wholly owned subsidiary of the Du Pont Company.⁴⁸⁸

Conoco will acquire a 66.66% interest in about 58,000 acres of Dynamic's lands in the Fraser Delta area. ... Describing the joint venture as a "company maker" for Dynamic, President Wayne Babcock said Conoco will bring a level of worldwide technical expertise and financial strength not often available to a junior company.⁴⁸⁹

A January 1991 map of Dynamic Oil's petroleum permit, included in the January 1991 David Anderson Commission final report, shows a large rectangular tenure area of 21,888 hectares, extending from the University of B.C. in west Vancouver City, down southward to the US border to a point in the Georgia Strait, then eastward to the east boundary of the Town of Tsawwassen at Boundary Bay, and then northward to about Boundary Road at the No 1. Highway (freeway) on the Vancouver/Burnaby city border. The provincial tenure is described as title No. 802, permit class D,

Exploration pact National Post
July 28, 1988

Dynamic Oil Ltd. signed a joint venture letter of agreement with Conoco Canada Ltd. to explore for oil and gas in the Fraser Valley and delta area of southwestern B.C. In return for two-thirds of Dynamic's interest in the plan, Conoco will pay \$950,000 in cash and pay up to an additional \$560,000 for proprietary and non-proprietary seismic data to be acquired.



⁴⁸⁷ *Exploration pact*, National Post, July 28, 1988.

⁴⁸⁸ *Dynamic, Conoco sign joint venture*, Surrey Leader, August 3, 1988.

⁴⁸⁹ *Conoco Enters Joint Venture for Fraser Valley/Delta Exploration*, Daily Oil Bulletin, July 28, 1988.

with an original issue date of October 23, 1957. Appendix I of the Anderson report states that Conoco had a 66.67 % interest in this old, transferred permit which remains "inactive, but valid." The permit "was originally issued to two individuals: John White and Elmer Palmer and, through transfers, has been held by various companies throughout the years, including Richfield Oil, British American Oil and Gulf Oil Canada." Revealed in Part One of the Second Wave chapter of this report, Richfield Oil proposed to develop a gas storage facility underneath Point Roberts, an American municipality.

In early August 1988, Dynamic Oil's Wayne Babcock advertised the new partnership's intention "to begin the first-ever extensive seismic exploration of the Fraser Valley."

The Dynamic / Conoco exploration is taking place on some of the 23,500 hectares (58,000 acres) of private lands which Dynamic has acquired through exploration leases from owners. B.C.'s Ministry

The Fraser gas exploration play

Source: Alberta Report
Staff map by Nick Murphy

The Province

Seismic project a first

Wednesday, August 10, 1988

By BRIAN LEWIS
Business Reporter

A junior Vancouver energy company has linked up with a large international oil and gas corporation to begin the first-ever extensive seismic exploration of the Fraser Valley.

Dynamic Oil Ltd. has been conducting preliminary exploration work in the Fraser Valley for the past few years.

But a brief seismic project last summer captured the attention of Calgary-based Conoco Canada Ltd., which late last month signed an agreement with Dynamic to begin work.

Conoco Canada is a wholly-owned subsidiary of Conoco Inc., which is rated among the top 15 private oil and gas companies in the world. Conoco Inc. is a wholly-owned subsidiary of the Du Pont Company.

Conoco Canada holds about two-thirds of the Fraser Valley exploration partnership, with Dynamic retaining one-third.

Dynamic's president is geologist Wayne Babcock. He has had a keen interest in oil and gas exploration in what is now referred to as the Georgia Basin, which stretches from Bellingham in the south to Abbotsford in the east and well into the Georgia Strait.

"The area has always fascinated me," he says. "Anywhere else in the world where you have a delta this old and deep, hydrocarbons have been found." The delta, or basin, to which Babcock refers isn't the one we know today. Underneath it is the "old" Fraser Delta which goes back roughly 65 million years to when dinosaurs existed.

Babcock is optimistic that the venture will succeed and he thinks they'll find more natural gas than oil.

"We have a major play sitting right under our noses here that nobody has recognized in the past."

That's not the case on the U.S. side of the basin, however. Last spring, a consortium led by Calgary-based Canadian Hunter Exploration Ltd. and Vancouver-based Inland Natural Gas Co. Ltd. drilled an exploratory gas well near Birch Bay.

Canadian Hunter said at the time that no commercial quantities of gas were found but that there could be an underground gas storage area. That's a formation badly needed by the Greater Vancouver area so that cheaper summer gas could be stored locally for winter use.

Exploration on B.C.'s side of the basin is complicated since it's a mix of private freehold land, where owners have mineral rights, and Crown lands.

The Dynamic/Conoco exploration is taking place on some of the 23,500 hectares (58,000 acres) of private lands which Dynamic has acquired through exploration leases from owners. B.C.'s Ministry of Energy, Mines and Petroleum Resources is in the process of determining which Crown lands it will release for exploration bidding.

However, Canadian Hunter executive vice-president Jim Gray cautions that exploration in the Georgia Basin is only in the very earliest of stages. "It has a lot of characteristics of an oil and gas basin but it is not a low-risk environment."

Seismic crew chief Neil Nelson checks vibrator pads through which signal is transmitted.
Staff photo by Rick Loughran

of Energy, Mines and Petroleum Resources is in the process of determining which Crown lands it will release for exploration bidding.⁴⁹⁰

Energy Minister Jack Davis informed affected municipal parties in an August 31, 1988, form letter that his ministry had approved CGG Geophysics Canada Ltd.'s application for seismic exploration.

The approval is subject to CGG obtaining required road use consents. Municipalities through which this seismic program will pass have been contacted previously by the company to obtain approval for the use of Municipal roads.



The Langley Advance

1988 PRIZE WINNER
CANADIAN COMMUNITY
NEWSPAPERS ASSOCIATION
INTER-MEDIA COMPETITIONS

LANGLEY OWNED, MANAGED AND STAFFED!
VOLUME 58, NUMBER 5. WEDNESDAY, AUGUST 24, 1988.

WEDNESDAY EDITION

Authorized as Second Class Mail by the Post Office Department, Ottawa, under Registration No. 0548, and for payment of postage by cash.
P.O. Box 3310, Langley, B.C. 40¢ per copy. Phone 534-8641.

Earth shaking survey seeking gas

Langley is veritably vibrating with research. A \$1.2 million seismic study currently underway in south Langley will continue for another two months.

About 30 men and women from CGG Calgary are undertaking the exploration survey for a consortium of five oil companies which plant trucks will be moving to Highway 1 and to Fraser Highway.

The tests are used to determine densities and changes in density of the soil and rocks below the surface of the ground.

To obtain the readings, the trucks are used to send large amounts of energy into the ground by

It will be three to four weeks before deposits that may exist can be identified

manager Ed Harmling won't name. But, according to another CGG employee, Neil Nelson, B.C. Hydro is among them.

The survey is seeking natural gas and ore deposits and is being carried out this week on 16th Ave.

Last week the survey lines were run out along 248th St.

In future weeks, the four \$300,000 vibrator means of surface vibrations.

The energy itself goes into the ground at different frequencies which are reflected back up at angles to geophones which are planted in long lines away from the vibration source, the trucks.

Changes in angles and intensities of the vibrations at various frequencies picked up by the ge-

(Continued on 2a)



FLEET OF FOUR vibrator trucks (below) and a crew of 30 men and women are currently undertaking a seismic operation for hydrocarbons in the south Langley area. Exploration will move to Fraser Hwy. and Highway 1 and to other Lower Mainland municipalities while observer Robert Brink mans the recording truck (left), the nerve centre for the \$1.2 million seismic exploration that began 10 days ago and is expected to last several more weeks.

⁴⁹⁰ *Seismic Project a first*, The Province, August 10, 1988.

A two-page, September 1988 Ministry of Energy backgrounder, “Fraser Valley Seismic Survey,” stated that the seismic program would:

... run for some 8 to 10 weeks. Approximately 200 kilometres (125 miles) of survey will be run along roads and highways, most of them in a 20 kilometre (12 mile) wide strip north of the U.S. border extending from Tsawwassen on the west, to Abbotsford on the east.

In the operation, the field crew uses four vibrator trucks and a recording truck. Cables with microphones connected to them every 33 metres (100 feet) are strung out for a distance of about five kilometres along the roadsides. The four vibrator trucks move along the route as a group, stopping to vibrate for about 15 seconds every 33 metres (100 feet). The survey covers about four to six kilometres per day.

The Langley Advance newspaper reported that seismic testing began on August 14. However, that testing may not have been conducted by the Dynamic/Conoco partnership alone, making reference to a mysterious “consortium of five oil companies.”

A \$1.2 million seismic study currently underway in south Langley will continue another two months.

About 30 men and women from CGG Calgary are undertaking the exploration survey for a consortium of five oil companies which plant manager Ed Harmling won’t name. But, according to another CGG employee, Neil Nelson, B.C. Hydro is among them.

In future weeks, the four \$300,000 vibrator trucks will be moving to Highway 1 and to Fraser Highway.⁴⁹¹

The newspaper reference to “B.C. Hydro” was an error and should have stated Inland Gas which had just won the bid for control over B.C. Hydro’s Gas Division. Inland was not yet in partnership with Dynamic Oil and Conoco Canada, a partnership announced twenty months later on April 12, 1990. However, an August 1989 announcement stated that Inland (by then, B.C. Gas) was part of a petroleum exploration consortium, with partners Canadian Hunter, Optima Energy, and Epic Resources. And as the August 1988 Langley Advance article states, the members of the new consortium were not being named, meaning that the other members of the Fraser Valley exploration consortium were reluctant to be identified with the media. Instructions were most likely given to employees to keep the information confidential and remain silent when asked.

A year later, by October 1989 “more than 500 kilometres of [seismic] line was shot” in the Fraser Valley by the two consortiums.⁴⁹² In total, some 825 kilometres of seismic data was compiled over a ten-year period which included 322 kilometres of former B.C. Hydro Gas Division’s 1977 seismic data which was subsequently purchased by one of the consortiums. Fraser Valley Gas Project manager Bob Spring stated in a November 23, 1990, letter to the Anderson Commission office that B.C. Hydro’s 1977 seismic data for locating underground gas storage structures “is considered as almost “unusable” by today’s standards and cannot be compared to our 1988/89 data.”

⁴⁹¹ *Earth shaking survey seeking gas*, Langley Advance, August 24, 1988.

⁴⁹² *Valley Gas Hunt On*, Vancouver Province newspaper, October 27, 1989.

To compliment private industry's seismic survey data, both federal and provincial agencies conducted physical surveys, more-or-less political support technical data and report mechanisms, meant to evaluate 'potential' hydrocarbon estimates. This included a geophysical project dubbed "Lithoprobe" which was conducted in the Fraser Valley. The Geological Survey of Canada conducted geological studies of the Fraser Valley, "in consultation with provincial geoscientists and area universities, under the auspices of the Frontier Geoscience Program (Georgia Basin Project)." ⁴⁹³ These physical studies were part of a larger integrated hydrocarbon evaluation of the Georgia Sedimentary Basin, which included an "extensive marine geophysical survey from northern Georgia Strait to Puget Sound," by federal geoscientists in October 1989, who gathered "detailed gravity, magnetic and reflection data," and the 1988 Ministry of Energy publication, "Evaluation of the Hydrocarbon Potential of the Georgia Depression." ⁴⁹⁴ The "Ministry subsequently made the report available to industry [in August 1988] and asked for an indication of industry interest in the Fraser Valley." ⁴⁹⁵

⁴⁹³ EMPR technical submission to Anderson Commission, August 26, 1990, Tab, *Petroleum Geology in British Columbia*, page 12.

⁴⁹⁴ EMPR technical submission to Anderson Commission, August 26, 1990, Tab, *Petroleum Geology in British Columbia*, page 11.

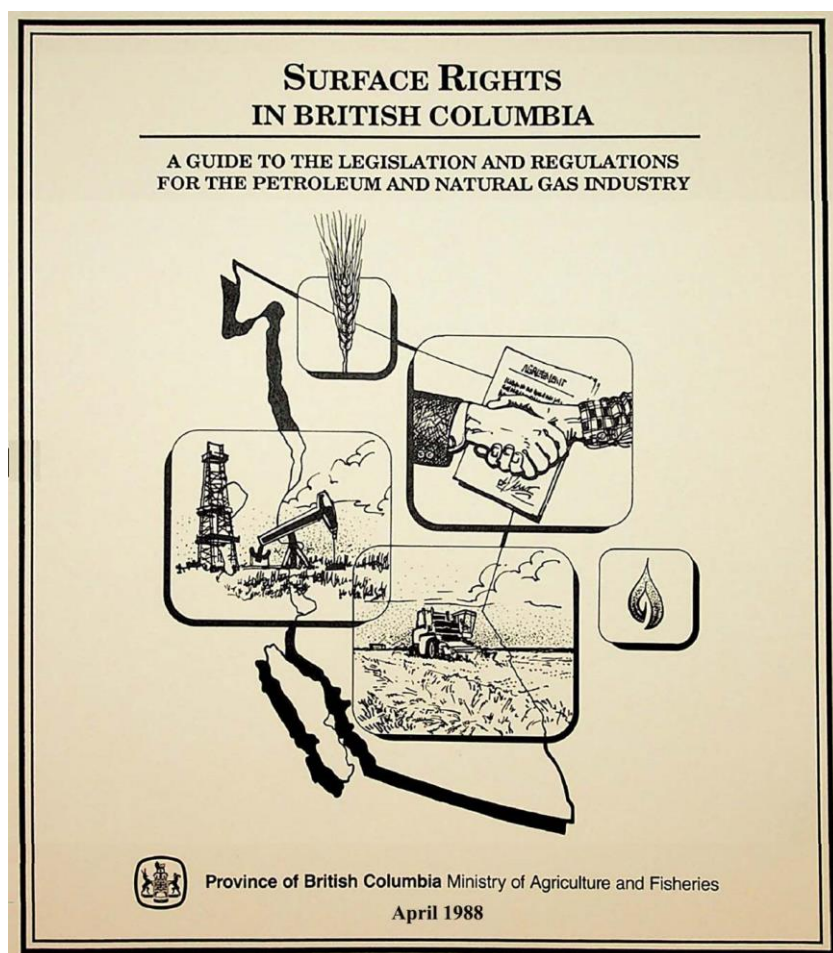
⁴⁹⁵ EMPR technical submission to Anderson Commission, August 26, 1990, Tab, *Technical Submission Summary*, page 1.

5 – 5. Provincial Government's 'Consultation' with Third-Order Governments

*"Apparently the gas proposal was important enough for ministry officials to meet and discuss details of the plan with local MLAs, local municipal governments and senior municipal staff, but took no action to inform local residents apart from oblique advertisement in local newspapers," Vickers said.*⁴⁹⁶

As the Conoco / Dynamic Oil consortium began seismic exploration in zones of the Fraser Valley, the Ministry of Energy began a sensitive "consultation program" from August 1988 to September 1989 for its advocacy of Fraser Valley petroleum exploration. That program was "limited to government agencies and elected officials" alone. Why the Ministry evaded 'public consultation' was pathetically rationalized within the Energy Ministry's lengthy August 27, 1990, technical, multi-binder submission to the David Anderson Commission.

The most significant reason for not carrying out a broad public involvement program was that there were no proposed activities on which to focus the public consultation. This is due in part to the lack of a resource inventory prior to exploration taking place. If gas could be inventoried in the same manner as trees, a development or harvesting plan could be prepared by the Ministry and presented to the public for discussion. Proposed well locations could be identified, the size and duration of disturbances would be known as would the benefits of the project. However, not even the presence of gas is certain, much less the amount or location. These questions can only be answered through multi-million-dollar exploration programs which must be planned and presented by industry.



⁴⁹⁶ *Arrangements were made before public told* – Vickers, The Chilliwack Progress, February 6, 1991.

Therefore, a disposition of petroleum and natural gas rights prior to public consultation was necessary to establish a project proponent. Someone had to have a stake in the issue before they could develop plans to be put forward to the public.⁴⁹⁷

As John Allan, the assistant deputy minister of the Energy Resources Division, wrote to the Village of Anmore near the City of Port Moody on April 26, 1989, stating “the enclosed “Question & Answer” sheet may be of help in responding to queries from the public.” The Energy, Mines and Petroleum Minister was cognisant of the inherent dangers associated with a ‘public consultation’ process about petroleum development in the Fraser Valley. Therefore, management and control of elected politicians, bureaucrats and administrators was an easier task. As a result, in 1990-1991 citizenry would repeatedly ask questions why government evaded ‘public consultation’ in the 1988-1989 preliminary stages, with the Ministry’s explanation to the Commission Hearings in the above quote meant to justify those embarrassing questions. I.e.:

In August 1988, the Ministry of Energy, Mines and Petroleum Resources started an extensive consultation program to inform local MLAs and municipal governments affected by gas exploration and storage about the Fraser Valley Gas Project without informing local residents.

“Apparently the gas proposal was important enough for ministry officials to meet and discuss details of the plan with local MLAs, local municipal governments and senior municipal staff, but took no action to inform local residents apart from an oblique advertisement in local newspapers,” [Al] Vickers said.⁴⁹⁸

The Ministry would wash its hands of the ‘public consultation’ affairs:

The responsibility for designing a project that is compatible with the community rests with industry. The role of the Ministry is to manage rights and to ensure operations are conducted in a safe and environmentally sound manner.⁴⁹⁹

A revised, five-page questions-and-answers document, initially prepared and circulated by the Ministry of Energy in November 1988,⁵⁰⁰ to municipal governments during the 1988 to 1989 limited consultation process, included the following critical question and falsified answer on the final page:

What about my water supply?

Storage, or natural gas well drilling, will not disrupt or contaminate groundwater supplies because gas formations are found many hundreds of metres below water wells and are separated from them by thick, impermeable layers of rock. It is these impermeable layers of rock which provide the top seal for gas which is stored underground.

The groundwater issue was included, because Ministry staff remembered the thorny issue raised in 1977 for B.C. Hydro’s drilling and gas storage facility proposal locations in the Surrey area, concerns both addressed in the media and in the Thurber report, Hydro’s consultant (refer to *The Third Wave* chapter of this report for the narrative).

⁴⁹⁷ Tab, *Petroleum Title in British Columbia*, pages 24-25.

⁴⁹⁸ *Drilling planned before public told says Vickers*, Abbotsford News, February 9, 1991.

⁴⁹⁹ Tab, *Petroleum Title in British Columbia*, page 25.

⁵⁰⁰ Attachment G, Petroleum Titles Branch Exhibits, EMPR technical document for Anderson Commission, August 26, 1990.

In 1988, when the Ministry of Energy's administrators published the questions-and-answers document, there were already numerous instances of groundwater contamination linked to petroleum developments in the United States and Canada, such as coalbed methane operational incidents in Alabama, New Mexico and Colorado,⁵⁰¹ including gas migration incidents from underground gas storage in Michigan and Illinois, and a wide assortment of significant and deadly sour gas well blowouts in Alberta and B.C. which occurred from the late 1950s onward, and deadly sour gas incidents in the United States from the late 1920s onwards. The water contamination incidents and controversies were rigorously ignored by both the fossil fuel industry collective and government (federal, provincial, state) stemming primarily from legal liability concerns, a collective cover-up which persists to this day! Statements defending this water contamination cover-up – 'no groundwater contamination incidents here' – would be published in the Fraser Valley newspapers in 1990 by industry and in evidential materials presented by government and private industry to the Anderson Commission.

For instance, a related argument about poisonous gases stated in a July 20, 1990, letter by Fraser Valley Gas Project manager Bob Spring to Commissioner David Anderson, referring to a 1985 community health study from sour gas plants near Pincher Creek, Alberta: **"it is encouraging to know that the long-term effects of sour gas production has not been a threat to community health."** The originating deadly and controversial effects of escaping sour gas from petroleum facilities upon the Pincher Creek farming community and livestock were headlined in newspapers from 1958 onwards, leading to an ugly class action lawsuit undertaken by local farmers and residents in the late 1960s.

'Something' In Pincher's Air

Farmers Say Animals Poisoned; Claim Gas Plants Are To Blame

(See Company Statement on Page 21)

By KEN PRESTON

[Herald Staff Writer]

PINCHER CREEK — There's something about the air down here — it kills.

It causes cattle to collapse, pigs to be poisoned, and farmers to forsake their land.

Henry Levesque, 38, a bachelor, sold his machinery two days ago at "sacrificial prices."

Next on the auction block goes his land.

Barbara McRae, a fair-haired tot of 2, has gained one pound in weight in one year. Her three brothers and two sisters have varying degrees of conjunctivitis, say specialists.

COWS POISONED

Jack Marcellus says in the last year three cows and 10 calves have been poisoned. He's been forced to sell his milk cows. Their production dropped to a point where it was uneconomical to keep them. Even his two-year-old Golden Labrador Kip turns his nose up at the air 22 miles south of this southern Alberta town.

UNCONSCIOUS

Mr. Marcellus says on one occasion the air rendered his hired man, 19-year-old Ron Sparrow unconscious. It made his wife Sally sick. It causes his son, Johnny, to have hives, his nine-month-old son Stephen to lose his appetite and Diane, 6, has headaches, vomiting and diarrhoea.

Other families in this rich ranchland where Herefords appear to be favorites are similarly affected.

Ken Phillips, secretary-treasurer of the Municipal District of Pincher Creek says farmers are afraid of something that can't be seen and can't be heard.

AFFECTS NERVES

It can be smelled and when it does, he says, it has a debilitating affect on sensory nerves.

Farmers say they are the victims of gas attacks. Mr. Marcellus and others claim the air is "polluted, unhealthy and dangerous to life."

All point an accusing finger at sulphur-gas plants 12 miles south of Pincher Creek which government and oil scientists say are innocent by lack of scientific evidence to the contrary.

Jack Marcellus says of the "overpowering, rotten egg smell" — my nose doesn't lie, my kids are not sick without cause.

Farmers on low-lying land up and down wind of the two plants on a parallel and 10 miles apart blame the plants for their ills. These ills, they claim, started five years ago when the first \$15,000,000 plant went into operation.

Calgary Herald, October 20, 1962

⁵⁰¹ Some of these early groundwater contamination events in the United States are summarized in Will Koop's on-line January 23, 2012, report, [Frack EU: Unconventional Intrigue in Poland](#), in Chapter 9, *Mr. Smith's Mission: The Interstate Oil and Gas Compact Commission Comes to Europe*.

Pincher residents bitter

By Bruce Masterman
(Herald High River bureau)

PINCHER CREEK — Area residents are angry and bitter today over the province's refusal to launch an extensive study into health problems they believe are caused by two sour gas plants.

"I'm just disgusted," said Wendy Carpentier, head of the 20-member Pincher Creek Industrial Pollution Committee.

Carpentier said she was heartened to learn that the Canadian Public Health Association (CPHA) had recommended the government sponsor a year-long, \$200,000 study.

But her joy faded Tuesday when Social Services Minister Bob Bogle announced that instead of launching a new study, provincial environmental health officials would be asked to review five earlier studies, add in new information and then make a recommendation to the minister.

Bogle said the new information would come from tests in the area but he ruled out a large scale study along the lines proposed by the association.

"I don't think Bogle is that con-

cerned about our problem," Carpentier said.

She said Bogle's decision was particularly "puzzling" because the province had hired a CPHA task

force last November to conduct public hearings into the complaints.

"The government asked (the association) to look into the situation and now the government is

ignoring the task force's findings," she added.

"It was a waste of everybody's time."

See PINCHER, Page A2

New probe scuttled

By Yvonne Zacharias
(Herald Edmonton bureau)

EDMONTON — The Alberta government has rejected the Canadian Public Health Association's call for an intensive \$200,000 study to determine whether sour gas plants near Pincher Creek are a health hazard.

Instead, Social Services Minister Bob Bogle said staff in his department will pull together all existing information on the problem in southeastern Alberta and present it to the provincial board of health which will make recommendations to the minister.

Bogle added in an interview that some testing will be done in the area, but not nearly on the large scale proposed by the association.

If no conclusive evidence can be found linking the plants to health problems in what Bogle described as "one last attempt to either prove or disprove the concerns" of local

residents, "the case will be closed."

"We'll say we've done our best," Bogle added.

The minister's decision drew an immediate negative response from Alistair Crerar, chief executive officer of the Environmental Council of Alberta, who said a report commissioned by his group in 1980 came to the same conclusion as the association.

Crerar said the association had three nationally recognized experts to conduct the task force. "When you don't accept their recommendations, why bring them in in the first place?"

In a report commissioned by the government, the Canadian Public Health Association said there is a possible link between emissions from the Shell and Gulf sour gas plants and the health problems of nearby residents.

For the past 20 years, local people have complained of fainting

spells, nausea, vomiting, sweating spells, bleeding noses, breathing problems and screaming fits among babies.

But the association said only comprehensive testing of blood, hair and urine samples of local people over a period of at least one year can prove a connection.

Bogle rejects the argument that such an intensive study is needed. "You can only go so far," he said. "There comes a point in time when some conclusion has to be drawn on the evidence."

There have been five studies since 1980, but no conclusive evidence to verify local suspicions that the plants are to blame.

Before taking action, Bogle said his department would the five reports with some new information.

He has not established a time frame for the work to be completed, though it will be done "as quickly as is practical and feasible."



Sophie Taylor won't let issue die

Garth Pritchard, Calgary Herald

Alberta

Red Deer Advocate - December 2, 1982

Blowout aids Pincher Creek cause

PINCHER CREEK (CP) — People who have tried for 20 years to blame health problems on nearby sour gas plants say a wild gas well 400 km north is helping their cause.

"It's the best thing that ever happened," said rancher Dale McRae. "All of a sudden we're not just a bunch of bitches. It means votes and people will listen."

Neighbor Allen Marr added: "People have always thought we were just complainers down here. Now they got a good dose of it (sour gas) up north and they realize it can get you sick."

The rotten-egg stench of hydrogen sulphide — the poisonous compound that gives sour gas its name — is common around Pincher Creek.

But the putrid odor is a new one for disgruntled Edmonton residents. It has been drifting over the city intermittently since Oct. 17 when an Amoco Canada Petroleum Ltd. well at Lodgepole went wild.

Edmonton is complaining about the smell and about nausea and headaches, two ailments Pincher Creek residents have tried to blame on local

sour gas plants owned by Gulf Canada Ltd. and Shell Canada Resources Ltd.

Marr and his wife Janet said diarrhea, nosebleeds and eye inflammations often accompany the headaches and nausea. Their boys, aged three and one, are hard-hit, as are the three children of neighbors Terry and Wendy Carpentier.

Three-year-old Sean Carpentier began having problems at age eight months. Wendy, a registered nursing assistant, said Sean would turn blue and choke in his crib. Only a good shaking would start him breathing again.

Today, Sean often sleeps connected to a machine which monitors his heart rate and sounds an alarm whenever the boy is in trouble.

Mrs. Carpentier, president of the Pincher Creek Industrial Pollution Committee, leads a half-dozen families who have tried repeatedly to blame their problems on the gas plants.

Shell's Waterton plant, about 15 km south of town is the larger of the two. It Akes the brunt of criticism.

Hydrogen sulphide can be deadly in

concentrations of less than one-tenth of one per cent, but company officials and the Alberta government say controls, which eliminate 98.7 per cent of the pollutant, also eliminate the health danger. However, there were 1,104 violations of provincial guidelines in 1980 and no prosecutions.

Waterton plant manager Art Mathes said Shell has been able to average 99.1 per cent. Even with that, the plant emits five to six tonnes of hydrogen sulphide daily.

Mathes said the amount does not matter and that monitoring stations in the foothills around the plant — including one beside the Carpentier home — say there is no danger.

"When you crack an egg open by our analysers it drives the needle right off the scale," Mathes said. "So every time you eat breakfast and have an egg you're exposed to higher concentrations of hydrogen sulphide than you even are around here."

Mathes stressed there is also a big difference between Amoco's wild well and a plant like Shell's, one of about 140 sour gas plants in Alberta.



Herald file photo

Amoco well still blowing wild
Calgary Herald November 12, 1982

Emissions standard shattered by well

EDMONTON (CP) — The levels of hydrogen sulphide released from a sour gas well that blew out of control Oct. 17 exceeded provincial standards by up to 1,000 times, says an Alberta Environment Department spokesman.

The rotten-egg smell of hydrogen sulphide, poisonous in high concentrations, spread as far as Calgary and Edmonton after the Amoco Canada Petroleum Co. Ltd. well blew out of

control near Lodgepole, 110 kilometres southwest of Edmonton.

At the time Environment Department officials said the levels were not a health hazard. But department spokesman Al Schultz said Wednesday levels were well above what is allowed under provincial regulations.

Schultz said standards were exceeded by about 50 times in the Edmonton area and closer to the well hydrogen sulphide levels were 1,000 times higher.

THE CALGARY HERALD

Published by the proprietor, Southam Inc., at the Herald Building,
215 - 16th St. S.E., Calgary, Alberta, Canada T2E 7P5

FRANK G. SWANSON
Publisher

WILLIAM F. GOLD
Editor

H. O. THOMASSON
General Manager

100th year

FRIDAY, JANUARY 29, 1982

No. 24

Pincher Creek study

For 20 years, residents of the Pincher Creek area have been complaining of fainting, nausea, vomiting, sweating spells, bleeding noses, breathing problems and unexplained screaming fits in babies.

Nobody is sure what's causing it. There are theories, but no confirmations.

That in itself should be enough call for medical and environmental studies.

Apparently it isn't enough to move the government to approve a \$200,000 study, recommended by the Canadian Public Health Association. Instead, Social Services Minister Bob Bogle announced that provincial environmental health officials would be asked to review five earlier studies, add in new information and then make recommendations to the minister. The "new information" will come from tests in the area, said Bogle.

The area residents are understandably bitter and angry.

While there are suspicions the symptoms might be connected to emissions from the nearby Shell and Gulf sour natural gas plants, studies conducted by the University of Alberta, the University of Calgary and the provincial Environment Department have failed to establish a direct connection.

But something is making an entire cross-section of people in one area very ill, something which, after 20 years, must be considered chronic.

Yet the government is not offering any hope for the area residents, despite the announced "review" of previous studies. In fact, Bogle has described the review as "one last attempt to either prove or disprove the concerns" that the plants may be linked to health problems.

Once done, "the case will be closed."

"We'll say we've done our best," said Bogle.

Bogle can say whatever he likes, but if the review fails to either prove or disprove the sour gas plant link, what then?

Maybe the minister has forgotten the bottom line: the responsibility to find out what is making all of these people sick.



Sign at entrance to Shell's Waterton plant near Pincher Creek gives warning that poisonous, flammable gas is used in production

There's no 'mystery' to complaints: Lawyer

"What mystery? The thing is absolutely crystal clear," William Geddes, lawyer.

Of all the information collected about the damaged health of people near sour gas plants, the largest bundles of it outside industry files sit in the office of William Geddes.

A former Colgarin, Geddes is now an Edmonton lawyer. He used to be an engineer before he switched to law, and it happened that the longest case of his career stemmed from, some believe, an engineering problem.

Geddes acted as counsel for 15 families south of Pincher Creek who sued Shell and Gulf in 1985. By the time the suit was settled out of court in 1971 with a \$700,000 payment to the families, Geddes had put in more than 2,000 hours, conducted approximately 100 interviews and amassed a wealth of paper.

The sworn testimony, the oil company documents, the notes, the farm records — they all leave no doubt whatsoever, in Bill Geddes' mind about one thing: There is no "mystery" about the Pincher Creek health complaints.

Detailed picture

For more than three years at the end of the 1960s, during the protracted examination for discovery, Geddes' clients presented a detailed picture of what it was like to live with air pollution.

The farmers and their wives and children talked about the sicknesses and the fumes.

Edith McRae testified for an intense and exhausting 3½ days in Calgary's court building about the detailed diary she had kept of the vomiting, nausea, severe headaches and loss of appetite in her six children.

Others among the plaintiffs had also kept diaries and there were farm records and hand-written notes about incidents they believed resulted from gas plant operations.

Geddes brought in samples of relatively new, severely corroded barbed wire from downwind of one of the plants and compared it with some from an unpolluted area — 50-year-old wire still in good condition.

Because each side may examine the other's documents, Geddes and his clients gained access to oil company records, which filled two dozen filing cabinets. When it became clear that abnormal plant operations in many instances dovetailed with times and dates of abnormal illnesses and other incidents, the families began to realize they had a "very strong" case in proving liability or responsibility, says Geddes.

After three years of the discovery process, and at the completion of discovery of seven of the plaintiffs, the lawyers for Shell and Gulf immediately informed Geddes they wanted to attempt to settle the lawsuit.

And nothing causes Geddes' eyes to narrow quite like statements such as the one repeated recently by Shell's Waterton plant manager Art Mathes, that the companies handed over \$700,000 simply for business and public relations reasons.

"What does he know about it?" Geddes says.

"That's a bunch of crap... those people (industry lawyers) sat across the table from me and said, 'We can't beat you in court. A judge would believe your people.'"

There was no question that the settlement at the time was based on 100 per cent of the amount of damages that the plaintiffs could ever have proven in court.

"It wasn't a nuisance settlement. It wasn't a PR settlement. It was directly a settlement to avoid a catastrophe for the oil companies, which would be a losing lawsuit with additional cost and resulting publicity."

"For them to say differently today is a figment of their imagination."

The current significance of a lawsuit that began so long ago includes the fact that the health problems suffered by Edith McRae's children, the Marcellus and Levesque families and the others are the same kinds of sicknesses occurring in the region today.

There is also the similarity to another lawsuit that was handled by Geddes, and a \$180,000 out-of-court settlement that was agreed to in 1979 for a farmer named Fred Soltermann of Aik, who sued Chevron for similar pollution effects.

When the wind blew from the west, Soltermann and his children would wake up in the morning with headaches, says Geddes, and they would be listless and not feel like eating. His fence wire and machinery rusted. His cattle weren't well.

"Really, I can just interchange Soltermann and Edith and Gordon McRae or Jack Marcellus or Henry Levesque," Geddes says.

Their complaints are consistent, their evidence is consistent, the regularity of their complaints is consistent (but the ages are different, their farming practices are different and the persistence of their complaints is different).

"In Soltermann's case, I think he complained for over 20 years."

Once again, an oil company decided it didn't want to go to court with a fight about sour gas pollution.

Fast, easy solution unlikely in sour gas controversy

A fast, easy answer to sour gas health complaints is unlikely no matter whose assessments turn out to be most realistic.

Engineers such as Edward Jones see, in the long run, an engineering solution. Jones has detailed at public hearings a proposal for companies to pipe waste gases into oil fields to repressure them and enhance recovery, instead of polluting the atmosphere with emissions.

Oil company spokesmen say the scheme would be too costly but the federal Environment Department's chief of fuels processing, Joe Labuda, says it "has potential. I think Jones is on the right track."

Jones also believes anti-pollution laws won't be effective until fines of the order of \$5,000 per offence are levied on company officers and directors individually, rather than the corporate till.

Lawyer William Geddes suggests people be kept a safe distance from sour gas plants by land expropriation with fair compensation to the owners, just as if a highway were going through somebody's back yard.

"If you're going to harm people, are they not to be compensated?" Others have urged the government to force gas plants to bring processing efficiency to virtually 100 per cent, an initially expensive option but a possible one.

Meanwhile, one of the sadder sides to the Pincher Creek pollution saga is the way it can divide a community. The struggle for such simple pools as clean air and normal health slowly, almost imperceptibly, forms walls between friends and neighbors.

At first, 20 or so years ago, the bearers of those strange new odors were outsiders. Their gas flames and steamy clouds were a sudden oddity, plunked on to the edge of a wilderness.

Since then, Shell Canada, whose sour gas plant is now much larger than the older Gulf Pincher Creek plant, has emerged as a powerful force in the community. Its employees sit on the town council and other boards. Its payroll is the community's largest. It is like the auto industry in Detroit. General Motors, Ford and Chrysler rolled into one.

Shell workers live in the Twin Butte area, downwind of the plant, but they do not complain about unusual illness. Both sides in the dispute say this proves something.



Pincher Creek area's beautiful setting belies division in community concerning complaints about sour gas plants

"The way they tell it any employee who works for Shell never even gets a common cold," Wendy Carpenter told The Herald.

In an interview the next day, the Shell plant's environmental co-ordinator, Ken Dickie, proudly asserted: "Our employees don't even get colds."

Carpenter and others admit they have lost some friends because of the trouble caused to Shell and Gulf by outraged parents. Biting the hand that feeds you can be an unpopular move in a company town.

One mother says she was almost run off the highway one night after stopping her car to take pictures of a huge flare at the Shell plant. Other stories of intimidation abound.

For the people who live in Pincher Creek, the pollution issue is a nuisance of the kind that cannot be settled in a courtroom or a laboratory. Mayor Juan Tean has a point when he expresses exasperation about enduring publicity, especially when it mistakenly cites the town itself as the source of health complaints.

As for the current victims of ravaged health, their plight has important emotional similarities to the experience of the 15 families who sued Shell and Gulf for all those years.

Lawyer Bill Geddes recalls his thoughts when the oil companies' lawyers offered to settle out of court after several years of exhausting examination of documents and testimony. As he drove from Edmonton toward Pincher Creek to explain the offer to his clients, he pondered the question of what was the biggest problem in the farmers' lives.

It suddenly occurred to him: Their biggest problem was the lawsuit — the battle itself, not the subject of the conflict, not the pollution.

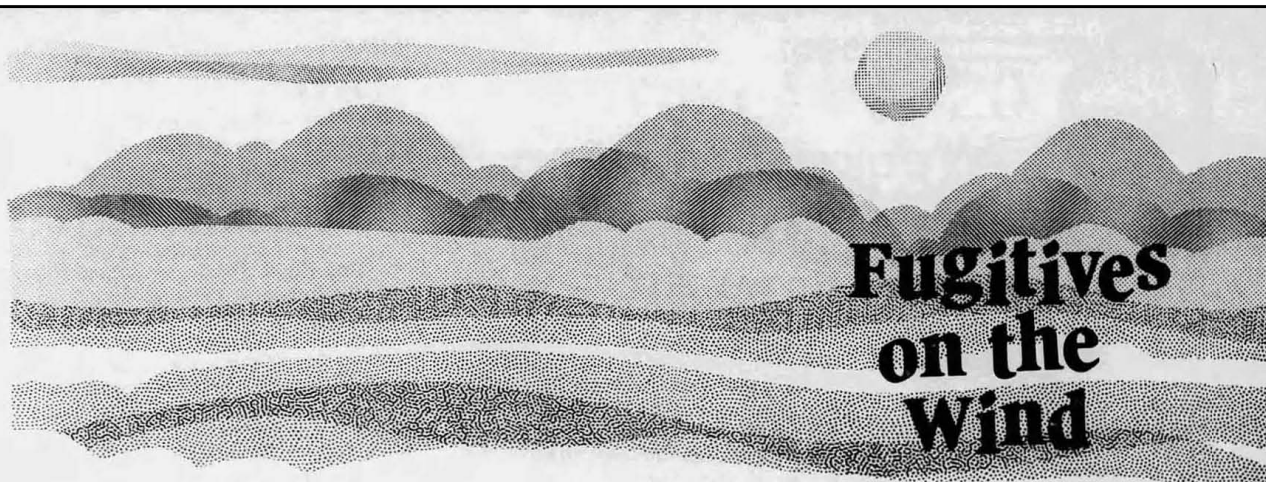
Geddes decided: "I've got to get this thing settled so they can get back on the mainstream of life and quit talking to their lawyer."

The current turmoil of the illness-ridden families south of Pincher Creek is not as complex and encompassing as was the lawsuit, but the burdensome distractions are in many ways alike. The lives of ordinary people have become the subject of cabinet meetings,

press conferences, legal scrutiny and community polarization.

The political nuances have overwhelmed the medical ones. The solution, then, probably lies more to do with politics and economics than medicine and laboratories.

Society, in a sort of passive way, accepts it has to pay a price for the needs and conveniences of modern life, but some people are having to pay a lot more than others. In the end, solving the health problems of places like Twin Butte might simply be a matter of shifting the cost from the shoulders of a few to those of the many.



Tim Adams, Calgary Herald

Fugitives' producer hopes special prompts action on deadly problem

By Martin Morrow

(Herald staff writer)

"This is something I've lived with every day for three years. Perhaps this documentary is one way to prompt someone to go in and solve the problem."

This is how CFCN news producer Lynne Rach describes her film *Fugitives on the Wind*, which airs this Sunday at 7 p.m. (4-5) on News Plus.

According to Rach, it all began in Jan. 1980 when, accompanied by CFCN news director Thompson MacDonald and a photographer, she travelled to the Pincher Creek area to investigate complaints by residents that the health of their children was being affected by emissions from nearby gas plants. After almost three years of research and investigation, Rach has put together *Fugitives*, an hour-long documentary that reveals how the health and lives of Albertans have been affected by sour gas leaks and other dangerous emissions, and asks some serious questions as to why so little has been done to solve the problem.

Calgarians were greeted early one morning at the beginning of this month by the unpleasant odor of hydrogen sulphide gas from a leaking Amoco gas well some 200 kilometres away. Alberta Environment said the odor was harmless to Calgarians, but in Lethbridge four-year-old Erling Boddy was feeling the effects of the sour gas. Erling is one of the children whose health is believed to have been seriously impaired by fugitive emissions. His

mother, Sharlaine Boddy, was living in Pincher Creek and pregnant with Erling at the time of a sour gas well accident at the Shell Waterton plant. According to Rach, the child is highly sensitive to natural gas and is on a monitor every night of his life for fear that he might stop breathing in his sleep. The Boddy's story is one of several Rach has used in her documentary to illustrate how industrial pollution has endangered the health and altered the lives of their victims.

Equally poignant is the story of the Petersons, an elderly couple now living in their camper and uncertain of how they'll be spending the coming winter. The home outside of Redcliff, Alta. that they own and lived in for six years now stands abandoned. The Petersons could no longer live at the residence because of failing health. In addition, their plants were drying up and their trees dying. The problems were linked to a nearby slough, which proved to be contaminated with pesticide, possibly due to midnight (illegal) dumping.

But *Fugitives on the Wind* goes beyond simply presenting these individual cases. During the three-year period in which she was gathering the information for her documentary, Rach collaborated with meteorologist Julian Kinisky, who had originally investigated health hazards in the Pincher Creek area some 20 years before. She also had snow, humidifier and well water collected from the Twin Butte area and tested for cyanide — which chemical engi-

neer Ed Jones says can be formed in sour gas plants. Kinisky's findings and the result of the cyanide test are included in the film.

However, while families from the Pincher Creek area believe emissions from the gas plants are seriously harming their children, the film reveals that plant officials have their doubts. Rach talks to Art Mathes, manager of the Shell Waterton plant, who claims plant employees no indication of health problems. His view is corroborated by Ken Dickie, environment co-ordinator with the plant, who says he wouldn't be living in the area with his family if he thought there was a health risk.

In researching *Fugitives on the Wind*, Rach dug up a spate of reports on the Pincher Creek area. "The problem has been denied for over 20 years," Rach says. "When you start delving into it you get outraged. I have at least eight to ten reports that have been done in the last three years or so. Each one says 'Maybe (there's a problem), but there's nothing concrete. There's no way that we can link the gas plant to the sicknesses of the people.'"

Rach says that the reason CFCN News delayed producing this documentary for almost three years was because "we were waiting until we could do something positive." Perhaps the many questions posed by *Fugitives on the Wind* will prompt someone to try to solve this 20-year-old problem. "I'm hoping for some response," says Rach.

By Bob Bott
(Herald staff writer)

A new breed of oilman is gradually surfacing in the offices of the biggest oil companies here.

They are the staff environmentalists, charged with the rather schizophrenic role of improving the companies' environmental practices from within while at the same time defending them from the critics outside.

So far, there are only a handful of them—about seven full-time environmentalists and less than 40 who devote the majority of their time to environmental activity. They work for the biggest of the more than 200 companies in the Canadian Petroleum Association.

The job descriptions vary widely, but all have one thing in common—they spend a great deal of time attending meetings. It seems they are constantly meeting with civil servants, with company executives, with workers in the field and even with each other.

Most are engineers by profession, but some companies are now actively seeking biologists and other scientists to bolster their research capacity. Previously, outside consultants provided most of the scientific expertise, but the firms now want their own experts to oversee consultants and evaluate their work.

Biologist at Amoco

One of the first biologists on the staff of a Calgary oil company was Ron Findlay, environmental co-ordinator at Amoco Canada Ltd. and current chairman of the CPA's environmental conservation committee.

"Most of us are engineers learning about ecology," says Mr. Findlay. "I'm an ecologist learning about engineering."

The conservation committee's main function has been to advise the CPA on the feasibility of government policies and guidelines affecting the petroleum industry and to suggest how such policies can be implemented once adopted.

However, the committee is also becoming increasingly involved in proposing and organizing joint research programs with government and universities. It also is assisting the Petroleum Industry Training Service to incorporate environmental education in staff development for oil employees.

Research projects are under way or contemplated into biological means of cleaning up oil spills, disposal of salt water and drilling fluids at well sites, minimizing the effects of construction on roads and leases, and assessing the effects of emissions from sour gas plants.

Mr. Findlay says these studies are helping to elaborate the "multiple use concept" so that the effects of oil industry activity on other land uses can best be minimized.

"It's a very difficult knife edge to walk," he says of his own role as a biologist and environmentalist working within the oil industry. "None of us is in business to devastate the environment, but our operations are going to have an impact and our job is to keep that impact to an acceptable minimum."

Calgary Herald - June 11, 1976

**Big Oil steers itself into
"greening of the boardroom" public relations,
hiring "environmental consultants"
because of serious problems from
cumulative impacts on the environment**

Staff environmentalists — a new breed of oilmen



THE CANADIAN PETROLEUM ASSOCIATION'S ENVIRONMENT CONSERVATION COMMITTEE
... more than 30 companies have environmentalists participating in committee activities

Education stressed

Within the company, Mr. Findlay says his role is primarily one of educator and communicator—making sure that Amoco employees are aware of the environmental consequences of their actions. "The goal is to get a proper balance between resource management and an economic operation."

He is well prepared for this, having spent five years as education director for the Calgary Zoological Society prior to joining Amoco two years ago. He is a graduate of the Utah State University natural resources college.

"I don't regret the change at all. It's been very exciting, and no two days are the same. It is a lot of fun and a challenge that I enjoy," he says, noting that Amoco currently is letting him spend most of his time working on CPA projects.

While much of Mr. Findlay's emphasis has been on research projects, Lorne Walker, environmental control engineer at Mobil Oil Canada Ltd., has concentrated on heightening environmental awareness within his company—even using a sort of confessional called "critical self-analysis" to proselytize among employees.

Asked to define his role, Mr. Walker said it involved "establishing and monitoring an internal system through which our company can interpret and consistently apply environmental management processes as an integral part of our business activity."

An engineer by profession, as were all the other oil environmentalists contacted, Mr. Walker says Mobil management has "backed me to the hilt" in efforts to instill environmental awareness at every level in the company. "By controlling and preventing loss and damage, we can save hundreds of thousands of dollars down the road," he notes.

In the "critical self-analysis" process, every aspect of a project is studied for environmental impact and possible improvement. This has been applied to activities as minor as lease roads and as major as gas plants and pipelines, and it has resulted in significant changes in operating procedures, says Mr. Walker.

His switch from reservoir engineer to environmentalist began in 1971 when he helped develop environmental procedures for drilling on Sable Island off the East Coast.

Harry Palmer, environmental co-ordinator at Dome Petroleum Ltd., has specialized in yet another aspect of oil industry ecology—the preparation of environmental impact statements for submission to government regulatory agencies. Prior to joining Dome last year, he managed the environmental program for the Polar Gas consortium.

Mr. Palmer says that at its best, "impact assessment can help the company as well as the government by avoiding costly changes in plans once a project is begun. But he sees a dangerous trend towards rigid, detailed requirements that could lead to a situation like the "lawyer's game" caused by such laws in the United States.

"The federal government is taking an ideal, academic approach which is trying to get the answer to every possible question. These questions should be asked all right, but we cannot always give answers. The time when the question is asked is usually when we are least able to answer it."

While fighting against "unrealistic and unattainable" government rules, Mr. Palmer says he is trying to "monitor, educate and help" the line departments at Dome to incorporate environmental concerns into their standard operating procedures.

"Environmental problems are engineering problems," he says. "I don't separate them in my mind, but it has widened the scope of engineering. Our job used to be to secure the project from the environment, whereas now we must also secure the environment from the project as well."

Similar views are expressed by Jerry Gainer at Gulf Oil Canada Ltd., who compares today's environmental concern with the worker safety movement a generation ago. He expects that in a few years, good environmental practices will be fully incorporated into standard engineering and operating procedures.

"We are not going to expand the environmental affairs group into another big bureaucracy," says Mr. Gainer, echoing a common sentiment among oil companies. "We want to have our operating people doing these things on their own volition. This is the direction the industry is moving."

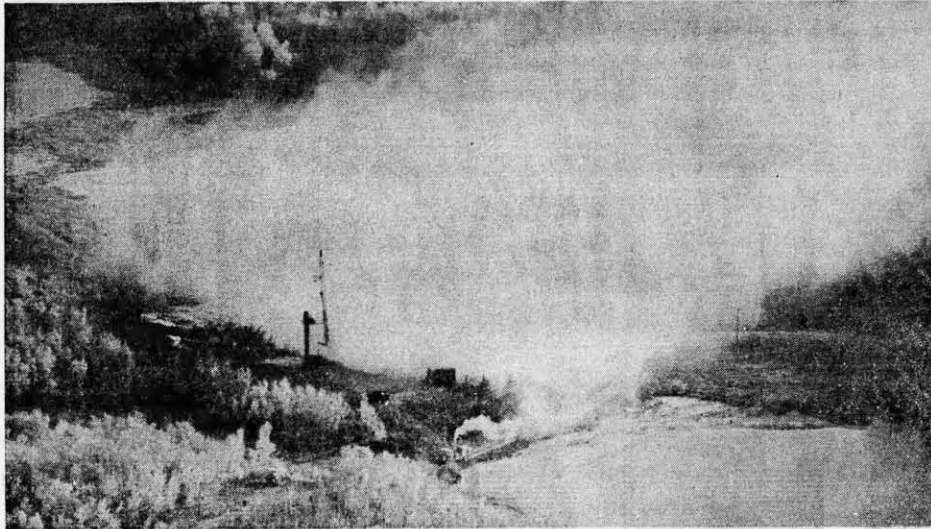
Practices incorporated

He said that of the 553 people in Gulf Canada's exploration and production departments, about 17 man-years are devoted to environmental activities—about 3.1 per cent of the company's manpower. But there are many "environmental" practices, such as grading seismic lines to avoid erosion, which were long ago incorporated into standard procedures and cannot be counted.

"We have now convinced management that until all the ecological costs have been evaluated, you don't have the full picture of the economics of a project," Mr. Gainer concluded. "And, with seven agencies looking at every proposal and delays running into years, you have to get it right the first time through."

Residents may have to flee again if wind drops

Gas evacuees allowed home



Gas spews from well out of control near New Norway

Journal photo by Mike Voss

By STEVE HUME and SHAWN WADDELL
Of The Journal

CAMROSE — Many of the hundreds of farmers and small town residents, forced to flee their homes Tuesday night because of the approach of a deadly cloud of hydrogen sulphide gas, were given permission to return this morning.

An east wind today was dissipating the thin cloud of poisonous gas but evacuees were warned that they might have to flee once more if the wind died down.

The gas spewed from a Sun Oil Co. well, inactive for the past 10 years, about 4:30 p.m. while a crew was attempting to reopen it.

Crews wearing gas masks were working to cap the well that blew out of control Tuesday. The gas which may be harmful in even small concentrations and deadly in slightly larger doses, was still spewing out of the well.

The whole area, about 50

miles southeast of Edmonton, was ringed with gas detection devices equipped to give the alarm if hydrogen sulphide was detected.

The gas could be seen this morning hanging in a thin cloud for about 20 miles east of the well site. About five miles from the site, the cloud had widened to about 200 yards in a wedge that was moving eastward in 10-15 miles an hour winds.

If the winds die down evacuation could be necessary again. Camrose radio station CFCW will announce any evacuation bulletins.

Moves down Battle River Valley

RCMP this morning said the cloud of hydrogen sulphide was moving down the Battle River valley but there was no danger to the people living nearby. Some of the residents reported eye irritation from the gas.

From the air this morning the wellsite was still spewing a blue-white plume of gas and water which trailed off 12 to 15 miles over the rolling countryside.

Gas could still be observed in concentration over low-lying land and in river bottoms.

Livestock, however, seemed to have been unaffected by the toxic gas and was still grazing peacefully on ranges close to the wellsite.

In some areas close to the heavy gas concentration cattle appeared to have retreated to higher ground and many were still sticking to the crowns of small hills.

J. L. Kerns, livestock commissioner, said the effects of the gas on livestock could be as serious as on humans. He added that he had been in contact with agriculture fieldman in Camrose and Wetaskiwin and a team of investigators left Edmonton this morning to set up a close watch on the situation.

Mr. Kerns said his office had not yet received any reports of animals adversely affected by the poisonous gas.

Density greater than air

The gas, with a density much greater than air, tends to sink to low levels.

Farms in the restricted area were still deserted this morning, although at least two cars could be seen venturing into the danger zone after checking with RCMP road blocks.

Police were permitting farmers to enter the zone to feed their livestock in areas where the gas had dissipated, but plans still seem to keep a close watch on the area for the rest of today and possibly tomorrow.

The well site is at the north end of Red Deer Lake, about five miles west of Fortinosh, on Highway 21.

Reports of sick children, nausea and chest pains have been received from families evacuated from the area. Ten persons were treated in hospital but were later released.

People fled with little more than their favorite pets and night clothes, leaving hundreds of thousands of dollars worth of valuable livestock in the area threatened by the gas cloud.

They were moved to Camrose in the northeast, and Wetaskiwin to the west, where emergency measures volunteers arranged accommodation.

For most of the evacuated, however, there was a friendly neighbor to rely on and only about 600 registered at the emergency centres.

Gordon Fredericks, a contract operator for the company who was about 400 yards from the site when the blowout occurred, said the violent blast blew about 30 feet of pipe more than 20 feet in the air.

The blowout took place while the contract crew from Gamache Well Services Ltd. of Calgary was pulling be-

Lone Mountie watched over a ghost town

By SHAWN WADDELL and STEVE HUME
Of The Journal

NEW NORWAY — The thriving development potential of this little town of 250 was cited in a Journal classified ad earlier this week. Tuesday night it was a dead town. A ghost town. Nothing moved but a deadly cloud of gas spewing from a ruptured gas well less than three miles away — and one RCMP officer.

The people, even the pets, were gone, gone to safety in the gathering dark late autumn. Not even a barking dog was left behind.

New Norway, 50 miles southeast of Edmonton, is a quiet town at the best of times, but Tuesday night the silence had an atmosphere of menace belied only by a few forgotten porch lights and the red neon signs of the New Norway Hotel — locked up tight, tavern and all.

The only human being in town was a lonely RCMP officer, patrolling the empty streets and nervously glancing at the scrip of chemically treated paper he wore to detect the slightest whiff of deadly gas.

"When this goes brown, I cut out . . ." he muttered. It was the only sound.

Out beyond the rooftops, from the tiny communities of Duhamel, Perintosh, Geyne and all the fertile quarter sections scattered across 250 square miles of farmland, people streamed to safety at Camrose and Wetaskiwin.

Radio station CFCW, at Camrose, kept them informed of the latest developments by punctuating country and western programs with accurate, matter-of-fact bulletins.

At Camrose, where the evacuated registered with the emergency measures organization, there was an air of calm as solid as the people who were leaving their land and livestock.

Mrs. Phyllis Jensen, 40, who has lived in the New Norway region all her life with 47-year-old husband Noel, was one of them. They live in a farmhouse a scant quarter mile from the well site.

ACUTE DOSE MEANS INSTANT DEATH

An acute dose of hydrogen sulphide gas can result in death in seconds even with only one sniff of the poison gas, the workmen's compensation board says.

There are several ways the gas can be detected and your nose is usually the first, and unfortunately, sometimes the last, the board warns.

If the gas is in the 100-120 parts per million range, the sense of smell can be deadened in two or three minutes.

The concentration in the gas in the Sun Oil Co. leak is about 30,000 parts per million.

At 1,000 parts per million a person is unconscious at once and, "permanent brain dam-

age may result unless rescued promptly," the board points out.

Besides oil and gas wells, hydrogen sulphide can also come from gas plants, refineries, sewers, underground mines, blasting sites and commercial laboratories.

It burns the eyes and irritates the respiratory system in low concentrations. It is a colorless gas, yet appears like a cloud when it is combined with the air.

First aid for victims of hydrogen sulphide poisoning calls for removal of the person to a fresh air zone, with the patient kept warm.

If the eyes are affected they should be washed thoroughly with clear water, the board says. A doctor should be summoned immediately.

Ottawa to aid Yellowhead route

Ottawa has agreed to share the cost of upgrading the Yellowhead route. Industry and Commerce Minister Fred Peacock said today.

His announcement at a press conference follows a series of meetings with Federal Transport Minister Jean Marchand.

Costs of bringing the route up to Trans-Canada Highway

standards will be shared equally by Ottawa and the four western provinces.

The highway runs through western Manitoba, northern Saskatchewan, northern Alberta and through Jasper down to Kamloops, B.C.

Federal-provincial planning for the Yellowhead route will be completed in another con-

More ROUTE Page 8



Journal photo by Steve Makin

Mr. and Mrs. Joe Cardinal, daughter Leslie, at Camrose emergency centre

Where to find it

Ann Landers	30
Art Evans	23
Barry Westgate	38
Bertie	38
Deaths, Marriages	52
Bridge	57
Business, Stocks	63-67
Charles Lynch	4
Classified ads	53-71
Comics, Features	90
Comments	40
Crossword Puzzle	56
Entertainment	94, 95
Family Section	73-76
Focus on People	11
Horoscope	53
Keith Ashwell	22
Jane Sheppard	27
Letters to The Journal	4
News Digest	43
Sport	73-82
TV, Radio	22
Wayne Overland	73

Weather

Sunny, winds westerly 15-25. High near 55; low tonight 30-35. A few cloudy periods Thursday, winds westerly. Details on Page 17.

\$700,000 out-of-court award for 15 Pincher Creek families

A \$700,000 settlement has been reached out of court in a dispute in which Shell Canada Ltd. and Gulf Canada Ltd. were accused of causing nuisance and damage to Pincher Creek area residents.

Fifteen families filed a claim totalling about \$1.5 million in 1965, alleging that the gas plants in the area had polluted the atmosphere causing a nuisance and in some cases, a threat to health.

Examinations for discovery were held between the claimants and the oil companies ending a year ago. From there, the parties entered negotiations for a voluntary settlement.

W. G. Geddes of Edmonton, counsel for some of the families, said there were claims

of periodic illness made by some farm families.

The plants involved are Shell's Waterton processing facility and the Gulf installation at Pincher Creek. The plants are located eight miles apart on an east-west line in the path of prevailing winds.

The eight families who live between one quarter and 16 miles from the plants, complained that the sulphur dioxide and trace gases given off by the plants, "affected the enjoyment of their farmsteads," Mr. Geddes said this morning.

Mr. Geddes stressed that it was not a constant problem but the irritation from the gases and odors "occurred periodically."

The families said the younger children, livestock, and pets

They said the gases irritated nasal passages and affected appetites and complained of corrosion of wire fences and farm machinery.

INQUIRY HELD

In 1963-64 a provincial government inquiry was held and concluded there was no problem.

At this point the families decided to take legal action.

There were more than 30 days of examination for discovery stretching over four or five years, Mr. Geddes said. The lawyer said the Pincher Creek area is subject to "unusual weather conditions" and that he is convinced the oil companies were not aware that there would be any pollution problem when they built their plants.

Pincher Creek health study done

By Catherine Butlin
(Herald staff writer)

A study of possible causes of a 20-year-history of illness in families downwind from sour gas plants in the Pincher Creek area has been completed, its author says.

Despite a boycott of the study by some residents who say an independent medical body should have looked at illnesses they say stem from the two nearby plants, author Earle Snider says the study is significant.

Snider, an Edmonton sociolo-

gist, refused to release his findings until Social Services Minister Bob Bogle is given the report at the end of the month.

However, he said in a telephone interview from Edmonton the boycott organized by the Pincher Creek Industrial Pollution Committee was a failure.

Snider got 93 responses from the 100 residents randomly selected by a computer to be tested. A response rate he said is "glorious."

There is no difficulty generalizing from the data he has

collected from hair tissue samples, and information about diet, weight and a variety of other factors he studied.

As well as the 93 computer-chosen subjects, Snider collected similar information from 40 area residents who volunteered to add data to the survey.

Snider is looking for causes of resident complaints of severe headaches, nosebleeds and respiratory problems.

The health problems have occurred since Shell Canada and Gulf Canada built sour gas

plants in their vicinity in the '50s and '60s.

The plants are built to extract sulphur from sour natural gas and emit some of it in the form of sulphur dioxide through smokestacks.

The province rejected a proposal from the Canadian Public Health Association for a \$200,000 study of illness in families downwind from the plant.

Instead, Snider, a University of Alberta sociologist was contracted by the provincial social services department to do the study.

Gas well smell drifts 200 km to Calgary

Calgary Herald - October 29, 1982

An unpleasant odor of rotten eggs drifted into Calgary late Thursday as fumes continued to spread from an out-of-control sour gas well about 200 kilometres northwest of the city.

Albert Poulette, Alberta Environment complaints investigator, said he received reports at about 8:30 p.m. of the gas being detected in southeast Calgary. The smell

was still perceptible this morning.

And as Calgarians wrinkled their noses, work continued on the capping of the Amoco Canada Resources Ltd. sour gas well.

Hollie Johnson, a spokesman for the Calgary-based well operator, said progress was made in preparing the site for diversion of the leaking gas to two nearby flare stacks.

But more positioning of equipment must be done today before well-control specialists can flare the gas, she said. Controlled burning of the gas will end the major threat to nearby communities — the dumping of poisonous hydrogen sulphide into the atmosphere.

Since blowing out of control 13 days ago after equipment failed, the well has pumped 56,000 to 283,

000 cubic metres of sour gas a day into the atmosphere. The gas contains hydrogen sulphide and hydrocarbon condensate.

Work at the site has been hampered periodically by the lack of consistent winds, leading to a buildup of hydrogen sulphide in the immediate area. But winds cooperated Thursday for the second day in a row, said Johnson.

Phew!

Calgary Herald
November 25, 1982

Winnipeg blames well for foul smell

(Herald staff — CP)

Manitoba environmental control officials Wednesday blamed the wild sour gas well at Lodgepole for a rotten-egg smell which hung over Winnipeg, more than 1,300 kilometres away.

Adrian Jackson, head of Manitoba's air pollution control branch, said levels of hydrogen sulphide gas were 10 times the normal reading for the Winnipeg area.

"It's usually zero and there is no other place in Manitoba that it could have come from so the source is easy to draw," he said.

The smell permeated the entire city of Winnipeg and was also detected farther east in Whiteshell Provincial Park, near the Manitoba-Ontario border.

Crews were thwarted again Wednesday in their efforts to cap the well, and Alberta Environment Minister Fred Bradley flew to the area after a deluge of angry phone calls from residents fed up with the stench.

Hollie Johnson, a spokesman for Calgary-based well operator Amoco Canada Petroleum Ltd., said a wild well control team cannot do anything until the winds pick up. The site was

inaccessible Wednesday because weak winds from the southeast failed to disperse a heavy cloud of poisonous hydrogen sulphide.

Weather permitting, the Wild Well Control Inc. team was to try again today to reposition a blowout preventer stack on the wellhead, 45 kilometres southwest of Drayton Valley.

Amoco has been predicting since late last week that the well could be capped in "a matter of days," depending on weather conditions.

Once the blowout preventer is in place, the Texas-based crew will try to divert the gas to a pit where it can be safely flared. The exploratory well, which has been spewing between 56,000 and 283,000 cubic metres of sour gas each day since blowing Oct. 17, will then be capped with heavy drilling mud.

Alberta Environment Department spokesman Gordon Peck said concentrations of hydrogen sulphide in Calgary peaked at 1.30 p.m. Wednesday at 0.045 parts per million. Ten parts per million for a one-hour period is the level at which the department says evacuation should be considered.

The Environment Department lifted an evacuation alert for residents of the hamlet of

Cynthia after hydrogen sulphide levels exceeded 10 parts per million Tuesday.

Rufus Hoke, the Wild Well employee injured in an accident at the site last week in which another man was killed, remains in critical condition in an Edmonton hospital.

Johnson said Hoke has been unconscious since the accident, which took the life of a fellow-American, 36-year-old Byron Lee. Drayton Valley RCMP have refused to release the age or hometown of Hoke, who apparently inhaled a high concentration of hydrogen sulphide.

Meanwhile, a producing oil well blew out of control Tuesday night near Rainbow Lake, 700 km northwest of Edmonton, but a flow of sour gas stopped on its own four hours later. There were no injuries.

The incident occurred as a service crew was preparing to install a blowout preventer because of a blowout which occurred at the well during the weekend.

Alberta Environment said monitoring stations were set up and people were kept away from the site while the gas was spewing out. The owners, Mobil Oil Ltd., said work will continue to install the blowout preventer.

The Energy ministry explained to the 1990 David Anderson Fraser Valley Petroleum Exploration Commission that “although petroleum exploration companies already held substantial freehold leases and had leased rights from the Federal government by 1988, they needed to obtain an interest in Provincial rights to assemble a large enough block to propose a viable exploration project.” That is primarily why the Ministry began its ‘consultation’ program in August 1988, in order to clear a path with third-order government for “the disposition of Provincial rights that took place on October 25, 1989,” a date announced in April 1989 when the bidding competition for exploration rights were to be approved for lease in the Fraser Valley.⁵⁰²

A series of ‘consultation’ correspondence, notices, meetings and presentations were convened by the Ministry of Energy with government agencies, municipalities, MLAs, newspapers, and government bureaucrats on August 8, August 31, September 13, September 15, September 21,⁵⁰³ and October 17, 1988, and on January 16, January 19, January 30, April 26, May 15, August 1, August 2, August 11, August 15, August 22, August 31, September 6, September 8, September 11, September 21, September 22, September 28, October 5, and October 6, 1989.⁵⁰⁴

A critical aim by the Ministry for these various ‘consultations’ with municipal representatives was to eventually determine which lands in the Fraser Valley would meet the optimum criteria, i.e., least political opposition, when leased for petroleum interests.

As you are aware, we have been consulting with Municipal staff in the affected municipalities to ensure that postings are in line with community plans. A final list of parcels was then approved for inclusion in the Ministry’s regular sale on October 25, 1989.⁵⁰⁵

Ministry staff visited officials in the potentially affected district municipalities of Delta, Surrey, Langley and Matsqui and discussed the requests in relation to community plans. These meetings took place in the period August 1 to August 15, 1989. **Final selection of the rights to be made available accounted for population density. That is, residential areas that extended over sufficient areas to preclude any access to underlying resources were excluded.** [Bold emphasis] Also, community plans were examined to limit conflict with future developments. Equitable treatment of those making the requests and their stated priorities were also considered important. A decision on which parcels would be offered for competition was reached by the end of August [1989].⁵⁰⁶

⁵⁰² Tab, *Petroleum Title in British Columbia*, page 24, Anderson Commission Technical Hearing Exhibits.

⁵⁰³ “Slide show presentation to representatives of Pitt Meadows, Maple Ridge, Abbotsford, Dewdney, Matsqui,” at the Union of BC Municipalities convention, Whistler, BC.

⁵⁰⁴ Tab, *Petroleum Title in British Columbia*, Anderson Commission Technical Hearing Exhibits.

⁵⁰⁵ EMPR letter, Fraser Valley Crown Land Disposition, September 6, 1989, sent to Delta, Langley, Surrey and Matsqui municipalities, in EMPR T-3, Petroleum Titles Branch Exhibits, to the Anderson Commission.

⁵⁰⁶ Tab, *Petroleum Title in British Columbia*, Anderson Commission Technical Hearing Exhibits.

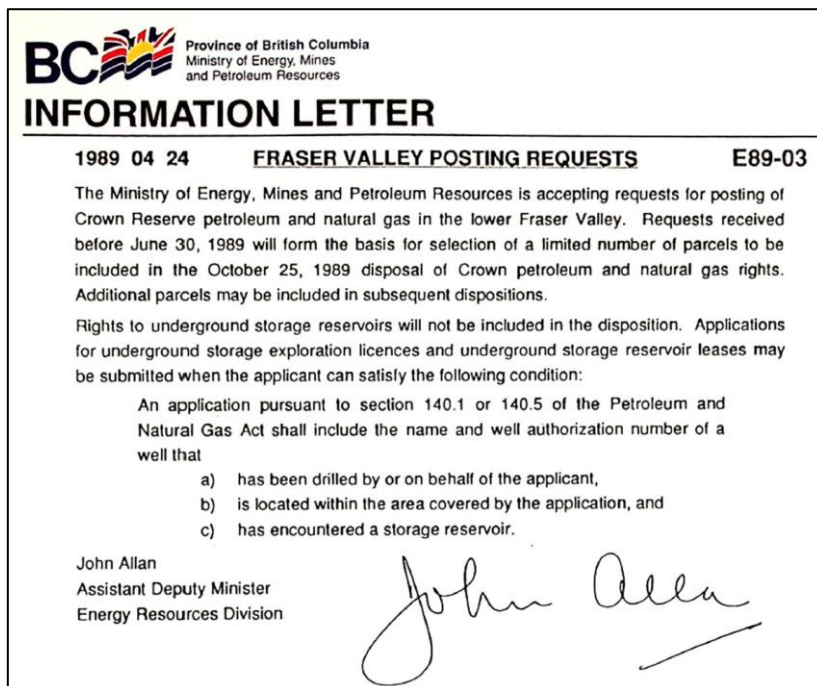
5 – 6. The October 26, 1989, Bidding Process Results

John Allan, the Energy Resource Division's Assistant Deputy Minister with the Ministry of Energy, Mines and Petroleum Resources, released a special notification to the public on April 24, 1989, Information Letter E89-03, titled *Fraser Valley Posting Requests*.

The Ministry of Energy, Mines and Petroleum Resources is accepting requests for posting of Crown Reserve petroleum and natural gas in the lower Fraser Valley. Requests received before June 30, 1989 will form the basis for selection of a limited number of parcels to be included in the October 25, 1989 disposal of Crown petroleum and natural gas rights. Additional parcels may be included in subsequent dispositions.

Rights to underground storage reservoirs will not be included in the disposition. Applications for underground storage exploration licences and underground storage reservoir leases may be submitted when the applicant can satisfy the following condition:

An application pursuant to section 140.1 or 140.5 of the Petroleum and Natural Gas Act shall include the name and well authorization number of a well that a) has been drilled by or on behalf of the applicant, b) is located within the area covered by the application, and c) has encountered a storage reservoir.



HOW TO ACQUIRE TITLE

Provincial petroleum and natural gas rights in certain areas of British Columbia are designated Crown Reserve as illustrated in Figure 1. An interest in Crown Reserve petroleum and natural gas rights may only be obtained through competitive bidding by sealed tender. Anyone may request that a parcel of Crown Reserve rights be posted for bidding as a drilling licence, permit or lease at one of the 11 dispositions held annually by the Petroleum Titles Branch.

Who owns the natural gas that may be found?

Mineral and natural gas rights in most of British Columbia are owned by the Crown. In the Fraser Valley, some landowners own the mineral and natural gas rights. Crown rights are temporarily awarded to exploration companies through a competitive bidding process. Companies wishing to develop privately-owned rights must arrange leases directly with the landowners.

Ministry of Energy, Mines & Petroleum Resources

3. The company acquires Crown petroleum and natural gas rights by competitive bidding and the company may also acquire privately-held rights by negotiation with owners.

What does this notice of Posting Requests mean?


Companies interested in exploring for natural gas in the Fraser Valley are being asked to indicate specific areas they would like to explore. These specific areas will then be considered by the Ministry for the October 25, 1989 sale. Rights will be obtained through the normal competitive bidding process used elsewhere in the Province.

Five days before the notification, the provincial Cabinet, or Executive Council, approved Order-in-Council No. 585 on April 19, 1989, the *Petroleum and Natural Gas Storage Reservoir Regulation*, granting special privilege to any corporate applicant for an underground natural gas storage facility in the Fraser Valley. Four months later, and two months prior to the October 25th bidding process for petroleum permits in the Fraser Valley, government's Executive Council approved Order-in-Council 1223 on August 24, 1989, for B.C. Gas' July 11, 1989, application "relating to preliminary surveys and investigation for the potential development of underground natural gas storage in the Fraser Delta."

With B.C. Gas' interests for underground storage intact, it, and its two consortium partner petroleum bidders, awaited the approval announcement of October 25. Of a total "15 parcels of Crown-owned mineral leases in the Fraser Valley, ten of these were picked up."⁵⁰⁷

PROVINCE OF BRITISH COLUMBIA
ORDER OF THE LIEUTENANT GOVERNOR IN COUNCIL

Order in Council No. **585**, Approved and Ordered **20 APR 1989**



Lieutenant Governor


Executive Council Chambers, Victoria **APR 19 1989**

On the recommendation of the undersigned, the Lieutenant Governor, by and with the advice and consent of the Executive Council, orders that the following regulation be made:

PETROLEUM AND NATURAL GAS STORAGE RESERVOIR REGULATION

1. In this regulation "Act" means the *Petroleum and Natural Gas Act*.
2. The fee for an exploration licence for a storage reservoir pursuant to section 140.1 of the Act is \$500.
3. An application pursuant to section 140.1 or 140.5 of the Act shall include the name and well authorisation number of a well that
 - (a) has been drilled by or on behalf of the applicant,
 - (b) is located within the area covered by the application, and
 - (c) has encountered a storage reservoir.
4. Section 3 of the regulation applies only to that area lying west of longitude 123° west, east of the Strait of Georgia, south of latitude 49°30' north and north of the Canada-United States of America border.


Minister of Energy, Mines and Petroleum Resources


Presiding Member of the Executive Council

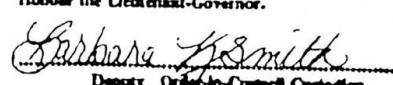
(This part is for administrative purposes only and is not part of the Order.)

Authority under which Order is made:
Act and sections: Petroleum and Natural Gas Act, s. 140.7
Other (specify):
March 30, 1989 587/89/13/b

ORDER OF THE LIEUTENANT GOVERNOR IN COUNCIL

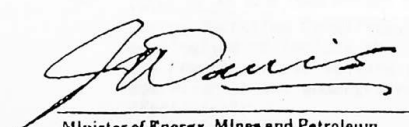
Order in Council No. **1223**, Approved and Ordered **AUG 24 1989**

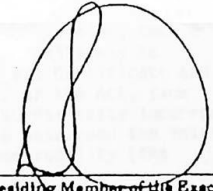
I hereby certify that the following is a true copy of a Minute of the Honourable the Executive Council of the Province of British Columbia approved by His Honour the Lieutenant-Governor.


Deputy Order-in-Council Clerk

Executive Council Chambers, Victoria

On the recommendation of the undersigned, the Lieutenant Governor, by and with the advice and consent of the Executive Council, orders that approval is given to the attached application by BC Gas Inc., dated July 11, 1989, relating to preliminary surveys and investigation for the potential development of underground natural gas storage in the Fraser Delta.


Minister of Energy, Mines and Petroleum Resources


Presiding Member of the Executive Council

(This part is for administrative purposes only and is not part of the Order.)


Authority under which Order is made:
Act and sections: Hydro and Power Authority Privatization Act, section 18
Other (specify): Utilities Commission Act, sections 22 and 24
August 11, 1989 1/1 20/89/111/cil

⁵⁰⁷ *Fraser delta gas play gets shove ahead*, National Post, November 6, 1989.

October 25, 1989, Ten Parcels Bidding Process Results

Parcel No.	Hectares	Purchased By	Percent Ownership	Price Per Hectare	Bonus Paid to Gov't.
12158	2,211	Conoco Canada Ltd.	100 %	\$497.52	\$1.1 million
12159	2,612	- B.C. Gas - Canadian Hunter - Optima Energy - Epic Resources	80 % 10 % 2.5 % 7.5 %	\$136.13	\$355,572.27
12161	3,310	Conoco Canada Ltd.	100 %	\$949.55	\$3,143,010.5
12162	2,007	Canadian Coastal Resources Ltd.	100 %	\$87.48	\$175,555.55
12188	264	Conoco Canada Ltd.	100 %	\$312.50	\$82,500
12189	441	Conoco Canada Ltd.	100 %	\$750.58	\$331,005.78
12190	476	Conoco Canada Ltd.	100 %	\$126.89	\$60,394.88
12195	259	Conoco Canada Ltd.	100 %	\$79.07	\$20,479.13
12196	259	Conoco Canada Ltd.	100 %	593.05	\$153,599.95
12197	259	Conoco Canada Ltd.	100 %	593.05	\$153,599.95

After the awarding of the ten parcels by the Ministry of Energy summarized in its five-page document, *Competition for the Right to Explore and Develop Crown Petroleum and Natural Gas Resources*, as shown in the attached table, newspaper media published maps that showed the parcel locations in the Fraser Valley.



Province of
British Columbia

NEWS RELEASE

MINISTRY OF ENERGY, MINES
AND PETROLEUM RESOURCES

1989:41

FOR IMMEDIATE RELEASE

October 26, 1989

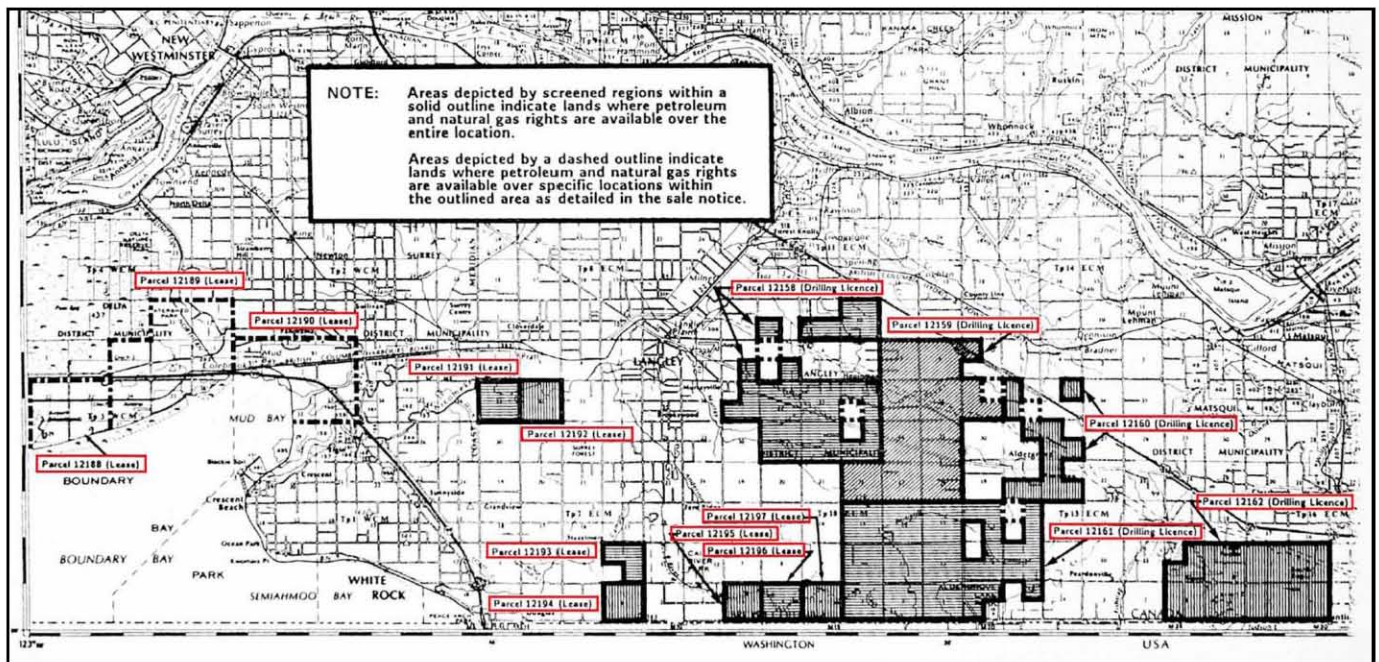
OCTOBER SALE OF DRILLING RIGHTS BRINGS \$13 MILLION

Victoria, B.C. - The October sale of oil and gas drilling rights brought \$13 million in revenue to the province, Energy Minister Jack Davis announced today. This brings the total paid so far this year to \$79 million.

"There is a boom in B.C.'s natural gas industry," said Davis. "Strong economic growth here and in the U.S., plus natural gas' environmental benefits as a clean-burning fuel, are the driving forces. Some big finds have rewarded companies' exploration efforts. This adds up to a very good outlook for the industry."

For the first time in five years, Crown drilling rights in the Fraser Valley were included in the sale. Fifteen parcels -- five drilling licences and 10 leases -- were offered in five locations, covering 13,857 hectares. Bids were accepted on 10 of the parcels. The average price per hectare was \$461.

"The price for the sale of rights in the Fraser Valley shows the strong interest companies have in continuing their exploration programs," said the Minister. "Prior to 1963, 35 exploration wells were drilled, and over the past two years, more than 500 kilometres of seismic exploration has been carried out on the surface. Now companies will be able to make applications for drilling. Engineering, environmental and safety details are all considered in the approval process."



Valley gas hunt on

The Province

By Brian Lewis
Business Reporter

Friday,
October 27, 1989

High hopes for major find

Drilling rigs and roughnecks will soon become a familiar sight on the Lower Fraser Valley landscape.

That's when oil and gas companies begin exploration for a major natural gas reserve on Greater Vancouver's doorstep.

The expected activity started yesterday when the provincial government released its October oil- and gas-drilling rights' sale, which included lands in the Fraser Valley for the first time since exploration interest in the area was raised a few years ago.

As the accompanying map shows, oil companies snapped up nearly 14,000 hectares, primarily in the Delta-Surrey-Langley-Matsqui areas, and paid about \$5.6 million to provincial coffers for drilling rights.

By far the biggest player in this new search in the largely unexplored valley basin is Calgary-based Conoco Canada Ltd., which is wholly owned by the DuPont Corporation.

Conoco also has a joint-venture agreement with Vancouver-based Dynamic Oil Ltd., which has been active in the area for some time.

Conoco bought more than half the rights sold and paid just over \$5 million.

That price included a whopping \$3.1 million for a 3,310-hectare section near Matsqui, which topped the October sale at \$950 per hectare. By comparison, the top price in the same sale in B.C.'s traditional north-eastern gas fields was \$516 per hectare.

B.C. Gas Inc. led a partnership, which includes Calgary-based Canadian Hunter Exploration Ltd., in purchasing a 2,612-hectare property near Aldergrove for \$355,572.

Todd Tipton, Conoco vice-president of exploration, says all the companies must negotiate surface access rights with the

landowners.

If commercial quantities of gas are found, the government will collect royalties on production since mineral rights are owned by the Crown. A landowner would likely receive some benefit from production as well, he says.

"We feel the Fraser Valley Basin is extremely unexplored and has very good potential for natural gas, but not oil," he said. "So we're after gas to supply Greater Vancouver."

The Lower Mainland's gas is now transported about 1,400 kilometres by the Westcoast Energy Inc. pipeline from north-eastern B.C.

Extra B.C. gas is also stored underground in Washington state to meet Greater Vancouver's high-demand winter period.

Because of that, the companies will be looking for a large underground gas storage site in these Fraser Valley parcels. Such a site could be filled with cheaper, summer-produced natural gas to supplement winter use.

"Storage is something on everybody's mind since this basin is so close to a big market," says Canadian Hunter executive vice-president Jim Gray. "But the key is to find gas and this is a high-risk area."

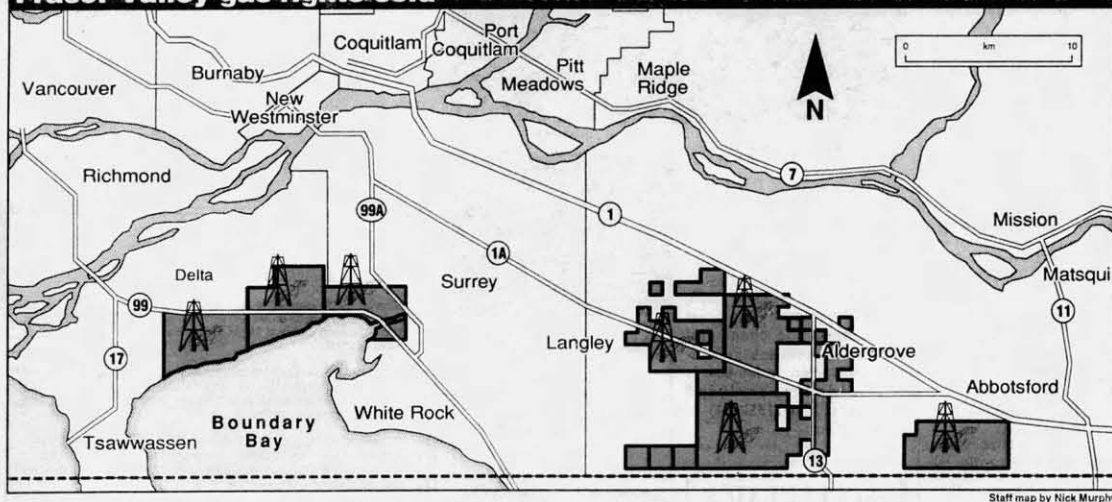
Canadian Hunter and B.C. Gas drilled an unsuccessful well at Birch Bay in 1987.

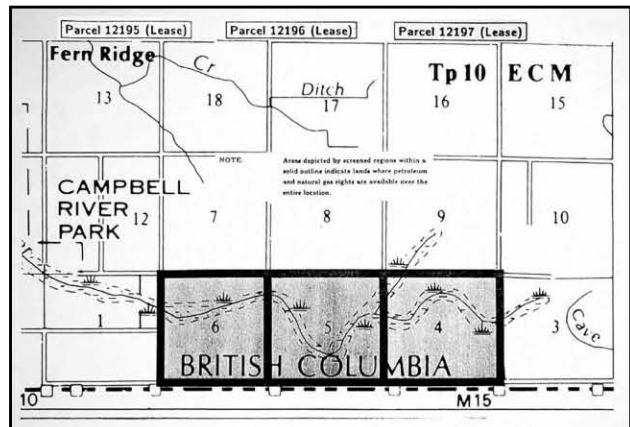
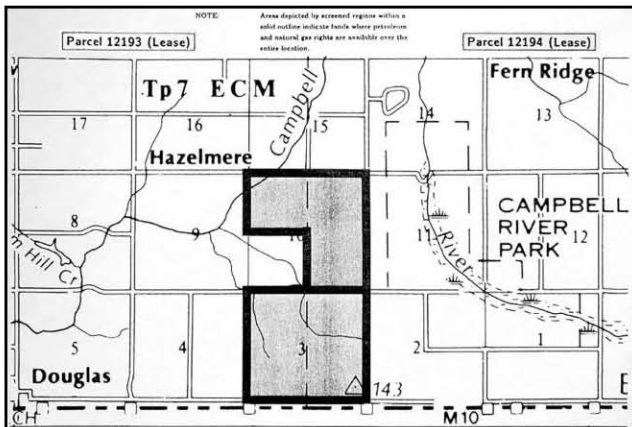
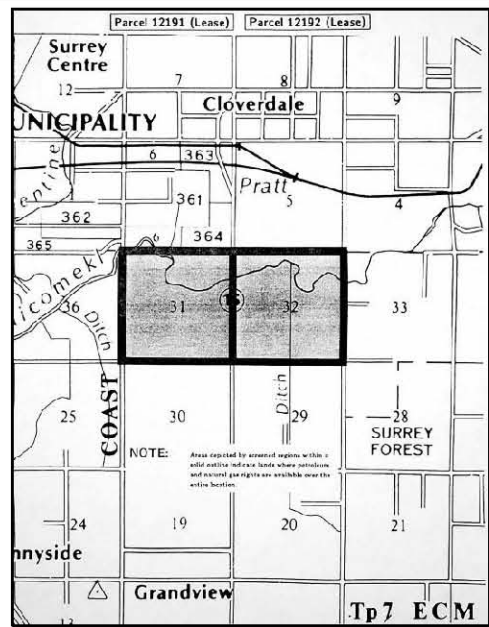
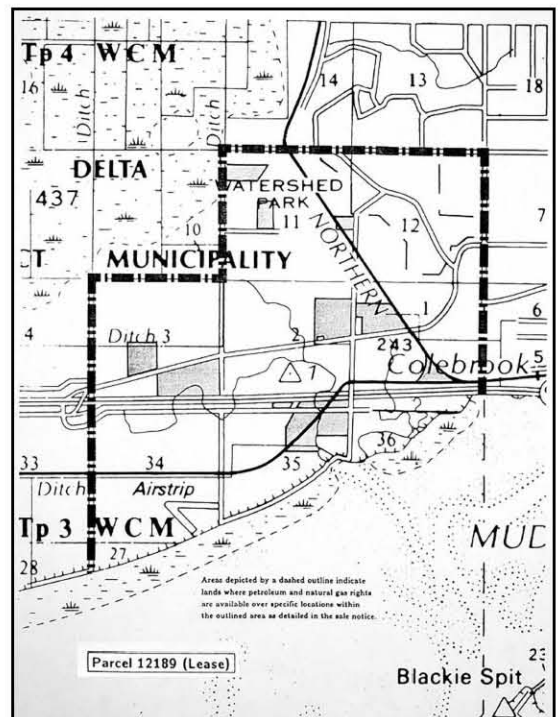
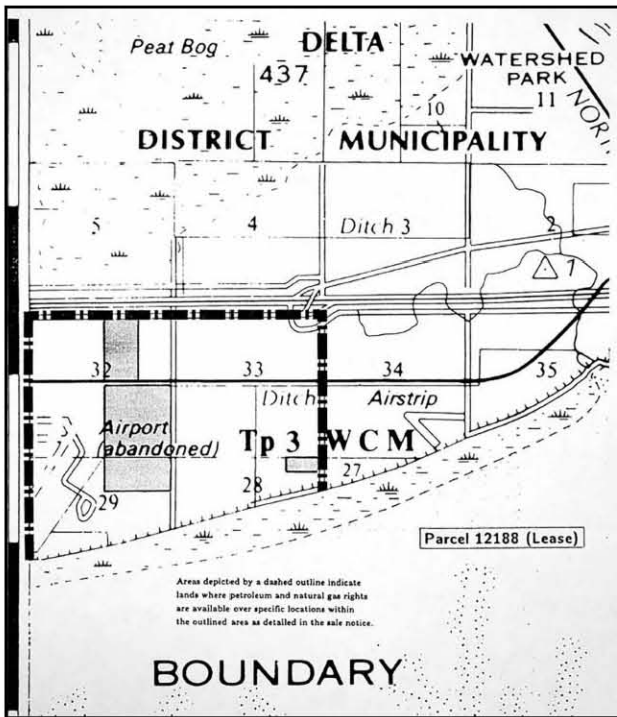
Tipton says he hopes to have the first well drilled within the year and says he doesn't anticipate problems drilling in populated areas, although special steps, such as using electric-powered rigs to cut noise, may be used.

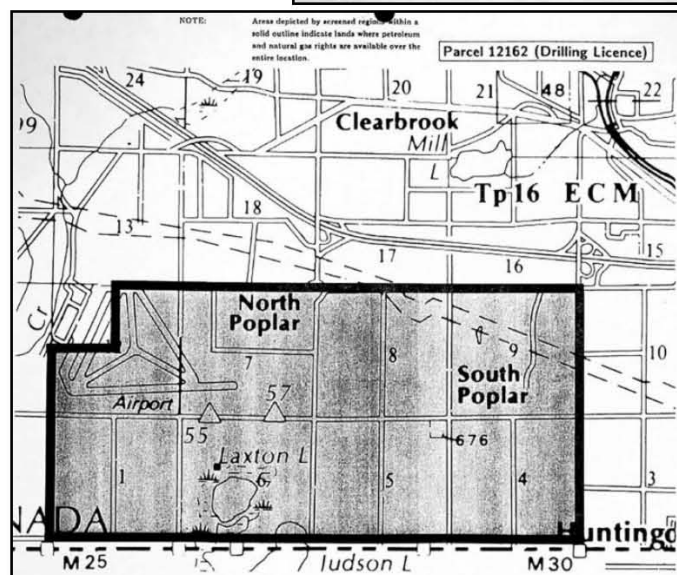
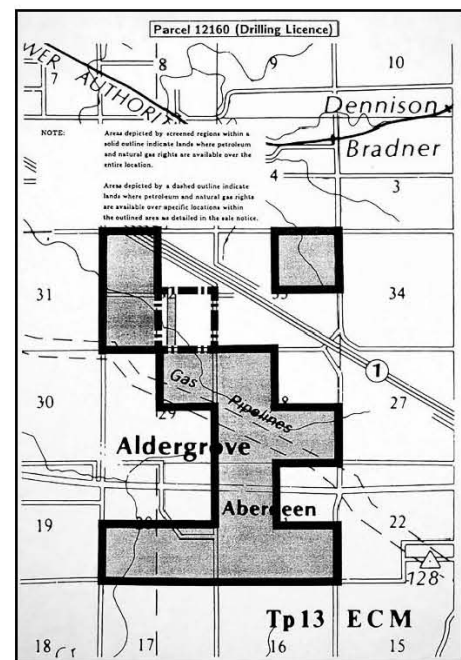
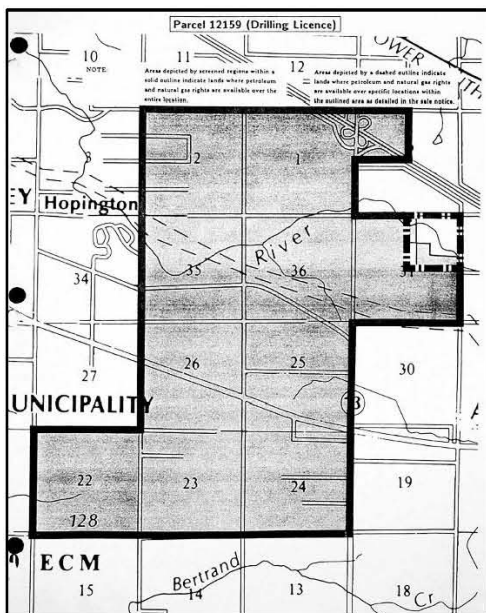
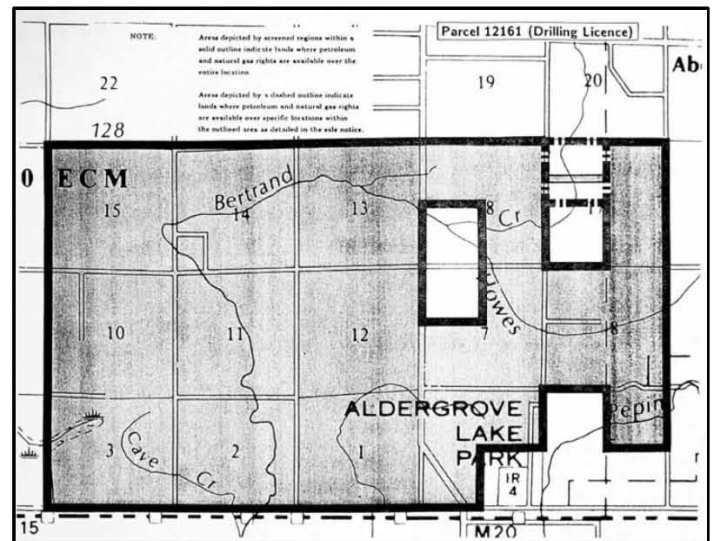
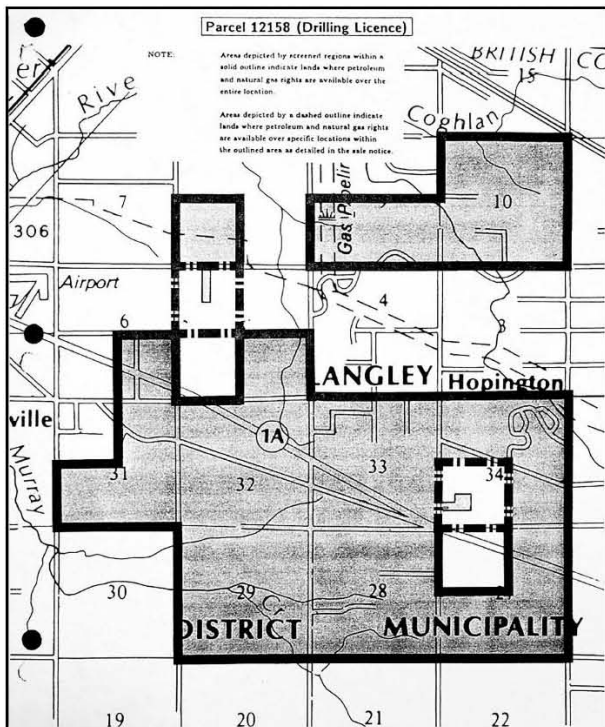
Yesterday's sale culminated an initial two years of seismic exploration throughout the Fraser Valley, in which more than 500 kilometres of line were shot.

There hasn't been a well sunk in the area since 1963.

Fraser Valley gas rights sold

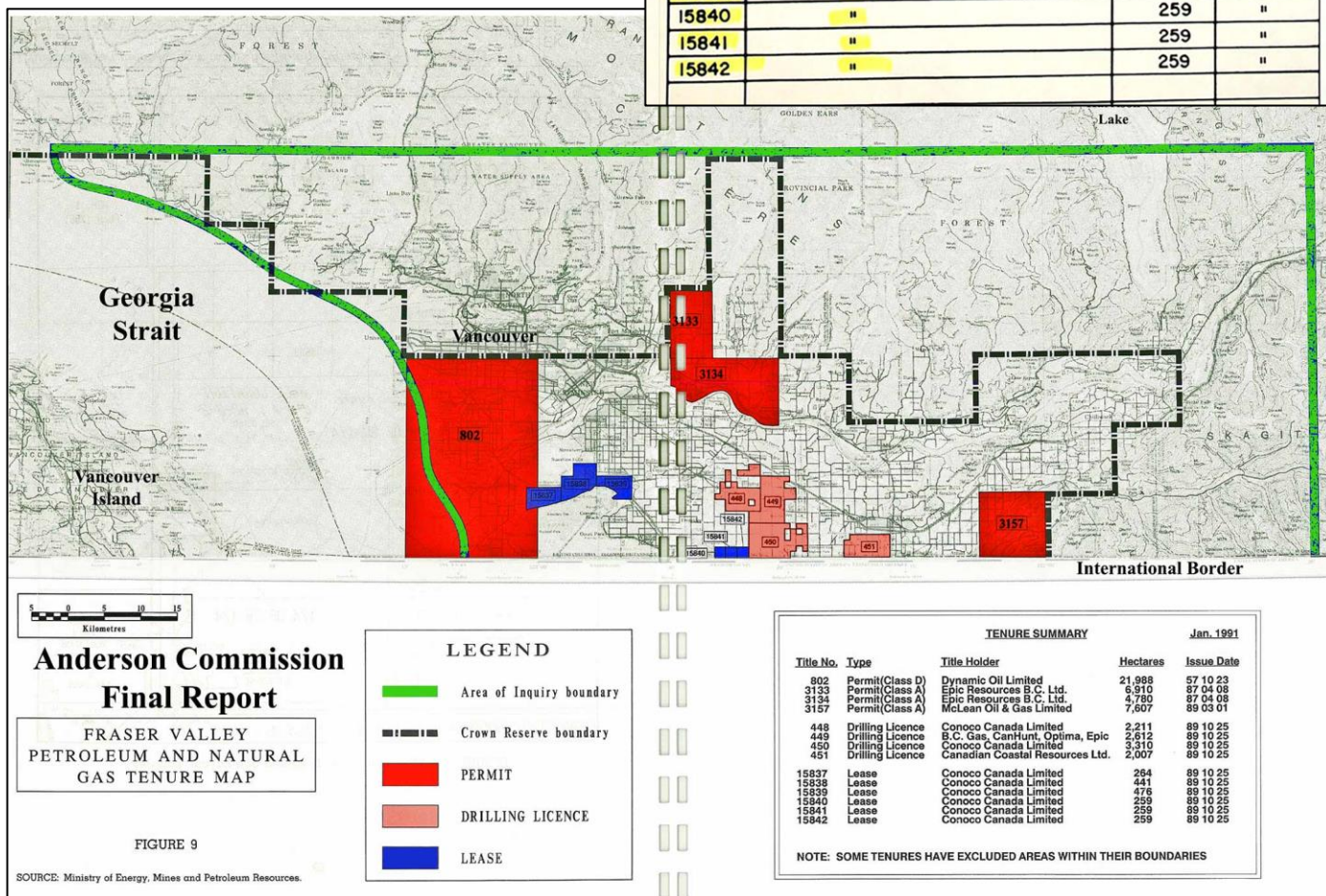




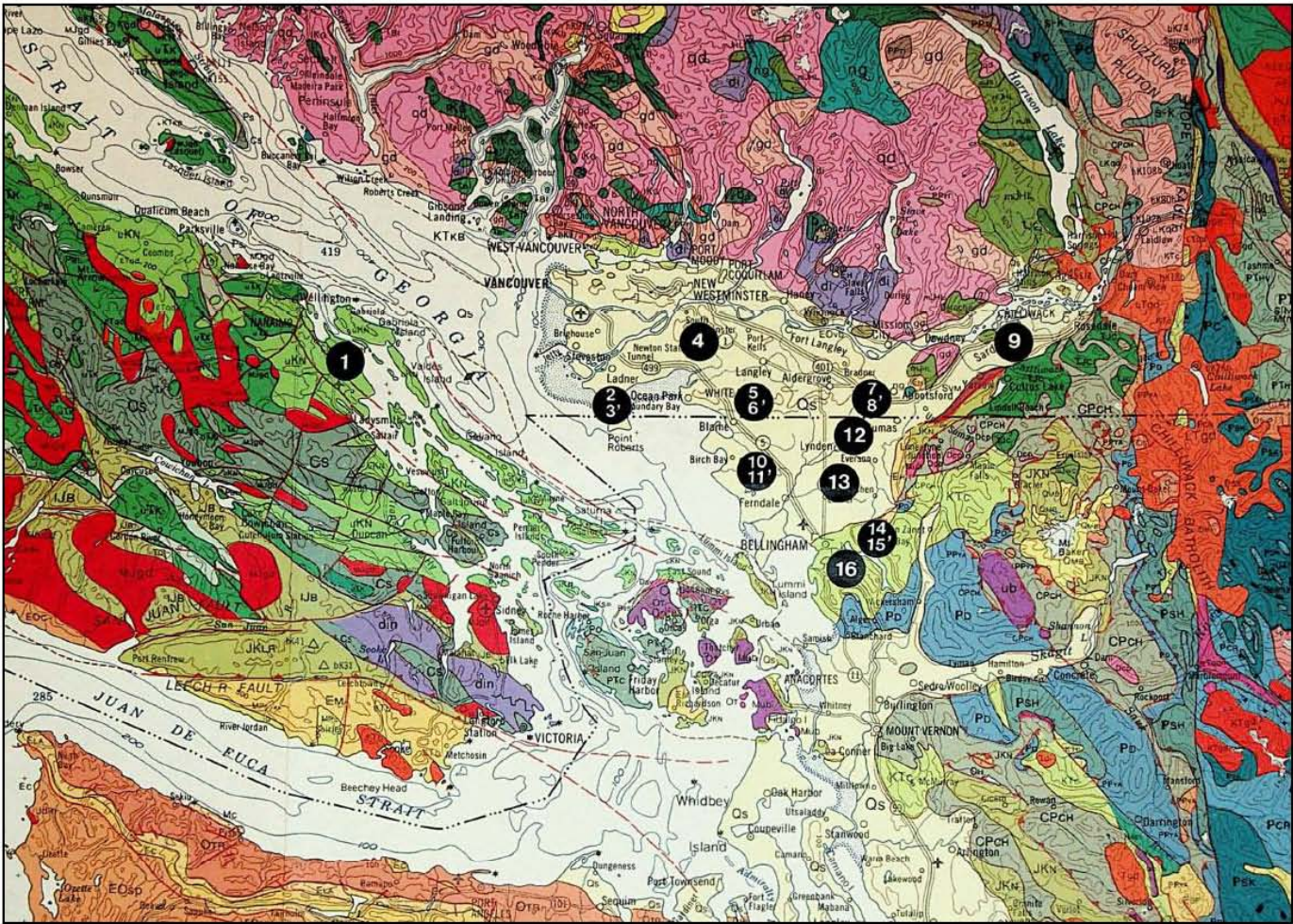


What the maps presented to the media omitted, however, were the other locations of the Ministry of Energy's recently permitted petroleum parcels granted to Epic Resources B.C. Ltd. on April 8, 1987 (parcels 3132, 3133, 3134) and July 29, 1987 (parcels 3135, 3136, 3138, 3139), to McLean Oil and Gas Ltd. on March 3, 1989 (parcel 3157), and the old October 23, 1957, petroleum tenure No. 802 transferred to Dynamic Oil Ltd. As narrated in the sub-chapter below, *The Public Hearing Series: the Tuesday, June 12th Opener*, the Anderson Commission failed to present all the Fraser Valley petroleum tenures on its satellite map wall display. This was an embarrassing deficiency in the public hearing process, which The Friends of the Fraser Valley discovered and exposed to the media.

No.	PERMITTEE	Hectares	Issue Date
802	Dynamic Oil Limited	21,988	57-10-23
1533	Haida Resources Ltd.	5,378	65-6-4
1534	"	5,338	"
1557	Offshore Oil & Gas Corp. Ltd.	8,184	66-2-28
1644	Haida Resources Ltd.	2,113	66-10-21
3132	Epic Resources B.C. Ltd.	6,804	87-4-8
3133	"	6,910	"
3134	"	4,780	"
3135	"	5,491	87-7-29
3136	"	7,325	"
3138	"	6,233	"
3139	"	7,144	"
3157	McLean Oil & Gas Limited	7,607	89-3-1
LICENCEE			
448	Conoco Canada Limited	2,211	89-10-25
449	B.C. Gas, CanHunt, Optima, Epic	2,612	"
450	Conoco Canada Limited	3,310	"
451	Canadian Coastal Resources Ltd.	2,007	"
LESSEE			
G-1	Meager Creek Development Corporation	410	87-12-17
15837	Conoco Canada Limited	264	89-10-25
15838	"	441	"
15839	"	476	"
15840	"	259	"
15841	"	259	"
15842	"	259	"



With the finalization of Fraser Valley petroleum leases intact, almost everything was in place. It took years of strategy, investment and promotion behind private industry's arrival for this moment. Announcements were made to news reporters that drilling would be taking place within a year. However, one final conditional hurdle remained.



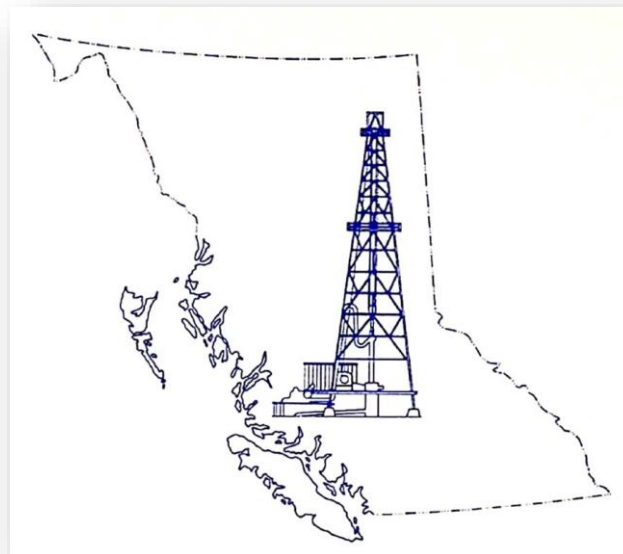
SELECTED WELLS							
WELL NAME		KB. (m)	TD. (m)	WELL NAME		KB. (m)	TD. (m)
1	BP YELLOW POINT	60.5	1573.0	9	FRASER VALLEY CHILLIWACK	11.3	1884.6
2	GREAT BASINS NO. 1	63.4	1842.2	10	CAN HUNTER BIRCH BAY	—	—
3	RICHFIELD PURE POINT ROBERTS	59.4	4508.6	11	FERNDAL COMMUNITY	20*	1899.2
4	ALLENBEE SOUTH BRAZEAU NO. 1	—	1432.6	12	STREMLER NO. 1	40.2	2244.9
5	RICHFIELD PURE SUNNYSIDE	113.7	3320.8	13	HILLEBRECHT NO. 1	19.8	1064.4
6	ROYAL CAN-VAN TOR BIG HORN KUHN NO. 1	28.9	1585.6	14	SQUALICUM LAKE NO. 1	167.0	1883.7
7	HERCON-KEY EVANS NO. 1	42.3	2396.3	15	ROSS NO. 1	—	1434.7
8	RICHFIELD PURE ABBOTSFORD	70.1	958.3	16	PELICAN DOME NO. 1	153*	1663.6

* Estimated

ENCLOSURE NO. 2
 SHEET 92
 FRASER RIVER
 MAP 1386 A

Above: earlier petroleum exploration drilling locations on geological basins map.

As part of the B.C. government’s October 25, 1989, lease conditions for petroleum license rights over the Fraser Valley – rights leased and let, that is, without public consent – petroleum companies and the recently formed private utility company B.C. Gas Inc. were now held responsible to conduct public consultation forums and processes. These revised conditions were spelled out in a December 12, 1989, Ministry of Energy, Mines and Petroleum Resources Information Letter, subject heading “Public Consultation Guidelines, Oil and Gas Development:”



The Ministry is now being more specific in its requirements for public consultation related to oil and gas exploration. Public consultation planning will be required of all applicants for work approvals from the Ministry under the Drilling and Production Regulation.

Public consultation plans should be developed by the proponent and reviewed with Ministry staff at the beginning of project planning and prior to formal application.

Public consultation techniques may include a wide array of initiatives, from personal contacts, informal meetings and information letters, to brochures, open houses, storefront offices, workshops or seminars.

The philosophy and practical public consultation advice contained in the Canadian Petroleum Association’s Public Consultation Handbook is endorsed by the Ministry.

In preparation for adhering to the Ministry’s special revised public consultation guidelines, Dynamic Oil Limited, in partnership with Conoco Canada Ltd., hired the services of Victoria City-based Connor Development Services Ltd. in late December 1989. Connor Development’s assignment was to conduct two sociological profiles, one of Langley Township, the other of Surrey and Delta municipalities, population communities located in the vicinity of proposed methane (“natural”) gas drilling sites. Beyond its initial contract, Connor Development “was also retained through the first quarter of 1990 to advise Dynamic and Conoco Canada during the public consultation process.”⁵⁰⁸

D.M. Connor Development Services was formed by Desmond M. Connor in 1968 with an office in the Ottawa, Ontario area. As the consulting firm’s public relations services slowly expanded, it eventually established an operation centre in Victoria City, British Columbia. Summarized in the October 4, 1991, edition of the Chilliwack Progress newspaper, Desmond Connor “is a consulting sociologist,” and “has

⁵⁰⁸ Bob Spring one page letter to David Anderson, September 6, 1990.

taught in the School of Public Administration at the University of Victoria and is currently an adjunct professor in the graduate program in Natural Resource Management at Simon Fraser University.”

Some of Connor’s Ontario and western Canada clients included Ontario Hydro, the Aluminum Company of Canada (ALCAN), the Northern Canada Power Commission, Bradbury Industries (wood preservative manufacturing plant proposal, 100 Mile House), Canadian Forest Products’ Howe Sound pulp mill, Continental Environmental Systems (Koster Siding waste dump proposal), Fraser River Harbour Commission (a 1983 secret investigation report), Progressive Construction (Milan and Olga Ilich’s Terra Nova residential development in Richmond, B.C.), Falconbridge Ltd. (the zinc-copper mining proposal on southern Saltspring Island), the Mining Association of British Columbia (the 1988 report, *Preventing and Resolving Public Controversy*), and the Atomic Energy of Canada’s subsidiary, Local Energy Systems (nuclear reactor proposal for the University of Saskatchewan).

Connor Development’s sociological consultants Gary Reith and Sharon McCarthy generated two internal reports for Dynamic Oil in January 1990.⁵⁰⁹ Bob Spring, a Conoco Canada Ltd. employee since 1985 and its newly 1991 appointed Western Canada Project Manager, a title used as Project Manager of the Fraser Valley Gas Project consortium (Dynamic Oil, Conoco, and B.C. Gas), sent copies of the two Connor reports⁵¹⁰ to Commissioner David Anderson on September 6, 1990. Spring forwarded the two reports to Anderson after he was directly questioned about them during cross examination by Commission counsel Doug MacAdams on August 28, 1990, during the second day of the Anderson Commission’s technical hearings.⁵¹¹ Gary Reith, a former B.C. Environment Ministry Waste Management employee, wrote in Connor Development’s January 1990 District of Langley report that the sociological profile “is intended to orient personnel from Dynamic Oil Limited to key social realities associated with its proposed natural gas drilling program.”

In early January 1990, Gary Reith and Sharon McCarthy wandered into the Fraser Valley urban and farmland wilderness to document for Dynamic Oil who that public opposition to its proposed petroleum operations would most likely consist of. Reith canvassed all notable environmental, outdoor and wildlife organizations, compiled data on all media outlets, read reports, and interviewed “more than 30 individuals.” Reith identified and summarized the role and concerns of the Society Promoting Environmental Conservation (SPEC), the Western Canada Wilderness Committee, West Coast Environmental Law Association, T. Buck Suzuki Foundation, Greenpeace, the B.C. Federation of Naturalists, the Vancouver Natural History Society, the Fraser River Coalition, the B.C. Wildlife Federation, Ducks Unlimited, and the Fraser Wetlands Habitat Committee. Reith concluded, in general, that there would be relatively minor concerns and conflicts generated by these organizations for the drilling proposals in the Langley District area.

Reith identified provincial and federal environmental agencies, American agencies, the Langley and Aldergrove Chambers of Commerce, ratepayer associations, community clubs, farming and farm related

⁵⁰⁹ *District of Langley: A Social Profile*, by Gary Reith, and *The Districts of Surrey and Delta: A Social Profile*, by Sharon McCarthy.

⁵¹⁰ The reports were then retained as part of the Commission’s records which were put into storage in early 1991. In 1994 the MEMPR transferred the Anderson Commission’s records to the BC Archives, where they remained, uncatalogued, until early 2021. No member of the public had requested or reviewed the Commission records until June 2021 by the author of this report.

⁵¹¹ Transcripts, volume 2, pages 375-376.

organizations: “In general, none of the groups appear to have any major apprehensions about the drilling program at this time but many have a number of questions and emerging concerns.”

Of the eight conclusion bullet points in Reith’s January 1990 report, he wrote the following in points 6 to 8:

An information vacuum surrounds the proposed drilling program. Most individuals are unfamiliar with the regulatory or technical aspects of the drilling program. Local newspapers have been the primary source of information about the drilling program to date; news has been limited.

Most local organizations and individuals appear to have few specific concerns about the drilling program. Currently there is little evidence to indicate that the drilling program is destined to be a major controversy. In general, the seismic testing programs conducted earlier seem to have contributed to an overall positive image of the natural gas industry. In addition, most people consider natural gas as an environmental-friendly fuel.

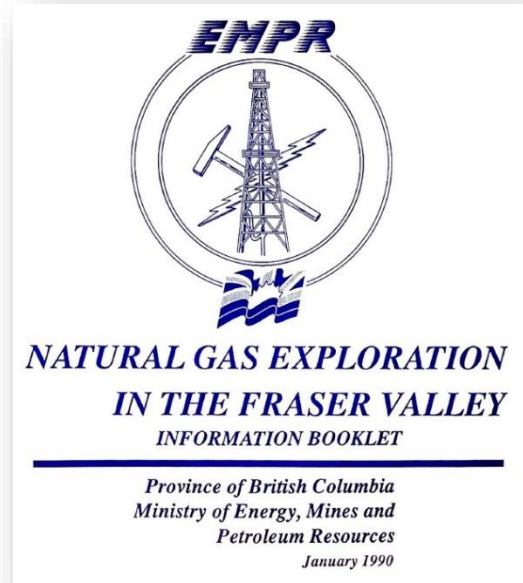
The regional environmental organizations are concerned about the potential environmental risk of drilling near Boundary Bay. There is little indication that these groups will have the interests or resources to pay much attention to the situation in Langley.

There are several general concerns about the drilling program. These include: the short-term impacts of the program on residents and uses adjacent to the drill site (eg. drill noise and traffic); possible impacts on well water supply and quality; the possibility that a natural gas discovery would lead to an exploration boom and disrupt the rural lifestyle in south Langley; and risks to public health and safety in the event of a blow-out or discovery of sour gas.

Reith ended by making a series of recommendations, including the distribution of a company brochure, “to all homes within a one-mile radius of the proposed drill sites,” and to organizations on a mailing list, to government agencies, libraries, and Chamber of Commerce offices. The timing of Dynamic’s brochure would accompany and fit into the distribution plan of a Ministry of Energy, Mines and Petroleum Resources information booklet about the proposed gas exploration drilling and underground gas storage in the Fraser Valley. Reith noted that Dynamic Oil’s three planned community open houses scheduled for February 20, 21, and 22, 1990, should be advertised in the local newspapers.

Reith noted the District of Langley’s role:

The District of Langley administers a noise bylaw within the community and to that extent has some permitting authority over proposed drilling. Although its regulatory powers are limited, the District is a key organization because it is an obvious target for protests, should any arise as a result of the drilling program.





INFORMATION LETTER

E90-1

SUBJECT: FRASER VALLEY NATURAL GAS EXPLORATION

This is a further update on activity related to exploration for natural gas in the Fraser Valley.

Sale of Crown Rights

- The October 25th disposition of Crown petroleum rights in the Fraser Valley resulted in the sale of ten parcels in three locations, covering 12,098 hectares in the Fraser Valley, at an average price of \$461 per hectare.
- Conoco Canada Limited, and its partner, Dynamic Oil Limited, obtained the majority of the parcels through the competitive bidding process. They have a time-limited interest in the resources, but not an automatic right to carry out exploration work. Permission must be obtained from property owners, the Ministry of Energy, Mines and Petroleum Resources, and other regulatory agencies for each individual operation.

Company Activity

- Since the October 25th disposition, Dynamic Oil Limited has been consolidating its land position and making preparations for drilling applications and public consultation, as required under the provincial Drilling and Production Regulation. The company has obtained permission from landowners to survey three locations: one in Delta and two in Langley. Once that has been completed, the company is expected to make a formal application for permission to drill.

Ministry Activity and Public Information

- To ensure that elected officials, the public, and staff in government agencies are fully informed about drilling activities and regulations, the Ministry has prepared a booklet about routine drilling operations and the special requirements that will be placed on the operators in the Fraser Valley. A copy is enclosed for your information.
- Also enclosed is a short brochure to be delivered to homes within a one-mile radius of the proposed drilling locations. Both the brochure and booklet will be available to local residents and the general public at Municipal Offices in Langley and Delta.

John Allan
Assistant Deputy Minister
Energy Resources Division

Enclosures

90/01/29

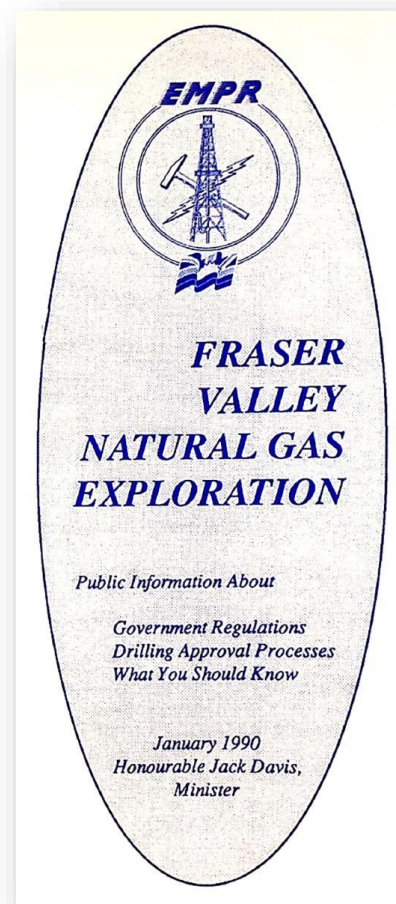
Given the dramatic events that would unfold two months later – namely the public protests before Langley Council on the evening of March 5, 1990 – Reith’s comments would turn out to be profoundly prophetic.

Reith also noted the following:

Dynamic Oil Limited’s proposed drilling program in south Langley faces a citizenry which has demonstrated its ability to conduct organized, protracted and successful campaigns to oppose developments which are perceived to be undesirable. The large number of controversies in south Langley ⁵¹² has tended to create a siege mentality among some residents, who suggest that south Langley is the target of undesirable developments because it is perceived as a thinly populated area with no political clout. In the context of a community with heightened anxieties, and in the midst of at least one major controversy (i.e., the B.C. Hydro transmission line) the company might anticipate its proposed drilling program to be greeted with some suspicion and cynicism. ⁵¹³

Reith’s commentary on the ‘problem’ was also identified by Emile Morin, a board member of Alberta’s Energy Resources Conservation Board, who testified at the David Anderson technical hearings on August 31, 1990:

The risk is one of rejection, and the marshalling of the forces, and opposing the scheme, and indeed I think that happened in this particular instance where there was a significant opposition to the siting of the Shell plant, the [Caroline] Shell gas plant [in Alberta], and that ultimately resulted in Shell moving their plant to a different site. ⁵¹⁴



⁵¹² The controversies also included local opposition to gravel extraction and golf course proposals on private lands and in the ALR (Agricultural Land Reserve).

⁵¹³ *District of Langley, A Social Profile*, page 9.

⁵¹⁴ Testimony of Emile Morin, Board member of Alberta’s Energy Resource Conservation Board (ERCB), Anderson Commission transcripts, Volume 5, pages 892-893. Morin had spent “two or three years in Special Projects,” where he “served as a technical advisor to the Lodgepole Inquiry Panel, and subsequent to that, when [he] became Manager of the Drilling and Production Department, [and] served as Chairman of the Blowout Prevention Review Committee, which is the group that put together many of the drilling criteria for sour critical wells” (page 858).

5 – 8. ‘Natural’ Gas: The Friendly Energy Source Propaganda

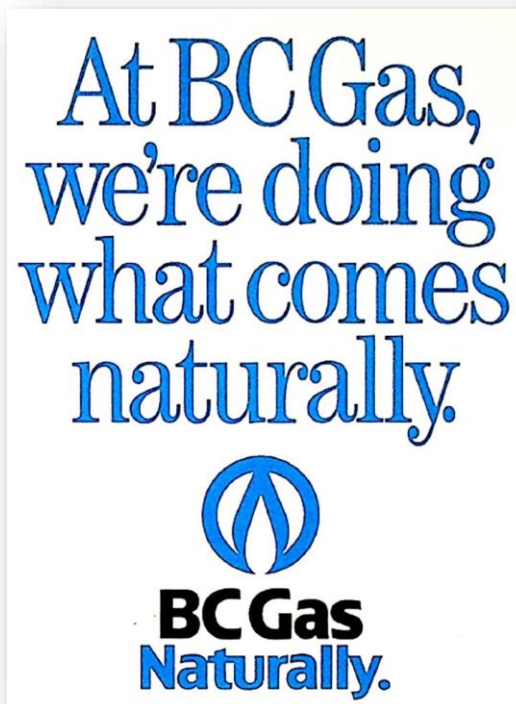
*Preservation of our environment is becoming a major public issue. Clean burning natural gas is gaining prominence as the right fuel at the right time, offering solutions to many environmental problems.*⁵¹⁵

*“I’d like to know if the guy who invented the phrase ‘natural gas’ is still alive. The thing is natural gas is ‘methane!’ And, if it comes out that methane was leaking some people will understand that methane is deadly. I mean, you don’t have to blow up, you just have to inhale it a couple of times and you are gone. You see, it’s NATURAL, NATURAL GAS! You can almost hear the orchestra in the back, it’s so soothing. Don’t worry.”*⁵¹⁶

Earlier on in Connor Development’s Langley District social profile report, Gary Reith pitched the following campaign strategy to Dynamic Oil:

... time is of the essence. The reality that natural gas drilling might occur soon is slowly circulating through the community. The vacuum of information about the project provides ideal conditions for fears and anxieties to develop from rumours and misinformation.

Natural gas is perceived to be an environmentally friendly energy source. ... Now is an appropriate time for the company to proceed with a systematic public program to address the information vacuum currently existing about its drilling program and capitalize on the generally positive public attitudes towards natural gas.



Bubbling since at least 1987, the petroleum industry in the United States and Canada began strategically promoting and advertising “natural gas” as a cleaner and better fossil fuel alternative to coal and oil, the new ‘bridge fuel.’ That Gary Reith candidly stated that the petroleum industry’s advertisement campaign was a “perceived” condition, that is, as a recognized and approved public relations perception, could not have been any clearer.

The October 18, 1989, Province newspaper headline on the front page of the Business section, *B.C. gas boom coming*, stated “the boom in B.C.’s northeastern natural gas fields is just beginning but already spokesmen expect it to play an increasingly important role in our economy over the next decade and beyond.” The article stated: “B.C. Gas, the newly named company that grew from the merger and privatization involving Inland Natural Gas and B.C. Hydro’s gas division, has begun an aggressive gas-use campaign.”

⁵¹⁵ Front cover message on B.C. Gas’s 1989 Annual Report.

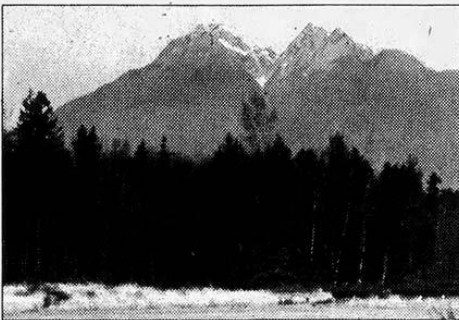
⁵¹⁶ Al Vickers, telephone interview, December 21, 2020.

At BC Gas, we're doing what comes naturally.

As B.C.'s major gas utility, we're proud of our role in expanding the use of natural gas...safe, efficient and clean-burning. It's the energy source which best preserves nature's balance.

In addition to distributing natural gas for B.C. homes and industries, we're developing new ways to serve the province's growing energy needs...ways compatible with a clean, healthful environment.

It's part of our commitment to your energy future.



Looking for natural solutions to store gas.

Since natural gas is found in underground reservoirs, storing the gas in similar geological formations is a "natural" method. During the past several months BC Gas has conducted seismic surveys at a number of Fraser Valley sites, and is negotiating with property owners for the right to test for suitable storage locations. Underground gas storage is a safe and successful practice at over 400 sites in Canada and the U.S.A. Fraser Valley underground storage will help to ensure natural gas supplies for the Lower Mainland during periods of peak winter use. Moving gas from the northern fields to storage by using excess pipeline capacity in the summer also helps to maintain low gas costs.

BC Gas  **Naturally.**

Langley Advance
November 29, 1989

Strong economic growth here and in the U.S. is driving up demand for electricity well beyond forecasts.

And, particularly in the U.S., that's coupled with an out-of-favor nuclear option, which puts increasing pressure on alternative forms of power generation.

But heightened public awareness and concern over acid-rain, the greenhouse effect and a disappearing ozone layer in the upper stratosphere are sending a strong message to utilities.

It's saying you must burn fossil fuels for electricity generation, then don't burn oil or coal – burn natural gas.

The markets are in place – and so are our [B.C.'s] gas reserves.

Adds B.C. Energy Minister Jack Davis: "Until now the U.S. Northwest industries have been fuel switchers but now, for economic and environmental reasons, they're dropping heavy oil and looking for gas."

From November 29 to December 3, 1989, B.C. Gas ran large, full-page advertisements in all the major newspapers in the Fraser Valley, with the headline: "At B.C. Gas, we're doing what comes naturally." The first paragraph of the advertisement stated the following:

As B.C.'s major gas utility, we're proud of our role in expanding the use of natural gas ... safe, efficient and clean burning. It's the energy source which best preserves nature's balance.

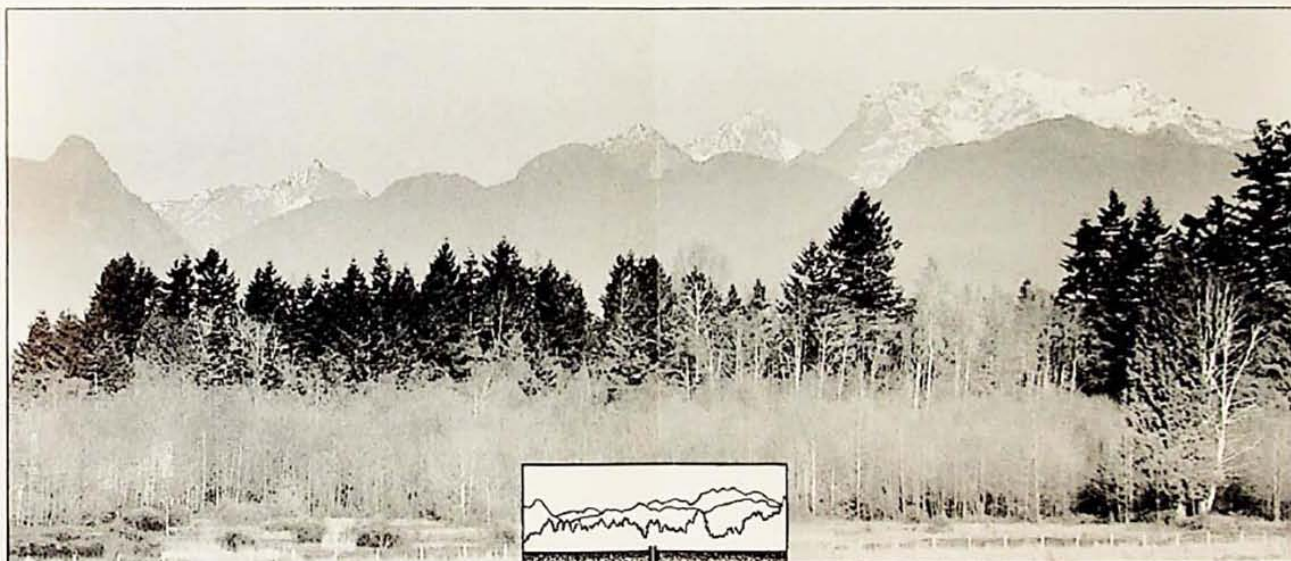
BC Gas is looking for ways to store natural gas the way nature taught us. Underground and environmentally sound.

The natural gas which provides safe, clean power for British Columbians is found in deep underground reservoirs. That's the way nature stores this remarkable form of energy...and it's being considered as a storage method by BC Gas.

During the past several months BC Gas

has investigated the feasibility of underground gas storage in the Fraser Valley.

We've conducted seismic surveys at a number of Valley sites...and are negotiating with property owners for the right to test for suitable underground storage locations.



When we locate a suitable geological formation, gas will be pumped into this natural reservoir for storage. The process involves several stages of exploration and development. Each phase requires approval by the B.C. Utilities Commission.

A safe, proven storage method.

Deep underground gas storage is being successfully practised at some 400 sites in Canada and the U.S.A. It's safe, environmentally sound, and contributes to



maintaining low gas costs.

Storage in the Fraser Valley would mean more assured natural gas supplies for the Lower Mainland. (During the extended 1989 winter cold spell, B.C. had to depend on an underground storage site in Washington State.) Deep underground storage is the natural way to prevent the possibility of local gas shortages during periods of peak energy demand.

Just after Dynamic Oil Limited, B.C. Gas, and Conoco Canada Ltd. joined forces on April 12, 1990, to establish The Fraser Valley Gas Project consortium, it paid for a full-page ad published in the Langley Times on April 21, 1990. The top of the ad led with a large font title, "Natural Gas is a friend of the environment."

All Canadians, including corporations, are far more aware of our fragile environment than ever before. And that's where natural gas can help. It's the cleanest burning fossil fuel known.

Natural gas produces less carbon dioxide than coal or oil and produces fewer emissions into the atmosphere helping to moderate the greenhouse effect.

Natural gas is a friend of the environment.

All Canadians, including corporations, are far more aware of our fragile environment than ever before. And that's where natural gas can help. It's the cleanest burning fossil fuel known.

Natural gas produces less carbon dioxide than coal or oil and produces fewer emissions into the atmosphere helping to moderate the greenhouse effect.

Many of us depend on natural gas for everyday living. We use it for home heat, hot water, cooking, swimming pools, clothes dryers and automobile fuel. Natural gas is safe, economical and is a natural friend of the environment.

The growing population in the Lower Mainland is creating a need to find local sources of natural gas and storage areas.

By tapping the natural gas potential of the Fraser Valley we can have safe, reliable and economical supplies into the future. And we can enjoy these benefits without harm to the local environment or any adverse effect on our quality of life.

Gas exploration has little environmental impact

Contrary to what you may have heard, drill sites have little environmental impact. The working area and drill rigs are cleared and dismantled within six weeks, and the land is quickly restored to its natural state.

During drilling, underground water quality is protected by advanced pollution control practices...



the same practices which have allowed the drilling of 7,300 oil and gas wells in northeastern B.C. without a single reported instance of water contamination.

Visual impact is minor

In the event that natural gas is discovered, the visual impact on the landscape is negligible. The only surface evidence of the well would be a small shed which covers the capped above-ground pipe. All transmission pipes would be under-

ground and out of sight.

Underground storage safe and proven

Underground storage of natural gas is being successfully practiced at more than 400 sites in Canada and the U.S.A. It's a safe and proven way to ensure natural gas supplies during periods of peak demand. At present, we're partially dependent on supplies stored underground in Washington State... a situation which could result in future shortages for the Lower Mainland.

Visit our Aldergrove * information office

If you have any questions about natural gas drilling or storage, drop in to our Consumer Information Centre at Aldergrove Centre Mall, 3100-272nd Street in Aldergrove. Or phone 856-8144 Monday to Friday.

By ensuring reliable supplies of clean-burning natural gas and using it in our daily lives, we are all helping to preserve B.C.'s environment.

Natural gas is indeed a friend of the environment.

*After May 7th.

The Fraser Valley Gas Project



Langley Advance
April 25, 1990

Many of us depend on natural gas for everyday living. We use it for home heat, hot water, cooking, swimming pools, clothes dryers and automobile fuel. Natural gas is safe, economical and is a natural friend of the environment.

The growing population in the Lower Mainland is creating a need to find local sources of natural gas and storage areas.

By tapping the natural gas potential of the Fraser Valley we can have safe, reliable and economical supplies into the future. And we can enjoy these benefits without harm to the local environment or any adverse effect on our quality of life.

The Valley needs natural gas. So does our environment.

The Fraser Valley's future demands for natural gas are especially strong because of the Valley's fast rising population. So we must prepare now for the natural gas we'll need tomorrow.

We need natural gas because it's a safe, efficient form of energy. We rely on it for home heating for cooking and other household uses, as an energy source for business and industry and a cleaner burning fuel for motor vehicles.

Natural gas also serves the environment. It releases far fewer emissions into the atmosphere than other fossil fuels. So when people switch to gas from oil or coal, it reduces acid rain and helps moderate the greenhouse effect. Conversion to natural gas for automobiles can reduce carbon monoxide emissions by up to 50%.



At present, most of our gas comes by pipeline from northeastern B.C., with special peak period supplies from storage sites in Washington State. The Valley really needs its own regional supply of natural gas...a supply that allows us to end our dependence

on U.S. storage in peak winter months.

The Fraser Valley Gas Project can create those supplies...by exploring for new gas deposits and suitable safe underground storage sites here in the Valley.

It's a natural move to meet our future energy needs. And to help create a cleaner, fresher environment.

Visit the Fraser Valley Gas Project Information Centre at Aldergrove Centre Mall, 3100-272nd St. in Aldergrove. Or phone 856-8144 Mon. to Sat.

The Fraser Valley Gas Project



Langley Advance
June 13, 1990

In early May 1990 when the B.C. government announced the formation of a Commission of Inquiry into Fraser Valley gas exploration, B.C. Gas president Robert Kadlec informed his shareholder audience during B.C. Gas' annual meeting that the natural gas switch is preferred to "dirtier fuels such as oil, gasoline and diesel fuel."⁵¹⁷

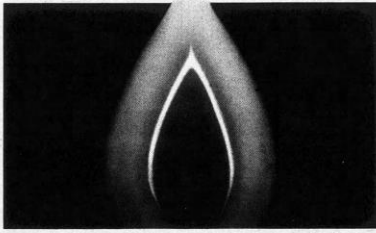
As community opposition began to escalate, the Fraser Valley Gas Project consortium launched a series of full-page newspaper ads. The item published in the Langley Times on June 13, 1990, "The Valley needs natural gas - So does our environment," alongside a photo of a mother duck with seven ducklings, states:

Natural gas also serves the environment. It releases far fewer emissions into the atmosphere than other fossil fuels. So, when people switch to gas from oil or coal, it reduces acid rain and helps moderate the greenhouse effect.

In another full-page ad in the Langley Advance on August 22, 1990, *Natural gas stored underground here will be used here*, states: "Natural gas ... [is] the cleanest burning of all fossil fuels."

Our Commitment To The Fraser Valley And
Lower Mainland:

Natural gas stored underground here will be used here.



We know there's concern in the Fraser Valley that natural gas stored here in underground reservoirs as part of the Fraser Valley Gas Project might be exported to U.S. gas users. It's a totally unfounded concern, because our commitment is clear: gas stored underground in the Fraser Valley by BC Gas as part of the Fraser Valley Gas Project is reserved for the exclusive use of Lower Mainland residents.

The main purpose of the Fraser Valley Gas Project is to ensure more reliable gas supplies for Lower Mainland users, and to end our dependence during peak winter months on gas stored in Washington State.

The Fraser Valley Gas Project can provide the local supplies we need, without any adverse effect on your quality of life. Gas exploration

has little impact on the environment, and underground storage is a safe, proven way to make supplies available where demand is greatest.





Natural gas is the leading energy source for B.C. homes, business and industry, and an environmentally superior fuel for motor vehicles. It's the cleanest burning of all fossil fuels. As more people convert to natural gas, it improves air quality and reduces acid rain.

Developing regional gas supplies can help to meet our growing energy needs, while creating a cleaner environment.

For more information, visit the Fraser Valley Gas Project Information Centre at Aldergrove Centre Mall, 3100-272nd Street, Aldergrove. Or phone 856-8144 Monday to Saturday.

The Fraser Valley Gas Project

Langley Advance
August 22, 1990

⁵¹⁷ *Fraser Valley opposition to gas drilling 'not sensible,' Times Colonist, May 9, 1990.*

In B.C. Gas Inc.'s technical submissions for the David Anderson Commission's preparatory sessions,⁵¹⁸ it stated under a section called, "The Greenhouse Effect and Global Warming:"

Most scientists and government officials agree that the average earth surface temperature will gradually rise in response to the concentration of CO₂ and other trace gases in the atmosphere. Although small amounts of methane, a trace gas of concern, are released, natural gas has significantly less carbon than any other fossil fuel and therefore contributes less to global warming.⁵¹⁹

In its submission, B.C. Gas appended a June 1990 report, "Natural Gas and the Environment," co-published by the Canadian Gas Association and the Ontario Natural Gas Association, a report used "to explain the advantages of natural gas over other fossil fuels." As world-wide scientists began organizing public concerns about global warming, the international natural gas industry collective was organizing and advancing its strategic position and talking points. The Canadian Gas Association report included the following:

While natural gas may not be the ultimate "environmentally friendly" fuel, it does have an increasingly important role to play in combatting pollution. By all measures air emissions, solid wastes, water pollution and water consumption -- natural gas is an environmentally desirable fossil fuel.

While the activity level of methane is higher than that of carbon dioxide, it is effective for a considerably shorter period in the atmosphere. The half life of methane is estimated at 7-10 years; the half life of carbon dioxide is 500 years.

The activity of methane is estimated to be as much as thirty times higher than that of carbon dioxide on a unit basis. However, the amount of methane released by the natural gas fuel cycle is small. Therefore, the overall contribution of the natural gas fuel cycle to the greenhouse effect (considering carbon dioxide and methane) is smaller than that of the other fossil fuels.

Natural gas leakages account for less than two percent of the total worldwide releases of methane.

In July and August 1989, the Alphatania Group, London, England, surveyed 41 natural gas operating companies around the world to determine the extent of methane leakage from their operations. It was the Group's conclusion that the world gas industry is efficient in the conservation of natural gas within its system with an overall throughput leakage factor of 0.63%.

Contrary to B.C. Gas's posturing and promotional assurances, the first IPCC (Intergovernmental Panel on Climate Change) report of 1990 states un-categorically:

We are certain of the following: emissions resulting from human activities are substantially increasing the atmospheric concentrations of the greenhouse gases carbon dioxide, methane,

⁵¹⁸ Note. The David Anderson Commission January 1991 final report omitted inclusion of the preparatory meetings list as an appendix. It's odd, because the Commission had numerous list versions of these meetings, along with all other public meeting and technical hearing list dates. Only two references to the word "preparatory" were included in the final report. See Appendix E, for a list of the Preparatory meetings.

⁵¹⁹ BC Gas Technical Submission, BCG-16, Natural Gas and the Environment.

chlorofluorocarbons (CFCs) and nitrous oxide. These increases will enhance the greenhouse effect, resulting on average in an additional warming of the Earth's surface.⁵²⁰

The 1990 IPPC report refers to “the ventilation of natural gas,”⁵²¹ and states that “methane is the major component of natural gas, hence leakage from pipelines and venting from oil and gas wells could represent a significant source of atmospheric CH₄ [methane].”⁵²²

New observational satellite technology, such as the Scanning Imaging Absorption Spectrometer for Atmospheric Chartography (SCIAMACHY), would later discover in data collected from 2003 to 2009 “a methane cloud about the size of Delaware” in the San Juan Basin in the western United States, where coal bed methane (natural gas) and hydraulic fracturing (fracked gas) production was booming.⁵²³

As scientists would better determine through careful analyses (about 2005 following), when methane (i.e., “natural gas”), or CH₄, escapes into the upper atmosphere as a greenhouse gas, for the initial duration its potency is about 200 times greater, measure per measure, than carbon dioxide. Methane's potency then undergoes processes of molecular dissipation and reduction, eventually averaging to about 85 times greater than carbon dioxide over a 20-year period. Following, methane's potency is reduced to about 35 times that of carbon dioxide over a span of a century.

⁵²⁰ IPPC report, 1990, Executive Summary.

⁵²¹ Ibid., page xv.

⁵²² Ibid., page 21.

⁵²³ *Methane Matters: Scientists work to quantify the effects of a potent greenhouse gas*, by Adam Voiland, March 8, 2016.

5 – 9. No Foes: Then Came the Friends of the Fraser Valley

*“[Todd] Tipton [Conoco vice-president of exploration] says he hopes to have the first well drilled within the year and says he doesn’t anticipate problems drilling in populated areas ... Yesterday’s sale culminated an initial two years of seismic exploration throughout the Fraser Valley, in which more than 500 kilometres of line were shot.”*⁵²⁴

*“Despite our intent to consult with the community under “knowledgeable” advisement, we failed to gain acceptance. As pointed out by the ERCB [Energy Resources Conservation Board, the Alberta Regulator], the risk of open consultation is the possibility of being met with forceful opposition. An organized opposition intervened during our third open house on February 22, 1990, thereby preventing any further effective community consultation.”*⁵²⁵

*“To call the Friends environmentalists is invalid,” Jerry Walter said. We developed as a group because we are personally threatened in our homes. Our animals are threatened, our water is threatened, our lives are threatened.”*⁵²⁶

*“You have to understand, once you are under siege by the oil and gas industry you are absolutely helpless. I must say, even now I can feel my blood pressure rising, thinking about them. ... There is no doubt that what the industry was proposing was a risk to groundwater, and I think people could see that. There was just such a disbelief that anybody with any braincells would think of doing this kind of procedure in an occupied area. ... But most of all it was just a scam, a straight investor scam, I think.”*⁵²⁷

*“It was a horrific job. I mean, it was a four-and-a-half-year battle. It lasted for four-and-a-half years! It wasn’t an over-nighter!” Most the people [members of the Friends] were professional people, doctors, lawyers, dentists, ceo’s. It was amazing, just amazing. I felt a little bit humbled at times because here I was conducting the orchestra, and I didn’t even know how to play the guitar. I remember the night we first got started. In fact, it was in my living-room, in our home, we had a big living-room, and it was jam-packed with these professional people. And I came down the stairs and I said, I have to apologize, I have just been speaking to so-and-so, and I just came up with a name for our society. How about the Friends of the Fraser Valley? And they just loved it, so it went from there.”*⁵²⁸

*It is noteworthy that no grassroots group such as the Friends of the Fraser Valley formed to oppose the Hydro proposal in 1978.*⁵²⁹

The three ‘open house,’ ‘community consultation’ events, sponsored by Dynamic Oil and Conoco Canada, occurred: on February 20, 1990, at the East Delta Hall in Delta; on the 21st at the Langley

⁵²⁴ *Valley Gas Hunt On*, Vancouver Province newspaper, October 27, 1989.

⁵²⁵ In Bob Spring’s one page letter to David Anderson, September 6, 1990.

⁵²⁶ Gas Commissioner hears both sides, by Cori Ross, Langley Times, July 4, 1990.

⁵²⁷ Margaret Ormston, telephone interview, December 26, 2020.

⁵²⁸ Al Vickers, telephone, December 21, 2020.

⁵²⁹ D. Fenn note to David Anderson, Re Background and Local Reaction to the B.C. Hydro Proposal to Explore for Natural Gas in the Fraser Valley in 1978, October 17, 1990.

Murrayville Community Hall; and on the 22nd at the Aldergrove Kinsmen Community Hall. All events were convened from the hours of 2 to 9 p.m.

Drilling Program for Natural Gas in the Fraser Valley

INFORMATION AVAILABLE

Brochures

For a copy of the brochure and booklet published by the Ministry of Energy Mines and Petroleum Resources, visit your municipal office or local library or call 387-5995 (Victoria).

For the brochure produced by Dynamic Oil Ltd. and Conoco Canada Ltd., check these same locations or call 266-3318 (Vancouver).

Open Houses — 2:00 to 9:00 p.m.

- | | |
|---------|--|
| Feb. 20 | East Delta Hall
10379 Trunk Road
(#10 Hwy. & 104th St.), Delta, BC |
| Feb. 21 | Murrayville Com. Hall
216th St. & Old Yale, Langley, BC |
| Feb. 22 | Kinsmen Hall
26770 – 29th Avenue, Langley, BC |

Come along and find out more about the Dynamic Oil Ltd. and Conoco Canada Ltd.'s drilling program — ask questions, make suggestions and register your views. Ministry staff will be present to answer questions about government policy and regulations.



Surrey Leader - February 18, 1990

Community concerns were featured in a February 21st newspaper article in the Langley Advance, *Residents Explode, Gas drilling planned:*

Langley homeowners are uneasy about a plan to drill for natural gas in their own back yards.

They're charging that the provincial government and the companies involved in the proposal have not done enough to inform people or give them a chance to offer their input.

The article stated that some residents had mistakenly tossed the duo company's promotional information pamphlet in the garbage, thinking it was "junk mail." The article, which described some of the community's immediate fears, quoted Bruce Hanwell from the Ministry of Energy, Mines and Petroleum Resources who had heard and read the public's concerns at the first open house, responded to the reporter with the following:

There's a lot of misinformation about drilling for gas. We maintain that wells are drilled without incident in most cases.

At the third and last open house meeting in Aldergrove, “permission was granted to Dr. Margaret Ormston, an opponent of the project, to set up her own display and to be present and tell people why she opposed the project.”⁵³⁰

Within three days following the open house events, a large gathering of serious-minded citizens congregated in the living room of the Al Vickers’ home:

About 30 residents of rural Langley formed a group [an organization] to protest gas exploration in the Township at a meeting Sunday [February 25th].

Eileen Spencer, of 26262 5A Ave. in Aldergrove, said Friends of the Fraser Valley was organized to fight the drilling program proposed by Dynamic Oil Ltd. and its venture partner Conoco.⁵³¹

The companies propose to drill two exploratory wells in Langley, one at 40 Avenue and 232 Street, another at Zero Avenue and 256 Street.

Spencer said the group’s main concerns lie with the potential for leakage of “sour gas,” the risk of an explosion, and the fear that chemicals used in the drilling process could contaminate water wells and fish spawning streams.⁵³²

The open house ‘public engagement’ forums organized by Conoco and Dynamic Oil evoked a primordial ‘survival mode’ response, triggering and awakening what would quickly become an organized and stinging revolt from the citizenry.



⁵³⁰ The Fraser Valley Gas Project written presentation to the Commission on Fraser Valley Petroleum Exploration, June 12, 1990, page 7.

⁵³¹ In early 1990, another group was formed by a citizen group in Chilliwack called The Upper Fraser Environmental Society, which also supported The Friends to oppose petroleum development.

⁵³² *Protest Group forms*, Langley Times, February 28, 1990.

Margaret and Charles

Friends of the Fraser Valley (FOTFV) Eileen Spencer's informed statement in the Langley Times newspaper, listing "main concerns" from proposed petroleum development, originated from Margaret Ormston and Charles Maclean. Both had first-hand knowledge of the petroleum industry's operations. Their experiential information was imparted to Eileen and the new organization membership.

[Ormston] said that noise, increased traffic and potential contamination to the groundwater and area creeks still worry her. She is concerned chemicals used in lubrication during drilling, could contaminate groundwater, or be spilled into creeks.⁵³³

Strong reactions to gas report

SEE SPECIAL REPORTS ON GAS ISSUE, PAGES 5, 6, 7.

ALDERGROVE - Several dozen people expressed their opposition to the Fraser Valley Gas Project with a demonstration outside the project's offices here, Monday afternoon.

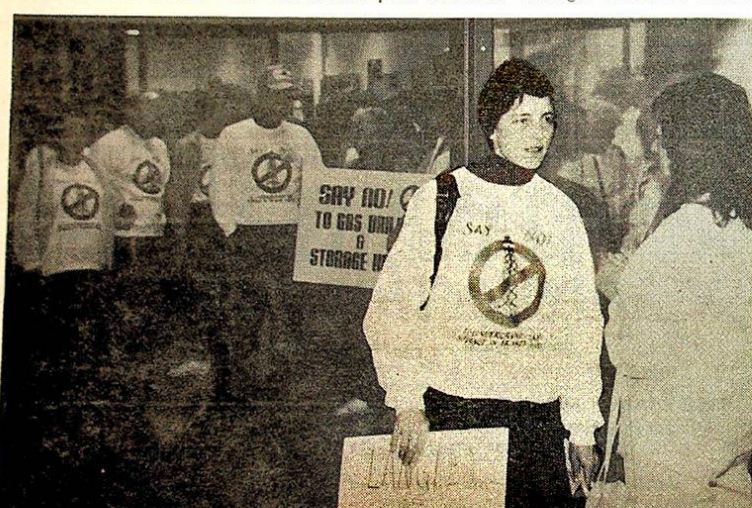
Inside, spokesmen for BC Gas, Conoco and Dynamic Oil had called a press conference to discuss the final report of David Anderson's commission of inquiry on the proposals for gas exploration and gas storage. Provincial cabinet released the report last week, along with their order that underground storage not be pursued for the Fraser Valley.

The demonstrators outside scoffed loudly at the words of a project press release read out by one of the Friends of the Fraser Valley. In the release, project manager Bob Spring said, "We're very pleased. This is another stage in a lengthy process and it would seem that Commissioner Anderson has presented a solid case in support of developing local supplies of natural gas."

"The provincial government now has an extensive report from an independent authority confirming the low risks and substantial benefits of searching for natural gas in the Fraser Valley."

Not all were there to protest, however. Rosemary Genberg and her husband dropped in to pick up a copy of Anderson's report from the office, and they told The Star that they lived immediately next door to the proposed Murray Creek exploration site on 232 Street.

Rosemary said she was born on the site proposed for drilling and the ashes of her forebears were scattered on the former farm site, now subdivided into smaller lots. She said she had lengthy discussions with both sides on 'Neighbor', page 6



JUST SAY NO
Friends of the Fraser Valley spokesperson Margaret Ormston and supporters demonstrated their opposition to gas exploration and storage at the Fraser Valley Gas Project office, Monday.

The Aldergrove STAR ★

"Illegitimus non carborundum"

VOL. 33 NO. 6 THURSDAY, JANUARY 31, 1991 30 CENTS

Established 1957 3089 - 272 Street, Aldergrove, B.C. Call 856-8303 or 856-5212

Margaret's and Charles's involvements became pivotal. They counseled and educated the FOTFV about the nuisance, dangers, powers, and deception of the petroleum industry, knowledge which then helped members to formulate strategies and implement public education initiatives in the FOTFV's lengthy and hard-fought campaign over the next three or so years to oppose petroleum development in the Fraser Valley. Their participation was extremely beneficial and motivational, because challenging both the petroleum industry and the Ministry of Energy Mines and Petroleum Resources are formidable and daunting tasks not meant for the faint hearted. The ensuing, intense battles would end up taking personal tolls.

⁵³³ *Drilling proposals meet opposition*, Langley Times, February 28, 1990.

The law firm **MacCALLUM DOUGLAS McINTYRE** is very pleased to announce that **CHARLES R. MACLEAN, Q.C.**, has joined the firm effective June 1, 1989, and will continue his criminal and civil litigation practice at

MacCallum Douglas McIntyre
LAWYERS

**No. 202 - 20558 Fraser Highway
Langley, B.C. V3A 4G2
530-4161 Fax 530-5716**

Allen S. MacCallum	Charles R. Maclean, Q.C.
C. James McIntyre	Craig W.J. Goebel
John F. Douglas	Grant P. Dickin
Colin A. Pritchard	Allen L. Gillespie

The law firm's lawyers practice in the following areas of law:

- corporate and commercial
- real estate
- franchising
- wills and estates
- bankruptcy and insolvency
- civil litigation
- personal injury
- criminal
- family and divorce

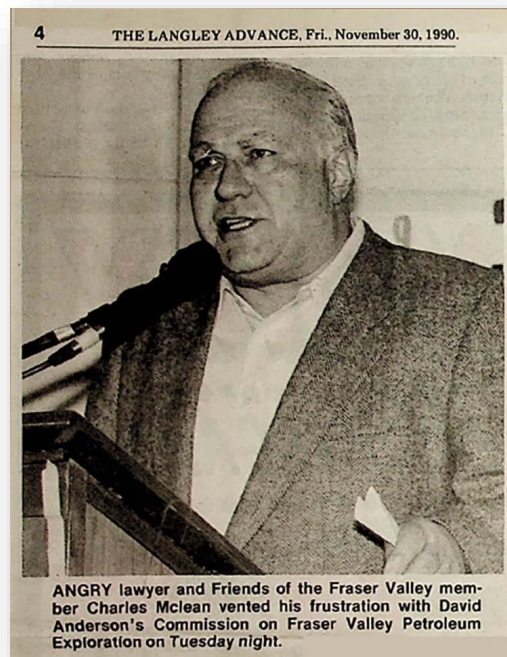
"LEGAL SERVICES AS COMPLETE AS YOUR NEEDS"

Charles and Margaret had moved from Ft. St. John to Aldergrove in the summer / autumn of 1989 to escape the petroleum industry. They had lived on a 300-acre property about 14 kilometers north of Ft. St. John since 1974 (see Appendix A). There, they experienced the nuisance and anguish suffered by many other landowners and farmers on and around their properties in northeast B.C. from oil and gas developments. They now frustratingly found themselves back 'in the thick of it,' as one of the proposed drilling sites was located not far away from their new property.

Charles was an experienced criminal lawyer. Margaret was a family physician. Both had oratory skills and were accomplished speakers.

Maclean, a lawyer who has been involved in disputes regarding drilling in the northeastern part of the province, says Langley is no place for a natural gas operation.

"In our minds it's insane to put a gas field in the middle of a residential area," said Maclean.⁵³⁴



ANGRY lawyer and Friends of the Fraser Valley member Charles Maclean vented his frustration with David Anderson's Commission on Fraser Valley Petroleum Exploration on Tuesday night.

Gas drillers facing opposition

by Bruce Cox

Angry Langley residents have organized in an attempt to put the brakes on natural gas drilling in the Fraser Valley.

Friends of the Fraser Valley formed and held their first meeting on Feb. 25th. Their intent is to give the public what they feel is a more realistic picture than that presented at recent government open houses.

"We want to fight the program ... we feel the government should have put out more information," said Eileen Spencer, one of about 30 members.

The organization is in the process of compiling information for a leaflet to advise local residents about how drilling exploration has been carried out elsewhere in B.C.

Charles Maclean said he and his wife moved to Langley last fall from Fort St. John to escape six oil wells that had been drilled on their ranch.

Maclean, a lawyer who has been involved in disputes regarding drilling in the northeastern part of the province, says Langley is no place for a natural gas operation.

"In our minds it's insane to put a gas field in the middle of a residential area," said Maclean.

Maclean said the three test wells in Langley, Aldergrove, and Delta could be only the beginning.

"If they find gas, obviously, they're going to do a lot more than that," he said.

The first order of business for FOTFV will involve a presentation to Township Council on Monday, March 5th.

"The fact that local politicians weren't aware of this strikes us as scandalous," said Maclean.

Langley Advance
February 28, 1990

⁵³⁴ Gas drillers facing opposition, Langley Advance, February 28, 1990.

A March 7, 1990, Langley Times article, *Drilling Protest Mounts*, provided a summary of what Ormston stated in a delegation before Langley Township Council on March 5th about her experiences near Ft. St. John:

Margaret Ormston, who lives nearby Dynamic's planned drilling site, said she left Fort St John after 15 years of drilling by companies on her property there.

She said that homeowners, once government drilling rights are obtained, can do nothing to stop the company.

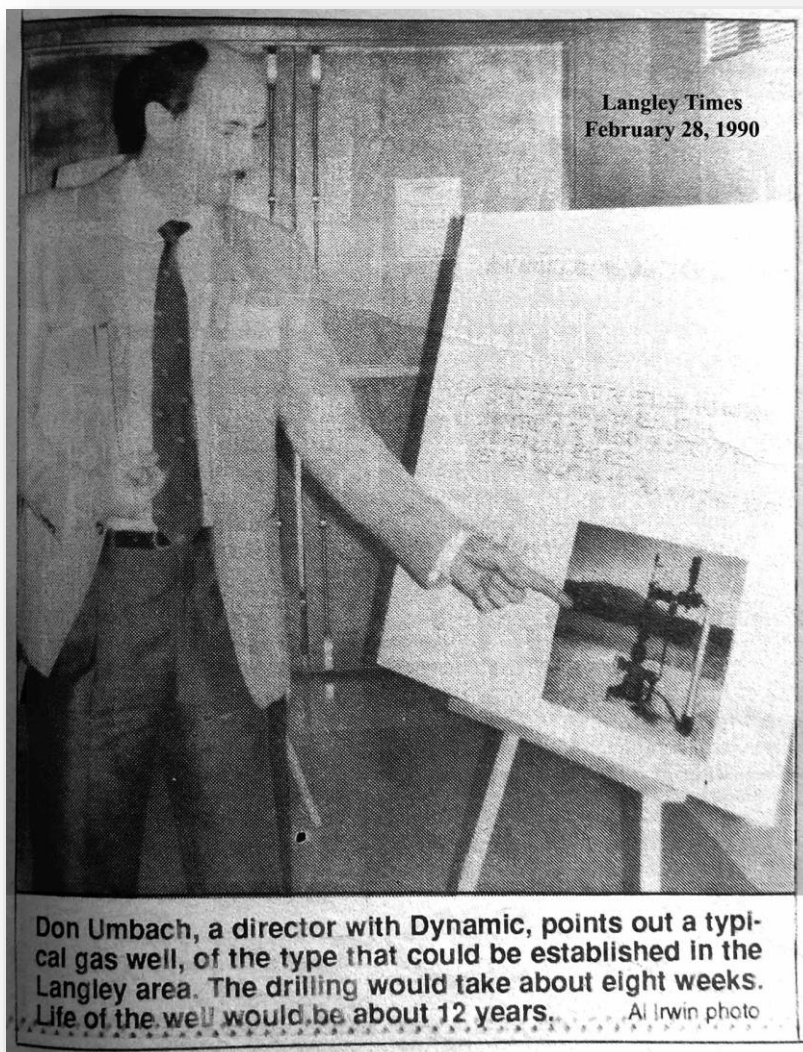
The government requires that disputes over access must go to the Mediation and Arbitration Board, and the board "panders to every wish of the oil industry," she added.

The board would negotiate financial compensation but will not stop the company from drilling on any special area the property owner may want preserved, Ormston said.

She added that during drilling, "the ground shakes and the house rattles, the noise and traffic is continuous 24 hours a day and the crews are inconsiderate."

Ormston said if gas is found, there would be miles of pipeline, "with flares going off (burning at the wells) 24 hours a day, not just one, but hundreds throughout the Fraser Valley."

Ormston said while gas companies claim ground water is protected by the use of steel pipe encasing the drilling, the clay layers that maintain the water table cannot withstand the constant vibration, and many wells have been destroyed in Fort St John.



Another account was recorded in the March 28, 1990, edition of the Langley Times, “Drilling opponents seek City support:”

Ormston, who had drilling rigs on her Fort St John property for 15 years, described the noise, traffic and chemical spills that accompanies such work.

“I’ve seen, unfortunately, far too much of the havoc on very beautiful countryside and gagged too many times on the stench of hydrogen sulfide [H₂S] in my basement, to feel anything but very scared at the prospect of petroleum resource development in the Fraser Valley,” she said.

Ormston presented an oral presentation of her experiences in far-off northeast B.C. at the July 9, 1990, David Anderson Commission public hearing in Chilliwack, a transcript of which is provided in **Appendix A** of this report. Ormston provided photos of her property that showed some of the oil drilling operations and gave the Commission a copy of a two-page written statement, in which she said her “very pleasing 300-acre property was turned very quickly into an undesirable industrial wasteland,” where she witnessed “groundwater contamination” and “constant flaring of unwanted gas.” Ormston exposed the oil patch’s sordid, isolated affairs and daily operations to an otherwise ignorant and uneducated southwestern B.C. public.

On the Sunday afternoon of February 25, 1990, the newly born Friends of the Fraser Valley core membership agreed to initiate two immediate actions: “compiling information for a leaflet to advise local residents about how drilling exploration has been carried out elsewhere in B.C.,” and for “a presentation to [Langley] Township Council on Monday, March 5th,”⁵³⁵ about a week later.⁵³⁶

The jam-packed, standing room only, March 5th evening meeting at Langley Township Hall became a pivotal and electrifying event in the Friends’ newly forged public campaign. The mass turnout and long list of speakers convinced

Township Council:

... to do what it could to stop natural gas and oil exploration in the Fraser Valley.

It will ask the provincial government to revoke all natural gas exploration licenses, and will form a task force with local municipalities to urge the government to halt all oil and natural gas drilling in the Valley.

“Any prohibition by Township against gas extraction would be unenforceable, he [Mayor John Beales] said, adding “If there’s anything we can do, I’m sure we will do it.”⁵³⁷

12 • LANGLEY TIMES, WEDNESDAY, MARCH 7, 1990

Drilling protest mounts

By Al Irwin

Langley Township council will ask the provincial Ministry of Energy, Mines and Petroleum to revoke all gas and oil drilling permits issued in the Fraser Valley.

Council unanimously approved the action Monday, after receiving a planning department report on natural gas exploration, which indicates the Township's bylaws controlling construction and noise are powerless to regulate the oil and gas industry and after hearing a delegation of residents opposed to the drilling.

Council also passed a motion to request participation of other Fraser Valley municipalities on a joint task force, to lobby the province to halt all natural gas and oil drilling in the valley.

Council and the residents were reacting to plans outlined by Dynamic Oil Ltd., of Vancouver, and its venture partner Conoco, an international energy company, at public information meetings Feb. 21 and 22 at Murrayville and Aldergrove. At the meetings Dynamic officials outlined plans to sink two exploratory natural gas wells, one near Zero Avenue and 248 Street, another near 40 Avenue and 232 Street.

The wells are expected to be drilled during a six-to-eight-week period beginning in late April or early May.

A delegation of residents, representing the newly-formed Friends of the Fraser Valley, told council it was ludicrous to even consider drilling in a populated area like the Fraser Valley.

Sandra Hulbert, of 23670 36A Ave. in Langley, told council she feared contamination of groundwater, and the danger inherent in an explosion or leakage of gas.

“The provincial government wouldn’t allow them (energy companies) to drill in the Capilano watershed, and our groundwater is as important to us,” Hulbert added that in a densely populated and earthquake prone areas like the Fraser Valley, it is “ludicrous to even consider drilling.”

Margaret Ormston, of 324 256th St. in Aldergrove, who lives nearby Dynamic’s planned drilling site, said she left Fort St. John after 15 years of drilling by companies on her property there.

She said that homeowners, once government drilling rights are obtained, can do nothing to stop the company.

The government requires that disputes over access must go to the Mediation and Arbitration Board, and the board “panders to every wish of the oil industry,” she added.

The board would negotiate financial compensation, but will not stop the company from drilling on any special area the property owner may want preserved, Ormston said.

She added that during drilling, “the ground shakes and the house rattles, the noise and traffic is continuous 24 hours a day and the crews are inconsiderate.”

Ormston said if gas is found, there would be miles of pipeline, “with flares going off (burning at the wells) 24 hours a day, not just one, but hundreds throughout the Fraser Valley.”

During the open house in Aldergrove, Jim Britton, vice president of operations for Dynamic said that regulations did not permit burning off excess gas at the wells.

Ormston said while gas companies claim ground water is protected by the use of steel pipe encasing the drilling, the clay layers that maintain the water table cannot withstand the constant vibration, and many wells have been destroyed in Fort St. John.

Britton, at the public meeting, said of 500,000 gas and oil wells drilled in Western Canada and the U.S., none have resulted in the destruction of drinking wells.

The news of Langley Township’s rejection of petroleum exploration, and the possible formation of organized inter-municipal opposition, quickly reached the ears of an alarmed Energy Minister, Jack Davis. The very next morning, Tuesday March 6, Davis issued a public statement defending the exploration program, calling upon ‘calm’ and ‘reason’:

⁵³⁵ *Gas drillers facing opposition*, by Bruce Cox, Langley Advance, February 28, 1990.

⁵³⁶ According to page 9 of David Anderson’s November 1990 *Special Report on Allegations of Witness Tampering*, The Friends of the Fraser Valley Ecological Society was “registered under the Society Act of BC on 24 July” 1990.

⁵³⁷ *Council fights gas drillers*, Langley Advance, March 7, 1990.

"All that Council heard last night was a one-sided presentation suggesting a worst-case scenario for oil, not gas drilling."

The search is for natural gas, noted Davis. Three wells are planned but have not been given permits. "The concerns I have heard expressed simply don't apply to exploration as it's proposed for the Valley."

"Therefore, I have asked the company to step up the pace of its public consultation program in the Valley, and to respond to any and all requests for information so that informed decisions can be made."

"I have also asked that local municipalities not be hasty in taking a position until they've heard the facts. They can be assured that no permits will be issued until consultation is complete," concluded Davis.

The company has already distributed over 6,500 information leaflets and held three days of Open Houses in the Fraser Valley.

Exploration has gone on in the Valley and in neighboring areas in Washington for many years, with no safety or environmental problems. Finding natural gas in the Fraser Valley would be a benefit to gas consumers throughout the Lower Mainland.

Residents and local officials will be kept well informed. The regulations make sure that the environment and public safety are fully protected. Industry must proceed cautiously and respect local opinion.

Council's gas stand irks energy minister

Provincial Energy Minister Jack Davis has voiced displeasure over Township Council's decision March 5th to oppose natural gas exploration in the Fraser Valley.

In a press release, Davis assured local municipalities they could "be assured that no permits will be issued until consultation is complete", and asked that "local municipalities not be hasty in taking a position until they've heard all the facts."

It was Davis' conviction that Langley Township council did just that after Dr. Margaret Ormston's March 5th presentation in which she lambasted the oil and gas companies.

"All that Council heard [March 5th] was a one-sided presentation suggesting a worst-case scenario for oil, not gas drilling." Davis reminded council that the search is for natural gas.

"The concerns I have heard expressed simply don't apply to exploration as it's proposed for the Valley."

Davis pointed out that exploration has gone on in the Fraser Valley and northern Washington State "for many years with no safety or environmental problems."

Langley Advance
March 14, 1990

DRILLING OPPOSED

Langley Township council wants an end to all natural gas exploration in the Fraser Valley and has voted to ask the Ministry of Energy, Mines and Resources to revoke all drilling permits. On Monday, council heard the objections of residents who oppose the drilling, and also that their own bylaws will be unenforceable in controlling the drilling.

Langley Times
March 7, 1990

Page 12

The Langley Advance newspaper identified that Davis "has voiced displeasure over Township Council's decision," and was particularly irked by "Dr. Margaret Ormston's March 5th presentation in which she lambasted the oil and gas companies."⁵³⁸

Langley Township's sudden position of rejection was forcing both government and private industry to step up their public relations efforts one more notch. On March 7, Conoco Canada ran a small ad in the Langley Advance, asking the public to "call us and we will be glad to talk with you about our plans and to mail you a copy of the brochure." Dynamic and Conoco sought to deliver a counter presentation to Langley Township Council on March 12th, where, despite their best inter-corporate intentions, they "found no sympathetic ears:"

Drilling Program for Natural Gas in Langley

Did you miss out on the recent information program about this project?

If you did not receive a brochure or were unable to attend one of our Open Houses, call us and we will be glad to talk with you about our plans and to mail you a copy of the brochure. Copies should also be in area libraries and the Municipal Office. Call Dynamic Oil Ltd. at 266- 3318 (Vancouver).

If you have questions about government policy and regulations, call Bruce Hanwell, Ministry of Energy, Mines and Petroleum Resources, Victoria, 356-2752.



Langley Advance - March 7, 1990

WERE YOU INFORMED THAT THE SUBSURFACE RIGHTS OF YOUR PROPERTY HAVE BEEN SOLD FOR PETROLEUM RESOURCE DEVELOPMENT?

IS THIS WHAT YOU THOUGHT NATURAL GAS DRILLING WOULD BRING TO YOUR AREA?

SAFETY: Disaster Evacuation Plan

The Ministry of Energy, Mines and Petroleum Resources have set guidelines in YOUR AREA for "THE ORDERLY EVACUATION OF RESIDENCES". (EMPR Information Booklet page 1). Disaster evacuation plans are designed to deal with an "UNCONTROLLED FLOW OF NATURAL GAS". (EMPR Information Booklet page 9). **Note: NO MENTION** is made of residential safety if natural gas, impregnated with DEADLY HYDROGEN SULPHIDE is hit!

COMPULSORY ENTRY & OCCUPATION OF LAND

Under the Petroleum and Natural Gas Act, the drilling company has **FULL LEGAL ACCESS TO YOUR LAND**. Drilling companies can occupy your land **whether you want them to or not!**

WATER CONTAMINATION

There is a clear potential for groundwater contamination through either hydrogen sulphide gas, drilling fluids or both. "The operator would conduct nearby water well testing... should such action be deemed necessary by the land owner or Ministry." (EMPR Information Booklet page 7). Remember, once groundwater is contaminated it can **NEVER** be restored! In addition, if damage does occur, there is **no legal obligation** for the drilling companies, the Municipalities, or the Provincial Government to provide you with water. You're on your own!

OTHER "BENEFITS" TO YOUR COMMUNITY

Property devaluation, increased traffic, road damage (local tax burden), noise/air/ground pollution, destruction of our rural lifestyles, destruction of our sanctioned lands.

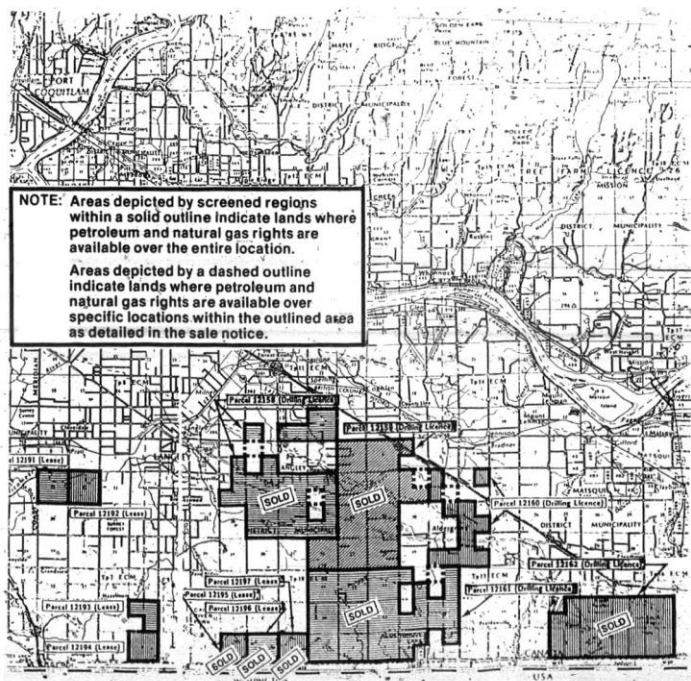
WHY IS THIS HAPPENING TO YOUR COMMUNITY? WHAT CAN BE DONE?

If you are as concerned as we are, PLEASE ATTEND a local community information meeting.

WEDNESDAY, MARCH 21, 1990
7:00 p.m.
KINSMEN COMMUNITY CENTRE
26770 - 29th Avenue, Aldergrove, B.C.

Friends of the Fraser Valley

(A non-political group of concerned residents)
280 - 256th Street, Aldergrove, B.C. V0X 1A0



Langley Advance - March 14, 1990

(34b-1)

⁵³⁸ Council gas stand irks energy minister, Langley Advance, March 14, 1990.

Dynamic was trying to assure council and the over-flowing public gallery that drilling for natural gas in the Fraser Valley is a safe, clean, and beneficial enterprise, but the hostile crowd remained unconverted.

Conoco representative Orest Humeniuk said ... the Fraser Valley ... is a low risk, conventional drilling environment.

Alderman Muriel Arnason ... asked the representatives what experience they had exploring for oil and gas in an area as densely populated as the Fraser Valley, with 512 people per square mile.

Humeniuk didn't have an immediate answer, and finally acknowledged that "statistically" he didn't know, which prompted laughter and catcalls from the gallery.

After the team of crisp, business-suited executives finished its presentation, council gave permission to Friends of the Fraser Valley to address council, and spokesman Charles Maclean took the stand.

"It isn't what these people [executives] are telling you, but what they aren't telling you that was important," MacLean said, quoting Winston Churchill's comment about "a woman's two-piece bikini; what it doesn't cover is interesting, but what it does cover is vital."⁵³⁹

Responding yet again, on March 14, Energy Minister Davis released a government Public Information Letter (E90-6) to update the public on the status of Fraser Valley exploration, explaining that government had not yet given approval for drilling permits, that the citizenry should remain calm.

Dynamic/Conoco propose to drill three wells, one in Boundary Bay and two in Langley. They have completed their land acquisition program and have received permission from the landowners to proceed.

No approvals have been given by the Ministry to drill a well. There is a full process of application procedures which must first be carried out.

Two days after the Dynamic / Conoco March 12 presentation at Langley Township Council, the consortium placed an ad in the Langley Advance called, "Does Drilling for Natural Gas Contaminate Your Water?" The consortium's ominous and troublesome question came with the following self-serving answer and assurance:

Does Drilling for Natural Gas Contaminate Your Water?

No. The fact is: over 7,000 wells have been drilled by oil and gas companies in Northeast BC and no water quality or quantity changes have been reported.

Special techniques have been developed by the drilling industry to prevent water well difficulties, artesian or otherwise. It's a careful, step-by-step procedure that has worked over and over again. Large-diameter steel casing is first set in a shallow hole below the water table zone. Drilling continues inside a second steel pipe which is cemented from top to bottom inside the casing. Ground water is safely bypassed and left uninterrupted.

Nearby water wells are checked before, during and after the drilling operation. Call it over-cautious, but that's standard procedure. The drilling industry in Canada utilizes the best ground water protection techniques available in the world.

For further information about Dynamic and Conoco's drilling program for natural gas, call Don Umbach or Laurie Grimson at 266-3318 (Vancouver). If you have questions about government policy or regulations, call Bruce Hanwell at 356-2752. (Ministry of Energy, Mines and Petroleum Resources, Victoria).

Dynamic/Conoco News



CONOCO

Advertisements

Langley Advance - March 14, 1990

⁵³⁹ *Hostile crowd opposes gas*, Langley Advance, March 14, 1990.

NO. The fact is: over 7,000 wells have been drilled by oil and gas companies in Northeast B.C. and no water quality or quantity changes have been reported. ... The drilling industry in Canada utilizes the best ground water protection techniques available in the world.

On same day as the industry ad, The Friends of the Fraser Valley announced in a news article, and in a separate large advertisement, that the group was holding its first major public meeting on March 21, 1990, at Aldergrove's Kinsmen Community Center, where Margaret Ormston "said residents should know more that what has been presented through government open houses."⁵⁴⁰

**IS THIS WHAT YOU THOUGHT NATURAL GAS DRILLING WOULD
BRING TO YOUR AREA?**

SAFETY

Disaster Evacuation Plan
The Ministry of Energy, Mines and Petroleum Resources have set guidelines in YOUR AREA for
"THE ORDERLY EVACUATION OF RESIDENCES". (EMPR Information Booklet page 1)

Disaster evacuation plans are designed to deal with an
"UNCONTROLLED FLOW OF NATURAL GAS" (EMPR Information Booklet page 9)

Note: NO MENTION is made of residential safety if natural gas, impregnated with
DEADLY HYDROGEN SULPHIDE, is hit!

COMPULSORY ENTRY & OCCUPATION OF LAND

Under the Petroleum and Natural Gas Act, the drilling company has
FULL LEGAL ACCESS TO YOUR LAND.
Drilling companies can occupy your land **whether you want them to or not!**

WATER CONTAMINATION

There is a clear potential for groundwater contamination through either
hydrogen sulphide gas, drilling fluids or both.

"The operator would conduct nearby water well testing should such action be
deemed necessary by the land owner or Ministry." (EMPR Information Booklet page 7)

Remember, once groundwater is contaminated it can **NEVER** be restored!
In addition, if damage does occur, there is **no legal obligation** for the drilling companies, the
Municipalities, or the Provincial Government to provide you with water. You're on your own!

OTHER "BENEFITS" TO YOUR COMMUNITY

Property devaluation, increased traffic, road damage (local tax burden), noise/air/ground
pollution, destruction of our rural lifestyles, destruction of our sanctioned lands.

**WHY IS THIS HAPPENING TO YOUR COMMUNITY?
WHAT CAN BE DONE?**

If you are as concerned as we are, **PLEASE ATTEND** a local community information meeting -

WEDNESDAY, MARCH 21, 1990
7:00 p.m.
KINSMEN COMMUNITY CENTRE
26770 - 29th Avenue
Aldergrove, B. C.

Friends of the Fraser Valley
(A non-political group of concerned residents)
260 - 256th Street
Aldergrove, B. C. V0X 1A0

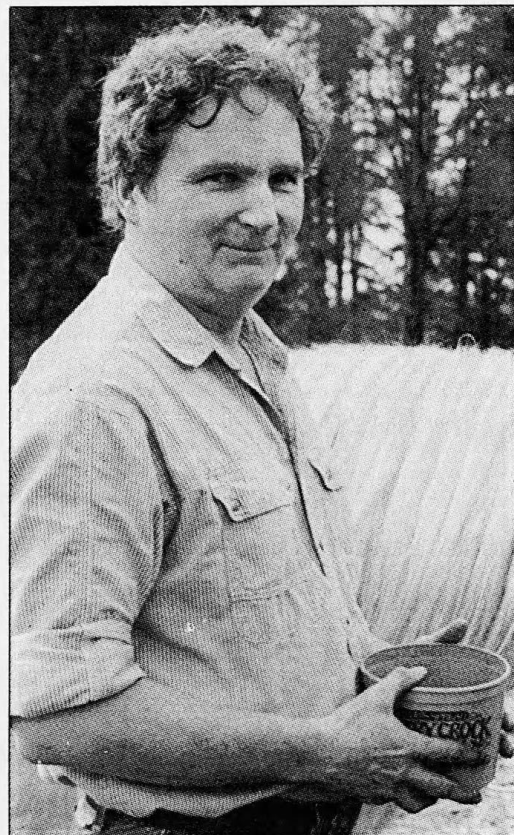
⁵⁴⁰ Friends fear gas drilling politics, Langley Advance, March 14, 1990.

The Friends' meeting advertisement, with its headline "Were You Informed that the Subsurface Rights of Your Property have been Sold for Petroleum Resource Development," included a large map showing the "sold" petroleum tenure locations in the Fraser Valley", and sub-headings, such as a "disaster evacuation plan," "occupation of land," and "water contamination." It was an eye-opening event for local citizenry.

The Friends of the Fraser Valley, now only a month old, were busy doing voluntary homework, that is, in addition to each of their members' normal working lives. Through trial and error, responsibilities were allocated and shared, each according to their abilities and talents. Those voluntary responsibilities, along with new members joining in over time, would require various coordinated campaign research and communication skills, evidence of which began to bear fruit at the first public meeting.

Al Vickers, a high school teacher, who had been given the title of chairman, had already acquired self-taught community campaigning and public speaking skills. Vickers had appeared on numerous occasions before Langley Township Council to advocate concerns over local issues, some of the more recent of which included large-scale gravel extraction controversies on agricultural lands, an outcome which was physically disturbing groundwater sources and altering groundwater quality. Vickers was previously identified as a person of interest in Dynamic Oil's internal January 1990 sociology assessment report of Langley Township.

COR [Council of Ratepayers] is an umbrella organization linking the more than 25 local ratepayer groups in the District of Langley. COR appears to provide an effective mechanism by which to disseminate information about the proposed drilling program to individual ratepayers groups, who can subsequently determine if they have **any concerns or questions. The president of COR is Mr. Al Vickers.** Mr. Vickers, a resident of southeast Langley, is well known for his active participation in a number of controversies, including the motorsport park and the Jackman Pit [garbage] transfer station.⁵⁴¹



The Province, July 2, 1992 Staff file photo by Gerry Kahrmann
Al Vickers is fiercely opposed to gas drilling in Fraser Valley.

In preparation for the March 21 public meeting, the Friends distributed a one-page information letter, with the opening title, "Is this what you thought natural gas drilling would bring to your area?" It mentioned the following themes:

- Safety. The development of a "disaster evacuation plan" associated with "uncontrolled flow of natural gas" and with "deadly hydrogen sulphide;"

⁵⁴¹ *District of Langley Social Profile*, Connor Development Services Ltd., January 1990, page 18.

- Compulsory entry and occupation of land. “Drilling companies can occupy your land whether you want them or not!”
- Water Contamination. “Once groundwater is contaminated it can NEVER be restored! In addition, if damage does occur, there is no legal obligation for the drilling companies, the Municipalities, or the Provincial Government to provide you with water. You’re on your own!”
- Other “benefits” to your community. “Property devaluation, increased traffic, road damage, noise/air/ground pollution” etc.

Little was published in newspapers about this tide-turning meeting. Thankfully, Dynamic Oil hired someone to attend and take careful notes, by either shorthand or audio recording, of the public event at the Kinsmen Community Centre. The name Sharon McCarthy was appended to the end of three-page Dynamic Oil Ltd. memo which was faxed to Dynamic Oil president Wayne Babcock. In turn, on March 23rd Dynamic Oil forwarded, by fax, a copy of the memo to its other partner, the Ministry of Energy, Mines and Petroleum Resources, for its own evaluation.⁵⁴²

The memo began with the attendance figure: “Approximately 250 attendees,” a significant number. It included summary comments made by Dr. Margaret Ormston, Friends’ chairman Al Vickers, real estate agent Sandra Hulbert, and lawyer Charles Maclean, which included a topical list of questions and comments to be followed upon by the Friends. Here are some excerpts:

Margaret Ormston:

The company has secured the rights for whatever they find beneath the surface, not just natural gas. Drilling is for deposits of any fuel: oil, natural or sour gas.

There is no public commitment from MEMPR that Dynamic is only interested in natural gas. They are applying for a license for petroleum rights. If oil is found it will be extracted which will involve battery stations and pipelines all over the valley.

The three wells proposed by Dynamic have been given “special” well status. This means that there is an evacuation plan in place in case of a blowout, which could be natural or sour gas. If a disaster plan is in place, that means that there is the possibility of an accident. A sour gas blowout would be fatal.

Al Vickers:

Drilling is dangerous to groundwater. Langley is completely dependent on groundwater from shallow wells (10 - 15 feet below surface). The majority are single wells used for domestic purposes, gardens and farming. This water source is not protected by any municipal or provincial government and requires special protection. Water may be contaminated by either natural or sour gas, the liquids used in drilling activities or by the treatment and containment of fluids after drilling. Once water is contaminated, it is permanent.

Research that has been done on gas blow-outs in the last five years indicate that casing (which Dynamic will be using) did not help prevent these accidents.

⁵⁴² File memo and attachments found in the Anderson Commission records.

There is also the possibility that storage for natural gas will be found. This will result in further risks to residents.

Municipal noise and nuisance regulations cannot be enforced if they interfere with drilling activity. Any bylaw that could possibly provide some protection to residents is useless once a license has been granted to drill because decisions by the provincial government take precedence.

Drilling occurs 24 hours a day with 190 persons working on each well. This results in a noticeable increase in road traffic which in turn impacts on municipal roads.

Vancouver is susceptible to earthquakes. If an earthquake occurred in areas where gas is stored, the result would be disastrous.

Someone from, or hired by, the provincial government also monitored the March 21 public meeting event and immediately informed government. The B.C. Director of Communications, Irwin Henderson, stated in a two-page March 22nd letter dispatched to Minister Jack Davis:

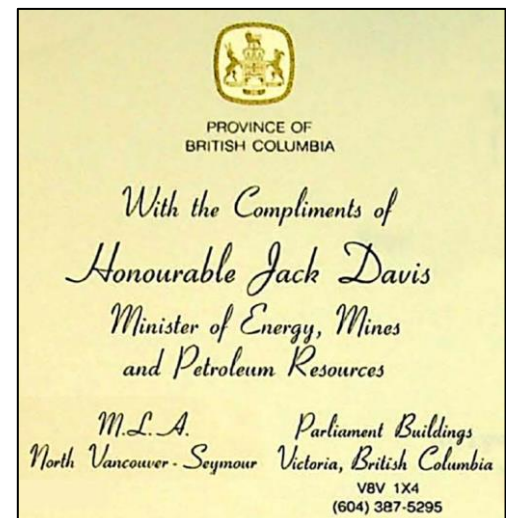
Last night's meeting attracted a "standing room only" [250 plus] crowd and heard presentations from local activists focusing on: safety; declining property values; how property owner have no rights; water contamination from drilling; loss of "lifestyle" values - noise, traffic, etc.

Present were: CBC radio (George Wilson), local cable, local newspaper; Mayor and aldermen, Langley; BCTV is preparing a story.

The speakers covered each topic in detail but were one-sided, alarmist, and must have the "other side" presented.

All attendees were encouraged to write the Premier and pressure their MLAs.

A full digest is being prepared. It will cover issues and facts raised by the five speakers [Charles Maclean,



INFORMATION LETTER

RESPONSE TO CONCERNS ON FRASER VALLEY DRILLING:

. RESIDENTS' CONCERNS--OVER WATER SUPPLIES, SAFETY, AND QUALITY OF LIFE--ARE VALID AND MUST BE ADDRESSED.

. THERE IS A PROCESS IN PLACE AND THE COMPANIES MUST:

- DO A FULL ENVIRONMENTAL STUDY;
- CONSULT THE PUBLIC;
- HAVE FINAL PLANS APPROVED.

. THERE WILL BE NO APPROVALS UNTIL ALL VALID CONCERNS ARE ADDRESSED AND THE PUBLIC HAS BEEN INCLUDED AT EACH STEP.

. THERE ARE NO DEADLINES. THE COMPANIES WILL BE GIVEN AMPLE TIME TO DEAL WITH THESE ISSUES. IT MAY TAKE A YEAR OR MORE.

. PEOPLE WILL BENEFIT IF GAS IS FOUND OR IF STORAGE CAN BE ESTABLISHED IN THE LOWER MAINLAND. DURING WINTER PEAKS, WE RUN CLOSE TO DELIVERY-SYSTEM CAPACITY AND THIS CAN RESULT IN SHORTAGES AND HIGHER COSTS FOR GAS CONSUMERS.

HONOURABLE JACK DAVIS
MINISTER
1990.03.22

oil and gas lawyer from Fort St. John; Dr. Margaret Ormiston who suffered an oil spill on her Fort St. John property two years ago; a local realtor; Al Vickers, local preservation activist; Ray Addington, meeting chairman and CEO of Kelly Douglas].

B.C. Gas's proposal for storage was known to members of the audience and aldermen.

A collection of \$1,200 was received from the crowd for further campaigning.

Friends of the Fraser Valley

STOP NATURAL GAS & OIL DRILLING IN THE FRASER VALLEY

The purpose of the meeting is to make people in the Fraser Valley aware of the gas well drilling programme and to encourage all residents to advise the Provincial Government that granting rights for natural gas and oil drilling in the Fraser Valley is

A DANGEROUS MISTAKE AND MUST NOT BE ALLOWED TO PROCEED.

~~Mayor Beales and Langley Council have given their unanimous support for an immediate halt to all oil and natural gas drilling in the Fraser Valley, but unfortunately, they do not have the power to prevent the proposed drilling program. Such power lies **only** with the Provincial Government.~~

We believe the Premier, the Hon. William N. Vander Zalm, has not been made aware of the **terrible dangers** residents could be exposed to nor the **irrevocable damage** that will be done to the living environment of all people in Surrey, Delta, Langley, Matsqui, Abbotsford and the rest of the Fraser Valley. We believe he has more sense than to allow this drilling to take place.

We want you, as we have done, to write, phone, or send a facsimile message to the Premier telling him that drilling in the Fraser Valley **MUST NOT BE ALLOWED TO PROCEED**. We urge you to do this **IMMEDIATELY**. Remember, an accident will be too high a price to pay!

In plain words, if this initiative is allowed to proceed, the Fraser Valley will not be a pleasant place in which to live being dominated by the wants and needs of the energy industry.

PLEASE CONTACT PREMIER VANDER ZALM IMMEDIATELY!

The Hon. William N. Vander Zalm, MLA
Premier
Government of the Province of British Columbia
Room 156, West Annex
Parliament Buildings
Victoria, B. C.
V8V 1X4

Telephone: (604) 387-1715
Facsimile: (604) 387-0087

Irwin Henderson recommended “follow up action” procedures for the Premier’s office, which included a draft response from the Premier, a draft for Jack Davis to be sent to “Premier and MLAs,” and a “meeting with the [petroleum] company today,” with “staff urging that they get into the community and become publicly visible in setting out the facts.” Irwin’s “recommended position” for Minister Jack Davis:

Gov’t. wants the best for the Fraser Valley; no application received; will ensure there is no undue haste in dealing with application; due process will be followed; all citizens concerns will be met; company must inform and consult.

As Henderson stated in his memo, The Friends urged the public to contact their provincial elected representatives and the Premier to register opposition. The Friends circulated a one-pager to event attendees with the headline, “granting rights for natural gas and oil drilling in the Fraser Valley is A DANGEROUS MISTAKE AND MUST NOT BE ALLOWED TO PROCEED.” The handout continued with the following:

Mayor Beales and Langley Council have given their unanimous support for an immediate halt to all oil and natural gas drilling in the Fraser Valley, but unfortunately, they do not have the power to prevent the proposed drilling program. Such power lies only with the Provincial Government.

We believe the Premier, the Hon. William N. Vander Zalm, has not been made aware of the **terrible dangers** residents could be exposed to nor the **irrevocable damage** that will be done to the living environment of all people in Surrey, Delta, Langley, Matsqui, Abbotsford and the rest of the Fraser Valley. We believe he has more sense than to allow this drilling to take place.

We want you, as we have done, to write, phone, or send a facsimile message to the Premier telling him that drilling in the Fraser Valley **MUST NOT BE ALLOWED TO PROCEED**. We urge you to do this **IMMEDIATELY**. Remember, an accident will be too high a price to pay!

In plain words. if this initiative is allowed to proceed, the Fraser Valley will not be a pleasant place in which to live being dominated by the wants and needs of the energy industry.

The Friends’ message and support was rapidly gaining momentum. Its membership was also increasing. And, on March 26th, The Friends appeared before Langley City Council to summarize points the group made at the March 21st public meeting, and to request “the same unanimous support to

FRASER VALLEY ALARM SPREADS

Waging war on drilling

The Province - March 26, 1990

By Keith Fraser
Staff Reporter

Fraser Valley residents are gearing up to battle natural-gas exploration.

The B.C. government last year sold rights to several oil companies and drilling at a number of locations is scheduled to begin soon.

Property owners don't own the rights to underground resources.

Friends of the Fraser Valley, a group of concerned residents, yesterday said it planned a fight.

A delegation is appearing before Langley city council tonight and further meetings are planned in other municipalities, including Surrey and Matsqui.

Group organizer Sandra Hulbert, a Langley realtor, says she will "probably lie down in front of the bulldozers" if the rigs move into her neighborhood.

Drilling at the Murray Creek site, near 232nd Street and 40th Avenue, only a few kilometres from Hulbert's home, is scheduled to start soon.

"We're not going to give up," says Hulbert, 43. "We're going to fight this with the last breath we have."

Hulbert says people are concerned that the community's water supply, which comes mainly from wells, will be threatened.

"We're really worried about the contamination of hydrogen sulfide gas," she says. "If that happens, our water is ruined."

Other fears include safety.

Hulbert says the site is only a few kilometres from Langley municipal hall, the police station and a seniors' mobile-home park.

She says Dynamic Oil Ltd., a Vancouver-based company, is involved in the drilling at Murray Creek. Company officials could not be reached.

lobby the provincial government to halt natural gas and oil drilling in the valley that Langley Township had pledged March 5.”⁵⁴³

Fraser Valley residents are gearing up to battle natural-gas exploration.

Friends of the Fraser Valley, a group of concerned residents, yesterday said it planned a fight.

A delegation is appearing before Langley city council tonight and further meetings are planned in other municipalities, including Surrey and Matsqui.

Group organizer Sandra Hulbert, a Langley realtor, says she will “probably lie down in front of the bulldozers” if the rigs move into her neighborhood.

“We’re not going to give up,” says Hulbert, 43. “We’re going to fight this with the last breath we have.”⁵⁴⁴

“The main message that our group is trying to get across is that to stop this drilling in the valley there’s only one way to do it – and that is for everyone to lobby the provincial government,” Hulbert said.

“We feel that a mistake has been made and we want that mistake corrected before it’s too late. The message we want to give to the oil companies, and to the Minister of Mines, is to get out of our valley,” she added. “We don’t want them here now, we don’t want them here ever.”⁵⁴⁵

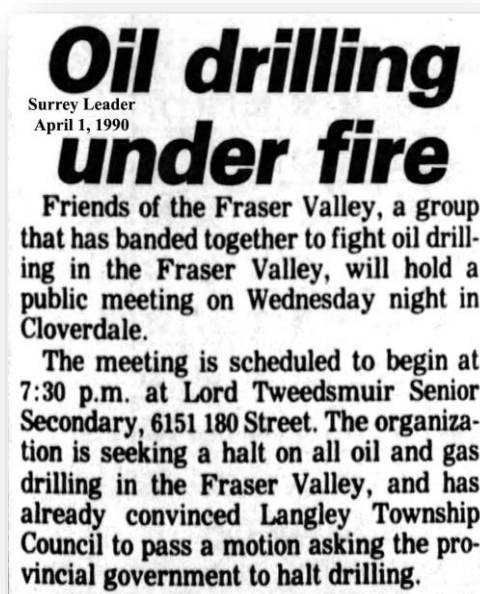
Langley City did not pass a similar motion to Langley Township. It, however, followed councillor Merv Hunter’s recommendation:

“I think the City Council should maybe go on record or go on to request to the provincial government, Jack Davis in particular, and ask for a full set of information on this whole drilling operation in the Fraser Valley,” he said.

“I think if we have that we can either call him a liar or say he’s doing a good thing, or at least come up with a half-intelligent response at that time.”

Hunter then made a motion, which passed, that council make a request to the Ministry of Energy, Mines and Petroleum for a formal report, containing detailed information, as soon as possible.⁵⁴⁶

The Langley Times newspaper reported that Langley City Council’s motion was prompted by concern and confusion as to why Dynamic Oil and Conoco would not admit to the Friends if they “would be searching for underground



⁵⁴³ *Drilling opponents seek City support*, Langley Times, March 28, 1990.

⁵⁴⁴ *Waging war on drilling*, Vancouver Province, March 26, 1990.

⁵⁴⁵ *Drilling opponents seek City support*, Langley Times, March 28, 1990.

⁵⁴⁶ *Ibid.*

GAS WARFARE

Residents vow fight to stop drilling

Many worried over effect on lifestyle, environment

Stories by Fabian Dawson
Staff Reporter

Teacher Al Vickers commutes a total of three hours every day between Langley and North Vancouver. And he loves it.

"The rural lifestyle makes it worthwhile," he says.

But now Vickers, like hundreds of others in the Fraser Valley, are furious with Victoria for "selling their lifestyle" to two gas-exploration companies.

Vancouver-based Dynamic Oil Ltd. and Alberta-based Conoco Canada Ltd. have joined forces to look for the natural gas they believe lies below the homes and properties of about 500,000 Fraser Valley residents.

Victoria last October auctioned off the mineral rights below 7,285

hectares in the Delta-Surrey-Langley-Matsqui-Abbotsford areas to the companies for \$5.6 million.

The joint venture is now in its planning stages and the first three drilling sites have been identified.

They are at the foot of 88th Street at Boundary Bay in Delta, at 232nd Street and Old Yale Road, just south of the Fraser Highway in Langley and between 248th and 256th streets just south of Eighth Avenue in Langley.

Drilling is expected to begin late this year and company officials estimate they could find up to three trillion cubic metres of gas — enough to supply the Lower Mainland for the next 30 years.

In addition, Victoria says it may allow underground storage of natural gas between rock formations.

The plans have sparked a fiery protest by worried residents and



Staff photos by Gerry Kahrman.

Al Vickers, with wife Sharon, says the Socreds will 'pay the price' if drilling goes ahead.

Fraser Valley municipalities.

Vickers and about 200 other Langley residents have formed Friends of the Fraser Valley, with the sole aim of keeping oil- and gas-exploration companies out.

"Our numbers are growing by the day," said Vickers, the group chairman.

At its inaugural meeting last week, the Friends raised more than \$1,200 to fight the exploration plans.

Already it has persuaded Langley district council to pass a resolution against the drilling.

Members have distributed hundreds of leaflets outlining their fears of what the drilling will do to the environment.

They plan to hold the first of a series of public meetings Wednesday in Surrey.

They are also urging residents to deluge Premier Vander Zalm's office with protest letters.

"This is just the beginning and the tide is turning our way," said Vickers.

"It's a despicable move by Victoria and the Socreds will have to pay the price if this drilling goes ahead."

Sandra Hulbert, a Fraser Valley

realtor, fears property prices will nosedive once the drills go in.

"They will pay the surface owner but what about his neighbor and the surrounding property?" Hulbert said. "Who will want to live next to a drilling rig?"

Hulbert said the companies will have legal access to the land they lease. And that, she said, means "they can walk into your back yard and put in a drill even if you don't agree with it."

"Technically, they have to negotiate payment but the bottom line is that they have access."

Langley businessman Doug Anderson is worried about the side-effects of drilling.

"There will be increased traffic, roads will be damaged with heavy rigs and the noise will be unbearable," said Anderson, who has worked on oil rigs in Alberta.

He said residential safety will be compromised because there is a risk the natural gas will contain deadly hydrogen sulphide gas.

"If there is uncontrolled flow or a blowout, the whole area has to be evacuated and we are talking about thousands of people and head of livestock," he said.

But perhaps the most troubling

concern is that drilling will contaminate ground water and artesian wells, on which thousands of residents rely.

"They (Victoria) and the oil companies have admitted that this is possible by stating that tests will be done on wells before and after drilling," said Vickers, whose home and farm are less than a kilometre from a drill site.

He also points to evacuation plans being developed by the oil companies as further confirmation of possible disaster.

"So, with all this potential danger, why does Victoria allow them to drill in such a densely populated area?" Vickers said.

Langley MLA Dan Peterson said the Friends have genuine concerns but added: "There is a lot of misinformation going around."

"If there is the slightest hint that the concerns are not being addressed, the companies will not be awarded any drilling rights, and I can guarantee that."

Peterson said he's starting a campaign of his own tomorrow by sending information letters to constituents and writing to community newspapers.



Realtor Sandra Hulbert fears property prices will nosedive.

storage space for natural gas.” The reluctance to admit or mention “underground storage space” would be revealed in a few weeks time when B.C. Gas Inc. announced its partnership arrangement with the two petroleum companies. The Friends invited City Council to attend its next public meeting scheduled for April 4 at Lord Tweedsmuir senior secondary school in Cloverdale.

Leading up to the Cloverdale meeting, on April 1st the Province newspaper published a front-page headline, “Valley Gas Fight:”

Fraser Valley residents are digging in to fight natural-gas exploration on their doorsteps.

“We will respond through the ballot box if drilling is allowed,” said Al Vickers, chairman of the newly formed Friends of the Fraser Valley.

Now Langley district council is trying to form a council of war to help the Friends.

The district is summoning the mayors of Abbotsford, Matsqui, Surrey, Delta and Richmond this week to discuss how to halt the hunt for natural gas.

“This area is totally opposed and we hope to stop it,” Langley district Mayor John Beales told the Sunday Province yesterday.

“There are many worried about the danger to water supply and the disruption of rural lifestyle.”

Surrey Mayor Bob Bose said his council is refusing to allow the companies to do seismic studies on municipal roads.

“And we are not happy with underground storage,” he said.

The April 1st edition included two full page feature adjoining articles, one titled “Gas Warfare: Residents vow fight to stop drilling,” and the other page titled, “Out to set the public straight.” A large photograph of Al Vickers and wife Sharon at their residence had a caption beneath: “Al Vickers, with wife Sharon, says the Socreds [Social Credit Party] will ‘pay the price’ if drilling goes ahead.”

“So, with all this potential danger, why does Victoria [B.C. government] allow them to drill in such a densely populated area?” Vickers said.

Langley MLA Dan Peterson said the Friends have genuine concerns but added: “There is a lot of misinformation going around.”

“If there is the slightest hint that the concerns are not being addressed, the companies will not be awarded any drilling rights, and I can guarantee that.”

In the other article, Ministry of Energy’s director of petroleum engineering and operations, Bruce Hanwell, said that “the concerns of residents are legitimate” ... “but they are being fuelled with misinformation.” Conoco Project Manager Bob Spring “said an office will be set up in the valley to deal with residents,” and Dynamic Oil president Wayne Babcock “said an information campaign, including public meetings, will be held to tell Fraser Valley homeowners “what we will do, how we will do it and the effects”.”

Water contamination: “The possibility of this happening is extremely remote,” said Babcock. The initial phase of drilling will be similar to drilling a well for water.

Drilling will occur inside two steel pipes and a concrete encasement. These three layers make it virtually impossible for sour gas, if any, or drilling fluids, to escape.

In response to the media, Langley riding Social Credit MLA Dan Peterson distributed a two-page news release on April 2nd in which he supported the exploration and gas storage initiatives as “opportunities” that “government and residents cannot ignore.”

“Your interests and mine are the same - - secure energy, a clean environment and our valued Fraser Valley lifestyle,” Peterson told his constituents.

Responding to Dan Peterson’s news release and associated article in the Langley Times, Charles Bradford, the Fort Langley/Aldergrove NDP (New Democratic Party) provincial council delegate, suggested in an April 11th letter to the editor to the Langley Times that the government conduct an Environmental Impact Study while invoking a moratorium.

It is that the mineral rights have already been sold, and no matter how much residents protest, the oil and gas companies can exercise their right to drill and move onto any property whenever they wish. The property owners cannot stop them. Only the provincial government has this power.

April 4th, the same day as The Friends’ public meeting in Cloverdale, Dynamic Oil and Conoco placed another ad in the Langley Advance, “Natural Gas: Safest and Cleanest Fuel on Earth?”

There are more benefits: No oil spills going into the ocean. No dust particles being released into the atmosphere. And upon combustion, the release of carbon dioxide is lower than any other fossil fuel.⁵⁴⁷

At the April 4th Cloverdale meeting, where some 200 citizens showed up, criminal lawyer and Queens Counsel Charles Maclean, “a life-time Social Credit member,” stated:

“I am ashamed of the party for allowing this to happen.”

“This is not the party of the people,” MacLean said to a standing ovation from the crowd.

MacLean urged residents to deluge Premier Bill Vander Zalm with letters so that he can correct “the idiotic nonsense.”

Natural Gas: Safest and Cleanest Fuel on Earth?

Almost, but not quite...instead it's hydrogen, if handled properly. Unfortunately, this exotic fuel is almost totally unavailable because of technology and expense.

But, if you're looking at fuels that **ARE** available...then the one that's cleanest, safest, and most efficient would have to be natural gas. Other fossil fuels don't even come close.

Look at what natural gas **DOESN'T** cause...


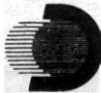
Acid rain caused by sulphate emission? This environmental plague is caused by coal and oil, but not natural gas. Ozone destruction resulting from the emission of nitrate? Again, natural gas totally eliminates these emissions because it burns at lower temperatures.

There are more benefits: No oil spills going into the ocean. No dust particles being released into the atmosphere. And upon combustion, the release of carbon dioxide is lower than any other fossil fuel.

And the positive advantages? There are many, apart from being a lot cheaper and more efficient. For example, natural gas, for the processing of milk is an obvious asset favouring cleanliness in the food industry. In greenhouses, market gardening yields are increased through natural gas heating and supplementary CO₂ and water vapour that favours vegetable growth. And natural gas is gaining rapid acceptance as a safe, clean, alternative fuel for motor vehicles.

Would you like to know more about the environmental benefits of this, efficient fuel or Dynamic and Conoco's program to make it more available in the Lower Mainland? If you do, call Jim Britton or Don Umbach at 266-3318. If you have questions about government policy or regulations, call Bruce Hanwell at 356-2752. (Ministry of Energy, Mines and Petroleum Resources, Victoria).

Dynamic/Conoco News



Langley Advance - April 4, 1990

⁵⁴⁷ Responding to a Dynamic/Conoco ad that ran on March 25th, Langley resident Don Spiegel wrote at the end of his April 14, 1990, letter to the editor: “Dere konoko, us igerent reeders shure bleeves duh add, its grate!”

And he slammed Langley MLAs Carol Gran and Dan Peterson⁵⁴⁸ for not attending the public meetings organized by the Friends of the Fraser Valley.

"Carol does not have the grace to attend this meeting and Peterson is hiding behind her skirts," he said.⁵⁴⁹

Feeling the rising surge in public pressure, the winds of which were buffeting his electoral riding sails, Langley MLA Dan Peterson directed "a question" and a "supplementary" to Energy Minister Jack Davis during the April 10, 1990, afternoon session of the B.C. Legislature:

MR. PETERSON: Mr. Speaker, I have a question for the Minister of Energy, Mines and Petroleum Resources.

My constituents are very alarmed by the potential environmental and safety hazards which may arise as a result of proposed gas drilling in the Fraser Valley. Part of this alarm

results from some extremely provocative comments which have been made on the subject by the member for Kootenay (Ms. Edwards).

Mr. Speaker, will the minister assure this House and my constituents that no drilling permits have been issued or, in fact, will be issued unless all legitimate environmental and safety concerns have been satisfactorily addressed?

HON. MR. DAVIS: Mr. Speaker, I can assure the honourable member and the House that no drilling permits have been issued. None are likely to be issued for some months. None will be issued until the public in the area is fully satisfied that the operations will be safe, quiet and in the public interest.

MR. PETERSON: Supplementary, Mr. Speaker. What assurances can the minister provide to this House that the public's concerns will be fully and impartially addressed in your ministry's review



⁵⁴⁸ Dan Peterson was a former campaign manager for both Langley alderman Carol Gran and Langley MLA Bob McClelland. Prior to the 1986 provincial election, the Social Credit Party administration divided the Langley District Electoral Riding into a dual riding. Prior to his election in October 1986, Dan Peterson was a production supervisor for B.C. Hydro.

⁵⁴⁹ *Socred stalwart attacks drilling*, The Province, April 5, 1990.

process? What steps has the minister decided to take to ensure that Fraser Valley residents will be fully informed concerning the safety and environmental implications of any drilling project which could, in fact, possibly be authorized?

HON. MR. DAVIS: Mr. Speaker, any significant energy project — certainly one of any size or concern to a large number of people — is subject to a review process. The smaller ones are exclusively in-house between ministries. But if there is a mounting public concern in the Fraser Valley, I would have no hesitation in recommending to my colleagues that we appoint a special inquiry commissioner and have a public review of the matter.⁵⁵⁰

Jack Davis's reference for government to convene a "special inquiry" was a significant statement, an amazing confession and testimony directly linked to the public advocacy strategies conducted by The Friends of the Fraser Valley over a mere month previous, since March 5th. Significant, remarkable strides had been made by an energized citizenry in a short period of time. And, in a few weeks, by May 3, 1990, Jack Davis would make a significant announcement.

In the provincial political context, the Fraser Valley exploration issue was one of many other prominent environmental controversies facing the Social Credit Party's final days in office: rampant clearcutting of old growth forests and cumulative forestry landscape degradation practices; proposals to significantly expand, or 'roll-over,' tree farm licences; new industrial pulp mill proposals; industrial logging and livestock grazing in formerly protected community drinking watersheds; unresolved First Nations land titles and rights making its way through the Supreme Court; etc.

During another public meeting on April 11th in White Rock which The Friends sponsored, where another crowd of 200 people attended, The Friends responded unfavorably to Jack Davis' April 10th pronouncement of the possibility for a public inquiry.

44★ The Province

Thursday, April 12, 1990

Foes pan Davis's drilling inquiry

By Fabian Dawson
Staff Reporter

Energy Minister Jack Davis says he will recommend a special inquiry into natural-gas exploration in the Fraser Valley.

But valley residents opposed to planned drilling say an inquiry would be nothing more than an effort to gas their protest until after the next election.

Three exploration wells are planned by Conoco Inc. and Dynamic Oil, which last fall bought mineral rights to 7,285 hectares (18,000 acres).

"If there is mounting public concern, I have no hesitation in recommending to my colleagues that we appoint a special inquiry commissioner and have a public review of the issues," Davis told the legislature yesterday.

He was replying to Langley

Socred MLA Dan Peterson, who raised environmental and safety questions about exploratory drilling for natural gas.

Sandra Hulbert, of Friends of the Fraser Valley — a group formed to fight the drilling — said the issue must be settled before an election.

"The inquiry will push public protest under the rug while it goes on," Hulbert said.

"And if it continues after an election, we don't think they will listen to us."

About 200 people last night attended a White Rock public meeting organized by Friends of the Fraser Valley, and heard about the dangers of exploratory drilling.

On Tuesday, 36 environmental groups joined Langley district council in supporting moves to kill exploratory-drilling plans.

⁵⁵⁰ 1990 Legislative Session: 4th Session, 34th Parliament, Tuesday, April 10, 1990, Afternoon Sitting, Official Report of the Debates of the Legislative Assembly, BC Hansard, page 8929.

Valley residents opposed to planned drilling say an inquiry would be nothing more than an effort to gas their protest until after the next election.

Sandra Hulbert ... said the issue must be settled before an election. "The inquiry will push public protest under the rug while it goes on," Hulbert said. "And if it continues after an election, we don't think they will listen to us."⁵⁵¹

The Vancouver Province newspaper staff reporter, Fabian Dawson, stated in the same article that on Tuesday, April 11, "36 environmental groups joined Langley district council in supporting moves to kill exploratory-drilling plans." Nothing more was found or mentioned again about the participation of the "36 environmental groups."

On the defensive, single-term Social Credit Langley MLA Carol Gran, who previously served for ten years as executive assistant to former Langley District MLA and Energy Minister Bob McClelland, sought to appeal her constituents in the April 14, 1990, Saturday edition of the Langley Times:

Langley residents can rest assured that no gas wells or storage sites will be drilled without the full consent and understanding of the community, according to MLA Carol Gran.

"Let it be understood that as your MLA, I too am concerned, particularly about the poor job being done by the two oil companies involved," Gran said Thursday in a letter to the Times.

"They have made a total mess of communicating their intentions to the community and quite frankly are solely responsible for the current confusion," she said.

Gas drilling study just a 'stalling tactic'

In the same Saturday edition of the Langley Times was an open letter to Premier Vander Zalm by Aldergrove resident Darlene Sherwin:

Sir: I have just attended an informational meeting [by The Friends]. ... I was dismayed to learn that the well sites have already been chosen and are situated next to fully populated communities in the Fraser Valley, including my own.

This is an untenable situation, especially in view of the certain hazards such as drilling presents to our groundwater, our atmosphere, and to the health and lifestyle of the community at large.

To say there is no real danger is a bizarre notion at best. We need only recall the numerous reports of poisonous 'sour gas,' the well explosions, and permanent contaminations of groundwater in northeastern Alberta, in our own Peace River country and in various states in the U.S.A.

Over 250 of my neighbours gave you a clear message at last night's meeting: give the Gas Corporations their lease money back now and tell them "No Deal," Mr. Vander Zalm.

⁵⁵¹ *Foes pan Davis's drilling inquiry*, The Province, April 12, 1990.

Responding to the concerns raised during a panel presentation and discussion at The Friends' Cloverdale public meeting, Conoco representative Bob Spring stated for the press:

"This area hasn't been subjected to exploration in a long time," Spring said. "They don't necessarily understand what it's all about. And naturally, it raises a lot of concerns. So, we need to go out there and correct some of the misconceptions. We have to show people all the precautions we're taking."

But before they begin any drilling or exploration, they said they [Spring, Wayne Babcock] will establish a Valley office to deal with residents' concerns about the drilling.⁵⁵²

⁵⁵² *'Friends' fight for gas plan*, Abbotsford News, April 14, 1990.

5 – 11. Out of the Closet and into the Limelight

*B.C. Gas has formed a partnership with Conoco to obtain first rights on any natural gas found here, or if the drilling is unsuccessful – but the right conditions are found – to develop a storage facility, [Cam] Avery [director of corporate communications for B.C. Gas] said.*⁵⁵³

*Three companies have come together to form the Fraser Valley Gas Project. Once, we were competitors. When the provincial government put up the Fraser Valley gas leases for auction in October 1989, we were bidding against each other. In April of this year, April 1990, we formed a partnership to reflect our common interest in serving the Fraser Valley and Lower Mainland. Today, the three companies are B.C. Gas, Cononco and Dynamic Oil. B.C. Gas is a B.C.-based and B.C.-regulated utility. Conoco is the ninth largest oil and gas company in the world and is part of the DuPont corporate family. Dynamic Oil is a junior-based resource company whose participation in this project largely reflects the vision of its president, Wayne Babcock, who believes the answer to our energy needs in the Fraser Valley and the Lower Mainland lies beneath our feet.*⁵⁵⁴

On April 12, 1990, B.C. Gas Inc., the new giant private sector utility corporation, announced it had become an official partner with Dynamic Oil and Conoco Canada. The move granted B.C. Gas a commanding lion's share in almost all remaining petroleum tenures recently leased from government on October 25, 1989.⁵⁵⁵ B.C. Gas already possessed an 80% interest in a single 2,600-hectare petroleum "drilling licence" tenure parcel (No. 12159) that it shared with

other consortium members Canadian Hunter (10%), Optima Energy (2.5%) and Epic Resources (7.5%). The private utility corporation transformed itself into the biggest stakeholder player of the Fraser Valley consortiums bunch agreeing "to reimburse Dynamic and partner Conoco Canada Ltd. for half of the \$6 million those two paid for the land position."⁵⁵⁶

B.C. Gas had briefly publicized its intentions to discover underground gas storage in the Fraser Valley, narrated inside one of four generic paragraphs included in a full-page advertisement. "At B.C. Gas, we're doing what comes naturally," was distributed to nine lower mainland newspapers from November 28 to

Slide #7
THE FRASER VALLEY
GAS PROJECT + LOGOS

TO ACHIEVE THESE PURPOSES, THREE COMPANIES
HAVE COME TOGETHER TO FORM THE FRASER VALLEY
GAS PROJECT. ONCE WE WERE COMPETITORS. WHEN
THE PROVINCIAL GOVERNMENT PUT THE FRASER
VALLEY GAS LEASES UP FOR AUCTION IN OCTOBER,
1989, WE WERE BIDDING AGAINST EACH OTHER.

IN APRIL, 1990, WE FORMED A PARTNERSHIP TO
REFLECT OUR COMMON INTEREST IN SERVING THE
FRASER VALLEY AND THE LOWER MAINLAND.

TODAY THE THREE PARTNERS ARE BC GAS, CONOCO
CANADA AND DYNAMIC OIL.

⁵⁵³ Gas storage needed, Langley Times, May 5, 1990.

⁵⁵⁴ Audio transcript, June 12, 1990, public presentation by Cam Avery, BC corporate director of communications.

⁵⁵⁵ Excluding Canadian Coastal Resources Ltd.'s 7,600-hectare petroleum drilling licence tenure, parcel No. 12162.

⁵⁵⁶ BC Gas takes lead, National Post, April 13, 1990.

December 3, 1989.⁵⁵⁷ Fraser Valley residents were unaware of B.C. Gas's underground gas facility plans. As Cam Avery, B.C. Gas corporate director of communications, stated a public meeting on June 12, 1990: "information was not provided at these open houses [February 20 to 22, 1990] about the nature of natural gas storage."⁵⁵⁸

In relation to media publicity and public attention generated since February 1990 on Fraser Valley petroleum exploration, B.C. Gas was stepping out of the proverbial closet and into the limelight. It immediately launched well-financed public relations strategies seeking to promote the 'benefits' of Fraser Valley drilling, to better counter the convincing arguments and the successful public influence by The Friends of the Fraser Valley. The big guns were out, and the bigger battle begun.

B.C. Gas' partnership with the Dynamic Oil and Conoco consortium was now dubbed "The Fraser Valley Gas Project." It blitz-launched a series of six full-page advertisements in Fraser Valley newspapers from April 14 to June 13, 1990, avoiding the six advertisements in B.C.'s prominent newspapers, the Vancouver Sun, The Province, and the Times Colonist.

Publisher and Editor Briefing - Fraser Valley

Mr. Bob Spring, Conoco Canada and Mr. Cam Avery, Director, Corporate Communications, BC Gas briefed the following publishers and editors about the exploration for natural gas in the Fraser Valley, the various stages of exploration; the minimal impact on the environment and the benefits to the Aldergrove Community and the Province of British Columbia.

Tuesday May 1, 1990	•	Delta Optimist, Ted Murphy
Tuesday May 1, 1990	•	White Rock Peach Arch News - Miriam Sobrino
Wednesday May 2, 1990	•	Langley Times - Al Irwin
Wednesday May 2, 1990	•	Langley Advance - Bob Groeneveld
Wednesday May 2, 1990	•	Aldergrove Star - Mr. Langman
Wednesday May 2, 1990	•	Abbotsford Sumas Matsqui News - Mark Rushton, Randy Blair
Wednesday May 2, 1990	•	Abbotsford Clearbrook Times - Mike Youlds
Wednesday May 2, 1990	•	Surrey Leader - Frank Bucholtz

Its opening first full-page ad appeared from April 14 to 19, in: Langley Times, Surrey Leader, Langley Advance, the Abbotsford / Sumas / Matsqui News, the Abbotsford / Clearbrook Times, Delta Optimist, and Aldergrove Star. According to the Fraser Valley Gas Project's media statistics, all these newspapers had a combined circulation of 172,789. In bold lettering, the ad stated:

⁵⁵⁷ *The Fraser Valley Gas Project Public Information Programs: Summary of Advertising and Public Informational Materials*, BC Gas technical submission T-13, to the David Anderson Commission, August 1990, pages 17-18. Refer to Section 5-8, *Propaganda*, for the advertisement.

⁵⁵⁸ Audio transcript.

B.C. Gas has over 30 years experience in serving British Columbians with safe, efficient natural gas.

In partnership with Conoco Canada and Dynamic Oil we will not do anything to jeopardize that record.

The ad explained and purported that B.C. Gas's responsibility and role was as mother hen over all the rest of the chickens in the Fraser Valley pen:

It is their [Conoco Canada Ltd. and Dynamic Oil Ltd.] job to conduct test drilling to see if quantities of natural gas exist in the Fraser Valley. It is our job, as well as theirs, to ensure that it is done in the utmost safety and without harm to the environment.

BC Gas has over 30 years experience in serving British Columbians with safe, efficient natural gas.

In partnership with Conoco Canada and Dynamic Oil we will not do anything to jeopardize that record.

In order to provide the Lower Mainland with a more reliable and economical supply of natural gas, the cleanest-burning and most efficient fossil fuel, BC Gas has entered into a partnership agreement with two leading energy exploration companies: Conoco Canada Ltd. and Dynamic Oil Ltd. of Vancouver.

It is their job to conduct test drilling to see if quantities of natural gas exist in the Fraser Valley. It is our job, as well as theirs, to ensure that it is done in the utmost safety and without harm to the environment.

With today's advanced exploration technology, drill sites are dismantled within six weeks of being erected and the land is returned to its natural state.

Pollution controls are so effective that, after drilling 7,000 oil and gas wells in northeastern British Columbia, there has not been a single incident of water contamination. Despite this impeccable record, we still always check water wells before, during and after drilling.

Even though there has never been a population-threatening

accident at a well in B.C., we never begin drilling until a tested emergency plan is in place.

And underground gas storage is being safely and successfully practised at more than 400 sites in Canada and the U.S.A. Underground storage in the Fraser Valley would mean more assured natural gas supplies for the Lower Mainland during peak periods of winter use and would help maintain low gas costs.

These are just some of the steps we're taking to provide B.C. with a reliable source of energy in a prudent manner. BC Gas is not about to risk the proud reputation for social and environmental responsibility we've established with British Columbians over the past 30 years.

Learn more about our safety and environmental policies.

We believe that making intelligent decisions and forming knowledgeable opinions comes from knowing the facts. For that reason, we are opening a Consumer Information Centre in the Fraser Valley in the near future. We invite you to visit it and learn more about how B.C.'s energy needs are being met.

The Fraser Valley Gas Project



Abbotsford News
April 18, 1990

And B.C. Gas continued to dish out a central misinformation message that it's consortium members, and the Ministry of Energy, Mines and Petroleum, were claiming to the public:

Pollution controls are so effective that, after drilling 7,000 oil and gas wells in northeastern British Columbia, there has not been a single incident of water contamination. Despite this impeccable record, we still always check water wells before, during and after drilling.

B.C. Gas then claimed another misinformation message: "Even though there has never been a population-threatening accident at a well in B.C., we never begin drilling until a tested emergency plan is in place." There had been a few notable instances of toxic sour gas blowouts in northeast B.C.'s petroleum zones, one of which had the entire Blueberry First Nation running for their very lives away from their Reserve lands north of Ft. St. John.

B.C. Gas then claimed a third and final misinformation message central to the utility corporation's operational objectives: "Underground gas storage is being safely and successfully practiced at more than 400 sites in Canada and the U.S.A." It was this missive gas migration message, combined with the water contamination message, that prompted one member of The Friends of the Fraser Valley, Glen Breaks, to diligently and religiously research and challenge.

Finally, in the ad, B.C. Gas announced that its corporate consortium, The Fraser Valley Gas Project, was "opening a Consumer Information Centre in the Fraser Valley," as "we believe that making intelligent decisions and forming knowledgeable opinions comes from knowing the facts." The Gas Project's Information Office in Aldergrove would open on May 7, 1990.

The Fraser Valley Gas Project's second ad, under the title "**Natural Gas is a friend of the environment**," ran in newspapers from April 21 to April 25. Alongside a photo of a cute sparrow sitting on a wee branch next to Spring blossoms:

All Canadians, including corporations, are far more aware of our fragile environment than ever before. And that's where natural gas can help. It's the cleanest burning fossil fuel known.

Natural gas produces less carbon dioxide than coal or oil and produces fewer emissions into the atmosphere helping to moderate the greenhouse effect.

In Cam Avery's, B.C. Gas Corporate Director of Communications' talking points at a June 12, 1990, public meeting, he stressed how natural gas consumption was the best alternative to combat the greenhouse effect:

Natural gas is a friend of the environment.



All Canadians, including corporations, are far more aware of our fragile environment than ever before. And that's where natural gas can help. It's the cleanest burning fossil fuel known.

Natural gas produces less carbon dioxide than coal or oil and produces fewer emissions into the atmosphere helping to moderate the greenhouse effect.

Many of us depend on natural gas for everyday living. We use it for home heat, hot water, cooking, swimming pools, clothes dryers and automobile fuel. Natural gas is safe, economical and is a natural friend of the environment.

The growing population in the Lower Mainland is creating a need to find local sources of natural gas and storage areas.

By tapping the natural gas potential of the Fraser Valley we can have safe, reliable and economical supplies into the future. And we can enjoy these benefits without harm to the local environment or any adverse effect on our quality of life.

Gas exploration has little environmental impact
Contrary to what you may have heard, drill sites have little environmental impact. The working area and drill rigs are cleared and dismantled within six weeks, and the land is quickly restored to its natural state.

During drilling, underground water quality is protected by advanced pollution control practices... the same practices which have allowed the drilling of 7,300 oil and gas wells in northeastern B.C. without a single reported instance of water contamination.

Visual impact is minor
In the event that natural gas is discovered, the visual impact on the landscape is negligible. The only surface evidence of the well would be a small shed which covers the capped above-ground pipe. All transmission pipes would be underground and out of sight.

Underground storage safe and proven
Underground storage of natural gas is being successfully practiced at more than 400 sites in Canada and the U.S.A. It's a safe and proven way to ensure natural gas supplies during periods of peak demand. At present, we're partially dependent on supplies stored underground in Washington State... a situation which could result in future shortages for the Lower Mainland.

Visit our Aldergrove* information office
If you have any questions about natural gas drilling or storage, drop in to our Consumer Information Centre at Aldergrove Centre Mall, 3100-272nd Street in Aldergrove. Or phone 856-8144 Monday to Friday.

By ensuring reliable supplies of clean-burning natural gas and using it in our daily lives, we are all helping to preserve B.C.'s environment.

Natural gas is indeed a friend of the environment.

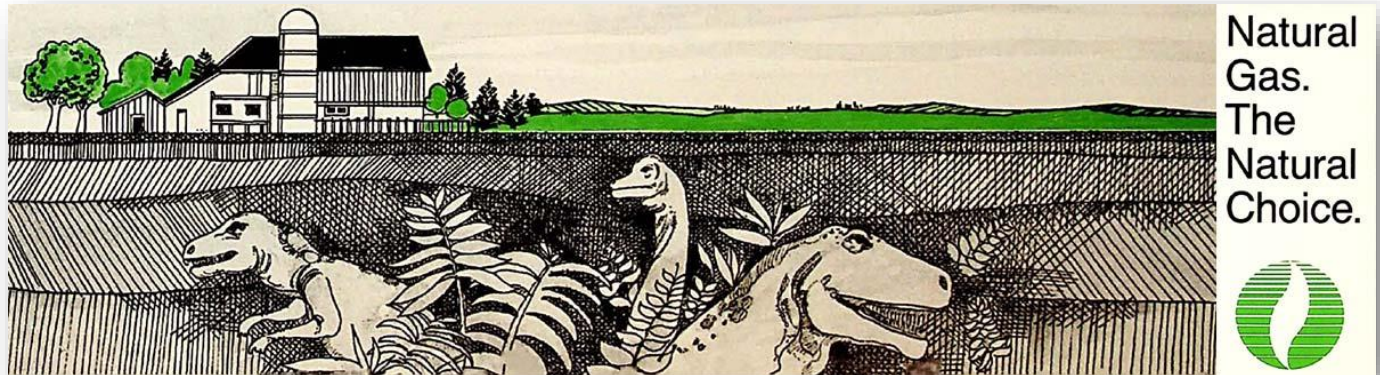
*After May 7th.

The Fraser Valley Gas Project



Langley Advance
April 25, 1990

We live in a time of heightened awareness around us. There is concern about acid rain, global warming, greenhouse gases and toxic air. And, because natural gas burns cleaner than wood, coal or gasoline, cities are restricting wood burning fireplaces and people are converting to natural gas. ... Increased use of natural gas is today's answer to decreasing damage to our atmosphere. Concern about atmosphere will increase the demand of natural gas dramatically in the coming decade.⁵⁵⁹



A national poll had recently been conducted with Canadians, the results of which were featured in Canada's newspapers. The twin topics of Environment and First Nations ranked prominently at the top of the Canadian public's concerns, topics which deeply concerned the corporate sector majors. The Fraser Valley Gas Project nevertheless sought to take advantage of this polling fact.

By tapping the natural gas potential of the Fraser Valley we can have safe, reliable and economical supplies into the future. And we can enjoy these benefits without harm to the local environment or any adverse effect on our quality of life.

The Fraser Valley Gas Project's third and fifth ad, **"The most frequently asked questions about natural gas exploration and the environment,"** ran in newspapers from May 5 to May 10, and a new version from June 6 to June 7.

Q. Is gas exploration likely to contaminate groundwater? A. No.

Q. Is there much risk of encountering sour gas? A. No.

Q. What about the danger of a blowout? A. Blowouts are extremely rare

Q. Will exploration cause a great deal of noise? A. No.

Q. Will gas exploration hurt property values? A. No.

Q. Would a gas well be very noticeable. A. No.

Q. Will rights of property owners be respected? A. Yes.

Q. Will there be much traffic around the drillsite? A. Only for two or three days

Q. Will an Emergency Response Plan be developed? A. Yes.

⁵⁵⁹ Audio transcript.

Q. How would an earthquake affect natural gas facilities? A. The most likely centres for a local earthquake lie offshore

Q. Do we really need this gas project? A. Yes.

The most frequently asked questions about natural gas exploration and the environment.

Working with communities is an important part of natural gas exploration. The Fraser Valley Gas Project believes that a better understanding of local and environmental concerns will assist everyone in making the right decisions. The following are the most frequently asked questions about the project.



Q. Is gas exploration likely to contaminate groundwater?

A. No. To prevent contamination, we use a special double-hulled pipe system with a 100 ft. long outer protective steel casing pipe and a 1,500 ft. long inner pipe through which the drill passes. Both pipes are also separately encased in cement to a depth of 1,500 ft. to ensure that any drilling exploration is completely isolated from exposure to groundwater. This is the same system used in northeastern B.C., where over 7,000 gas wells have been drilled without a single reported case of groundwater contamination. To verify the absence of contamination, all water wells close to Fraser Valley drill sites will be tested before and after drilling.

Q. Is there much risk of encountering sour gas?

A. No. There is no scientific or technical data to suggest the possibility of sour gas in the Fraser Valley basin. In fact, the valley contains iron rich sediments which "scrub out" or neutralize sour gas. For absolute safety, we will employ all the safety procedures used in extreme sour gas situations. In the unlikely event that sour gas is detected, the well will be plugged.

Q. What about the danger of a blowout?

A. Blowouts are extremely rare and we are confident that the technology used in the Fraser Valley will prevent the possibility of such a problem. In addition to carefully monitoring drilling data and maintaining proper drilling fluid densities, we will install and test the best available Blowout Preventer equipment.

Q. Will exploration cause a great deal of noise?

A. No. We will contract a rig equipped with special noise abatement features, similar to the rig used for drilling near Nanaimo. Noise levels will be monitored to ensure adherence to regional noise bylaws. We plan to keep drilling noise within 60 decibels, as measured 30 metres from the rig. This is a very moderate noise level, equivalent to the sound of a normal conversation at three feet.

Q. Will gas exploration hurt property values?

A. No. Gas exploration has a very brief, local impact. The working area and drill rigs are cleared and dismantled within six weeks and the land is fully restored to its natural state. Should gas be found, a small production facility would be installed and the owner would earn rental income.

Q. Would a new gas well be very noticeable?

A. No. The only surface indication would be a gas wellhead, a two-metre-high capped pipe with valves and gauges attached. This would be enclosed within a chain-link fence or a small shed. All transmission lines would be underground and out of sight. Wellheads would be widely spaced, approximately five over an area of five square miles.

Q. Will rights of property owners be respected?

A. Yes. All surface access to exploration areas has been successfully negotiated with individual land owners. In the event of a discovery, the location of a development well is flexible, allowing owners to also negotiate the positioning of wellhead facilities on their property.

Q. Will there be much traffic around the drillsite?

A. Only for two or three days while the rig is being assembled and taken down. During this period, about 40 truck loads of equipment will be moved onto the site. The trucks will conform to local bylaws, follow approved traffic routes and operate within the load ratings for all local roads. After the rig is set up, there will be no significant traffic.

Q. Will an Emergency Response Plan be developed?

A. Yes. While there is no evidence of any potential for sour gas or abnormal pressures, a fully coordinated Emergency Response Plan will be in place before gas drilling commences. It includes a detailed evacuation plan and procedures for communications between local, provincial and federal officials. The plan will be tested beforehand and will remain with the community for use in preparing for potential disasters such as earthquakes and floods.

Q. How would an earthquake affect natural gas facilities?

A. The most likely centres for a local earthquake lie offshore, with far less potential for damaging impact in the Fraser Valley. Based on experience in the most active earthquake trends in California, there is little reason to fear any significant damage to natural gas facilities. Gas production and storage facilities in these areas have survived a number of quakes without suffering serious damage or creating a major hazard to personal safety. As a precaution, any facilities developed in the Fraser Valley would be equipped with automatic shut-down valves in the event of surface equipment failure.

Q. Do we really need this gas project?

A. Yes. The growing population in the Lower Mainland area has created a need to find local sources of natural gas and underground storage areas. And as more customers convert to clean natural gas from other heating fuels, we must ensure there is a secure supply of low cost natural gas for everyone everyday, but especially during peak winter demand periods.

Our current storage facility in Delta, operating at capacity, dates from 1970 when we had 194,000 Lower Mainland customers. Today, we supply gas to over 418,000 customers in B.C.'s fastest-growing region. This huge increase in customers has been forcing us to store our gas for Lower Mainland customers 200 miles south of the border in Washington State, thereby jeopardizing our ability to effectively fulfill peak gas demands.

Finding new local supplies of natural gas and storing gas where the customer base is located makes short and long term economic sense, improves B.C.'s energy security and is a proven, safe and efficient method of gas exploration and storage.

For further information, visit our Consumer Information Centre after May 7 at Aldergrove Centre Mall, 3100 - 272nd Street in Aldergrove. Or phone 856-8144 Monday to Friday.

The Fraser Valley Gas Project



Dynamic
Oil Limited

BC Gas  Naturally.

CONOCO



Abbotsford News
May 9, 1990



Bob Spring

Bob Spring is the manager of Fraser Valley Gas Project, an amalgamation of Dynamic Oil, Conoco and B.C. Gas. The three companies are interested in drilling for oil in Langley and Delta. Public hearings about gas drilling are being slated throughout the Fraser Valley.

John Gordon photo
Surrey Leader - June 6, 1990

The Fraser Valley Gas Project's fourth ad, "The Fraser Valley Gas Project Information Centre is open!" ran in newspapers from May 12 to May 17.

We hope residents, businesspersons and everyone concerned about energy and environment take the opportunity to learn more about the proposed exploration and underground storage program in your area so informed decisions based on the facts can be made.

Come and visit our expert staff who have years of experience in the natural gas field.

Have questions about the project's environmental impact ... its economic benefits ... how the land is returned to its original state after exploration is finished ... or about our industry's outstanding safety record at over 400 exploration and underground storage sites in North America? We've got the whole story on natural gas.

R. M. (Bob) Spring
Manager of Fraser Valley Gas Project

The Fraser Valley Gas Project

P.O. Box 1762, 3100 - 272nd Street
Aldergrove, British Columbia V0X 1A0
Phone 856-8144 Fax 856-8031



BCGas Naturally.



PRINTED ON RECYCLED P

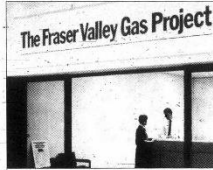
The Fraser Valley Gas Project Information Centre is open!

You're Welcome!

You are welcome to visit the Fraser Valley Gas Project Information Centre. We hope residents, business persons and everyone concerned about energy and the environment take the opportunity to learn more about the proposed exploration and underground storage program in your area so informed decisions based on the facts can be made.

Come in and visit our expert staff who have years of experience in the natural gas field.

Have questions about the project's environmental impact...its economic benefits...how the land is returned to its original state after exploration is finished...or about our industry's outstanding safety record at over 400 exploration and underground storage sites in North America? We've got the whole story on natural gas. On display will be a scale model of an



The Fraser Valley Gas Project

Aldergrove Centre Mall
3100-272nd Street
Aldergrove, B.C. V0X 1A0

Hours: 9:30 a.m. to 5 p.m.
Monday through Saturday
Phone: 856-8144

exploration rig which is on-site for six weeks while a well is being drilled.

We're Here to Listen

The Information Centre is just one component of our overall awareness program. Keep watching for our ads in your local paper. We will also be touring the Fraser Valley region with a mini-version of our Information Centre.

If you know of a group interested in the project, contact our office to arrange for a speaker.

Natural Gas is Today's Energy

Natural gas...it's today's answer to your clean, low cost and efficient energy needs. Plentiful natural gas stored where the demand centre is located will ensure everyone's access to natural gas and improve B.C.'s energy security.

Dynamic Oil Ltd., BC Gas and Conoco Canada invite you to come down for a visit. You'll be welcome. Naturally.

The Fraser Valley Gas Project



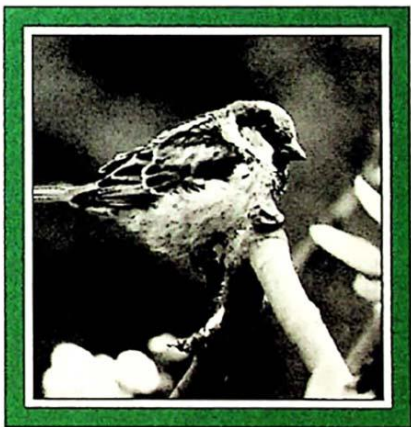
BCGas Naturally.



Langley Advance
May 16, 1990

The Fraser Valley Gas Project

a step toward a cleaner environment



The Fraser Valley Gas Project



BCGas Naturally.



Gas drilling has little environmental impact

Searching for new supplies of this positive form of energy has little effect on the environment. Exploration sites and drill rigs are cleared and dismantled within six weeks...and the land is quickly restored to its natural state. During drilling, underground water quality is protected by surface hole casing practices...the same practices which have allowed the drilling of thousands of wells in north-eastern B.C. without a single reported case of water quality or quantity changes. Should gas be discovered, the impact on the environment is negligible. The only surface evidence of the well would be a small fenced-off area with a capped above-ground pipe. All pipelines would be underground and out of sight.

Natural Gas - today's type of energy

A friend of the environment, natural gas is the safest and cleanest burning of all fossil fuels. It produces far fewer emissions than oil or coal...resulting in cleaner air, less acid rain and a reduced threat to the earth's ozone layer. It's truly today's type of energy...and its uses are almost endless.

Q Is gas exploration likely to contaminate groundwater?

A No. To prevent contamination, we use a special double-hulled pipe system with a 100 ft. long outer protective steel casing pipe and a 1,500 ft. long inner pipe through which the drill passes. Both pipes are also separately encased in cement to a depth of 1,500 ft. to ensure that any drilling exploration is completely isolated from exposure to groundwater. This is the same system used in north-eastern B.C., where over 7,000 gas wells have been drilled without a single reported case of groundwater contamination. To verify the absence of contamination, all water wells close to Fraser Valley drill sites will be tested before and after drilling.

The Fraser Valley Gas Project's sixth ad, "**The Valley needs natural gas. So does our environment,**" ran in the local newspapers from June 13 to June 20. Alongside a photo of a mother duck with her six cute ducklings:

"We need natural gas because it's a safe, efficient form of energy. ... Natural gas also serves the environment. It releases fewer emissions into the atmosphere than other fossil fuels. So when people switch to gas from oil or coal, it reduces acid rain and helps moderate the greenhouse effect."

The Valley needs natural gas. So does our environment.

The Fraser Valley's future demands for natural gas are especially strong because of the Valley's fast rising population. So we must prepare now for the natural gas we'll need tomorrow.

We need natural gas because it's a safe, efficient form of energy. We rely on it for home heating, for cooking and other household uses, as an energy source for business and industry and a cleaner burning fuel for motor vehicles.

Natural gas also serves the environment. It releases far fewer emissions into the atmosphere than other fossil fuels. So when people switch to gas from oil or coal, it reduces acid rain and helps moderate the greenhouse effect. Conversion to natural gas for automobiles can reduce carbon monoxide emissions by up to 50%.



At present, most of our gas comes by pipeline from northeastern B.C., with special peak period supplies from storage sites in Washington State. The Valley really needs its own regional supply of natural gas...a supply that allows us to end our dependence

on U.S. storage in peak winter months.

The Fraser Valley Gas Project can create those supplies...by exploring for new gas deposits and suitable safe underground storage sites here in the Valley.

It's a natural move to meet our future energy needs. And to help create a cleaner, fresher environment.

Visit the Fraser Valley Gas Project Information Centre at Aldergrove Centre Mall, 3100-272nd St. in Aldergrove. Or phone 856-8144 Mon. to Sat.

The Fraser Valley Gas Project



Langley Advance
June 13, 1990

At B.C. Gas' annual meeting in May 1990, president and chief executive officer Robert Kadlec told his shareholders, "Opposition from environmentalists to search for natural gas in the Fraser Valley doesn't make sense," and said "the environmental price of exploration is minimal in the valley:"

"We're not talking about the oil industry, or mining or timber harvesting. There is no clear-cut, no open pit, no slag or tailings pond, no flooding of valleys or draining of streams."

"Exploration involves less construction activity than it takes to build a house."

If gas is discovered, all that would be required would be a small installation every few kilometres to tap the gas and pipe it underground to B.C. Gas' distribution system, he said.⁵⁶⁰

Underground gas storage: safe and environmentally sound

Underground gas storage is being successfully practiced at more than 400 sites in Canada and the U.S.A. It's a safe, proven gas storage method... in fact, it's nature's own way of storing this precious fuel.

Underground gas storage in the Fraser Valley would ensure reliable local gas supplies for homes, business and industry. And it would end our partial dependence on gas stored underground in Washington State.

For further information, visit our Information Centre at Aldergrove Centre Mall, 3100-272nd Street in Aldergrove. Or phone 856-8144 Monday to Saturday.

⁵⁶⁰ *Fraser Valley opposition to gas drilling 'not sensible,' Times Colonist, May 9, 1990.*

5 – 12.

The Public Inquiry Begins

By way of background, the Government of British Columbia has taken some 5 1/2 million dollars of lease and permit money from the industry for the right to explore for hydrocarbons in the Fraser Valley. However, following public criticism of drilling plans in the Valley by residents, in May it appointed me as a sole commissioner to look into the whole question of whether drilling should take place, and if so, what regulations should govern the drilling program. ⁵⁶¹

When the criticism first surfaced, the government was in a quandary as to how to proceed. It had sold the rights to drill, thus leaving the impression that it was in favour of the project. Nevertheless, some local supporters of the government were opposed to the proposal, and the area in question is important politically. Shortly after, in late April, I was asked to undertake a commission of inquiry under the Inquiry Act to advise the government on what steps it should take. ⁵⁶²

The records of the commission will have considerable evidentiary, legal, and research value for future historians and researchers. ⁵⁶³

Following Conoco Canada's manager of the Fraser Valley Project Bob Spring's presentation to the Langley Chamber of Commerce on April 17, 1990, Social Credit Langley MLA Carol Gran, Minister of Government Management Services and Minister of Responsible for Women's Programs, stated in a media interview that the gas companies "have not done a good job:" "If Fraser Valley opposition to natural gas drilling maintains its momentum, there's little chance of exploratory drilling ever taking place." ⁵⁶⁴

Gran's reference to a "momentum" was because of the cumulative intensive, voluntary, and devoted efforts by The Friends of the Fraser Valley in educating the public and in making a stand to oppose petroleum exploration, the growing tide of which was now forcing Premier Bill Vander Zalm administration's hand. Beginning with Energy Minister Jack Davis' April 10 statement in the Legislature about the possibility of striking a Commission of Inquiry, behind the scenes a search for a viable and "independent" candidate to head such an Inquiry was already underway. Government had settled uncomfortable scores before, and Premier Vander Zalm wanted to do it again, and quickly.

The big announcement arrived on Thursday May 3, 1990, summed up in a three-page news release, "Davis Launches Fraser Valley Drilling Probe."

Energy Minister Jack Davis today announced that former B.C. oil-spill advisor, David Anderson [52 years of age], has been given wide-ranging terms of reference to review natural gas production

⁵⁶¹ Fax letter from David Anderson to Alexandra Alexander, Canadian Consulate General, Los Angeles, California, July 11, 1990.

⁵⁶² Letter to Dr. Edward Keyserlingk, McGill University Faculty of Law Centre for Medical and Legal Ethics, from David Anderson, October 19, 1990.

⁵⁶³ Gary A. Mitchell, B.C. Archives and Records Service, to Robert Tweedie, Commission secretary of the Royal Commission on Petroleum Exploration, August 8, 1990. As it turned out, the Commission records, which had been transferred to the B.C. Archives in 1994, remained uncatalogued until the author of this report had the B.C. Archives track the location of the eleven boxes of records in 2021 and make them available for the first time for scrutiny.

⁵⁶⁴ *Growing opposition could kill gas program*, Langley Times, April 21, 1990.



Province of
British Columbia

NEWS RELEASE

CAROL GRAN, MLA LANGLEY
AND DAN PETERSON, MLA LANGLEY

FOR IMMEDIATE RELEASE

May 3, 1990

MLAS WELCOME DRILLING REVIEW

Victoria, B.C. - Langley MLAs Carol Gran and Dan Peterson have welcomed today's announcement of David Anderson's appointment to review possible natural gas exploration development in the Fraser Valley.

"This public, impartial review will answer concerns voiced strongly in the Aldergrove and South Langley areas," said Gran. "It will put a stop to the fears, speculation and rumours that have been going around our communities."

and storage possibilities in the Lower Fraser Valley.⁵⁶⁵ "I am sure that Mr. Anderson, after hearings have been completed, will submit a report which is realistic from an economic as well as an environmental point of view."

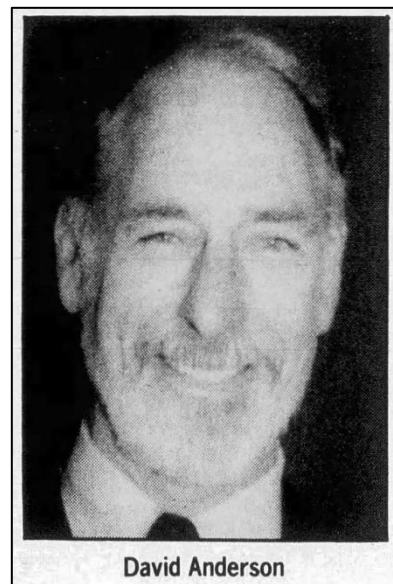
"Anderson's independent review will ensure that the public's concerns over impacts on human health, private property and air and water quality will receive a thorough examination before any drilling permits are issued," Davis said.

Anderson has been appointed a commissioner under the B.C. Inquiry Act. He therefore has full powers to hold hearings, call witnesses and hear testimony. His review, with full public input, should be complete with a report to government which should be made public by the end of September.

"Anderson has considerable experience in looking at pollution and pollution abatement measures in the energy sector," said Davis. "Consulting with the public and the companies he can develop a big picture scenario which will cover long-term development possibilities as well as exploration and development beginning in late 1990 or early 1991."

"I have canvassed the companies proposing to drill in this area and I have been assured that they will give their full support, both in terms of factual information and technical knowhow, to the Anderson Inquiry."

David Anderson, who has a law degree from UBC, is a former MP and MLA who, in recent years, specialized in environmental protection in the energy sector. He spent five years at the University of



David Anderson

⁵⁶⁵ Order in Council No. 695, approved and ordered on May 2, 1990, with authority under the *Inquiry Act*, Section 8.

"Remuneration of the Commissioner is set at \$400 for each day of involvement in the Inquiry calculated on the basis of eight working hours per day."



Province of
British Columbia

NEWS RELEASE

MINISTRY OF ENERGY, MINES
AND PETROLEUM RESOURCES

FOR IMMEDIATE RELEASE

1990:17

May 3, 1990

DAVIS LAUNCHES FRASER VALLEY DRILLING PROBE

Victoria, B.C. - Energy Minister Jack Davis today announced that former B.C. oil-spill advisor, David Anderson, has been given wide-ranging terms of reference to review natural gas production and storage possibilities in the Lower Fraser Valley. "I am sure that Mr. Anderson, after hearings have been completed, will submit a report which is realistic from an economic as well as an environmental point of view.

"Anderson's independent review will ensure that the public's concerns over impacts on human health, private property and air and water quality will receive a thorough examination before any drilling permits are issued," Davis said.

David Anderson, who has a law degree from UBC, is a former MP and MLA who, in recent years, specialized in environmental protection in the energy sector. He spent five years at the University of Victoria as a Professor at the School of Public Administration and has participated in its Environmental Studies program. Last year he completed a special assignment for Premier Vander Zalm on oil spills and what must be done in order to minimize the damage of oil tanker and other traffic inside and outside B.C. waters.

"Anderson has considerable experience in looking at pollution and pollution abatement measures in the energy sector," said Davis. "Consulting with the public and the companies he can develop a big picture scenario which will cover long-term development possibilities as well as exploration and development beginning in late 1990 or early 1991.

Victoria as a Professor at the School of Public Administration and has participated in its Environmental Studies program. Last year he completed a special assignment for Premier Vander Zalm on oil spills and what must be done in order to minimize the damage of oil tanker and other traffic inside and outside B.C. waters.

An attached biography stated that David Anderson, in his early years: received a Bachelor of Law in 1962 at the University of B.C.; served as a foreign service officer with the federal Department of External Affairs from 1962 to 1968; was a federal Liberal Party Member of Parliament (MP) under Prime Minister Pierre Trudeau from 1968 – 1972 in the Esquimalt / Saanich riding; was “founder and first chairman” of the federal House of Commons Special Committee on Environmental Pollution, from 1970 – 1972; and was B.C. Liberal Party Victoria City riding Member of the Legislative Assembly (MLA) from 1972 – 1975.

David Anderson	
Biography	
Born:	August 16, 1937 in Victoria, B.C.
Educated:	University of British Columbia, Bachelor of Law, 1962. University of Hong Kong, Institute of Oriental Studies, Mandarin Language Studies, 1965 to 1967.
Career:	Foreign Service Officer, Department of External Affairs, 1962 to 1968. Member of Parliament, (Esquimalt Saanich) 1968 to 1972. Founder and first Chairman, House of Commons Special Committee on Environmental Pollution, 1970 to 1972. Member of the Legislative Assembly of British Columbia, (Victoria City) 1972 to 1975. Counsel for BC Wildlife Federation on Strait of Juan de Fuca and Kitimat Pipeline/Port proposals, 1976 to 1979. Adjunct Professor, University of Victoria, School of Public Administration, 1979 to 1984. Member of the Immigration Appeal Board of Canada, 1984 to 1989. Advisor to the Premier of British Columbia on Tanker Traffic and Oil Spills, 1989. Environmental Consultant, 1989 to present.
Sports:	Silver Medal, Pan American Games, 1959. (Rowing) Silver Medal, Olympic Games, 1960. (Rowing)

“Who is this Man?” (1962 – 1975)

After graduating from the University of B.C. with a law degree, David Anderson became a civil servant with the federal department of External Affairs. According to Southam News Services Ottawa bureau chief Charles “globetrotter” Lynch, who wrote a series of hard-hitting articles in December 1963 while touring southeast Asia,⁵⁶⁶ he later reported that Anderson was a foreign service officer for about one year in Vietnam operating under the mandate of the International Control Commission (ICC), otherwise known as the International Control Supervision Commission. The ICC was established in 1954 after the Indo-China war, “with still-functioning commissions in Cambodia and Vietnam, after a conference at Geneva ended the six-year struggle between the French and Communist-led nationalist forces.”⁵⁶⁷

⁵⁶⁶ I.e.: ‘Made-in-U.S. crisis’ to get things done?, Ottawa Citizen, December 2, 1963; *Skipped Singapore – but Saigon is still swinging*, Ottawa Citizen, December 13, 1961; *U.S. target – ‘subvert the subverters’*, Ottawa Citizen, December 16, 1963; *New look in battle against Reds*, Ottawa Citizen, December 17, 1963; *New Zest to flying in Viet Nam*, Ottawa Citizen, December 18, 1961; *Growing feeling of uncertainty*, Ottawa Citizen, December 23, 1963; *South Vietnamese leader has fought for 20 years*, North Bay Nuggett, December 26, 1963; *Canada’s part in exercise of futility in Viet Nam*, North Bay Nuggett, December 30, 1963 (previously published in the Ottawa Citizen on December 19 under an alternate title, *An exercise in futility*).

⁵⁶⁷ *Southeast Asia*, The Ottawa Citizen, January 7, 1961.



LAOS CONTROL COMMISSION—Poland's Jerzy Michalowski, India's Samar Sen and Canada's Leon Mayrand, from left, representing the three-nation International Control Commission on Laos, are shown during a meeting in New

Delhi. The Indian member heads the commission. Members of the group left New Delhi for Laos Sunday to verify the cease-fire in the southeast Asian kingdom. **Windson Star**
(Associated Press Wirephoto) **May 8, 1961**

With tensions later escalating in Vietnam, recall of the ICC, “composed of Canada, Poland and India,”⁵⁶⁸ was announced in January 1961 in order to manage “peaceful settlement” and supervision for a “cease-fire agreement.”⁵⁶⁹ There, in the deeply troubled times and international intrigue of North and South Vietnam, Anderson “learned water skiing on the Saigon River in 1964 when he was legal advisor to the Canadian Commissioner in Vietnam.”⁵⁷⁰ By November 1963, Anderson’s Saigon boss, Commissioner Gordon E. Cox, stated there were “35 persons on his staff and 40 to 50 Canadians, mostly missionaries, in the country.”⁵⁷¹

When Anderson ran for the federal Liberal party in the June 1968 election, his civil service knowledge and experience in Vietnam was tested during a June 19, 1968, political panel debate concerning foreign policy alongside other federal party riding candidates. The event, which took place in Victoria City, was sponsored by the World Federalist society. NDP candidate Dr. Harvey Richardson said, “Canada is losing respect in the world community because we appear to be a yes-man to Uncle Sam – hanging on to his shirt tails economically and politically.” Richardson “slammed the Liberal government’s continuing policy of arms sales to the United States,” stating “we should not be selling weapons for use to kill in Vietnam.” Anderson:

⁵⁶⁸ *U.S. switch’s view, backs U.K. on Laos*, The Expositor, January 7, 1962.

⁵⁶⁹ *Gromyko to offer truce*, The Sault Star, March 27, 1961.

⁵⁷⁰ *Anderson finds relaxation in water-skiing*, Vancouver Sun, August 7, 1972.

⁵⁷¹ *Says Canadians safe in Viet Nam*, Owen Sound Sun Times, November 5, 1963.

replied that “he was not the slightest bit ashamed” of Canada’s efforts on the Commission. “We haven’t succeeded in stopping the war – nor has anyone else,” but the ICC still existed as the single line of communication between North and South Vietnam. Canada should not permit “nationalist sentiment” against the U.S. to result in actions contrary to Canada’s “national interest. It is vital to remember that we simply cannot ignore the United States.” Relations with that country affected Canada’s ability to work toward “our goal of world peace.”⁵⁷²

VICTORIA (Staff) — Liberal leader David Anderson plans to campaign here today, where he is running against Trade Minister Waldo Skillings in a two-seat riding in the Aug. 30 provincial election.

Anderson’s campaign gets under way following a four-day trip to the southern Interior. He wound up the weekend by water skiing at Westbank and attending a Penticton airshow.

In Summerland, he told a meeting of about 25 that a Liberal Government would preserve agricultural land by purchasing development rights and removing education taxes.

Anderson criticized the government’s \$25 million green belt fund as not designed to save farm land but only to buy up small tracts beside highways. He said a recent study showed that 33 per cent of arable land in the Okanagan Valley already has been permanently taken out of agricultural use.

“Excluding the Peace River region, the amount of agricultural land in this province is very small, only two or three per cent of the total area,” he said. “It is a limited resource. Steps must be taken to preserve farmland or we will be facing a critical situation in the next 10 to 20 years.”



Liberal leader David Anderson water skis on Okanagan Lake at the weekend. — Dave Roe’s photo

The Province - August 7, 1972

Amongst a later plethora of critiques of Canada’s involvement in Vietnam, Major Shane B. Schreiber’s 28-page paper, *The Road to Hell: Canada in Vietnam, 1954-1973*, paints a frank portrait of what transpired.

Canada’s role in Vietnam became a road to Hell paved with good intentions and mapped out by a deliberately ambiguous policy. Moreover, the conflict surrounding Canada’s policy was exacerbated by a cultural difference between the policymakers (primarily in the Department of External Affairs) and the policy executors (primarily in the Department of National Defence). In the

⁵⁷² At federalist meeting — ‘Can’t ignore U.S.’ claims candidate, Times Colonist, June 20, 1968.

final analysis, Canadian angst over its involvement in Vietnam is misplaced because, to some degree, Canada could not have avoided the role it played as a simultaneous quiet accomplice and victim of its own, and American “hell of good intentions.” The delicate balancing act that Canadian policymakers sought to use was both underpinned and undermined by Canada’s close relationship with the United States.

Anderson was subsequently assigned by Canada’s External Affairs as “an assistant government trade officer in Hong Kong,”⁵⁷³ the “desk officer responsible for Chinese affairs.”⁵⁷⁴ He was later referred to as an “expert on China.”⁵⁷⁵ There, he attended the University of Hong Kong. Ottawa bureau reporter Charles Lynch, who “first met” Anderson in Vietnam, said that Anderson “spent four years in Hong Kong, in the course of which he learned to speak Mandarin, entering Red China several times and visiting Peking. He was posted back to Ottawa last year [1967] as head of the China desk in the east block [of the Parliament buildings].”

Lynch reported that Anderson’s “leave of absence” from External Affairs in early 1968, to seek a nomination for the federal riding in the Esquimalt – Saanich riding, had previously been disallowed for civil servants.

Civil servants can now enter parliament through the front door instead of the back ... The back door, or civil servants’ entrance, is the one the Liberals used so frequently in the past – anointing senior public officials to cabinet posts and then getting them elected. This resulted in a preponderance of former mandarins in the cabinets of Lester Pearson, who was one of the breed himself. The new way, sanctioned by law for the first time in last week’s federal election, is much healthier. Civil servants who want a crack at politics can apply for a leave of absence to contest nominations. Sixteen federal civil servants were granted leave this time. Eight failed to get nominated and returned to their duties in the public service. Of the eight who were nominated, three were elected – David Anderson of the department of external affairs. ... All three ran as Liberals and had hard fights.

Next to the prime minister, Anderson should rank as Ottawa’s most eligible bachelor – handsome, athletic, and owner of a yacht that he had built in Hong Kong, sailed to Japan, and then shipped to the waters of the Ottawa River. ... His great grandfather was an MP for Victoria, who made way for Sir John A. Macdonald to run there in a byelection.

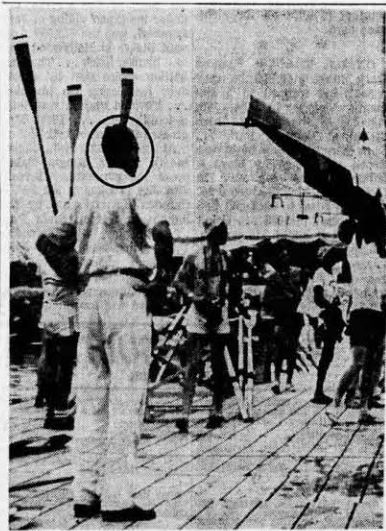
He’s bound by the Official Secret’s Act to keep the secrets he learned in diplomacy – but that’s the only barrier facing this promising new politician. Unlike most new MPs, he even has an apartment in Ottawa, and a girl friend in Montreal. He skis and rowed for UBC’s great crew of 1960-62. Shades of Trudeau, indeed!⁵⁷⁶

⁵⁷³ *Pen pictures of new MLAs*, Vancouver Sun, September 2, 1972.

⁵⁷⁴ *Esquimalt-Saanich Grits name Anderson*, Times Colonist, May 17, 1968.

⁵⁷⁵ *3 Liberals to contest federal seat*, Vancouver Sun, May 9, 1968.

⁵⁷⁶ *Civil servants get break*, The Province, July 5, 1968.



WHO IS THIS MAN ?

Here we see him preparing to win a silver medal for Canada in the 1960 Olympic Games.



WHO is this man ?

Here we see him relaxing from his duties as Assistant Government Trade Commissioner in Hong Kong.

(Picture shows him in Manila Harbour as member of winning crew, South China Sea race, Hong Kong-Corregidor.)



WHO is this man ?

Here we see him relaxing from his duties as Assistant Government Trade Commissioner in Hong Kong.

(Picture shows him in Manila Harbour as member of winning crew, South China Sea race, Hong Kong-Corregidor.)

FRI., MAY 17, 1968 Times Colonist

GORST NOT ON BALLOT

Esquimalt-Saanich Grits Name Anderson

Esquimalt-Saanich Liberals Thursday named David Anderson, a lean former Olympic rower, as their candidate for the June federal elections.

Mr. Anderson, 31, a specialist in the external affairs department and lawyer, was a member of the UBC rowing team that represented Canada at the Olympics in 1960.

Esquimalt Mayor Ray Bryant, who nominated Mr. Anderson, said he wished to dismiss the suggestion that the candidate was an outsider.

"He was born in Victoria and not only did I know him for many years but my wife attended Victoria High School with him," he said. "His only absence from Victoria has been to serve his country for six years in the department of external affairs."

He noted that Mr. Anderson had served as an assistant Canadian government trade commissioner in Hong Kong, as a legal adviser to the Canadian Commissioner in Vietnam, and was the desk officer responsible for Chinese affairs.



ANDERSON
... on first ballot

"The reason I'm nominating him this evening is because I sincerely feel that he is the best possible candidate to beat Conservative George Chatterton

and to allow the people of Esquimalt-Saanich to have a voice in the government."

Mr. Anderson said he believes he can win the election against the Progressive Conservative candidate.

'WON'T BE EASY'

"But it won't be easy," he said. "This riding hasn't elected a Liberal since 1940."

But, he added, the Liberals could win if they remained united under the leadership of Mr. Trudeau.

Mr. Anderson said he was interested in obtaining federally owned land—in particular unused military reserve land—for parks, as well as in the improvement of harbors and marine facilities to attract a greater number of tourists to the area.

Both Mr. Haley and Mr. Campbell spoke strongly of economic policies which would make Canada independent of foreign control.

The meeting was attended by more than 200 people, many representing the Victoria riding.

But he also:

- ★ Represented Canada in 1960 Olympics (won silver medal).
- ★ Served in Vietnam as legal adviser to the Canadian Commissioner.
- ★ Is a native Victorian.
- ★ Graduated from UBC.
- ★ Is young, yet widely experienced.
- ★ Served three years as an Air Force Reserve pilot.
- ★ Was assistant Government Trade Commissioner in Hong Kong.
- ★ Is trilingual (English, French and Mandarin Chinese).
- ★ Has the local knowledge, Ottawa contacts, and Far East knowhow needed for the coming years of Pacific expansion.

ONLY ONE MAN has all these qualifications to become a front-rank Government member to represent YOU . . .

**DAVID
ANDERSON**
LIBERAL

**. . . the Trudeau man
(and your man)
for Esquimalt-Saanich**

Inserted by Anderson for Action Committee

Phone 382-9131



"WHO is this man?"
political advertisements
in the late May 1968
edition of the Times Colonist

Vancouver Sun columnist Allan Fotherham described Anderson's sudden switch from civil service. [David] Edgar (now a Ron Basford aide), [Bob] Hutchinson, and Victoria broker Malcolm Anderson [David Anderson's brother] had a bright idea. They phoned Malcolm's brother [David, on the evening of April 22, 1968] and told him that if he could quit Ottawa immediately, he had one-third chance of getting the nomination and one-third chance of getting elected. David Anderson junked external affairs immediately, got the nomination on May 16, and was swept into office on June 25 on Trudeaumania and his own energetic, considerable gifts.⁵⁷⁷

During his four-year term as Member of Parliament in Ottawa (1968 – 1972), Anderson was later described in the media as a “top maverick on the Liberal backbench,” a “lone wolf,” and a “pollution-fighting MP”. These phrases were pronounced repeatedly as Anderson announced his intention in early May 1972 to step down as MP to run as leader of the B.C. provincial Liberal party, a party with five opposition members since the previous provincial election of July 1969. “Mr. Anderson has earned the reputation as a pesky maverick because of his habit of firing unexpected and often embarrassing questions at government ministers during the Commons question periods.”⁵⁷⁸

“Anderson ... earned the title of maverick and the animosity of some of his [federal] government supporters for his outspoken views on the role of the backbench MP.”⁵⁷⁹ Anderson was eventually pegged with having a “one-issue image,” “known primarily for his battle to prevent the shipment of oil via supertanker from Alaska down the B.C. coast to refineries in Washington.”⁵⁸⁰

In February 1972, “B.C. Mines Minister Frank Richter,” who attacked the federal government to seek political ground on behalf of big oil, “accused the federal government Friday of operating under a double standard in the matter of offshore oil exploration and drilling.”

The minister told the legislature federal Environment Minister Jack Davis and David Anderson, the conservation-conscious member of Parliament for Esquimalt-Saanich, see something sinister in permitting oil and gas exploration in west coast waters but treat east coast waters differently. Mr. Richter produced maps showing the area of offshore permits used by Ottawa for the east coast. “As of November 1971, there were 4,281 permits in existence covering 317,849,405 acres of water blanketing the east coast, surrounding Prince Edward Island and Newfoundland, and running up the

It's too late to cry over
SPILLED OIL,
 FIGHT IT WITH
DAVID ANDERSON
Wednesday, June 28, 7:30 p.m.
Odd Fellows Camp
 16249 Beach Road, White Rock
 (Turn right at Canadian Customs)
Special Guest: BARRIE CLARK
 and
PROVINCIAL CANDIDATES
Roy Brown, Langley
Bill VanderZalm, Surrey
Lorne Donnelly, Delta

Langley Advance
June 22, 1972

⁵⁷⁷ Vancouver Sun, May 6, 1975.

⁵⁷⁸ *Liberals choose Anderson to lead provincial party*, Nanaimo Daily News, May 23, 1972.

⁵⁷⁹ *Liberals to woo 'neglected majority'*, Vancouver Sun, May 23, 1972.

⁵⁸⁰ Ibid.

Anacosti Island in the Gulf of St. Lawrence.” He said to date 30 oil wells have been drilled to completion on the east coast and three wells are actively drilling.⁵⁸¹

Anderson had a public following both in Canada and the United States for his tough stance to prevent oil tanker traffic along B.C. coastal waters, whilst Anderson personally favored the proposed MacKenzie Valley Pipeline route in the Northwest Territories down to the United States,⁵⁸² a proposal that was later met with fierce opposition by First Nations during the Thomas Berger federal Commission of Inquiry.



With Anderson’s announcement to run as B.C. Liberal leader, two “conservationists” were reportedly “pleased” about the matter, with one making a more careful judgement in the matter.

Rick Careless, chairman of the Victoria branch of the Sierra Club, said if Anderson wins the leadership of the B.C. Liberal Party he would be in a better position to fight for pollution control. “He would be more effective as leader of the Liberal party here than he was as a backbencher in Ottawa,” he said.

Harry Collie, president of the Victoria branch of the Scientific Pollution Environmental Control [SPEC], said Anderson appears to have environmental sensitivity, and in local pollution problems he could be “very effective.” Collie added, however, that **he had reservations since he had read Anderson’s statement that there was “some truth” to what Premier Bennett has said over the years about the “danger of socialism” in B.C.** [Bold emphasis]⁵⁸³

In preparation for his Liberal Party candidacy at the May 20-22, 1972, Penticton City convention, “one well-placed official said [34-year-old] Anderson was admonished well in advance of the convention to steer clear of his anti-pollution accomplishments when stumping for delegate support.”⁵⁸⁴ Anderson was also advised to change from casual dress into a proper suit. During Anderson’s political campaigning after sealing his acclimation at the convention, he continued to battle against oil tanker traffic.

⁵⁸¹ *Offshore oil policy in conflict – Richter*, Nanaimo Daily News, February 12, 1972.

⁵⁸² *M.P. carries tanker war to Washington*, Langley Advance, March 30, 1972.

⁵⁸³ *Anderson welcomed by groups*, Times Colonist, May 5, 1972.

⁵⁸⁴ *Liberals to woo ‘neglected majority,’* Vancouver Sun, May 23, 1972.

ANDERSON FOR PRIME MINISTER



THE PLATFORM OF THE LIBERAL PARTY IN B.C. FOR THE 1972 PROVINCIAL ELECTION

Here's what will happen in British Columbia in the Anderson years.

JOB

1. Mobilize the Department of Industrial Development, Trade and Commerce and the private sector in the '70s to expand secondary industry and increase jobs.
2. Focus emphasis on job expanding secondary industry.
3. A co-ordinated program to help people, new to the work force, to develop job skills.
4. More processing of our raw materials in the province to provide more secondary industry basic to B.C.

SECONDARY INDUSTRY

5. Establish a major incentive program with a \$100,000,000 fund to expand existing secondary industries and bring new industry to B.C.
6. Work closely with communities throughout B.C. to determine what types of industry will be most acceptable in each area.
7. Expand export trade with Pacific rim countries.
8. Encourage companies in Pacific rim countries who are seeking distribution in North America to establish branch plants in B.C.

LABOUR-MANAGEMENT RELATIONS

In the last report on days lost through strikes (May 1972) there were over a million days lost in Canada. Over 700,000 of these were lost in British Columbia. This has to stop. The Anderson government, rather than leaning in the direction of big labour or big business, will work on behalf of people.

9. Abolish the Mediation Commission. Replace it with arbitrators acceptable to both union and management.
10. Set up an Industrial Council with representatives from labour, management and the government to work for better understanding and to propose cooperative approaches for problems as they arise, and to anticipate before they arise.
11. Encourage the automatic cost-of-living clause in contracts.
12. Introduce proper negotiating procedures for the public service.

THE ENVIRONMENT

David Anderson has a proud record of achievement as the leading figure in B.C.'s political life to work for the protection of our environment. Preservation of the environment is not incompatible with the preservation of jobs. In fact, environmental concerns will open up entirely new fields, products and processes and with them job opportunities.

13. Create a Department of the Environment. Give the Minister the major voice in the control of pollution and the protection of the environment.
14. Establish a clearing house for information relating to environmental problems.
15. Make available to the public the research obtained by the information clearing house.
16. Keep the Skagit Valley for permanent recreation and park land.
17. Enact an environmental policy act to guarantee full studies of potential environmental damage before any construction work can be undertaken.
18. Enforce green strip legislation to preserve vegetation beside streams and rivers.
19. Provide the fish and game branch with an adequate budget to carry out enforcement of regulations and scientific research.

THE ELDERLY

Our objective is to replace fear of age with pride in age.

20. Through Provincial supplements to Federal Pensions we will guarantee a monthly income, fixed to the cost of living for all persons sixty-five years and over. This amount will not be below \$200 per month.
21. All medicines prescribed by a physician will be available at no charge. Likewise, all medical appliances and other essential aids will be provided at no charge.

HOUSING

Housing is a major "people" problem. Efforts must be made to make neighbourhoods more livable and to develop better integrated communities.

22. All hospital services, acute care, extended care, intermediate or chronic care will be provided at the standard B.C. Hospital Insurance fee.
23. A Provincially financed housing programme designed to increase the number of homes and apartments for the elderly. Defer municipal home taxation until the home is sold.
24. Free passes on B.C. Hydro buses.
25. In co-operation with the Federal Government, local community offices will be established to ensure all those sixty-five years and over obtain all their entitled benefits.

HEALTH AND MEDICAL SERVICES

Health and medical services are among the most important basic services required by the entire population.

26. We will have to work with, rather than against, our doctors if we are to expand and improve our medical services.
27. The Anderson government will be sensitive to these needs and already has a program drawn up which will greatly expand these services.
28. Cancel the involvement of four separate ministers (Health and Hospital Insurance, Welfare, Labour and the Provincial Secretary) and place financial responsibility in the hands of one person, the Minister of Health.
29. Establish "satellite clinics" linked to major hospitals to provide emergency services and public health care.
30. Include dental care for those below the poverty income levels.
31. Double the support for the U.B.C. Medical School and increase continuing medical education.
32. Train para-medical personnel and physicians' assistants.

YOUTH

The future of our province will be in the hands of the youth of today. Yet, so many of them have never had a job. Not even a summer job.

33. Re-examine our concepts of what the role of the modern school should be in the society of today and tomorrow.
34. Develop a sports and physical fitness program in co-operation with communities everywhere in the province.
35. Require that all secondary schools, junior colleges and universities provide a comprehensive job search training program.
36. Involve the youth of the province in the organizational work, planning and implementation of the new Department of the Environment because it will have a direct bearing on their lives as citizens of the province.

EDUCATION

In this competitive world, we cannot allow B.C.'s educational system to fall behind the rest of the world. We must all be involved in the educational process—the student, the parent, the teacher.

37. Remove all costs of education from residential and farm lands and finance through general revenues.
38. Repeat Bill 3 and restore bargaining rights with local school boards. Finance 60% of the operating costs of independent schools which meet provincial standards, with the proviso that the provincial government would not contribute to studies outside the accepted provincial curriculum.
39. Reduce the size of classes, to at least the national average, and finance the hiring of teachers aids to give the individual needed help.
40. Require that counsellors and other teaching specialists be properly trained and qualified in their specialties.
41. Develop educational television including post-secondary programs for adults. Finance community colleges out of general revenues.
42. Use school facilities for community activities.
43. Encourage communities to become actively involved in the program and the services of each school.
44. Supply special help needed for the education of the handicapped.
45. All high school students seeking a drivers license shall complete a driver training program to be offered by the high schools.

PEOPLE POLICIES

People are David Anderson's top priority. His administration will make government services more responsive to the needs of the people.

46. Increase consumer protection legislation, especially in the areas of pyramid selling, warranties and home repairs, and hire the staff needed to enforce the laws.
47. Repeal the ban on liquor and tobacco advertising. It is bad legislation which has not worked and thus makes a mockery of the law, discriminating against B.C. publications.
48. Allow beer and wine to be sold in grocery stores.
49. Permit the development of neighbourhood pubs.
50. Provide legal aid to all persons unable to afford it.
51. Provide day care centers and home-maker services, through assistance to communities.
52. To reduce welfare rolls — provide increased vocational training and programs to encourage the unemployed to develop better job search skills.

STATUS OF WOMEN

While there has been much talk about improving the status of women, particularly in the work situation, little has been accomplished in B.C. The Anderson government has plans for specific improvements.

53. Ensure that women have equal rights with men in education including universities, vocational, technical and professional schools.
54. Guarantee that equal pay legislation in B.C. will be enforced so that skill, effort and responsibility will be the objective criteria in determining what is equal work.
55. Increase the number of women on provincial boards, commissions, corporations councils, advisory committees and task forces.
56. Ensure that provincial protective labour legislation be applicable to both sexes.

LEISURE TIME AND RECREATION

The increased leisure time of the future will require that new recreational facilities be constructed immediately.

57. There must be more camps and picnic areas and provincial parks within easy weekend access of the heavily-populated areas patrolled and staffed by qualified park rangers.
58. Provide more adventure playgrounds for children.
59. Develop walking trails, cycle paths and riding routes close to the centers of population.
60. Encourage the development of low-cost all areas close to the centers of population.
61. Support and encourage local agencies and organizations that provide summer camps for both young and old.
62. Support community recreational programs and the development of local recreational facilities.

INDIAN AFFAIRS

David Anderson has said, "It's all on the books. We don't have to introduce new legislation to improve the lot of our native peoples, merely extend to them the legislation which is there already, as we do for everyone else."

63. This means making the same services available to Indians as to other citizens of this province.
64. "Indians know all the areas where our provincial government has discriminated against them... they have repeatedly told us what they want and why. They don't expect another Royal Commission to investigate the needs they have spelled out to us ten thousand times."
65. "We will end government discrimination against Indians."

FARM POLICY

The Anderson government will preserve agriculture as one of our fundamental industries. We must preserve the B.C. Farmer.

66. The government will establish an Agricultural Lands Trust to pay farmers fair market value for their land to preserve farm lands from ill conceived land speculation and development.
67. Make the produce of B.C. farms competitive at home with the produce from other countries and to expand the export potential for farm produce.
68. Consult closely with the farming community on the marketing of agricultural products with special emphasis on securing international markets.
69. Increase expenditures through the U.B.C. Department of Agriculture and on the Provincial Department of Agriculture to provide broader services requested by the farming community.
70. Increase provincial government assistance to farmer co-ops to ensure efficient management of farm based resources.
71. Remove school taxes from farm lands and potential farm lands.

TAXES AND YOUR GOVERNMENT

Government must be made more visible in its actions and more responsive to public scrutiny.

72. Reform the provincial legislature to include Hansard and a question period. Permit T.V. and radio coverage of debates.
73. Increase modern management techniques at all levels of government.
74. Appoint an Auditor General to tell the public where public funds are going.
75. Provide an ombudsman to help people get justice from government departments.
76. Institute a Productivity and Prices Council for B.C. to report regularly to both the government and the public and to make specific recommendations for more efficient production and distribution.
77. Enforce compulsory automobile insurance legislation by requiring that motorists produce proof of insurance at the time of obtaining their license plates. If they cannot produce such proof they will be required to purchase insurance from the government with their plates. The government will strive to protect the private sector but will insist on compliance with the law for the protection of all.
78. New individuals the right to take legal action against the government.
79. Introduce improved and fairer appropriation and compensation laws to provide for the right of appeal.

TRANSPORTATION

There is a remarkable fiction abroad that B.C. has adequate roads. It is far from the truth.

The Anderson government will place great emphasis on cooperation with municipalities on mass transportation, rapid transit facilities and the upgrading of the provincial road system. Immediately.

ROADS

80. Develop the shorter route to the Cariboo - Chilcotin area by improving the road through Squamish and by completing the Pemberton-Lillooet section.
81. Improve the Hope - Princeton and Southern trans-provincial highways.
82. Give immediate priority to solving the highway bottleneck at Hope.
83. Consult with regional authorities to establish other highway priorities.

FERRIES

84. Increase the number of ferries and extend the hours of service.
85. Build a ferry terminal at the mouth of the north arm of the Fraser to carry the Nanaimo traffic now at Horseshoe Bay, thereby restoring Horseshoe Bay to a prime recreational area.
86. Improve restaurant facilities at all ferry terminals.

BUS TRANSPORTATION

Assist municipalities and regional districts to provide fast, convenient public transportation to meet the needs of local communities and to offer an attractive alternative to the use of the private automobile.

AIR TRANSPORTATION

87. Cooperate with the federal government to develop transportation links needed in northern areas.

CONSUMER PROTECTION

David Anderson sees the need to restore public confidence in government management on behalf of the people. His government will immediately implement unused standing legislation on consumer protection.

88. Set safety standards for the commercial sale of used cars.
89. Enforce full disclosure of interest on all consumer credit.
90. Regulate promotional gimmicks to ensure that advertising really conforms to existing legislation.
91. Require full disclosure to all who want the information, including the party concerned, by credit reporting agencies, and ensure individual rights of privacy.
92. Implement existing legislation on uniform standards for labelling merchandise.

NORTHERN DEVELOPMENT

It has been said that Canada's future lies in the north, but so far B.C.'s development has been sporadic and unco-ordinated. The Anderson government will open up the north.

93. Appoint a Minister for Northern Development.
94. Work to expand present Northern communications and increase the number of industries in the north through incentive programs.
95. Improve existing port facilities and encourage the development of new ports so that the north can ship directly to world markets and exploit cost savings.
96. Provide basic hospital, medical and dental services in the north, with government assistance.
97. Establish a flying ambulance service to serve the whole of the Province.

Darrell Cursons
IN CHIEF

Ian MacDonald
IN SKEENA



B.C. Liberal leader David Anderson flew here [Washington, D.C.] Sunday night for today's opening arguments in the Alaska pipeline court challenge and promptly fired a long-range shot at Premier W.A.C. Bennett. He branded as absurd Bennett's statement that the oil spill threat to B.C.'s coast from supertankers supplied by the pipeline is a federal problem. "Mr. Bennett may think this is a federal problem," Anderson said, in an interview this morning. "I don't." "And a lot of British Columbians agree with me. How do you think we're financing this lawsuit to block the pipeline? More than 3,000 British Columbians have had to cough up nickels and dimes to help pay the legal fees and they've done so willingly. Mr. Bennett may have washed his hands of the tanker problem. I hope he can wash our beaches as easily when one of those tankers goes up on the rocks." ⁵⁸⁵

Anderson, with his ambition on becoming B.C.'s premier, promised to protect the Skagit River Valley from further flooding, a huge environmental battle waged at the time with Washington State. "Mr. Anderson said protection of the environment is one of the greatest issues and B.C. is in a position to learn from the mistakes made in eastern Canada, California and Europe." ⁵⁸⁶

Leading up to the August 30, 1972, provincial election, Anderson's Liberal Party policy campaign, advertised in the newspapers, covered 18 topics with 100 promises but failed to include an energy policy. Nanaimo riding candidate Lloyd Schopp stated in an August 19, 1972, advertisement that "David Anderson's team" supported "nuclear power over damming of rivers."

In the August 30 provincial election, which saw the New Democrats winning a majority under Premier Dave Barrett, the B.C. Liberals ran 52 candidates in the 48 provincial ridings, five of which were elected: David Brousson, North Vancouver-Capilano; ⁵⁸⁷ Allan Williams, West Vancouver-Howe Sound; Pat McGeer and Garde Gardom, the two riding seats in Vancouver-Point Grey; and David Anderson, Victoria. Anderson's brother, Malcom Anderson, a broker, lost his Liberal Party bid in the Saanich and the Islands riding.

For three years, Anderson and his four colleagues sat as opposition, amongst the defeated Social Credit with 10 members, and the Progressive Conservatives with 2 seats. About seven months before the December 1975 provincial election, which saw the Social Credit re-emerge with a majority under Premier Bill Bennett, the Vancouver Sun newspaper reported on May 17, 1975, that Imperial Oil Ltd. had "made contributions to both federal and provincial political parties:"

Liberals, Conservatives and Socreds in B.C. have not admitted receiving any money from the firm, a subsidiary of Exxon – the world's largest corporation. Exxon chairman J.K. Jamieson disclosed earlier that the corporation has made contributions to political parties in Canada and Italy. Imperial Oil spokesman Bob Fenner said ... contributions have been made to political groups in all provinces, but not to those with a different "ideology" from that of the firm, such as those who advocated its nationalization. Fenner said it is not company policy to name the parties receiving the contributions or to disclose how much they received. ... Gerry Kristianson, executive assistant to B.C. Liberal leader David Anderson, said: "I will neither confirm or deny we have received any

⁵⁸⁵ *Pipeline-fighting Anderson fires broadside at Bennett*, Vancouver Sun, August 14, 1972.

⁵⁸⁶ *Buy-back plan on Skagit*, Tory Plank, Nanaimo Daily News, August 3, 1972.

⁵⁸⁷ Brousson resigned his seat in October 1973. Gordon Gibson, a Liberal (like his father), won the by-election in 1974, resuming the B.C. Liberal party seat status to five members.

money from Exxon or Imperial.” He said it was the policy of the provincial party not to disclose the source of contributions.⁵⁸⁸

That same month, on May 2nd, two of the four members of Anderson’s Liberals, Pat McGeer and Allan Williams, the “private enterprise” new unity party movers against the “socialist” NDP, parted ways and resigned on May 9th to sit as independents, leaving an abandoned Anderson feeling evermore lonely. “The open dissension apparent Friday is the culmination of more than 18 months of disagreement and some personal animosity pitting Anderson against McGeer and Williams.”⁵⁸⁹ On May 20, Garde Gardom, a lawyer, elected since 1966, being second MLA for Vancouver-Point Grey, announced his resignation from the Liberal Party. Remaining Liberal MLA Gordon Gibson said the following day, “I am a Liberal and I shall remain a Liberal.”⁵⁹⁰ The three defectors, which Allan Fotheringham dubbed as “the three musketeers,” opposed Anderson’s middle ground politics that he kept stick handling somewhere between the NDP and the Socreds. Garde Gardom, “the quickest convert since Saint Paul,” said at a large public rally, “we must put “province first, party second”.”⁵⁹¹



Vancouver Sun columnist Allan Fotheringham, who Anderson was taking a keen disliking to, reported that when Anderson aimed his sights to become party leader in B.C. in 1972, he “caught a fatal dose of the vanities” by leaving a promising future at federal politics: “at the time he even consulted a few respected journalist friends, who warned him not to come,” and “his impatient ambition sunk him.”⁵⁹²

The second opportunistic gamble has never worked. There may have been cases where lofty federal politicians parachuting into provincial scenes have succeeded. If so, memory fails. Anderson’s condescending manner from the start alienated almost everyone on all sides of the legislature, where the clubby atmosphere is unforgiving to such superior beings.

Anderson himself, aside from his time at UBC, had spent most of the last decade abroad – far from B.C.’s problems. Instead of acquiring a local hand to put him in touch, he brought in external affairs buddy from a Guyana posting, Gerry Kristianson, as his assistant. Anderson and his buddy even set themselves up in an office down the hall from the Liberal MLAs he was supposed to co-ordinate and lead. The physical separation was indicative. The MLAs enjoyed it.

⁵⁸⁸ *Imperial Oil admits donations to parties*, Vancouver Sun, May 17, 1975.

⁵⁸⁹ *Anderson blasts MLAs on unity stand - Liberal party split widens*, Vancouver Province, May 3, 1975.

⁵⁹⁰ *Gardom Quits*, Times Colonist, May 21, 1975.

⁵⁹¹ *Seekers of an easy shortcut*, Times Colonist, May 24, 1975.

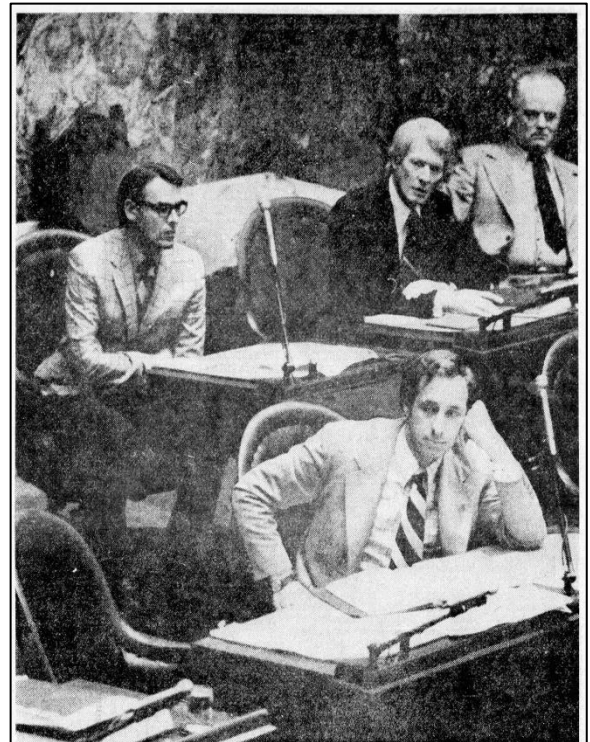
⁵⁹² Vancouver Sun, May 6, 1975.

But Anderson has never been able to command their [Pat McGeer, Allan Williams, and Garde Gardom] respect. There are such things as bright individuals who do not have it within them to be leaders. Such is Anderson. One of the strange sights of Victoria is to watch McGeer, Gardom and Williams stroll out from the Empress Hotel at night for the Union Club, often as not with a tennis-playing companion such as NDP Attorney-General Alex McDonald, while Anderson is left moodily sipping a beer in the Bengal Bar with Kristianson.⁵⁹³



STANDING ALONE in front of Liberal party defectors Patrick McGeer and Allan Williams in the Legislature Monday was Liberal leader David Anderson. To his right is chair normally taken by colleague

Garde Gardom while remaining Liberal MLA Gordon Gibson sits out of picture behind Gardom. Single Tory Scott Wallace, and New Democrat backbenchers, look on. (Bill Halkett photo) Times Colonist May 13, 1975



NEW ROLE, NEW SEATS are assumed in legislature Monday by MLAs Pat McGeer and Allan Williams after their resignation last week from Liberal caucus.

Vancouver Sun - May 13, 1975
us. In foreground is Liberal leader David Anderson; at right, Doug Kelly (NDP-Omineca). McGeer and Williams now sit as independents. (Story, P. 25.)



Anderson and a quote from Duff Pattullo, B.C. Liberal premier in the 1930s.

The Province - May 26, 1975

In the December 1975 provincial election, Anderson threw in the proverbial towel and did not run again, with MLA Gordon Gibson left holding the fort, becoming the sole leader and single remaining elected riding representative of the B.C. Liberal Party.

⁵⁹³ Vancouver Sun, May 6, 1975.

The Anderson Commission

Unlike the 1989 Douglas MacKay Coquitlam pipeline Commission of Inquiry, one of the wrinkles in government's 1990 Anderson Commission was an unexpected and troublesome delay of the final recommendation report scheduled for completion by late September 1990. It would be delayed by four additional grueling and sour tasting months.

Report of the COQUITLAM WATERSHED PIPELINE INQUIRY

Douglas L. MacKay, P.Eng.
Inquiry Commissioner

July 1989

Social Credit Langley MLA Carol Gran stated to her Fraser Valley constituents, "she was happy with the probe," and "said Anderson's reputation "is that of an environmentalist and of someone who is extremely fair. He certainly could not be accused of having any bias" in favor of the Socreds [her Social Credit Party]".⁵⁹⁴

In response, Conoco Canada's Bob Spring, the manager of the Fraser Valley Gas Project consortium, politely stated how his consortium "was hoping to proceed with their own plan of trying to convince the community that gas drilling is safe but that if the government feels "this is the way to go, we are prepared to co-operate".⁵⁹⁵ The Gas Project consortium opened its information and field office in Aldergrove four days after Jack Davis's announcement. "The opening of the Aldergrove office was "partly" because of the bad publicity his firm had gotten," said Bob Spring, and stated his "firm had been "wrong" not to begin its public information program sooner than the February open houses."⁵⁹⁶

In setting up the Commission, government had to establish funding criteria limits, its structure, the location of two offices in Victoria City (headquarters) and Langley, and appointments to assist Commissioner David Anderson.

PERIOD END 9012 MINISTRY 84	MINISTRY OF PROVINCIAL SECRETARY BALANCE OF FUNDS (SUMMARY)			Coquitlam Pipeline Royal Commission Provincial Budget		PAGE 1 OPR SCC
Generated May 2, 1990			at 3:01 AM			
DIVISION: ALL		BRANCH: ALL				
RESPONSIBILITY: 000 TO ZZZ		ACTIVITY: 40970 TO 40970		MAJOR STOB: 00 TO ZZ		
<u>PROGRAM DESCRIPTION</u>		<u>BUDGET</u>	<u>YTD ACTUAL</u>	<u>COMMITTED</u>	----- BALANCE OF FUNDS ----- <u>DOLLARS</u>	<u>PERCENT</u>
COQUITLAM WATERSHED/ ROYAL COM		0	357,640	48,881	406,521-	9999-
TOTAL EXPENDITURES		0	357,640	48,881	406,521-	

For funding, a comparative analysis was done of the recent June to July 1989 Douglas MacKay Commission Inquiry, the costs of which amounted to some \$400,000. The MacKay Commission hearings convened for a total of six days in the City of Burnaby. The controversial Commission was established because of intense opposition by Metro Vancouver (formerly called "Greater Vancouver") citizens and Metro Vancouver mayors as the proposed natural gas pipeline, with its pressurized, deadly and explosive

⁵⁹⁴ *Inquiry to study gas drilling*, Surrey Leader, May 6, 1990.

⁵⁹⁵ Ibid.

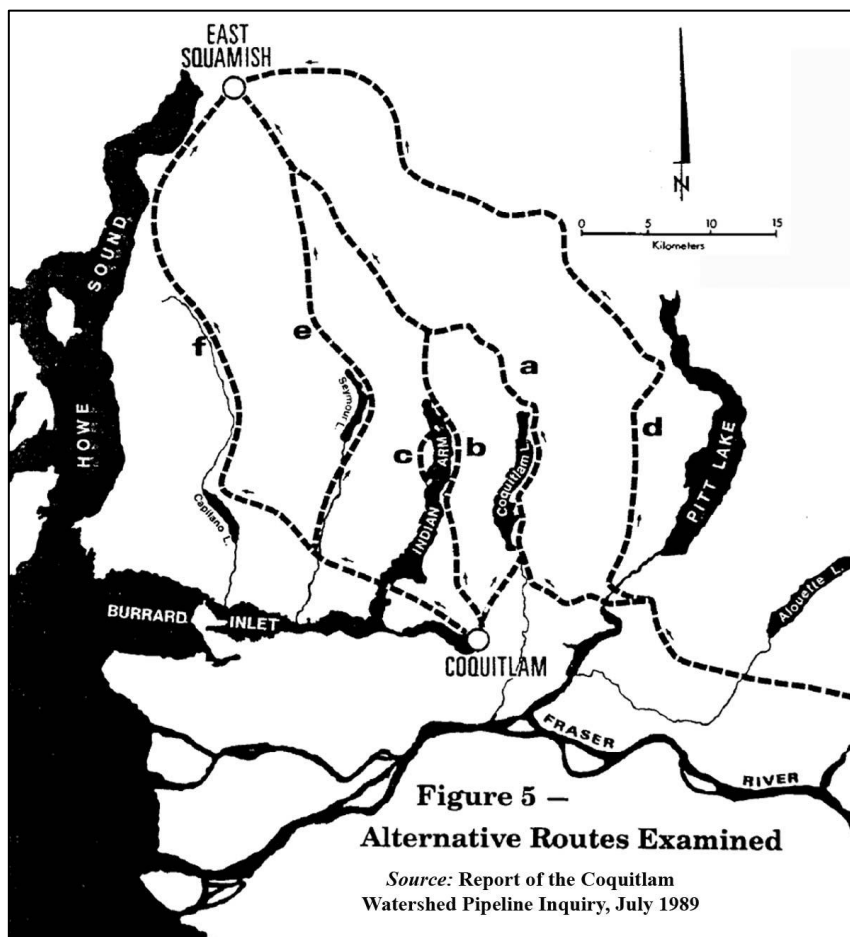
⁵⁹⁶ *Gas companies open office*, Langley Times, May 5, 1990.

contents, was Pacific Coast Energy Corporation's ⁵⁹⁷ preferred route to Squamish (part of the new pipeline strategic route to Vancouver Island) buried under and through the Coquitlam watershed, the public's drinking water supply. Of Pacific Coast's three other pipeline route options to Squamish, two would travel through Metro Vancouver's two other drinking watersheds, the Seymour and Capilano! There was much media (television, radio, newsprint, magazine) attention generated on the Coquitlam pipeline controversy.

The Inquiry was also mandated to seek out and receive the views of the public, whose concerns and apprehensions over the security of the water supply had been largely responsible for establishment of the Inquiry. ⁵⁹⁸

Outraged mayors are mapping out a battle plan to protect "the best water in the world." They're furious at a B.C. Utilities Commission decision to approve a pipeline through the Coquitlam watershed. "It's frightening that (the commission) wouldn't listen to 18 mayors," Coquitlam Mayor Lou Sekora said yesterday. ⁵⁹⁹

MacKay, who retired in 1987, had served as Greater Vancouver Water District's Chief Engineer since 1966, the Water District Commissioner in 1981 following, and Regional Manager in 1982 following for the Metro Vancouver Regional District. Just after his retirement, MacKay was appointed to head a previous provincial Inquiry in 1987 concerning construction cost overruns of the Coquihalla highway scandal, located north of the Town of Hope, exposing government cover-up involving advanced creative billing by, for instance the (J.C.) Kerkhoff Construction Group Ltd, ⁶⁰⁰ which received prominent attention by the media.



⁵⁹⁷ Pacific Coast Energy Corporation, a partnership of Alberta Energy Corporation and Westcoast Energy. The BC government awarded Pacific Coast the bid for the Vancouver Island gas line construction project in October 1987. After submitting an Energy Project Certificate to Energy Minister Jack Davis in November 1988, the BC Utilities Commission recommended the Coquitlam pipeline route in reports released on April 14, 1989.

⁵⁹⁸ *Report of the Coquitlam Watershed Pipeline Inquiry*, July 1989, page ix.

⁵⁹⁹ *Battle lines set*, The Province, April 16, 1989.

⁶⁰⁰ *Report of the Commissioner Inquiry in the Coquihalla and Related Highway Projects*, July 1989. References to J.C. Kerkhoff are found in BC Hansard, 34th Parliament, 1st Session, March 1987 to March 1988. Appointed as Commissioner on May 18, 1989, through Order in Council 759, "to inquire into and report on a number of issues relating to the proposed routing,

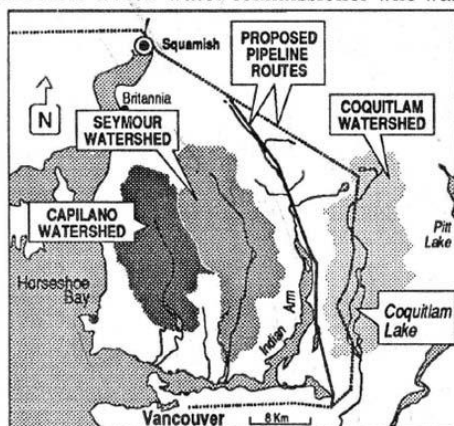
GVRD holds firm on pipeline despite expert's reassurance

By GLENN BOHN
Sun Environment Reporter

Greater Vancouver politicians have again rejected a natural-gas pipeline through the Coquitlam watershed, despite face-to-face reassurances from the man once in charge of protecting the region's drinking-water quality.

Doug MacKay, a former GVRD water commissioner who was appointed by the province to investigate the pipeline's environmental impact, reminded his one-time political bosses Thursday that he "fought vigorously" against a proposed highway through the Capilano watershed.

"And we won that battle, because the facts were on our side," he told GVRD directors.



"We won that battle, because the facts were on our side."

— Doug MacKay

adjourned without setting a date for an in-camera meeting.

It was not clear whether the province will override the GVRD's objections and issue an energy certificate, and perhaps prompt the federal government to order a full-scale environmental review of the taxpayer-subsidized, half-billion-dollar megaproject.

Ottawa has the power to order public hearings and reports that could take a year or more, because federal money is to subsidize the

Jackson noted the pipeline would bring natural gas to Vancouver Island, where pulp mills are now burning high-sulphur bunker oil. The oil, being transported by tankers, causes acid rain when burned.

Other route available

Toporowski complained of the "tunnel vision" of continued opposition when the facts before the board suggest there is only "a minimal risk" and the pipeline will improve air quality.

In his second Inquiry Commission role, MacKay was assigned to convene a rather delicate troubleshooting assignment. MacKay was a golden asset, chosen by government because he was a top insider. He had been one of them: he might sway them. He would create uncomfortable disfavour with his former regional government employer, an irritant to his colleagues: MacKay would recommend the proposed gas pipeline route in his final report.

"I don't feel bound (to the Greater Vancouver Regional District), he [MacKay] said Monday. "This is an inquiry under the Inquiry Act ... I will find the facts, both from the pipeline company and the (Greater Vancouver) water district, and any other source, and my judgement will be based on those facts. Those facts will be made public."

NOTICE OF PUBLIC HEARING

The government of British Columbia has appointed Douglas L. MacKay, P.Eng. to enquire into:

- whether the Vancouver Island natural gas pipeline should be constructed and operated in the Coquitlam Watershed;
- alternative routes to the Coquitlam Watershed pipeline route;
- potential adverse effects from the pipeline on the environment, health and safety, and water supplies and how they may be acceptably reduced;
- other matters relating to pipeline construction and operation including terms and conditions to apply to the recommended pipeline route.

PUBLIC HEARINGS to receive representations and evidence from interested persons will be held:

- Thursday, June 22, 1989
- commencing 9:00 am
- at Room 101, 4595 Canada Way, Burnaby, B.C.

Interested parties wishing to make statements or submit evidence are requested to advise the undersigned as quickly as possible and no later than June 14, 1989 of their intention to participate and are asked to provide a written summary of the nature of their interest and of the material they intend to present. Additional days of public hearings will be scheduled as required.

To obtain the full text of the terms of reference of the Inquiry or further information on how to proceed, contact:



Province of
British Columbia

Inquiry Offices
#902, 865 Hornby Street,
Vancouver, B.C. V6Z 2G3
Telephone: 660-6555
Fax: 660-7622

Dated June 2, 1989 - Vancouver, B.C.

construction and operation of the Vancouver Island National Gas Pipeline through the Coquitlam Watershed and alternatives thereto."

As a former GVRD manager and chief engineer, MacKay was responsible for the protection of the watershed. He has been on the record before as being opposed to any public use of the watersheds.⁶⁰¹

MacKay advocated logging in Metro Vancouver's three watersheds since it legally began in March 1967, when Metro Vancouver revised its land lease agreement with the provincial government, negating an originating 1927 agreement ("Indenture") that forbade logging. When the first logging roads were punched into the formerly protected and old growth-laden Coquitlam watershed in 1972, they would quickly extend far into the north-west upper end of the watershed, at a high elevation pass joining another logging road located in an upper clearcut-logged drainage of the southeast quadrant of the Indian River watershed at the head of the Indian Arm inlet. This road access, and similar logging road construction in the other two watersheds, would open the door, as it were, for the gas pipeline route next-to-logging-road proposals. MacKay was part of two problems: a former administrative logging advocate and now a pipeline route judge.

On June 8, 1990, B.C.'s Attorney General appointed lawyer A.D.P. MacAdams, of the MacAdams Law Firm, as Commission counsel for David Anderson. Douglas MacAdams had previously served as counsel for the Coquitlam pipeline MacKay Commission and was full of fresh 'hands on' experience relating to "the Inquiry's non-adversarial procedures."⁶⁰² Government automatically chose MacAdams to mediate a second and higher staged public controversy.

Before the Attorney General's June 8, 1990, letter of appointment, MacAdams had already been busy on the assignment. Stated in a June 6, 1990, internal letter to Commissioner David Anderson, MacAdams began drafting the Interim Procedural Rules prior to June 4th:

Premier calls pipeline foes

PROV. APR 19 1989

By IAN AUSTIN
Staff Reporter

Coquitlam Mayor Lou Sekora heard the premier's pipeline pitch yesterday, and hopes Bill Vander Zalm will change his tune.

Sekora is among 18 Lower Mainland mayors opposed to putting a natural-gas pipeline through the Coquitlam River watershed to Squamish.

The premier said Monday he would phone the mayors to find out why they object to the plan.

"I think he is doing a lot of thinking," Sekora said after yesterday's call from Vander Zalm. "I gave him some of my ideas, and he's thinking about it."

Pacific Coast Energy Corp. wants to bury a 30-centimetre pipe through the watershed, which provides drinking water for much of the eastern Lower Mainland.

Sekora backs an alternate route along Indian Arm that wouldn't stray into the watershed.

"I think we should all sit down and talk about this,

because there's got to be another route," he said.

Port Coquitlam Mayor Len Traboulay — who had yet to receive a call from the premier — also opposes the plan.

"I was up Sunday in a helicopter and I followed the route of the proposed pipeline," said Traboulay. "If you look on a map it looks fine — you have to go up there in person to see how crazy it is."

But Henry Yamauchi, a Pacific Coast engineer, said the Indian Arm route would be very difficult.

"There are slopes as steep as 55 degrees, and it would mean a tremendous amount of rock removal," said Yamauchi. "I'm sure there would be a terrible outcry at the scar we would leave behind."

Yamauchi said that route would cost \$35 million more and take at least five months longer to complete.

Pacific Coast claims its watershed route would have little or no effect on water quality.

EDITORIAL, Page 24

Staff graphics by Nick Murphy

⁶⁰¹ Pipeline inquiry chief vows to stay neutral, Vancouver Sun, May 16, 1989.

⁶⁰² Report of the Coquitlam Watershed Pipeline Inquiry, July 1989, page vii.

The rules which I think require some consideration, are rules 8.02, 8.03 and 8.04. The model put forward here is that used in the Coquitlam Watershed Inquiry, in which all examination and cross examination was directed through Commission counsel. The system worked well in achieving the objective of a fact based non-adversarial approach.

The key to the system was, however, that Commissioner Mackay was committed to this approach, as was well known to all participants. In our commission, this approach will only work if you think a fact based non-adversarial approach to be so important that you are willing to make it clear to the participants that you will not find cross examination by them or on behalf of them, however brilliant, to be of much assistance. If there is any real or perceived wavering on your part, I expect the approach will soon be in tatters.

As you and I discussed on Monday June 4, this approach in our commission will have an added advantage that by your telling the companies that their lawyers will be mutes, you are able to tell those who are skeptical of petroleum activity that they have no need for funding, for legal counsel, and for other expensive and time-consuming assistance because they will be on a level playing field with the proponents. [Bold emphasis]

Paragraph 10 gives you flexibility should the need arise. We may find (although I think it unlikely) that rules are needed to define who is a "participant", to govern production of documents or pre-hearing discovery of witnesses, or to cover off issuing subpoenas. I think we are best to leave these matters untouched until the need appears immanent. As you can see from the tag at the end, what I envisage is that on June

12 [the pre-scheduled, initial public hearing date] we have copies of these Interim Procedural Rules available for distribution, that you call on me to make a brief presentation, that I refer to the rules and give a summary of them, that I tender the rules as an exhibit, that the rules be marked, and that you announce that subject to further notice you are adopting these as the Interim Procedural Rules for the Commission. If all goes well, that is the last we will hear of matters connected with rules.

MACADAMS LAW FIRM

DOUGLAS MACADAMS
BARRISTER AND SOLICITOR

OUR FILE # 525-4
YOUR FILE #

204 GLADWIN CENTRE
2955 GLADWIN ROAD
ABBOTSFORD, B.C.
CANADA V2S 6W8

TELEPHONE: (604) 850-1675
TELECOPIER: (604) 850-1937

June 6, 1990

DELIVERED BY:

Fax to 533-5451 and to 356-9747

Commission on Fraser Valley Petroleum Exploration,
Langley, British Columbia and Victoria, British Columbia

Attention: David Anderson, Commissioner

Dear Commissioner Anderson:

RE: *Draft rules*

As discussed on Monday June 4, 1990 I have drawn up some Interim Procedural Rules for your consideration and for review by Rob Tweedie. The enclosed rules are marked "Draft #1 June 6, 1990" to avoid confusion with further drafts, if any.

I recognize these will have come too late for you to put in your briefcase for your trip to Ottawa. I am hoping Rob Tweedie can track you electronically and can cause them to arrive at your hotel in Ottawa tomorrow June 7.

The rules which I think require some consideration are rules 8.02, 8.03 and 8.04. The model put forward here is that used in the Coquitlam Watershed Inquiry, in which all examination and cross examination was directed through Commission counsel. The system worked well in achieving the objective of a fact based non-adversarial approach.

The key to the system was, however, that Commissioner Mackay was committed to this approach, as was well known to all participants. In our commission, this approach will only work if you think a fact based non-adversarial approach to be so important that you are willing to make it clear to the participants that you will not find cross examination by them or on behalf of them, however brilliant, to be of much assistance. If there is any real or perceived wavering on your part, I expect the approach will soon be in tatters.

MacAdams' draft rules sections referred to above, were laid out as following:

8. Phase III. Technical Hearings

8.01. Phase III: Technical Hearings will consist of presentations under oath of factual technical evidence relevant to the matters set out in the terms of reference.

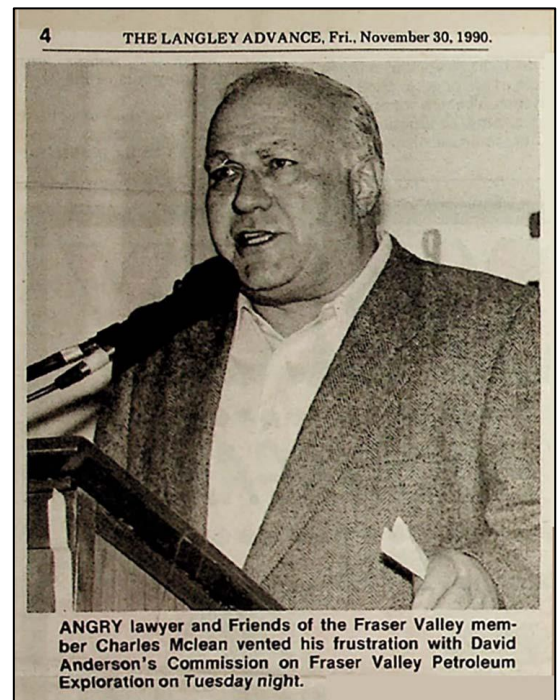
8.02. Witnesses called in the Phase III: Technical Hearings will be called by Commission Counsel, and will be examined and, if required, will be cross examined by Commission Counsel.

8.03. In keeping with the Commissioner's intention to base his report on factual evidence which has been presented in a non-adversarial way in public hearings, there will, as a general rule, be no cross examination of witnesses by any person, including by legal counsel, other than commission counsel.

8.04. Commission counsel is instructed to receive and consider and to the extent appropriate, to put forward all lines of questioning proposed by residents of Fraser Valley and others with an interest in the matters referred to in the terms of reference.

MacAdams' June 6 letter to Anderson is both insightful and key to the internal political operation of the Commission. Though not stated in any documents of discovery thus far, the B.C. Attorney General's department most likely feared the real possibility of Charles MacLean – a criminal lawyer, Queens Counsel, a fearless spokesman and founding member of The Friends of the Fraser Valley – taking an active and perhaps voluntary role during the Commission's cross examination and re-direct of technical witnesses. MacLean would have been perceived as a threat to the Commission's possible success in serving the petroleum interests, as his involvement could ultimately spell political embarrassment and disaster for the proponents.

Also helping in the Friends' fight is "illustrious" lawyer Charles Maclean, Q.C., who lives on 256 St. and is now associated with the Langley law firm of MacCallum, Douglas and McIntyre, as well.



[Ray] Addington ["president of the food-store giant Kelly Douglas and Company Ltd., which operates among others The Real Canadian Super Store and Super Valu"] described him as "a devastating scourge to those who do wrong or are considering doing wrong. We are indeed very fortunate to have him as our champion."⁶⁰³

And, Commissioner David Anderson would remember MacLean, as they had been in law school together in the late 1950s at the University of B.C.

⁶⁰³ *Anti-gas movement grows*, Langley Times, December 1, 1990.

So, to dissipate this threat, Douglas MacAdams would be asked to re-introduce the “non-adversarial” condition. During the introductions at the June 12 public hearing, MacAdams made the following statement concerning this condition from Phase 3, Technical Hearings, in the Interim Procedural Rules:

These technical hearings will consist of presentations under oath of factual technical evidence relevant to the matters set out in the terms of reference, a copy of which we all have.

Witnesses called in Phase 3 of the Technical Hearings will be called by me, as Commission Counsel, and will be examined and, if required, will be cross examined by me in my capacity as Commission Counsel.

In keeping with the Commissioner’s wish and intention to base his report on factual evidence which has been presented in public hearings in a non-adversarial way, the general rule will be that there will be no cross examination of witnesses at the technical hearings by any counsel or other representatives other than Commission counsel.

But, Commission counsel, in this case, myself, I have been instructed by the Commissioner to receive and to consider, and to the extent appropriate, to put forward all lines of questioning proposed by residents of the Fraser Valley and all others with an interest in the proposals and in those matters brought forward by the technical witnesses.

So that, in this way, we will not have, as is the case in some Commissions, a seriatim kind of cross examination by a battery of lawyers. But rather there will be full examination and cross examination channeled and funneled through the one lawyer, the Commissioner’s lawyer. This is a model which has worked successfully in other Commissions and is anticipated in a Hearing along the lines respecting the technical phase to work successfully in this case.

I am confident that the advice I’ve given, in which the Commissioner has accepted, that these rules will work, will indeed prove to be the case.⁶⁰⁴

Commissioner Anderson then added the following comments:

I can only add, or stress, the point made by Commission counsel that these [non-adversarial] rules have been used in other Commissions and used very successfully. I am referring particularly to the Coquihalla Highway Commission Inquiry and the Coquitlam Watershed Inquiry to the gas pipeline routing. The advantage to having a Commission counsel to do the questioning means that those who do not have the resources to hire their own lawyer are not disadvantaged by such a lack to the degree that they otherwise would be.⁶⁰⁵

In an October 17, 1990, form letter sent to various Mayors in the Fraser Valley, Anderson stated:

I should add that I had announced at the first public meeting on June 12 that the only person, other than myself, entitled to ask questions at the actual formal technical hearings would be the Commission's lawyer; this was done to prevent the companies from enjoying an advantage over opponents of the project by reason of greater resources and more technical and legal help. The

⁶⁰⁴ Transcript of audio, June 12, 1990, hearing.

⁶⁰⁵ Ibid.

process chosen was to level the playing field and to give opponents of the proposal the opportunity to have their questions put forth by a competent lawyer.

Contrary to the concerns that the Attorney General or Commission counsel may have had over criminal lawyer MacLean's direct participation, MacLean later confessed in a long November 28, 1990, personal letter to Premier Bill Vander Zalm that he could never have taken such a role:

Our participation in the affairs of the [Friends of the Fraser Valley] Society is purely as residents of the Fraser Valley. I am not legal counsel to the Society any more than my wife is its advisor on medical matters. Even if Anderson had allowed us legal representation before his commission, which he did not, I would not have acted for the Society because of my personal interest and strong feelings on the issues.

I have known Anderson since we were classmates at U.B.C. Law School 31 years ago. Because of this personal connection I felt it was improper for me to take an active part before him as sole Commissioner. In consequence, I did not do so. For the same reason I even avoided being present at the [May 1990] meeting in my own home, which was held at his request.

TO: David Anderson
FROM: David Fenn
DATE: November 6, 1990
RE: Telephone conversation with John Heaney, Research Director, NDP
Caucus - 387-0871

Mr. Heaney has three questions regarding the process of the Commission:

1. During the preparatory stage, when the process was relaxed and conference calls were used, was the proponents' counsel given greater access to witnesses than the Friends of the Fraser Valley?
2. Why was the proponents' counsel seated next to the Commission Counsel?
3. Was the Commission in a position to offer financial assistance to the Friends of the Fraser Valley in presenting their case and bringing their own witnesses?

The Friends of the Fraser Valley, who could not cross-examine or legally intervene during the Commission hearings, would later seriously question this "non-adversarial approach."

In our initial discussion with you, we raised concerns about our lack of legal counsel and adequate funds to meet the limitless resources of the gas and oil companies. We were assured by you that proponents and opponents would be treated equally in that Commission counsel would, throughout the technical hearings, ask all questions and should interveners wish to ask questions, they were to be submitted in written form for consideration by Commission counsel and put to the witness by him if relevant. There was no mention of the preparatory sessions and we were not aware that such were to be held until July 9th and were not aware of their significance until they were well underway.

It became obvious that the Commission counsel's line of questioning was being established during the preparatory sessions and that his inquiries were influenced by the presence of proponents and opponents, who, except in one case, were allowed equal access to witnesses, with however the startling inequity of the proponents being invariably represented by legal counsel, sometimes three in number, while the opponents had no legal counsel whatsoever, despite having been earlier assured by you that such would be unnecessary.

There is no doubt that we would have been well served by way of more effective questioning during that phase had we been encouraged to acquire legal counsel. On one occasion during the preparatory sessions, we were put in the invidious position of having to write out our questions while the proponents were able to use oral communication with your counsel, and on occasion with the proposed witnesses. Counsel for the proponents was deliberately inflammatory and insulting to a member of The Friends of the Fraser Valley on one occasion and on another made grossly inaccurate statements about the origin and content of a document, which counsel thought was in the hands of the Commission, but which had in fact been passed to B.C. Gas by the British Columbia Utilities Commission.⁶⁰⁶

MacAdams, the legal arbitrator alongside sitting judge Anderson, would not always be 'independently' capable, or perhaps politically reluctant, to fulfill his self-defined role of "level playing field," of providing 'all the facts' for cross examination during both the Commission's Preparatory Sessions (August 13 - 26)⁶⁰⁷ and Technical Hearings (August 27 – September 6). Specifically, in addressing, arguing and carefully stating the rainbow of technical points and facts researched, forwarded and communicated to the Commission by The Friends of the Fraser Valley. I.e.:

We sent you a letter dated the 8th of August 1990, directing your attention to a number of issues raised in the public meetings but not scheduled to be dealt with in the technical hearings. The issues covered such topics as real estate values, insurability, air quality and health concerns. These issues have been ignored and do not form a part of these proceedings.⁶⁰⁸

The Friends' concerns about this format also included the Commission's appointment of technical witnesses, an example of which was addressed by Friends chairman Al Vickers in his August 8, 1990, ten-page letter to David Anderson:

I would like to point out that in a telephone conversation of July 30, 1990, Mr. Fogarassy advised me that the Friend's request for representatives from Jackson and Mist, Oregon had been turned down and that a "neutral" Mr. Lingley [from the state Department of Natural Resources] would be replacing them. It goes without saying that the representation from the two U.S. storage sites is fundamental to our position and must not be discarded. In addition, Mr. Lingley's biased comments in a July 20, 1990, article of the Bellingham Herald hardly qualifies him as being an impartial and, therefore, credible witness.

⁶⁰⁶ Friends of the Fraser Valley news release, September 4, 1990. Included as Appendix 1 in the November 1990 *Appendices to the Special Report on Allegations of Witness Tampering at the Commission Hearings*.

⁶⁰⁷ Exceptions noted: preparatory material and interviews were also conducted during the Technical Hearings phase on August 28, on August 29, and on September 5.

⁶⁰⁸ Ibid.

Transcripts were made of the Commission's August 27 to September 6 Technical Hearings. However, and oddly, there was little to no narrative information or proper summaries found in the Commission records of the Preparatory Sessions. Only lists and rough notes were found. If someone had taken proper notes of these preparatory telephone and face-to-face



meetings, they were not included in the Commission records. There was no information to identify which members of the Commission had conducted the preparatory interviews, and how and when that information was provided to Commission counsel and to the Commissioner.

Province of British Columbia	<i>Tony</i>	Service Contract (General)
HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA, represented by the Minister <u>of Provincial Secretary</u> (the "Province") at the following address: <u>Inquiry Commission into Fraser Valley</u> <u>Petroleum or Gas Exploration</u> <u>c/o Ministry of Provincial Secretary</u> <u>Victoria, B.C. Postal Code: V8V 1X4</u> <u>Parliament Buildings</u>		MINISTRY CONTROL No. _____ FILE No. _____ PROJECT _____
THE PROVINCE AND THE CONTRACTOR AGREE TO THE TERMS CONTAINED IN SECTIONS 1 THROUGH 23, INCLUSIVE, ON THE REVERSE SIDE OF THIS DOCUMENT AND IN THE SCHEDULES OUTLINED BELOW (THE "SCHEDULES"):		AND <u>Josef A.S. Fogarassy</u> (the "Contractor") at the following address: - - - <u>Jubilee Avenue</u> <u>Victoria, B.C. V8R 4N4</u>
SCHEDULE "A" – SERVICES (a) SERVICES Reporting to Mr. David Anderson, Commissioner, provide the following services: <ul style="list-style-type: none"> . assisting in defining technical issues; . conducting literature surveys of technical questions; . advising on specialized technical consultants; . preparing questions of technical consultants or technical witnesses; . generally advising the Commissioner and the Commission Council on technical matters. 		

As David Anderson's second Commission operations anchor, government hired Josef [Tony] A.S. Fogarassy on May 11, 1990, as sole technical advisor. His contract was later extended to end on December 31, 1990. The young petroleum geologist's contract required: "assisting in defining technical issues; conducting literature surveys of technical questions; advising on specialized technical consultants; preparing questions of technical consultants or technical witnesses; generally advising the Commissioner and the Commission Council on technical matters."

Fogarassy sourced out and interpreted petroleum technical science journals, telephone-contacted and corresponded with local, national and international experts, and organized their appearance as technical witnesses. He visited numerous petroleum sites and met with company representatives in Europe and North America.

Fogarassy was educated at the University of B.C. His 1990 resume states that he obtained a Bachelor of Science in Geological Sciences in 1983, and a Master of Science in Geological Sciences in 1989. His M.Sc. thesis “involved assessment of petroleum potential of the Queen Charlotte Islands, B.C., and adjacent offshore areas.” In 1990, when serving with the Commission, he was also studying his first year of Law at the University of Victoria. As a young aspiring petroleum geologist, his resume states he had been employed with:

- Calgary-based Canadian Superior Oil Ltd from 1983 to 1984. (“Petroleum exploration in Alberta and Saskatchewan involving resource appraisal of Crown, competitor and company land holdings.”)
- Calgary-based Shell Canada Ltd. from 1984 to 1985. (“Petroleum exploration, offshore Nova Scotia. Responsibilities included administrative and technical onsite geologic assessments and evaluation of potential oil and gas reservoirs.”)
- Tripoli Libya-based Mobil Oil Libya Ltd. from 1985 to 1987. (“Petroleum exploration and development geology involving budget forecasting, mineral rights acquisition, and partner/service contract negotiations and agreements. Management and technical administration of Libyan staff. Extensive report writing and oral presentations.”)
- the Geological Survey of Canada from 1988 to 1989. (“Summer student. Geological mapping in southeast British Columbia and the Queen Charlotte Islands.”)
- and Calgary-based Chevron Canada Resources Ltd. in 1989. (Summer student. Beaufort Sea-Mackenzie Delta hydrodynamics study; Amauligak, Tarsiut, Kopanoar and Nipiterk fields.”)

Government hired Victoria City-based Robert J. Tweedie on May 10 as Commission secretary.

Reporting to Mr. David Anderson, Commissioner, the services to be performed are: responsible for the administration of the Commission including: coordination of the Victoria and Langley area offices; responsible for communications to interested parties, municipalities, and other government agencies; responsible for coordinating the administration of public and technical hearings.⁶⁰⁹



⁶⁰⁹ Commission Service Contract.

Government hired Victoria City-based Gillian Bass on May 22 as office manager.

As Secretary/Office Manager to the Commission in the Victoria Office, reporting to the Commission Secretary and/or the Commissioner, responsible for: providing secretarial services including drafting and typing of correspondence and reports, dictatyping, word processing, filing and general reception of visitors by telephone and in person; providing accurate and timely financial records and reports, processing of accounts, expenditure monitoring and control, maintaining petty cash fund, ordering equipment and supplies; coordinating meeting arrangements, travel itineraries and booking for flights and accommodations; other general administrative duties relating to the business of the Commission.

Shortly after Energy Minister Jack Davis' May 3rd announcement for a Public Inquiry, The Friends strategized how to tackle the looming technical-based process. They intuitively understood and vocalized that David Anderson would ultimately recommend exploration and drilling in his final report, despite what people were hoping about his purported 'green' or 'environmental' side. As far as The Friends were concerned, it was all pretense, a farce. Everything they had fought for over the last two and half months was now at stake. They had to study and understand relevant facets of the petroleum trade. They began to role up their sleeves to prepare for the next phase of the big battle.

One of The Friends, Glen Breaks, a skilled full-time carpenter and woodworker by trade, began diligently exploring and researching the strange world of underground gas storage and the technical business of 'upstream' gas. Because of his personal interest in the matter, mixed with his sense of duty and dedication in solving and understanding mechanical and carpentry problems, it was an assignment that would lead and take him more and more away from his business trade, a process that would severely test both him and his family.



Abbotsford Times, February 6, 1991

Friends of the Fraser Valley spokesman Glen Breaks and others have pledged to maintain their strong opposition to natural gas exploration in the Fraser Valley.

Larry McCallum photo

The internet was at its infancy in 1990 with a handful of websites. It was of no assistance. There were no cell phones, only land-line telephones, an answering and a fax machine. As Breaks began to dig in, he found himself making seemingly innumerable long-distance phone calls to the United States where almost all North America's underground gas storage areas are located, resulting in paying hefty telephone bills.

There were libraries and newspaper sources. There were people who passed on information, word of mouth. There was a tape recorder. He slowly accumulated, read and sifted through books, technical and petroleum reports, and published and peer-reviewed petroleum and geology papers. He interviewed petroleum engineers, state administrators, and affected citizenry. He was digging up the threads, analyzing and connecting the dots, asking hard questions and following the scent. He became an informed citizen on the mechanics of the petroleum industry. He shared his insights with his Friends of the Fraser Valley colleagues.

Paul Dickinson, one of The Friends and a practicing dentist, imparted some of the group's research findings in a June 6, 1990, letter published in the Langley Advance, a copy of which was included in Binder No. 1 of the four-binder Anderson Commission newspaper clippings collection. Dickinson's provocative letter appeared six days before the Commission's first public hearing of June 12 in Aldergrove, where industry presented its side of the story and where citizens asked industry hard questions.

The recent well blow-out on May 29th in Heidelberg Mississippi, that killed one person and sent a number of others to hospital, shows the other side of the story and should serve to remind us that drilling operations can be far from controllable.

The Friends of the Fraser Valley, to which I am proud to belong, have worked up a research file on well disasters over the last few decades. The following is a partial list of documented incidents which took or seriously threatened human life.

I doubt that the petroleum industry's current information campaign would have much to say to the public about any of these disasters: Williamsburg, Michigan, 1973; New Norway, Alberta, 1973; Denver City, Texas, 1975; San Fernando Valley, California, 1975; Drayton Valley, Alberta, 1977; Lac La Biche, Alberta, 1977; West Pembina, Alberta, 1977; Cessford, Alberta, 1977; Blueberry River Indian Reserve, B.C., 1979; Edson, Alberta, 1986; Kenai, Alaska, 1987; and Heidelberg, Mississippi, 1990.

It is our sincere hope that this list will not have to be extended in the next few years to include such names as Delta, Langley, and Abbotsford.

The more we research the literature on underground storage of natural gas, maybe the more fundamental goal of the petroleum companies in the Fraser Valley, the more we find tis relatively new technology to be at least disturbing, if not more so, than exploration drilling.

How can creating vast unnatural pressure areas under peoples' home not be risky? ... Everyone realizes that the population of the Fraser Valley is going to increase. If the petroleum industry's plans are risky for us now, with the passage of time they can only become more so.

Local dentist Paul Dickenson was a keen listener. While sitting in on the first day of the Commission's technical hearings on August 27, 1990, in the City of Delta, carefully following Commission counsel's cross examination of B.C. Ministry of Energy oil and gas policy staff, he learned that the Fraser Valley petroleum consortium, the Fraser Valley Gas Project, had been misinforming the public. The Ministry of Energy staff witness revealed that B.C. Hydro's November 1982 originating agreement with the Jackson Prairie underground gas storage facility in western Washington State as a winter back-up supply for the Lower Mainland argument, did not function as B.C. government representatives and B.C. Gas Inc. had

stated to the public: i.e., “[Energy Minister Jack] Davis said this [underground natural gas storage] would offset the province’s current reliance on the Jackson Prairie underground storage facility at Chehalis, Washington [State].”⁶¹⁰ This story is narrated in Section 19 of this chapter, *The Big about Storage at Jackson Prairie*.

URGENT NOTICE!

ANOTHER ASSAULT ON ALR LAND!

The oil and gas industry is planning a major drilling exploration operation in your area. If this exploration for natural gas and oil is permitted, here are some of the risks and hidden costs you and your community will have to take on.

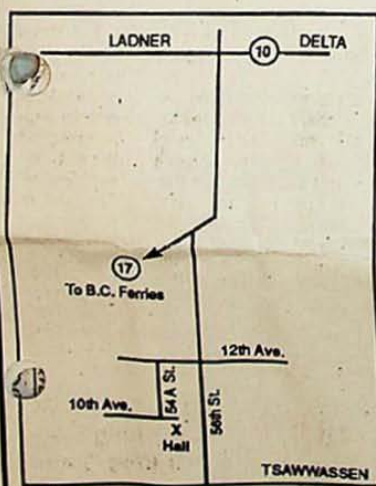
- ✓ A COMMUNITY-WIDE DISASTER EVACUATION PLAN IN THE EVENT OF RUNAWAY GAS WELLS, EXPLOSIONS, FIRES OR UNCONTROLLED RELEASES OF POISONOUS GASES.
- ✓ POTENTIAL GROUNDWATER CONTAMINATION WHICH COULD DIRECTLY AFFECT WATER SUPPLIES TO THOUSANDS OF HOMES IN THE DELTA, WHITE ROCK, SURREY, LANGLEY AND MATSQUI AREAS AND ALL COMMUNITIES EAST OF ABBOTSFORD.
- ✓ FORCED ENTRY AND OCCUPATION OF PRIVATE PROPERTY.
- ✓ NO MUNICIPAL POWER TO ENFORCE LOCAL COMMUNITY BYLAWS OVER THE OIL AND GAS INDUSTRY.
- ✓ PROPERTY DEVALUATION.
- ✓ INCREASED TRAFFIC, AIR AND NOISE POLLUTION.

EXAMPLE OF
WORST CASE
SCENARIOS.

Friends of the Fraser Valley believe it is too late, totally unnecessary, and environmentally irresponsible to permit a high-risk exploration program in the densely populated Fraser Valley.

If you feel the same as we do, please write Premier Bill Vander Zalm immediately and urge him to stop this needless assault on our safety, privacy and environment before it is too late!

Address of the Premier: The Hon. William N. Vander Zalm, M.L.A.
Premier
Government of the Provincial of British Columbia Parliament Buildings
Victoria, B.C. V8V 1X4



For further details of this B.C. Provincial Government plan, please attend the public information meeting scheduled in your area.

MONDAY, MAY 14, 1990, 7:30 p.m.

Kinsmen Community Hall

5410 - 10th Avenue, TSAWWASSEN, B.C.

Friends of the Fraser Valley
(A non-political group of concerned citizens)
260 - 256th Street, Aldergrove, B.C. V0X 1A0

⁶¹⁰ Province pleads for petroleum development in Fraser Valley, the Province, November 2, 1986.

Paul Dickenson also wrote the following, published in the Langley Times on September 5, 1990, the day after The Friends' announcement that the group was boycotting the Commission:

In your Sept. 1, 1990, edition, Marty Warman reports that the Friends of the Fraser Valley are to make a presentation on Thursday, Sept. 6 before the provincial commission of Inquiry into Fraser Valley oil and gas drilling. This, at one time, was proposed, but it is no longer the case. Using a variety of excuses and rule changes, the commission has rejected or excluded all the evidence that the Friends were prepared to present to the technical hearings. A great deal of time, effort and expense went into preparing for this presentation. The rejection has been most bitter, and under the circumstances seems extremely strange. We cannot understand why the people who live in the Valley and will have to live the rest of their lives with the burdens that these so-called experts, are conspiring to impose on us, should be excluded from any part of the hearings. Please let your readers know that we will not be presenting on Thursday. We sincerely attempted to present a case for the residents of the Valley in this part of the proceedings, but we were blocked.

5 – 14. The NIMBY (Not in My Back Yard) Sticky Label

*“I wouldn’t want an abattoir in my back yard.”*⁶¹¹

*The wolf thought it was pretty funny, but Uncle Wiggily didn’t when he happened to look over the fence and saw the Wolf coming. “Oh dear!” murmured Mr. Longears. “What shall I do to fool the Wolf? This is going to be an adventure all right, but I never thought I’d find one in my own back yard. What can I do?”*⁶¹²

*“There’s an elephant in my back yard,” an excited voice told the police desk sergeant today.*⁶¹³

*I don’t know what legend has come down in feline folklore about my back yard, but that Elysian piece of property seems to attract the most depraved tomcats in the Greater Vancouver area.*⁶¹⁴

*“What I want to know is how the sewage is turned into powder,” said Councillor Clifford Thomas. “If it uses heat is there a smokestack involved? If there is, I certainly wouldn’t want it in my back yard.”*⁶¹⁵

*If David Anderson lived in the Fraser Valley and an oil company found natural gas in his back yard, he would have questions that he would want answered.*⁶¹⁶

A week before the first public hearing on June 12, and when Commission Counsel MacAdams was in deep discussion with David Anderson about *Interim Procedural Rules*, the Abbotsford Times published an interview with Commissioner Anderson. In reporter Mike Youds’ article, Anderson referred to the “NIMBY syndrome,” indirectly equating it with, and sticking that label upon, The Friends of the Fraser Valley.

He says the strong backlash against drilling is partly a reaction to growth and development in general in the central valley.

“Land use in the valley is changing. There is heavy urbanization. This (gas exploration) is symbolic of the whole exercise and to some it’s the last straw. It’s tied up with a fundamental growth question which is perhaps a little larger than this commission.”

“We’ll sift through the legitimate concerns but there is a nimby (not in my backyard) syndrome. I think it is legitimate to fight for one’s property, but I don’t think it’s fair to do so at the expense of everyone else.”

Anderson’s NIMBY remark was inappropriate for a standing ‘independent’ Commission. It not only showed his cards, his leanings, but it may have also been strategic. The attribute was fuel for the fires on both sides of the table.

⁶¹¹ *People sign two petitions, for and against: Council perplexed by Abattoir issue*, the Windsor Star, December 10, 1934.

⁶¹² *Victoria Times Colonist*, July 30, 1931.

⁶¹³ *It’s an Elephant and no Pink One*, the Ottawa Journal, March 17, 1949.

⁶¹⁴ *Dissolute Tomcat*, the Vancouver Sun, February 21, 1953.

⁶¹⁵ *Turns down sewage unit*, the Windsor Star, January 21, 1956.

⁶¹⁶ *Anderson has concerns*, Langley Times, June 6, 1990.

Anderson's attribute most likely originated from Judy Lindsay, the Vancouver Sun newspaper business columnist, in her May 17, 1990, provocative titled article, "Drilling faces NIMBY syndrome." In Lindsay's carefully crafted column which supported the petroleum industry, she focusses her attention on Friends' chairman Al Vickers:

Vickers says the activity could contaminate ground water and blow-outs endanger people and animals. He paints a picture of the oil and gas industry as powerful and arrogant, the companies riding roughshod over individuals and their property.

Also at work here is the NIMBY syndrome: Not in my backyard. Two of the three drill sites are in the

southeast quarter of Langley district, and area of hobby farms and estates. Vickers, for instance, owns three horses and three cows, but is employed off the farm.

These people have a wonderful lifestyle to protect. But how damaging would a gas drilling operation be?

In answering her own question, Lindsay interviewed an unidentified manager of an unidentified wildlife refuge in southern Texas, inside of which American oil giant Conoco operates a "50-year-old oil and gas field."

When I talked to him on Wednesday [May 16], a refuge manager said he was not nervous in the least about Conoco's operations.

I doubt the folk and fauna of the Fraser Valley are more fragile than the whooping crane. The point is that companies routinely drill for gas and operate wells without contaminating groundwater or causing explosions. Those things can happen, but only when the operators don't follow the rules.

Lindsay's rosy-picture-painting of the petroleum industry seemed to fit hand-in-glove with the steady burst of full-page newspaper propaganda messaging advertisements waged by the Fraser Valley Gas Project consortium, which included Conoco Canada.

Drilling faces NIMBY syndrome

Vancouver Sun - May 17, 1990

THREE COMPANIES have joined forces to drill for gas in the Fraser Valley, but they have run into opposition from some valley residents who think any drilling is too risky.

One of the opponents, Al Vickers of Friends of the Fraser Valley, says simply that it is "wrong" to explore in the valley. "It places too many people at risk."

Vickers says the activity could contaminate the ground water and blow-outs endanger people and animals. He paints a picture of the oil and gas industry as powerful and arrogant, the companies riding roughshod over individuals and their property.


It's easy to see why he feels that way. For one thing, you can't prevent a company from drilling on your property; you can only haggle over what the rent will be.

For another, a seismic company chewed up several kilometres of 256th Street in Langley district last year, and it is not yet repaired. That doesn't earn the industry any friends, but Vickers tends to be over-enthusiastic in making his case.

The fact is the company agreed months ago to pay for repairs, but the municipality has not yet done the work.

Although more than 50 wells have been drilled in the Fraser Valley this century, the gas industry is basically unknown to most residents. If they're apprehensive about living near a gas field, well, they haven't had a

J U D Y



LINDSAY

ity to the summer when the birds are up north.

When I talked to him Wednesday, a refuge manager said he was not nervous in the least about Conoco's operations.

I doubt the folk and fauna of the Fraser Valley are more fragile than the whooping crane. The point is that companies routinely drill for gas and operate wells without contaminating groundwater or causing explosions. Those things can happen, but only when the operators don't follow the rules.

Geology suggests there is gas in the valley, but a finding of sandstone alone would be very useful to B.C. Gas, another of the trio. An area of sandstone, which absorbs gas like a sponge, could form a local gas reservoir, which would be more secure than the reservoir the company rents now in southern Washington.

If they find gas, they can drain the field and then use it to store more gas.

Underground storage sites are nothing unusual. There are more than 400 in North America, many in urban areas. They allow a company to buy and store cheap summer gas instead of having to make spot purchases of gas in the winter when it costs much more.

So the proposal has merit, but so has the appointment of David Anderson to conduct a study into gas drilling in the valley. The people in the communities affected are entitled to have their questions answered.

chance to develop a level of comfort.

Also at work here is the NIMBY syndrome: Not in my backyard. Two of the three drill sites are in the southeast quarter of Langley district, an area of hobby farms and estates. Vickers, for instance, owns three horses and three cows, but is employed off the farm.

These people have a wonderful lifestyle to protect. But how damaging would a gas drilling operation or a gas field be?

Consider the whooping cranes. Nearly extinct 50 years ago — just 15 birds were alive then — cranes now number 146. In the last eight years the population has doubled. The whooping cranes winter beside a 50-year-old oil and gas field in southern Texas.

Conoco, one of the companies wanting to drill for gas in the valley, operates that field inside a wildlife refuge but six or seven kilometres from the marshland favored by the birds. The company has to limit its drilling activ-

In response to Mike Youds' June 6th article referring to NIMBY, Aldergrove resident Darlene Sherwin responded in her letter to the editor:

It has been obvious since your attack on Mr. Vickers of Friends of Fraser Valley weeks ago that you see those who oppose gas drilling in this area as extremists and that you have no empathy and likely a great deal of misinformation regarding this issue which you adeptly use to manipulate your readership.

... it is unfair of you to imply, that concerned citizens are only caught up in a so-called nimby syndrome. It is not only the property, livestock and families of F. of F.V. this issue is about -- there is a risk to the entire populace whose ground water, for one thing, is definitely at stake. ⁶¹⁷

Sherwin's criticism of Youds' use of NIMBY-ism was spot on. Petroleum exploration and its life-cycle facilities impact large physical areas and boundaries, well beyond a few 'back yards.'

The "back yard" concept slowly took root in the early 1900s in North America to symbolize, for the most part, a place of 'sanctuary:' "I intend to make my back yard into a small bird sanctuary." ⁶¹⁸ And later: "The delight came from the conviction, after some years of searching the world for paradise, that I'd finally come across it in, so to speak, my own back yard." ⁶¹⁹

A 'back yard' was away from, distant from, and behind the front yard, separated by an urban, sub-urban, or country home or dwelling, the front of which was frequented by any sort of passer by. It was a private place, out of the view of others, in the open air, a place of refuge, away from the proximity of other people and other structures. Alongside a place of sharing that privacy with others, it could also mean a place meant to keep others out:

"I didn't have no business to let them in my back yard. It's my private property," Miller asserted in explaining his stand against the licence men. ⁶²⁰

In the evolution of public consciousness, the 'back yard' concept could mean something else. By extension, "back yard" could refer to a neighbourhood, a city, even an entire nation:

"This is all in a day's work and makes Canada like my own back-yard, she stated." ⁶²¹

"What," asks the astonished Fuehrer, "are those Military Idiots doing in my back yard?" ⁶²²

Imaginative narratives even applied the second war European front battles against the Nazis to a landowner fighting weeds, as used in the title of a May 30, 1942, Vancouver Sun news article, "War comes to the backyard front."

Aside from its literal sense, the "back yard" (or "backyard") became a power symbol, used for instance in a 1962 book published by Doubleday Books by author Arthur Cavanaugh, *My Own Back Yard*, "the story of a Brooklyn Catholic kid who loses his faith." ⁶²³

⁶¹⁷

⁶¹⁸ *A Bird Sanctuary in a Backyard*, the Windsor Star, June 2, 1939.

⁶¹⁹ Jack Scott column, the Vancouver Sun, April 8, 1960.

⁶²⁰ *Dog Licence Troubles*, Calgary Herald, January 6, 1942.

⁶²¹ Airline stewardess speaks to high school press club, The Province, October 28, 1941.

⁶²² *Hitler's Visitors*, the Windsor Star, April 2, 1945.

⁶²³ *Portrait of a Lonely Soul*, Ottawa Journal, April 24, 1962.

Contrary to definitions found on the internet of its origins beginning in the early 1980s, the Not-in-My-Back-Yard-string-of-words term seems to have originated in April 1967 as a title for a television documentary, “Not in My Back Yard.” Sponsored by the citizen group ROAR (Regional Organization for Airways Study), the documentary was broadcast by WTIC-TV in Hartford, Connecticut, “on the battle now being waged by the town of Suffield, to prevent the state from taking a large chunk of its rural and residential land for the expansion of Bradley International Airport.” ⁶²⁴ Six months later, cartoonist Ernie Bushmiller, with his “Nancy” cartoon series syndication, released a cartoon with the title, “Not in MY back yard,” published in at least 30 American newspapers.

It was soon used as standard expression by citizens or organized government when confronting industrial and land use proposals: “As Commissioner Richard T. Dwyer put it: “I wouldn’t want that thing [a TV tower] in my back yard.” ⁶²⁵ ”

By 1979, sociologists had tagged NIMBY in coining a new concept, the “NIMBY Syndrome.” The meaning or definition of syndrome was used by psychologists to portray a ‘behavioral’ activity or a ‘symptomatic’ condition. As a medical term, it may refer to a disorder or a disease. From 1980 onwards, North American newspapers began referring to and using the new terminology, mostly in reference to toxic waste controversies: “The “Not In My Back Yard” syndrome is the curse of the hazardous waste business.” ⁶²⁶

In defence of corporate interests, newspaper editors and columnists would use the new term as a pejorative tool to isolate groups, spokespeople and oppositionists. For instance, town of Smithers-based Interior News editor Bruce Busby, who castigated Telkwa Foundation representative Richard Overstall’s “position” of the influential Alcan (Aluminum Company of Canada) corporation “over its power and smelter programmes” in and south of its instant town of Kitimat: “the position smacks altogether too much of “I’m here, don’t let anybody else in” and the well-known NIMBY (not in my back yard) syndrome.” ⁶²⁷ Or: “I wonder how long it is going to take the NIMBY group to start to try to wreck the grain port at Prince Rupert, the LNG project slated for Port Simpson and the possibility of a coal mine at Telkwa.” ⁶²⁸

Probably the most pernicious of Canadian editorial examples was by Financial Post associate editor Terence Corcoran’s rant in 1989, under the title, “What NIMBYs want is impossible to achieve.”

The NIMBY is the main reason for the current national preoccupation with waste disposal sites and the general regulatory paralysis surrounding all forms of waste processing. Nobody wants to have any part of it.

As a socioeconomic force, the NIMBY could do for the 1990s what the Yuppies did to the 1980s; ruin the decade for everybody else. In some ways, a NIMBY is merely the self-gratifying Yuppie pulled inside out and turned toward the outside world. In short, a NIMBY is often – although not exclusively – a Yuppie with an egocentric social conscience. ⁶²⁹

⁶²⁴ *Special eyes Suffield’s battle on airport plans*, Hartford Courant, April 16, 1967.

⁶²⁵ *TV Tower is planned on Skyline*, San Mateo Times, February 9, 1966.

⁶²⁶ *Toxic waste still makes nasty neighbor*, Vancouver Sun, June 11, 1982.

⁶²⁷ *From the editor: the nimby syndrome*, Interior News, June 2, 1982.

⁶²⁸ Interior News, August 11, 1982.

⁶²⁹ *What NIMBYs want is impossible to achieve*, Financial Post, February 17, 1989.

July 6, 1990

ALLAN H. ROBINSON
Aldergrove, B.C.
VOX 1AO

Mr. David Anderson
Commission on Fraser Valley Petroleum Exploration
#105 - 20611 Fraser Valley Highway
Langley, B.C.
V3A 4G4

Dear Mr. Anderson:

Re: Natural Gas Exploration and Storage in the Fraser
Valley

I am a resident in one of the proposed drilling areas and therefore very concerned over the potential ramifications of the program. I am incensed with the view that has been put forward that residents who are opposed to this program have a "NIMBY" attitude. We have raised legitimate concerns with respect to the safety of ourselves and our livestock and these deserve a fair review. It upsets me greatly to read statements like the ones attributed to Mr. Bob Kadlec, President and Chief Executive Officer of B.C. Gas Inc. in the May 8, 1990, issue of The Province i.e. "Yet some are opposed to it, apparently on environmental grounds. Well, I want to say that that opposition makes no sense." and "Kadlec told shareholders 'opponents of this project are attempting to place unreasonable barriers in our way."

I was interested to read the statement attributed to you in the June 6, 1990, issue of the Abbotsford times "I think it's legitimate to fight for one's property but I don't think it's fair to do so at the expense of everyone else." I hope that this statement can't be interpreted that you have formed a conclusion on this matter prior to hearing all the evidence and representations.

Commission Correspondence Files

Like Darlene Sherwin's response to the Abbotsford News columnist's attribution of NIMBYism to the Friends of the Fraser Valley, a letter signed by "31 individuals" in the Stevens Point Journal newspaper summarized the following about concerns near the town of Stockton in Portage County, USA:

Some might choose to call them NIMBYS, meaning "not in my back yard" with any major county developments, but we would rather salute them for their concern about preservation of our natural resources for future generations. We would also remind them and all our citizens of Portage County that the concern over contamination of ground water does not stop at city wells and 44 percent of our population. We all have the responsibility to use foresight and good judgement in the placement of potentially dangerous county developments.⁶³⁰

⁶³⁰ Open Letter: *County responsible for water protection*, Stevens Point Journal, July 30, 1981.

The case against the application and attribution of NIMBY was well summarized in an OpEd article in the Detroit Free Press by Raymond E. Hayes, “a retired General Motors executive,” the “president of the Village Lake Angelus,” and “a member of Oakland County Citizens Against Toxic Waste:”

I am one of many Oakland County residents who oppose the proposed construction by the ERES Corp. of a hazardous waste disposal plant at I-75 (Chrysler Expressway) and Joslyn Road. In a recent Oakland-Detroit Free Press story, ERES President, Thomas Ross, referred to us who oppose him as NIMBYs (Not In My Back Yard).

Mr. Ross is wrong. We who oppose his plant are NIABY's (Not In Any Back Yard). We believe the ERES toxic waste facility should not be located in any back yard which has the characteristics of the I-75 and Joslyn Road site.

The proposed site is in a populated area surrounded within a two-mile radius by hundreds of homes, businesses, churches, schools and nursing homes. Nearly all residents depend on wells for their drinking water.⁶³¹

⁶³¹ *Don't dump in anyone's back yard*, Detroit Free Press, September 30, 1982.

5 – 15. The Public Hearing Series: the Tuesday, June 12th Opener

*The first meeting on 12 June is designed to allow the three companies involved in the Project Group (Conoco, Dynamic, and B.C. Gas) to explain their proposed drilling program, and what it might lead to. In the month following that meeting, there will be public hearings in approximately eight Fraser Valley communities to inform me of concerns of groups or individuals. These concerns will then be researched, and where necessary experts will be asked for their opinions on the issues raised.*⁶³²

VALLEY 12 WEDNESDAY, JUNE 6, 1990 ABBOTSFORD TIMES

Petroleum hearings begin June 12

By Mike Youds

The commissioner of an independent inquiry into Fraser Valley petroleum exploration says he will recommend a ban on oil and gas drilling in the valley "if the risks are excessive".

David Anderson, a former MP and MLA who has long specialized in environmental protection in the energy sector, was appointed by Energy Minister Jack Davis last month.


The inquiry follows several months of controversy over the provincial government's sale of \$5.5 million in drilling rights to Conoco and Dynamic Oil Ltd. Conoco and Dynamic have since formed a consortium, with distributor BC Gas, to tap suspected reserves of natural gas contained in sediments 2,000 metres below the valley floor.

"If the risks are excessive, the government has said I can include in my recommendations a ban on drilling in any area of the Fraser Valley and that obviously includes all of it," Anderson says. "That's what I'll recommend if that's what I believe."

Some residents of Aldergrove and Langley have strongly opposed the gas drilling. In March they formed a group called Friends of the Fraser Valley to lobby for a complete ban on petroleum exploration. Anderson has met already with representatives of the group and with representatives of the gas industry.

A long series of public hearings on proposed gas drilling in the Fraser Valley begins June 12 in Aldergrove at the Aldergrove Kinsmen Community Hall.

Anderson emphasizes that the inquiry, which has until Sept. 30 to report its findings, will be fully public. The public hearings will be followed by a research phase in mid-summer and final, technical hearings, also open to the public, in September.



"I think it's legitimate to fight for one's property but I don't think it's fair to do so at the expense of everyone else."
— David Anderson

He says the strong backlash against drilling is partly a reaction to growth and development in general in the central valley.

"Land use in the valley is changing. There is heavy urbanization. This (gas exploration) is symbolic of the whole exercise and to some it's the last straw. It's tied up with a fundamental growth question which is perhaps a little larger than this commission.

"We'll sift through the legitimate concerns but there is a nimby (not in my backyard) syndrome. I think it's legitimate to fight for one's property but I don't think it's fair to do so at the expense of everyone else."

He adds, however, that the commission's recommendations could be far-reaching in scope and area.

While only three drilling sites have been proposed, in south Aldergrove, Langley and Delta, the commission will consider all possibilities.

"What we want to do is avoid people being surprised by subsequent events. We want to make sure we flush out various scenarios."

Drilling rights have been owned throughout the valley, including extensive holdings in Abbotsford by a U.S. firm, for many years.

A veteran of efforts to get the oil industry to clean up its act, Anderson nonetheless admits that he is not a specialist in gas drilling. A researcher has been hired for technical background.

"I rather suspect also that the government believes anybody completely conversant with the industry might not be as responsive to criticisms," he says.

He says that the petroleum industry is not as monolithic as some people think and that various sectors have conflicting interests. Yet, as the former commissioner investigating oil spill hazards on the B.C. coast, he remains a critic of the oil industry.

"I fought them for 20 years and the Exxon Valdez proved I was right."

He adds, however, that the Exxon spill represented only two per cent of all oil spilled into the ocean in 1989.

NAME	
NOM	ALDERGROVE – MEETING Jun 12

Almost six weeks had passed since government's announcement of a Commission Inquiry when the first scheduled public hearing forum was held on June 12 at the Kinsmen Community Centre in Aldergrove, an event advertised in local newspapers. Unlike the following nine 'open' and informal public hearing meetings, the format of the meeting's first half was different and formal.

The June 12 hearing date and format was pre-planned by Commission counsel Doug MacAdams, part of his June 4 draft of Interim Procedural Rules. He referred to it as "Phase One: Initial Hearing."⁶³³ Here, he

⁶³² Letter from David Anderson to Mrs. Pat Gray, June 6, 1990.

⁶³³ Commission counsel MacAdams referred to the June 12, and subsequent public meetings of June 18 – July 11, as "hearings:" "Phase Two ... will consist of community hearings to be held at various locations..." The author of this report is using the word "hearing," or "hearings," as this was the technical language adopted by Commission counsel at the outset. However, David Anderson in his final report referred to them as "public meetings" (in Chapter 14, Public Participation, and in Appendix D). In the Acknowledgements section of Anderson's report, he also refers to them as "public meetings" in the same sentence as he refers to the other "technical hearings." On at least five occasions in his report, Anderson waivers from this usage: "Groundwater contamination from natural gas escaping from an underground storage facility was a major matter of

Fraser Valley Petroleum Exploration Commission. Expected Commission Timetable

The Commission was established by Order in Council 695/90 in early May of 1990 under part two of the British Columbia Inquiry Act. The sole commissioner, Mr. David Anderson, was sworn in on 8 May 1990. Mr. Anderson has a reporting date of 30 September 1990.

The expected timetable of the Commission was discussed in May with representatives of the Fraser Valley Gas Project, Friends of the Fraser Valley, and local elected officials. It consists of five separate stages, described below.

Stage One: Initial Hearing

The initial hearing is designed to allow representatives of the Fraser Valley Gas Project to explain their proposed drilling program and the implications of gas or gas storage discoveries. It will take place in Aldergrove on 12 June 1990.

Stage Two: Identification of Issues

This stage of the Commission's work is to supplement the terms of reference given to the Commissioner by the government with the views of the public on issues of concern. It will last until the second week of July, and will consist of eight public meetings in various Fraser Valley communities, the first of which will take place on 18 June 1990, in Clearbrook. Submissions from the public will also be received at the Commission's offices during this period.

Stage Three: Research and Analysis of Issues

The purpose of this stage is to carry out the appropriate literature searches and hold discussions with experts on the issues. This stage will identify which issues will require further analysis at the technical hearings. Some of the research work of this stage is already underway by Commission staff. It is expected that this will last until the end of August.

Stage Four: Technical Hearings

The technical hearings are designed to obtain the views of experts on the various issues identified and researched in the preceding stages. The technical hearings will be public, and are expected to begin in late August or early September.

Stage Five: Summations

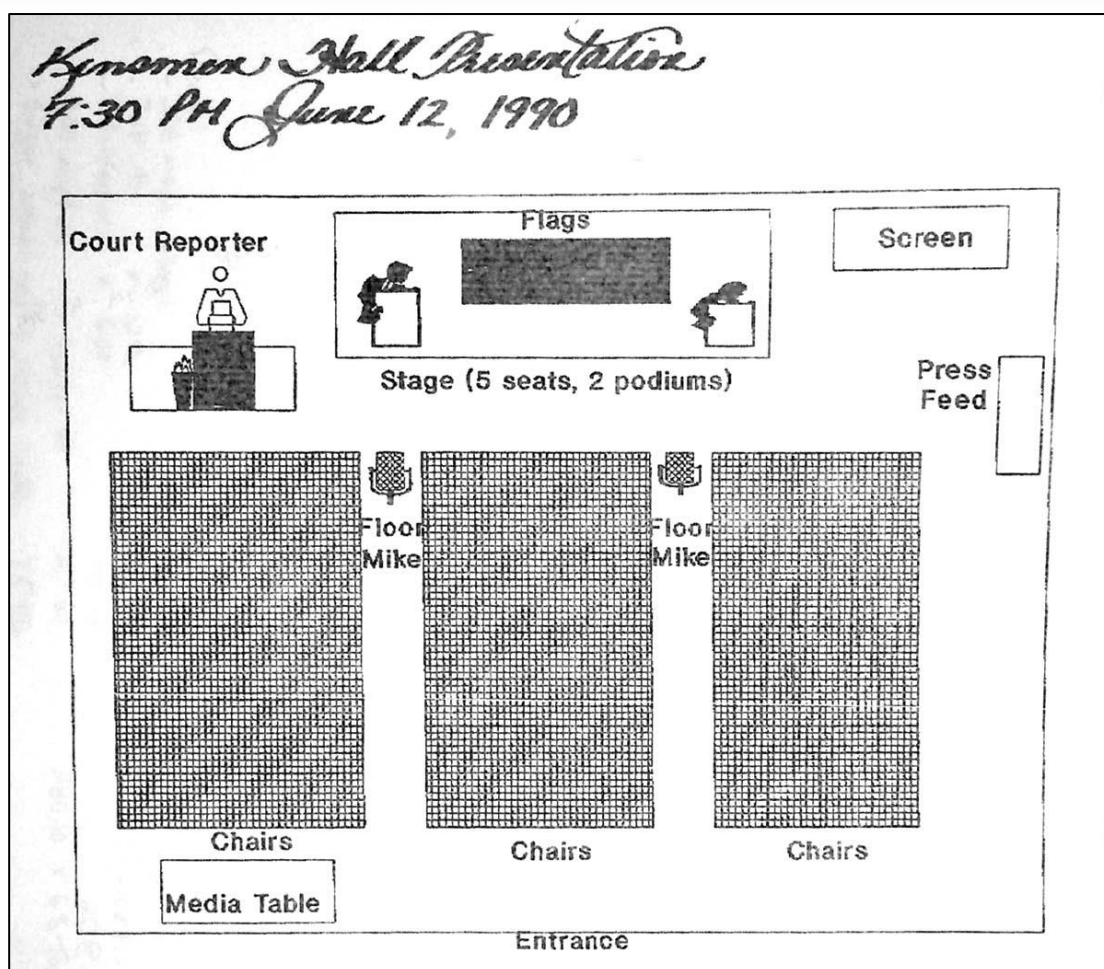
At this time those with opinions and views on the contents of the Commissioner's report, and the recommendations which he should make to the Government, are invited to make summary presentations to the Commissioner. This is expected to take place in mid September.

concern **at the public hearings**, and was carefully studied by the commission, which has concluded that while the risk exists, it is very slight." (Page 23) And: "**During public hearings** in the Fraser Valley, a frequently asked question was why storage was preferable to expanding the pipeline facilities ..." (Page 45) The other three examples are found on pages 46, 85, and 188.

wrote, would be a “presentation of proposals” by the Fraser Valley Gas Project, and “if time permits ... it is anticipated questions of a factual nature will be received from the public.” However, MacAdams had private reservations about allowing the public the opportunity to ask questions to industry speakers at the opening event:

I am not sure of the purpose on June 12 of having floor microphones. Is it intended to have questions from the floor on June 12? Are we prepared to have speeches and statements of position and the like on June 12, which is what floor mikes are, in our culture, designed to encourage? I do not for a moment say questions and comments are out of place on June 12. But I think careful thought is needed as to what is the intention.⁶³⁴

5. I am not sure of the purpose on June 12 of having floor microphones. Is it intended to have questions from the floor on June 12? Are we prepared to have speeches and statements of position and the like on June 12, which is what floor mikes are, in our culture, designed to encourage. I do not for a moment say questions and comments are out of place on June 12. But I think careful thought is needed as to what is the intention.



⁶³⁴ Douglas MacAdams to Robert Tweedie, *Re: Layout for meeting of June 12, 1990*, June 6, 1990.

David Anderson's Script for 12 June. Draft

Welcome to meeting. Recognition of any local political figures.

Quick Background on Commission.

Description of procedure to be followed today.

- A. Introductory Commission Business.
- B. Presentation By Fraser Valley Gas Project people.

A. Commission Business.

Introduction and Identification of Documents. Introduce Rob Tweedie, Commission Secretary. RT identifies document and assigns a number. DA agrees.

Documents : 1. Terms of Reference.
2. Schedule of Meetings.
3. Draft rules for meetings. Introduce Doug MacAdams, Commission Counsel, to identify document.

DA invites MacAdams to explain rules.

DA announces that comments will be received on draft rules in future, but not now. MacAdams/Tweedie announce they have a three dozen copies only, but more will be available at Commission offices.

DA gives addresses of Commission Offices, and introduces Elizabeth Svendsen (Langley) Gillian Bass (Victoria), and Tony Fogarassy (Research, no fixed address).

Then B, Fraser Valley Gas Project presentation.

DA introduces Cam Avery, Representative of BC Gas, and asks him to introduce Fraser Valley Gas Project presenters.

At end of presentation, DA thanks presenters and Cam Avery, and mentions that Community (Cable) TV will repeat coverage (date? Name of Cable TV system?). Also video cassettes for those who were not here will be in office.

Again mentions that this is not time for debating presentation, but for questions of a factual nature only.

Requests questions from floor.

Ends Questions, Thanks all for coming, announces next meetings, reminds public of schedule in their hands.

Revealed during the second half of the hearing, the microphoned question-and-answer session was the first and only opportunity for citizenry to put questions to the petroleum consortium representatives, questions and answers now part of the Commission's legal proceedings.

During Commissioner Anderson's introductions, he acknowledged the attendance of former Social Credit Party Langley District Riding MLA, Bob McClelland.⁶³⁵ Described in chapter four of this report, *The Fourth Wave*, McClelland was a former Minister of Energy, Mines and Petroleum Resources, who had given a "surprise announcement" on March 6, 1981, opening the Fraser Valley to oil and gas exploration. In 1981 McClelland also advocated offshore oil and gas exploration along B.C.'s coastline. Premier Bill Bennett would switch McClelland's Cabinet portfolios three more times. Following Premier Bennett's sudden announcement in May 1986 that he was quitting, by early August four more Ministers were also quitting, including McClelland who resigned his Cabinet post on August 11, four days after new Premier Bill Vander Zalm announced that he would be legislating new conflict-of-interest guidelines.

In a September 5, 1986, statement to the press, McClelland, who would receive a government pension of \$44,000, said "it's time to move on and make some decisions on a new career for myself." On the same day of his announcement, Inland Gas's (soon to be B.C. Gas Inc.'s) president and ceo Robert Kadlec and his fellow board directors hired McClelland as vice president and general manager of Trans Mountain Petroleum Ltd., the subsidiary of Trans Mountain Pipe Line Co. Ltd.


"It's a job I've dreamed of for about five years ever since I was in [as Minister of] energy," he said. "It's a very major career opportunity that has developed and because of talk of conflict of interest I don't want to have even the appearance of it. That's why I'm stepping down completely."⁶³⁶

⁶³⁵ "In 1982, the New Democrats nick-named McClelland "Broadway Bob" after he spent \$1,278 of the public's money during an overnight trip to New York in 1980, including \$373 to the Broadway musical, Sugar Babies. McClelland, who was the Energy Minister at the time of the trip, refused to disclose that he was in New York on business. McClelland was labor minister when then-premier Bill Bennett brought down his controversial restraint program in 1983. He came under heavy fire for abolishing the human rights branch and commission and replacing it with a council appointed by Cabinet." (Source, Vancouver Sun, Aug. 11, 1986, "McClelland third minister to quit.") In an "indiscretion" dubbed the Top Hat affair in late 1985, when Labour Minister, McClelland "used his government credit card to pay a Victoria escort service," a scandal narrated in the newspapers for years following. Top Hat Productions was the name of an escort service operated by Arlie Blakely. McClelland was divorced at that time.

⁶³⁶ *McClelland resigns seat in legislature*, Vancouver Sun, September 6, 1990.

The Province
September 7, 1986

**TRANS MOUNTAIN
PIPE LINE COMPANY LTD.**



Robert H. McClelland

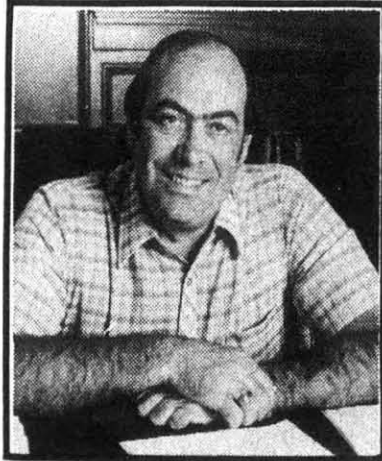
Mr. Richard B. Stokes, President & Chief Executive Officer of Trans Mountain Pipe Line Company Ltd. is pleased to announce the appointment of Mr. Robert H. McClelland to the position of Vice President, General Manager of the Company's wholly-owned subsidiary Trans Mountain Petroleum Ltd.

For the past 14 years Bob McClelland has been a member of the Legislative Assembly of the Province of British Columbia. Since 1975 he has been a member of the Executive Committee holding office as Minister of Health, Minister of Energy, Mines & Petroleum Resources, Minister of Labour and Minister of Industry & Small Business Development during which time he was the Minister responsible for the British Columbia Development Corporation.

Trans Mountain Petroleum Ltd. is involved in joint venture gas and oil exploration and development with Canadian Hunter Exploration Ltd. and Inland Gas & Oil Ltd. in the Provinces of British Columbia, Alberta and Saskatchewan.

THANK YOU

Bob McClelland



For the honesty, integrity
and consistent energy with
which you have served
Langley as our MLA.

We wish Denise and you
every success as you embark
on yet another exciting
and challenging career.

Langley Salutes You

A tribute to Bob McClelland Evening

Sponsored by the Langley Constituency
Social Credit Party

will be held on

Friday, October 3rd
at

Newlands Golf and Country Club

Cocktails at 6:30 p.m. and Dinner at 7:00 p.m.

We would be very pleased to have you attend.

Please call Edith or Marjorie
at **534-3613 or 534-5975**
to reserve your tickets.

Langley
Advance
September 10, 1986

(7-1)



COMMISSION OF INQUIRY INTO PETROLEUM EXPLORATION IN THE FRASER VALLEY

The Provincial Government has appointed Mr. David Anderson to carry out a wide ranging inquiry into the implications and risks of drilling for gas, oil or gas storage in the Fraser Valley.

The terms of reference for the Commission include the proposed exploration program of the Fraser Valley Gas Project group and any future developments that might result from a discovery.

They extend to:

- possible risks to public health.
- the adequacy of existing regulations governing drilling.
- areas which should be excluded from drilling activity.
- methods of avoiding or minimizing the risks and impacts of drilling, production and gas storage.

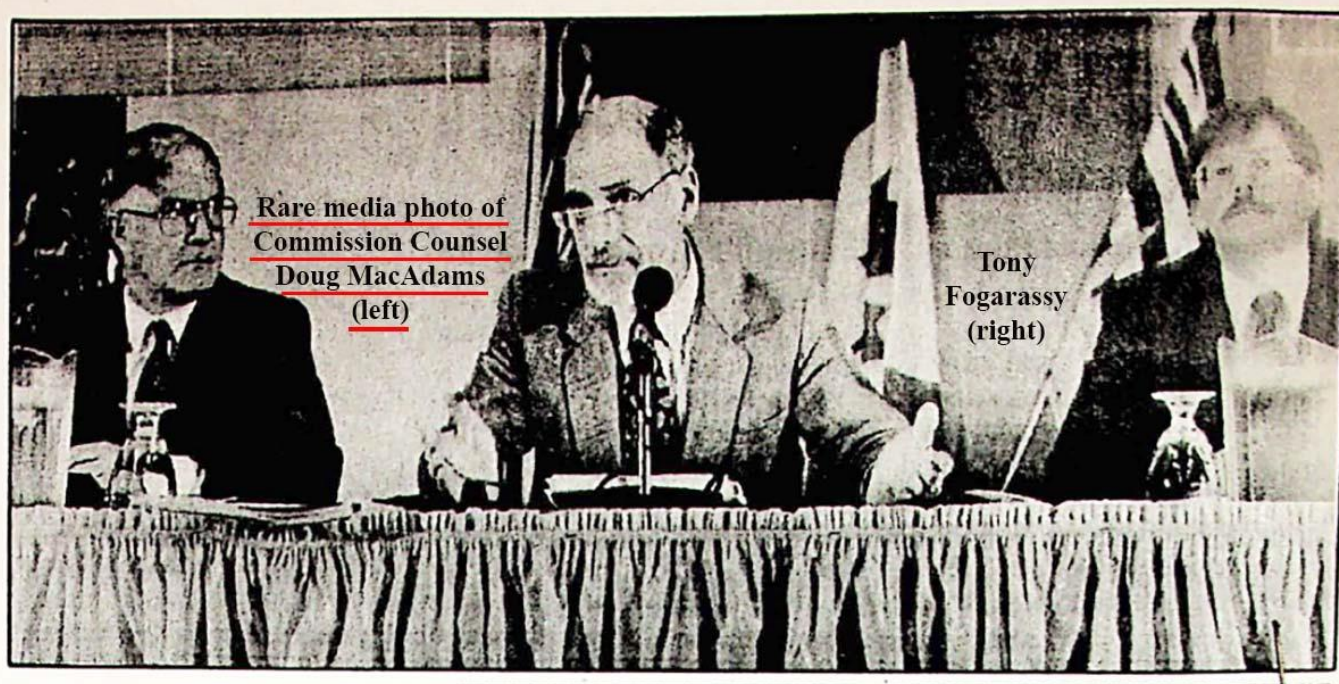
An initial meeting to hear the Fraser Valley Gas Project group explain the proposed drilling program will be held on June 12, 1990 at 7:30 p.m. in the Kinsmen Community Centre, 26770-29th Avenue, Aldergrove. Further hearings in other Fraser Valley communities to hear public concerns will follow. Time and locations of these meetings may be obtained from the Commission office.

Those wishing to make statements, submit evidence or be placed on the mailing list of the Commission are asked to contact the Commission office. Everyone with views on these issues is encouraged to take part.

**David Anderson, Commissioner,
Commission on Fraser Valley Petroleum Exploration
#105-20611 Fraser Hwy.
Langley, B.C. V3A 4G4**

**Telephone: 533-0059
Fax: 533-5451**

In B.C. Gas's 1989 annual report, it states that B.C. Gas owned 47.1% of Trans Mountain Pipeline, and stated that its subsidiary, Trans Mountain Petroleum, "is involved in oil and gas exploration and development in Canada." Perhaps in his retired capacity from government, McClelland's private duty was to report back to the Energy Minister Jack Davis for a personal account of the June 12th evening's proceedings. In his official capacity under the employ of B.C. Gas he would definitely advise his bosses of the same.



Rare media photo of
Commission Counsel
Doug MacAdams
(left)

Tony
Fogarassy
(right)

The Commission gave the Fraser Valley Gas Project consortium the floor to make its petroleum pitch to a Hearing audience of "more than 150 people."⁶³⁷

The first segment took about an hour's time. Cam Avery, B.C. Gas Inc.'s director of corporate communications, gave an overview presentation. Avery's delivery was

followed by Gas Project spokesman Bob Spring who stated, "we intend to go beyond compliance with the current [Provincial] regulations." The final presentation was made by John Thrasher, B.C. Gas Inc.'s underground gas storage planning director.

Slide #1
THE FRASER VALLEY
GAS PROJECT

MY NAME IS CAM AVERY. I AM DIRECTOR OF CORPORATE COMMUNICATIONS WITH BC GAS. WE'RE THE FOLKS WHO DELIVER NATURAL GAS TO YOUR HOMES AND WE ARE PARTNERS IN THE FRASER VALLEY GAS PROJECT WITH CONOCO CANADA AND DYNAMIC OIL.

Slide #4
FACTORS INCREASING DEMAND
• Environmental Regulations
• Conversion Incentives
• Natural Gas for Vehicles

INCREASED USE OF NATURAL GAS IS TODAY'S ANSWER TO DECREASING THE DAMAGE TO OUR ATMOSPHERE. ALL THESE FACTORS WILL INCREASE THE DEMAND FOR NATURAL GAS DRAMATICALLY IN THE COMING DECADE.

⁶³⁷ *Secure gas supply aim of drilling*, Langley Times, June 16, 1990.

<p>Slide # 51 A FULLY DEVELOPED EMERGENCY RESPONSE PLAN</p>	<p>AMONG THE SPECIAL FEATURES OF OUR FRASER VALLEY EXPLORATION PROPOSAL IS A FULLY-DEVELOPED EMERGENCY RESPONSE PLAN. THIS WOULD NOT BE INCLUDED IN AN ESTABLISHED EXPLORATION AREA SUCH AS FORT ST. JOHN . . . BUT IS REQUIRED BY THE MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES IN A POPULATED AREA SUCH AS THE VALLEY.</p> <p>OUR EMERGENCY RESPONSE PLAN HAS BEEN WIDELY USED IN ALBERTA . . . AND WILL BE SET UP AND TESTED PRIOR TO DRILLING HERE IN THE VALLEY. IT INCLUDES AN EVACUATION PROCESS FOR ALL RESIDENTS WITHIN ONE KILOMETRE OF THE WELL, IN THE UNLIKELY EVENT OF A DRILLING EMERGENCY. OPERATING WITHIN AN 8 TO 10 HOUR WARNING PERIOD, IT WOULD ALLOW FOR THE EVACUATION OF RESIDENTS AND SOME LIVESTOCK.</p>
<p>Slide # 52 A LASTING BENEFIT FOR THE COMMUNITY</p>	<p>THE EMERGENCY RESPONSE PLAN REFLECTS CONOCO'S WILLINGNESS TO BE FULLY PREPARED AND RESPONSIBLE . . . AND WE BELIEVE MOST RESIDENTS WILL FEEL MORE COMFORTABLE KNOWING THESE PREPARATIONS HAVE BEEN MADE. ONCE DEVELOPED, THE PLAN WILL BE TURNED OVER TO LOCAL OFFICIALS AND CAN BE USED FOR THE LASTING BENEFIT OF THE COMMUNITY IN THE EVENT OF A NATURAL DISASTER SUCH AS A FIRE, FLOOD OR EARTHQUAKE.</p>

After industry's business suit and tie presentations, the floor was opened for public questions. Oddly, Commissioner Anderson failed to ask members of the audience, who came to the microphone, to identify themselves.

Langley Times newspaper reporter Al Irwin wrote two versions of the event, versions circulated in at least three other newspapers.

During about an hour's question period following the gas group's presentation, the audience expressed a variety of concerns. They included the possibility of encountering deadly sour gas, danger of a blowout, destruction of ground water, harm to habitat of herons and deer, evacuation of farm animals in event of leakage, dangers of pipes bursting in an earthquake, and noise and excessive traffic during drilling.⁶³⁸

⁶³⁸ *Gas exploration plan gets its first airing*, Abbotsford, Sumas & Matsqui News, June 20, 1990.

Irwin summarized other questions and concerns raised by the hearing audience.

Regarding one man's question about earthquakes rupturing pipes to the wells or underground storage facilities, [Bob] Spring said Conoco has extensive experience in California in an area experiencing one earthquake per year on average, and yet there has never been a rupture or leakage caused by that.⁶³⁹

Asked if the initial three wells proposed were just the start of a proliferation, [Bob] Spring said there was only about seven or eight potential locations here and some of those would be dry.

B.C. Gas engineer John Thrasher told the crowd the firm is not seeking three or four small gas storage facilities, because cost of developing them is prohibitive.⁶⁴⁰

One member of the audience expressed skepticism about the government selling the mineral rights for some \$5 million, then casting itself in the role of protector of the public interest. He asked commissioner David Anderson if he was authorized to examine this "conflict of interest."⁶⁴¹

Not narrated in newspapers, the second segment of the June 12 hearing began with an explosive, angry question imparted by passion from an unidentified male resident with a strong Irish or Scottish accent. His name was John Howarth, identified in a later meeting video. The question, directed toward the petroleum consortium panel, was filled with tension, and you could literally hear a pin drop in the assembly hall.

Questioner: Can you give me a guarantee that you will not poison or pollute the groundwater which I drink? Yes or No? Yes or No!

Commissioner: Mr. Avery. Who would like to answer that? Mr. Spring.

Bob Spring: We will take every precaution ...

Murmur from the audience, and the questioner again: Yes or No?

Bob Spring: Yes.

Questioner: You can guarantee?

Bob Spring: Yes.

Questioner: Put that down in writing right now.

Bob Spring: Okay.

Questioner: Because, if you do poison my water, I poison your water. Now, if there is any RCMP, come and arrest me. Because that's what I am going to do. Your Mr. backup (?) has already sent the RCMP to my house because I answered: what do I think? He got scared. He thinks I'm a gun man. But I'm an honorable little soldier. You poison my water and I'll come and I'll poison yours. And there's no doubt about it.

⁶³⁹ *Securing supply*, Chilliwack Progress, July 4, 1990.

⁶⁴⁰ *Gas exploration seeks supply at good price*, Surrey Leader, June 27, 1990.

⁶⁴¹ *Secure gas supply aim of drilling*, Langley Times, June 16, 1990.

Later in the question-and-answer session, Friends' chairman Al Vickers directed the following to Bob Spring:

Vickers: The very first person who spoke on the other side of the room managed to get this from you. You said that you would be prepared to guarantee water supplies. Is there any way you can put that in writing for all of us?

[Clapping is heard from the audience.]

Commissioner: Bob. If you would like to answer that, please go ahead.

Bob Spring: We are guaranteed to go out and we will protect your water supply. We've had this discussion with ... [murmurs from the audience] ... yes, it is guaranteed.

Vickers: Well Bob, we will pursue the question probably, what would you call it, in the court of public opinion. But anyway sir, you have alluded to the fact that you would put a guarantee under our nose with respect to water rights and water supplies. And I am pleased to hear that. And I would hope the chairman of the Commission would duly note that his company, rather, Mr. Spring's company, has offered through the voice of Mr. Spring that would happen.

The third person at the standing microphone, a woman, asked a question about drilling mud contents, and imparted a troublesome account she had with a drilling contractor.

Questioner: I worked along with a drilling company. I took log, sampled all the cores as they went down. This gentleman from the drilling rig told me, he said, oh, we won't contaminate your water, we don't want to spoil the environment, or anything like that. He said, we have a special formula that we put down when the drills get stuck, sometimes at 30 feet, sometimes at 40, sometimes at 70. So, this is fine. He reached over, got his container, started to pour his solution down the drill. I smelled diesel. I grabbed the container from him. I says, no way! Is this your special container, your special fluid, special liquid, whatever? He said, yes. I said, that's diesel. Well, he said, you know how it is, he said. So, he poured diesel down. He got one gallon down. I stopped him, and I said, you either use water or quit drilling.

Commissioner: Thank you for your question. Bob. Do you want to reply to that?

Bob Spring: That's a good point. There are a wide variety of different kinds of drilling muds that have been used in the past. Some of them are petroleum-based. [Spring later referred to petroleum-based muds as "invert muds as they are known here."] All of the muds we intend to use here in the Fraser Valley are fresh water / clay muds. We will not use petroleum substances in that mud.

Questioner: That's what he guaranteed to us. He said he had a special solution. He said it wouldn't contaminate anything, and yet he used diesel. He had a very nice talk. He used a lot of psychology on us. And he said, yet he had to use diesel.

In reporter Al Irwin's article was a question put to Commissioner Anderson by Langley Township Alderman Aubrey Searle, "one of four aldermen at the hearing," concerning the Commission's Terms of Reference, Schedule C-2: "what level of risk are you being asked to determine is acceptable for this community?"

Searle: My concern, sir, is item H. You read that item H, “methods of avoiding, reducing or mitigating risks or impacts to acceptable levels, and of increasing benefits to residents, to the Region and the Province, including suggested changes to regulatory practice necessary to insure safe, prudent and environmentally acceptable activity.”

Slide # 21
DRILLING AND RECLAMATION
COMPLETED IN 3 - 6 WEEKS

Slide # 22
East Delta site (ground)

Slide # 22A
East Delta site (air)

Slide # 23
Campbell River site (ground)

Slide # 23A
Campbell River site (air)

Slide # 24
Murray Creek site (ground)

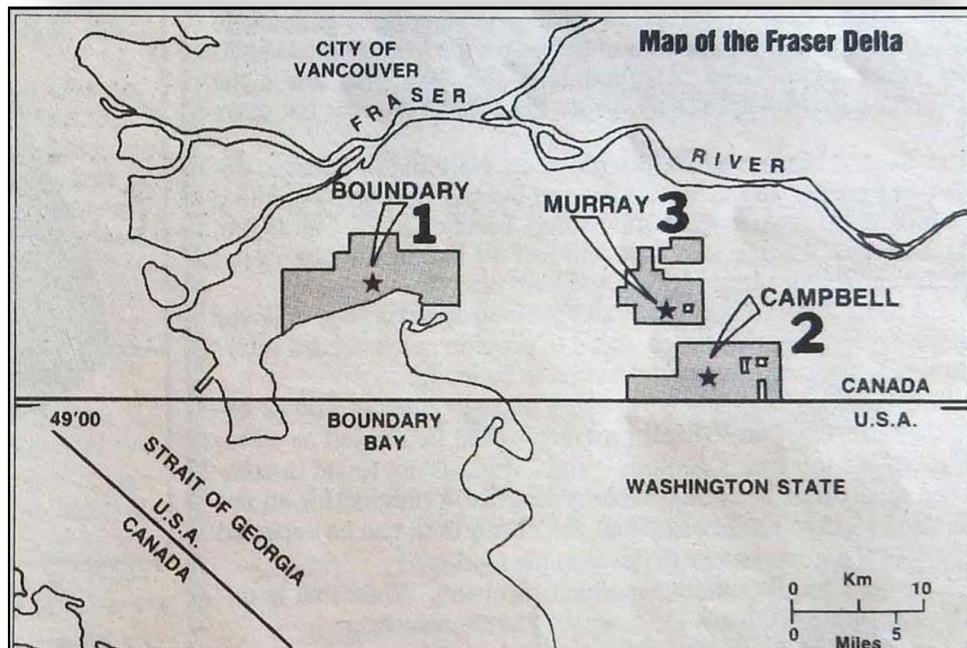
Slide # 24A
Murray Creek site (air)

THE PROPOSED DRILLING LOCATIONS ARE AT EAST DELTA, CAMPBELL RIVER AND MURRAY CREEK . . . AND I'LL BRIEFLY DESCRIBE EACH SITE.

THE FIRST IS AT THE SOUTH END OF 104TH STREET IN EAST DELTA, NEAR THE EDGE OF CORN FIELDS. THIS WELL WOULD BE DRILLED IN THREE TO FOUR WEEKS . . . AND WOULD REACH A DEPTH OF APPROXIMATELY 1,600 METRES (5,200 FEET).

THE SECOND LOCATION IS NEAR THE INTERSECTION OF 248TH STREET AND ZERO AVENUE, IN THE CAMPBELL RIVER AREA OF LANGLEY TOWNSHIP . . . AN AREA CURRENTLY USED FOR PASTURE. THE WELL HERE WOULD BE DRILLED IN FIVE TO SIX WEEKS, REACHING AN APPROXIMATE DEPTH OF 3,200 METRES (10,500 FEET).

THE THIRD LOCATION - MURRAY CREEK - IS NEAR THE INTERSECTION OF 232ND STREET AND OLD YALE ROAD IN LANGLEY TOWNSHIP. IT'S AN AREA NOT CURRENTLY USED FOR AGRICULTURE. PLANS HERE CALL FOR THE DRILLING OF A WELL IN FIVE TO SIX WEEKS, AGAIN TO AN APPROXIMATE DEPTH OF 3,200 METRES (10,500 FEET).



One could construe from that direction that the Inquiry is asked, if indeed there is a risk, then is it your responsibility to determine methods of reducing that risk? And that's a concern, because what level of risk are you asked to accept as being acceptable to this community? And it seems to me sir, that there is a paradox in that item. Item H seems to be directing you if you find something wrong, correct it, but proceed anyway. And I have a concern about that.

Commissioner: As far as the import of the word "acceptable" in the first line of sub-paragraph H, I think you are quite right. That is a value judgement upon which people will differ. And in particular when you talk of benefits as they do to the region, the residents, and the Province you are dealing with different groups who may have differing views. And it will not be an easy task ... I certainly think it is not easy to define that word "acceptable," and I could not agree more. I think that is going to be the crux of this Commission's activity.

Anderson comforted Alderman Searle's concerns with the following:

I think that you should also note that I have the power to recommend that any area of the Fraser Valley be exempted from drilling. Now this in fact could be all the entire area north of the Fraser River and the entire area south of the Fraser River. It could be all the Valley, in other words. So, there is that in the Terms of Reference as well, which I think should be noted. It is not predicated upon accepting drilling, regardless. It is not just a question of mitigating risk and having drilling going on regardless. I could recommend areas of exclusion to drilling.

Anderson made a similar statement in the Langley Times a week previous about this Terms of Reference powers to exclude drilling in the Fraser Valley, adding, "I've made recommendations that weren't popular with the government, but it may be impossible to convince the hardened critic."⁶⁴²

Al Vickers approached the floor microphone.

Vickers: My last question to Mr. Spring. It is my understanding that if natural gas supplies are found under our feet here that provincial regulations state that you will be allowed to put one gas well per square mile in the municipality. Is that true?

Spring: That is all we require. One gas well per square mile.

Vickers: Fine. I would like the people in this community to know that the number of square miles in the Langley municipality is 117. I think it would be fair to say that we can expect at least a hundred if extrapolated to a logical conclusion.

I would also like to ask you Mr. Spring, is it also correct that if you should find oil in your exploration program, that is, commercial supplies of oil, that the number of wells per square mile goes up from one to sixteen. Is that true?

Spring: First of all, on the gas wells. 117 won't ever happen. What I said in the presentation, each of the accumulations is likely to be three to five square miles in area. So, that would be three to five gas wells. Secondly, with oil wells. The normal placing for oil wells is one per quarter mile or four. The sixteen that you are talking about is for a much shallower, and much more high-tech yield, or a tertiary recovery methodology. None of that would ever be envisaged here in the Valley. And, if oil were found here in the Valley, we would have to go through very expensive facilities in order to

⁶⁴² *Anderson has concerns*, Langley Times, June 6, 1990.

drill all of those wells from a central location, and not impact on the more-dense well spacing. We would keep it down to the one or two wells per square mile.

Vickers: That is wonderful news. However, you failed to mention that at the Aldergrove Chamber of Commerce meeting the other day. You mentioned there were nine specific things that would be changing from the northeast [B.C.] fields when you come down here because it is populated. That was not one of them.

Spring: Which? The oil?

Vickers: Yes. I can only conclude that if that is the case, then I would like the people of this community to know that if there were, if the rules from up north were applied, with respect to oil drilling here in our wonderful Langley municipality, you can anticipate ... in excess of 1,800 oil wells. Anyway, that's the way the numbers game works.

Spring: If the oil were that widespread, we would have found it a long time ago before this.

Vickers: We are here expressing our concerns. ... I have a question to the first speaker.

Commissioner: Mr. Avery.

Vickers: Mr. Avery. Sir. Since you are part of the consortium with respect to the drilling in the Valley, and therefore you are part of the disaster evacuation plans, I anticipate that all of you, and you not being an exception to this, have anticipated potential durations for an evacuation. Let me give you an example for a case in mind. There was a case in Michigan State in the 1970s when a whole community was evacuated for an excess of one month. There are other examples, that I have at home, where villages and communities like this are evacuated for several days, in fact even a week at a time. It is quite obvious that during any extended duration, period of evacuation, there will be a subsequent disruption in business activity. Consequently, there will be a tremendous loss to the business community. I was just wondering if you have done any research in your consortium with respect to that, since you say you have anticipated the need of all your customers, particularly those in business activities. Have you set any guidelines for these?

Avery: First of all, the question as whether we had done any research on this. Since you have raised this at a number of meetings, we have very thoroughly researched that old Michigan case. I think Bob is most familiar with it, if you would like to hear about it.

Vickers: I have never raised that question before, sir. But anyway.

Spring: Certainly. We have looked at the Michigan blow-out that you have referred to. And it's a very specific geological situation that cannot take place here in the Fraser Valley. And secondly, it was due to operator error, and the report clearly stated that that will not take place here.

Audience: [Restless murmurs]

Avery: Mr. Commissioner, if I may. Just to back up on to deal with his second question. We will be responsible for whatever levels of compensation that are required for whatever period of evacuation might be required under such circumstances.

Al Vickers' "I have never raised that question before, sir" statement was a response to Cam Avery's joust, as Avery, most likely embittered that The Friends were responsible for the government's interfering

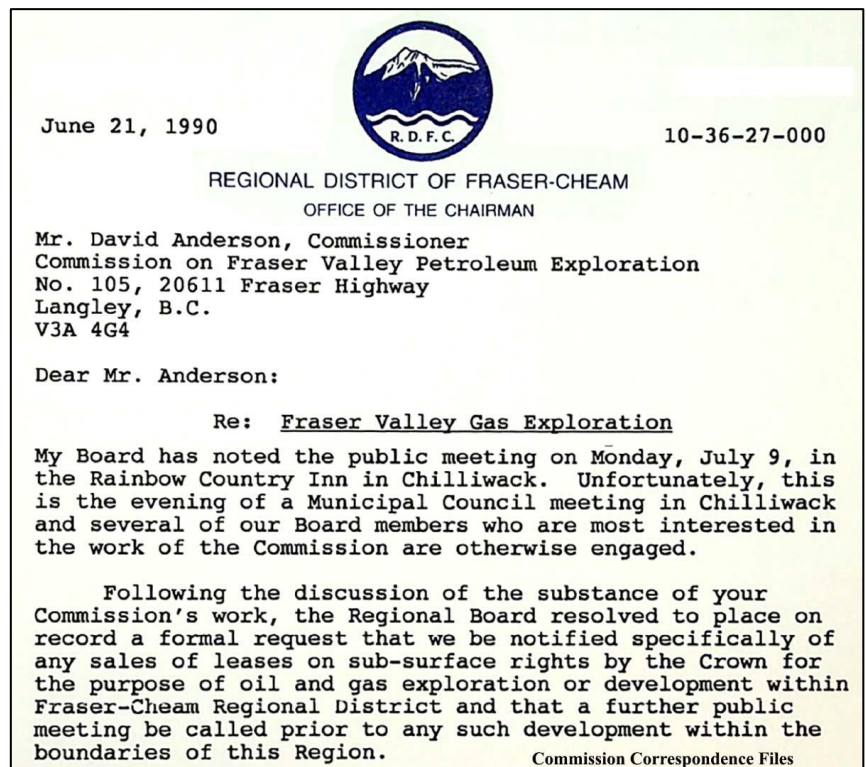
Inquiry, was very likely casting an aspersion towards Vickers with the audience. This was the first time The Friends had mentioned the Michigan event publicly.

The significant “Michigan blow-out” event is one that occurred in 1973 due to underground gas migration. Two formal reports were generated in 1973 and 1974 about Amoco corporation’s blow-out. A photocopy of the October 1973 report, “A Report on the Williamsburg Gas Eruptions,” had originally been provided to the Commission by Friend’s member Ray Addington at the July 11, 1990, hearing in Aldergrove (see Section 18 below, *July 11, 1990: The Final Public Hearing*, for Addington’s presentation). That report was mistakenly entered as Exhibit C-28 during the September 5, 1990, technical hearings. The subsequent October 1974 lengthy report, referred to as Exhibit C-28, “*An Analysis of the Amoco State Whitewater ‘E’ 1-22 Well as the Cause of the Natural Gas Eruptions at Williamsburg and Acme, Michigan in April 1973,*” was in fact listed as a report received by the Commission and presented on August 24, 1990, during the Preparatory Technical session phase of the Commission, part of Mark C. Nida’s⁶⁴³ afternoon testimony. Nida later appeared before the Commission on September 5, 1990, during the technical hearings.

An unnamed male delegate from the Fraser-Cheam Regional District Board came to the microphone stating to Commissioner Anderson that he was confused about the Commission’s intentions relating to the upcoming hearing in the City of Chilliwack. He wanted to know why constituents in the far eastern part of the Fraser Valley should be concerned about the proposal for three wells to be drilled in the areas of Aldergrove, Langley and Delta, areas physically distant from Chilliwack: “Specifically, I want to ask you whether there are any proposals to drill north of the [Fraser] River or east of the Vedder Canal?” After the question

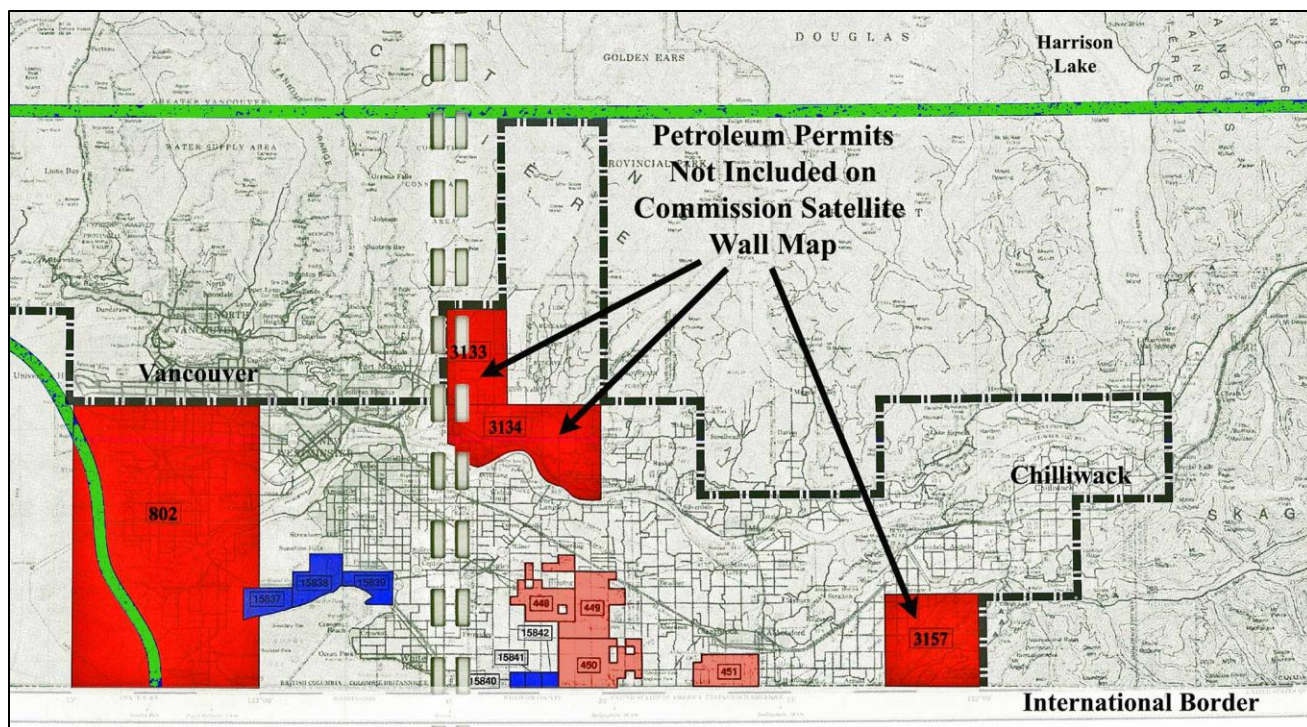
Anderson’s voice became distraught and irritable on the audio recording. He then summarized from the government’s Terms of Reference the physical boundaries of the Commission’s responsibilities, ranging from the Sunshine Coast, down to the U.S. border, and across to the upper Fraser Valley to the town of Hope, and pointed to a satellite map hanging on the wall of the auditorium showing those boundaries. He said: “it is obvious that I don’t expect someone’s going to come up with a drilling proposal in the next six weeks or eight weeks about that area.”

What Anderson failed to inform the audience was the existence of a petroleum permit / tenure located in the eastern part of the Fraser Valley near and south of the City of Chilliwack, and what the potential of



⁶⁴³ Mark Nida teleconference. Mark Nida’s biography states: “I have been with the Michigan Public Service Commission staff since May 1983 and worked on production, gas proration, pipelines, and gas storage projects.”

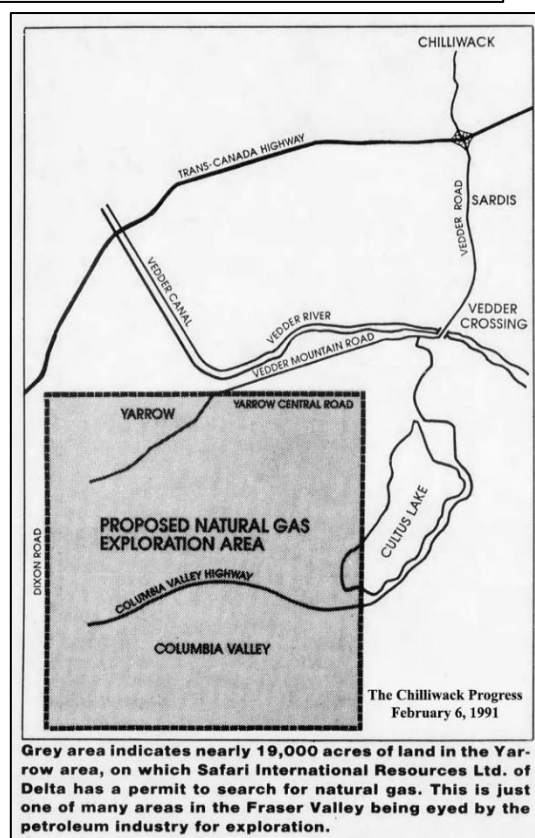
that petroleum interest may ultimately have as a relevant point of concern for the Regional District and the City of Chilliwack. Anderson failed to inform the Regional District representative about that concern because it appears as though the Ministry of Energy had not provided his Commission with the proper map information showing all the permit tenures.



After the June 12 public meeting, Friends of the Fraser Valley members Al Vickers and Paul Dickinson scrutinized the Fraser-Cheam Regional District delegate's concerns about petroleum exploration boundaries and Commissioner Anderson's incapability to inform the delegate. They raised the issue at the June 18 hearing in Clearbrook, summarized in Abbotsford News reporter Mary Warman's June 20, 1990, article, "Friends of the Fraser Valley want full disclosure of Valley holdings."

Al Vickers ... said the commission should be making a greater effort to advertise the boundaries of the study area – virtually from Sechelt to Hope and south to the U.S. border.

Aldergrove resident Paul Dickinson said residents of the Upper Fraser Valley, Chilliwack and Mission may not realize the extent of the holdings by a second consortium: Canadian Hunter Exploration Ltd., Epic Resources, and Optima Energy Group. These companies may be waiting patiently on the sidelines



Grey area indicates nearly 19,000 acres of land in the Yarrow area, on which Safari International Resources Ltd. of Delta has a permit to search for natural gas. This is just one of many areas in the Fraser Valley being eyed by the petroleum industry for exploration.

before proceeding with their plans, he added, calling on the chairman to press for full disclosure before the Inquiry is concluded.

“Find out what this other consortium has in mind,” he encouraged. “People in Abbotsford and the rest of the Valley may be misled to feel it’s someone else’s problem when it may not be.”

Anderson said he thought it would be difficult for the commission to penetrate the thoughts of a “Howe St. promoter”⁶⁴⁴ but said the second consortium has extensive holdings north of the Fraser River and east of Abbotsford. “There are other leases that could be described as quite extensive,” Anderson said, with “at least the equivalent amount of acreage” as the more-widely known consortium of B.C. Gas, Conoco Oil Co. Ltd. and Dynamic Oil Ltd. with access to more than 6,000 hectares of residential property and farmland in the Central Fraser Valley region.

A point of fact omitted by Commissioner Anderson in the news article was that B.C. Gas Inc. was also partner of the second consortium, or to be more precise, involved in both consortiums. As already explained, B.C. Gas was the sole corporation with majority holdings of petroleum permits and leases in the Fraser Valley.

At the July 9th public hearing in Chilliwack, Al Vickers summarized the same points:

Vickers: I would like to say the following. That in the Chilliwack Progress [newspaper], from July the 4th, here is a quote from one of the gentlemen tonight who belongs to Conoco [Bob Spring]: “Natural gas exploration in the Fraser Valley is not expected to extend to the vicinity of Chilliwack District, according to an official for one of the exploration companies.” You are going to be disappointed, Sir [Commissioner Anderson]. They are not coming here. However, six days earlier in the Sardis Times it says: “McClean Oil & Gas holds the drilling permit to a thirty square mile area just south of Yarrow Road, in the south-west corner of the District of Chilliwack. The permit is good until 1994.” Now, they are totally opposite positions. And that is no mistake by the oil industry.

And I would like to close by saying that Mr. Spring’s quote goes as follows, and this really bothers me, and I would like the Commission to know that it bothers the people and The Friends of the Fraser Valley too: “The people in the Yarrow area need not fear that their

Chilliwack Times
June 26, 1990 44 Pages Vol. 6 No. 21 Circulation 23,871
Serving Chilliwack, Abbotsford, Sardis, Vador, HO

Yarrow gas drilling site kept quiet

By Chris Campbell

A Calgary based oil company has been keeping a watchful eye on an independent inquiry currently looking into Fraser Valley petroleum exploration, hoping the outcome may help them to drill in Yarrow.

McClean Oil and Gas holds the drilling permit to 30 square-miles of land just south of Yarrow Rd., in the southwest corner of the District of Chilliwack. The permit is good until 1994.

According to a Ministry of Petroleum Resources fact-sheet, this permit gives the company the “exclusive right to explore for petroleum and natural gas within their boundaries.”

Fraser-Cheam Regional District director of planning Peter Cave said that despite Anderson’s protestations that the inquiry is only about three wells, he thinks the results will have “far reaching political effects” that may reach Chilliwack.

When informed by the *Chilliwack Times* about the permit held by McLean Oil and Gas, Cave said that Anderson had failed to mention it to him when confronted at a public meeting in Aldergrove on June 12.

“I was wondering why Anderson had avoided the issue. You know, I shouldn’t have to find these things out from a reporter. Why aren’t they providing us with the proper information?” he said.

At a regional district meeting June 19, Cave had more harsh words about the commission and their handling of the Aldergrove public meeting on June 12.

“I found it quite perplexing. I left unable to decide what the meeting was about,” he said.

“As the night wore on, people seemed more confused than enlightened.”

⁶⁴⁴ Similar to the “Wall Street” phrase, “Howe Street” refers to the former Vancouver Stock Exchange.

way of life will be affected in any material way by these exploratory efforts,” he stated. Now he’s assuming they are not going to be here. But they are in our area. And clearly if you are in our area the corollary of this is that our life and lifestyle will be seriously affected. And the industry has admitted it.

Because of the pressure put on the Commission by The Friends to provide the public with full information about all petroleum leases in the Fraser Valley, Commission researcher Tony Fogarassy had government forward the Commission the proper information. Commission records reveal that the Ministry of Energy faxed the Commission seven pages on July 4, 1990, four pages of which summarized all the petroleum lease and permit data. The information, later included in the Commission’s final January 1991 report (Map 9 and Appendix I), showed a total of 16 leases and permits. One of the recent Class “A” permits granted to McLean Oil & Gas Ltd. by the Ministry of Energy was issued on March 1, 1989, covering an area of 7,607 hectares in the vicinity of Chilliwack City. Government had quietly issued the permit to McLean Oil seven months before it issued petroleum permits in the Fraser Valley to the two consortiums on October 25, 1989, as narrated earlier in Section 6, *The October 26, 1989, Bidding Process Results*. The Regional District and its delegate, however, knew nothing about the McLean permit!

Unaware of McLean Oil’s nearby petroleum permit, the chairman of Regional District of Fraser-Cheam sent Commissioner Anderson a letter on June 21st stating the following:

My Board has noted the public meeting on Monday, July 9, in the Rainbow Country Inn in Chilliwack. Unfortunately, this is the evening of a Municipal Council meeting in Chilliwack and several of our Board members who are most interested in the work of the Commission are otherwise engaged.

Following the discussion of the substance of your Commission’s work, the Regional Board resolved to place on record a formal request that we be notified specifically of any sales of leases on sub-surface rights by the Crown for the purpose of oil and gas exploration or development within Fraser-Cheam Regional District and that a further public meeting be called prior to any such development within the boundaries of this Region.

There are members of our Board and citizens within Fraser-Cheam who have a general interest in the scope of the Commission’s work relating to the exploration program and natural gas storage within the Fraser Valley. However, our principal concern is that we have the opportunity to discuss specific projects if and when the oil companies show an interest in areas such as Chilliwack or Kent. Please include this request for a further public meeting in the event of a proposed project in our Region as part of the formal record of your Commission.

In addition to the McLean Oil permit, there were four large Class “A” permit blocks granted to Epic Resources, issued from April to July 1987, covering a total of 25,067 hectares in areas north of the Fraser River, extending from Coquitlam City in the west to Mission City in the east!

The Anderson Commission did not have the complete lease and permit boundary information as a public wall-map exhibit at the first and eight additional public hearings. Hats off to The Friends for taking a stand to help expose the Commission’s sloppy work and deficiency.

According to Commission records, the proper map with petroleum permit information was eventually shown at the final public hearing on July 11th. Anderson included the following revised comments in his introduction to the audience about the inclusion of a new map display:

“Adjacent to it is a map which we did not have a month ago, a map which gives the permit, lease, and license areas of the Valley, and the explanation of licenses, leases and permits is in the top left-hand corner. You will note there that there are chunks of the Valley, both to the west and the east, which are also under permit. So that is the reason that this Commission, from the start, attempted to get to other communities away from this specific area of the three drilling sites which the Fraser Valley Project would like to drill on.”

An unidentified male speaker had three questions near the end of the June 12th hearing session:

Questioner: I have three questions, two of them, the first two are in response to what appears to be fairly easy assurances that have been offered by the representatives from the oil industry here tonight. Assurances that there will be no groundwater contamination. And assurances that there is no sour gas.

With respect to the first question, I have a relative who recently retired from the civil service in B.C. who was with the Water Rights Branch. And I was quizzing him about the aspect of groundwater contamination. Specifically, whether there have been any cases proven in favour of the complainant, of groundwater contamination. And he stated, categorically, that there were no cases in B.C. where groundwater contamination, or even lower levels of groundwater, have been proven. And that is because the Courts seem to take the stance that what happens underground cannot be proven without a shadow of a doubt. It could be a coincidence from some other source, some other cause. Since the oil industry is so willing to make these assurances, could they give us some more direct evidence as to how secure they feel in giving these assurances. In other words, what are these assurances worth to us tonight? Or do we have to wait for court cases to determine whether or not this liability can be pinned on the oil companies, and that they then will be liable for damages? That's the first question.

And the second question relates to it. What evidence can you present to this group, or to future meetings, that there is in fact not a single chance of sour gas? Does that exist?

Commissioner: Three questions. Bob.

Bob Spring: First of all on your questions about groundwater. In order to establish that the groundwater has not been disturbed, and in order to provide a record of before and after, we have committed to a program that we will test all of the water wells within a certain radius of each well site, before the drilling and after. And that will establish a record of groundwater quality and groundwater quantity. And if there is any disturbance in that you don't have to go to the courts to get that fixed. As I said, even if you don't believe that we are responsible for that the Ministry can seek damages from us by taking over the well and have access to our assets.

Questioner: Excuse me. You really didn't answer the question.

Bob Spring: Yes.

Questioner: Has there been any cases that you know of in B.C. where evidence has been found in favour of the complainant, that is, that groundwater has been disturbed and that recompense was paid?

Bob Spring: I have no knowledge, for myself, of where groundwater was disturbed.

Questioner: You're saying that groundwater has never been disturbed as a result of drilling activities?

Bob Spring: I have no knowledge myself of groundwater being disturbed due to drilling activities in the Province of British Columbia.

Questioner: And that is the sum-total assurance to us, that ...

Bob Spring: That has nothing to do with assurances. I say we are going to take a wide range of technical concerns into this and preventative measures to protect your groundwater. We will test it before, during and after and assure that your groundwater is fully preserved. We are going through much greater methods that are currently in use in the regulations.

Questioner: So, if I am to understand you correctly, you are going to test the wells before drilling happens ...

Bob Spring: Um hum [yes].

Questioner: And if there is any change whatsoever in the quality of the water, or the volume of the water, you're accepting a full liability for that change?

Bob Spring: Yes.

Questioner: You will not go to court and try to ...

Bob Spring: If we are responsible for it, of course. [At this point, there is a noticeable editing alteration of the audio tape, however brief or lengthy of a moment]

Audience: [Laughter]

Questioner: There you go!

This to-and-fro between the questioner and Bob Spring about liability and the courts concerning linked groundwater contamination from petroleum operations is a remarkable and significant moment in the Commission's proceedings. It doesn't appear as though this thematic bridge would be crossed again in the remainder of the Commission's public and technical hearings, namely an opportunity by citizenry to directly question industry on sensitive subjects while in attendance of both Commission counsel MacAdams and Commissioner Anderson, the latter of which was granted quasi-legal powers under the *Inquiry Act* as judge and jury.

In the decades to come, and during that very time, citizenry in the United States and Canada would experience great difficulty and nasty hardship with petroleum corporations and government about this thorny groundwater contamination issue, with the result that the courts would almost always impose and resort to settlement restraint upon complainants through gag orders, namely confidentiality agreements. The horrible and financial difficulty of legally wrangling with industry through the courts and ultimately

forced into being gagged would allow a petroleum corporation the consequent freedom to mount its blood-soaked horse and go somewhere else where “we get to do it again down the street.”⁶⁴⁵

The opener June 12th Anderson Commission hearing was videotaped, two copies of which were found in the Commission records. Anderson stated in his introductions that his Langley Commission office would have a copy of the videotape for the public to watch and listen to there.

A June 6, 1990, memo by Karla Mebs,⁶⁴⁶ the Gas Project consortium’s hired public relations point person, states that “two video cameras to record for archival purposes / future presentation” were prepared for the meeting. The event was also recorded by a clerk stenographer from Chilliwack City-based Ogston Wells Reporting.

I think the court reporter at the June 12 session should be between the Commissioner and the witnesses. The talk will come from those two places for the most part, with, I expect some talk from me as Commission counsel. Court reporters who depend on their ears at the time rather than on tape recordings after the hearing to get it right need to be where they can hear. The place you have the court reporter is excellent for those engaged in the electronic recording of the proceedings.⁶⁴⁷

Oddly, no transcripts of the June 12 hearing were found in the Commission’s records,⁶⁴⁸ nor of the following nine public hearings. The records, however, did include audio cassette tapes of the ten public hearings which this report’s author digitized for analysis and transcriptions.



⁶⁴⁵ Quote from Alberta lawyer Glenn Solomon, the lawyer who represented the Alberta Energy Regulator (former known as the ERCB, the Energy Resource Conservation Board), in a December 1, 2014, YouTube audio tape published by the author of this report, *Legal Advice Dec1 2014*, referring to the court action by Jessica Ernst about fracking and contamination of her groundwater in Rosebud, Alberta.

⁶⁴⁶ Karla Mebs was the Vancouver Expo 1986 public affairs project coordinator for the provincial government from 1979 to November 1985. She then started her own public relations business.

⁶⁴⁷ Douglas MacAdams to Robert Tweedie, *Re: Layout for meeting of June 12, 1990*, June 6, 1990.

⁶⁴⁸ The Commission hired a Chilliwack-based Ogston Wells Reporting court reporter with information that the Commission was billed \$105 for the court reporter attending June 12.

Oddly, the question-and-answer segment of the June 12 public hearing was not included in the Commission's videotape copies. The reason as to why the session was not included was found in the Fraser Valley Gas Project's correspondence with the Commission, wherein Commission secretary Robert Tweedie had asked the industry group to provide the Commission with the 'full version' of the videotaped hearing, not just one half of it.

July 13, 1990

The Fraser Valley Gas Project
P.O. Box 1762, 3100-272nd Street
Aldergrove, British Columbia V0X 1A0
Phone 856-8144 Fax 856-8031

Mr. Robert Tweedie
No. 105, 20611 Fraser Highway
Langley, B.C.
V3A 4G4

Dear Mr. Tweedie: *Rob*

Re: Audio Tapes Commission Meeting July 11, 1990

Just a quick note to thank you for allowing me to dash off with the original audio tapes of the above noted meeting.

I have made the necessary duplications for our offices and I am pleased to return the originals to the Commission.

I look forward to seeing you next week. And once once again thank you for the tapes.

Yours Sincerely,
Karla Mebs
Karla Mebs

Rec'd Jul 24
-Edging

Enclosed, as your office requested, are two videotape copies of the Fraser Valley Gas project's June 12, 1990, presentation. In regards to obtaining a copy of the entire presentation and associated question and answer period, I will have Ms. Karla Mebs follow-up with you on this matter.⁶⁴⁹

In reply, Robert Tweedie wrote the following to B.C. Gas Inc.'s Gas Supply Planning Engineer Rob (R.M.) Stepan:

Thank you for your letter of July 25, Re: Videotapes of the Fraser Valley Gas Project's June 12, 1990, Presentation. I appreciate the trouble you took in dropping off the two Videotape copies of the Aldergrove, June 12 presentation at our office and I look forward to hearing from Karla on the Videotape of the question-and-answer session.

The Fraser Valley Gas Project
P.O. Box 1762
3100 - 272nd Street
Aldergrove, B.C. V0X 1A0

July 26, 1990

ATTENTION: R.M. Stepan, P. Eng.
Gas Supply Planning Engineer

Dear Bob,

Thank you for your letter of July 15, Re: Videotapes of the Fraser Valley Gas Project's June 12, 1990 Presentation. I appreciate the trouble you took in dropping off the two Videotape copies of the Aldergrove, June 12 presentation at our office and I look forward to hearing from Karla on the Videotape of the question and answer session.

Sincerely,
Robert
Robert Tweedie
Commission Secretary

It seems that industry never sent the Commission a copy of the question-and-answer session videotape. If so, the most likely reason why it was not sent was the consortium's discomfort with the contents. And, judging from the June 12 transcript selections above, industry would have been most displeased. Commission secretarial notes kept of the June 6 planning meeting for the June 12 public hearing state that Fraser Valley Gas Project's public relations Karla Mebs guaranteed she would "give me copies" of the "audio tape and video."

So, who filmed the event? A February 7, 1991, inventory of the Commission's Library Listings states that the two 55-minute videotapes were "edited Cable TV" versions. Community Cable television networks


⁶⁴⁹ R.M. Stepan, P. Eng., Gas Supply Planning Engineer, Fraser Valley Gas Project, to Robert Tweedie, July 25, 1990, Re: Videotapes of the Fraser Valley Gas Project's June 12, 1990 Presentation.

filmed the hearing event. However, the Fraser Valley Gas Project, which promised the Commission to later retrieve and copy copies from Community Cable, failed to provide the complete version.

The only remnants from Commission records of the public's questions at the June 12 hearing were found in a secretarial file as rough, scribbled and hard to read hand-written notes. According to those notes, a total of twenty questions were asked, such as:

Question: On February 21st the oil companies said only drilling, not storage. There we were lied to by the companies and the government. Answer by Cam Avery [B.C. Gas corporate director of communications]: B.C. Gas only joined after February 21st.

Question: Can you guarantee [our] water supply? (Huge popular support for the Question.)



COMMISSION OF INQUIRY INTO FRASER VALLEY OIL AND GAS DRILLING

Invitation to Public Meetings

The Government of British Columbia has appointed Mr. David Anderson to conduct a wide-ranging inquiry into the implications and risks of drilling for gas and oil and of storing gas in the Fraser Valley.

The terms of reference for the Commission include the proposed exploration program of the Fraser Valley Gas Project group and any future developments that might result from a discovery.

They extend to:

- possible risks to public health.
- the adequacy of existing regulations governing drilling.
- areas which should be excluded from drilling activity.
- methods of avoiding or minimizing the risks and impacts of drilling, production and gas storage.

The meetings will be held at the following locations:

Those wishing to make their views and opinions known are cordially invited to attend. The hearings will be informal.

Please inform the Commission offices as soon as possible if child care is needed.

**David Anderson, Commissioner,
Commission on Fraser Valley Petroleum Exploration,
#105-20611 Fraser Highway,
Langley, B.C.
V3A 4G4**

Telephone: 533-0667 Fax: 533-5451

Maple Ridge
Tuesday, July 3 1990 at
The Old Library Auditorium
11963 Haney Place
Maple Ridge

White Rock
Wednesday, July 4 1990 at
The Upper Town Centre Hall
15150 Russell Avenue
White Rock

Chilliwack
Monday, July 9 1990 at the
Best Western Rainbow Country Inn
43971 Industrial Way
Chilliwack

Mission
Tuesday, July 10 1990 at
The Mission Leisure Centre
7621 Taulbut Street
Mission

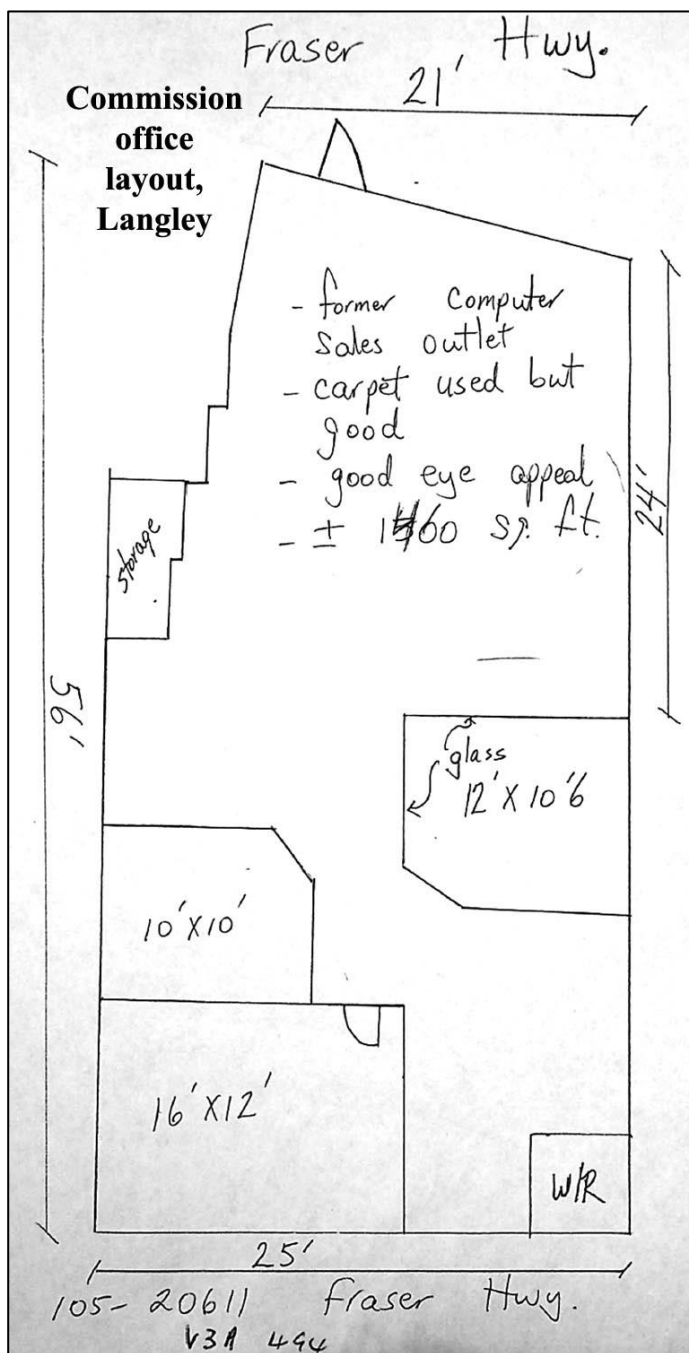
Aldergrove
Wednesday, July 11 at the
Kinsmen Community Centre
26770-29th Avenue
Aldergrove

Within a few days after the June 12 hearing, Friends of the Fraser Valley member Glen Breaks went to visit the Commission's new office in Langley. Explained in an interview with the author, at first he couldn't find the office. He then went around to the side of the building and there it was. He walked in and spent about two hours talking with staff about, and sharing, his research. He also handed staff photocopies of his research material.

The Anderson Commission Langley office was gradually acquiring documents for the Inquiry which the public was given access to. Some of its contents came as donations from The Friends. By August 1990 the collection was growing into a little library. At the end of the Commission Inquiry in early 1991 most of the library reference materials were transferred to the Ministry of Energy's headquarters library in Victoria.

Some of Glen Breaks' material may have included two undated, type-written pages of notes found in the Commission's records. The first sentence refers to the book, "Natural Gas Engineering Production and Storage," by Dr. Donald Katz and Robert Lee. It was "the last book by Dr. Katz who died in 1989." Breaks wrote, "Dr. Katz was coauthor of 250 papers and several books & received 17 national honors and awards including the national medal of Science from President Reagan in 1983." He included references to the following pages of that book: 16, 569, 571, 574, 585, 586, 587 589, photocopy pages of which he most likely handed over to office staff.

Breaks devoted the remainder of the two pages summarizing his telephone interviews, including "Walter Repcinsky" (proper spelling is "Rzepczynski"), the "author of Aquifer Storage Development," "who has coauthored work with Dr. Katz:"



Walter is recognized all over the U.S. as a leading expert in the field of Aquifer Storage. Tom Bahumian, a geologist with the F.E.R.C. in Wash. D.C. specializing in storage, told me that Walter

knows more than anyone else in the U.S. about aquifer storage. In actual fact there are only a handful of experts in this industry.

Walter said he is currently in charge of operation of 11 aquifer storage projects in Ill. [Illinois]. He told me that his company has had to abandon two such facilities due to high leakage. He said he knew of many others who had built aquifer storage and later wished they never had, for just the same reason – high leakage. It is definitely not a sure thing, he told me, regardless of how much testing is done. You don't know if the field will be successful until after 3 to 4 years of actual operation, or until full pressure and full volume and thereby full investment is reached.

Imagine the cost to the consumers in this instance. Instead of the purported savings of 15%, we see considerable rate hikes to cover such losses. Remember in the total history of aquifer storage, as many as 6 to 8 facilities have been abandoned out of the total of 55 built in the U.S. One could wonder why anyone would consider such a financially and environmentally risky venture? The answer is that for states like Ill. [Illinois] there is no other way. They have extremely cold winters and almost no gas supply of their own. The old wells they draw on in La. are depleting and cannot meet the peak usage.

Walter recommends that a project of this nature should not only be unpopulated in itself, but, if possible, should be away from any population.

This is in agreement with Dr. Katz's recommendations. In his conclusions he explains that aquifer storage was developed in the Mid-West because no other choices existed. He states that it is questionable as to whether or not aquifer storage can be developed at today's prices for bas gas.

On the subject of base gas, John Thrasher of B.C. Gas is prepared to deal with base rate ratios as high as 8 to 1. In reality, 3 to 1 is an accepted cut off point for feasibility of the facility. Walter R. also told me of problems related to depth. B.C. Gas proposed depth is between 1,500 to 4,000 feet for storage. Walter said at this depth they have had problems with formation of carbonic acid, which eats pipelines. They now remove CO₂ from their fields prior to injection, which is a costly process, one of which I am sure B.C. Gas is unaware of. Other costs which crop up more often than not are for desulphurization operations and dehumidification operations.

I talked with Harvey Stockton, an engineer at the Herscher Ill. [Illinois] facility. He told how their vent gas was handled. I asked if this ever created a problem with domestic water. He said over the years they had turned quite a few wells sour in the area but that they had recently reduced the pressure in their field and improved some of the wells. He said they still have 38 farm wells that they routinely sniff for gas and several 'hot' wells in the village of Herscher as well.

The contents from Glen Breaks' early research notes about report and book petroleum geologist authors Donald Katz and Walter Rzepczynski on underground gas storage, and from his telephone interviews with Tom Bahumian, Walter Rzepczynski, and Harvey Stockton, which he graciously submitted to the Commission for information and reference, were insightful, relevant, and helpful. In fact, his information challenged and countered certain claims made to the public by the Fraser Valley Gas Project consortium, particularly those made by B.C. Gas Inc. about gas storage. The contrary evidence would have been privately noted by Commission researcher Tony Fogarassy whose task it was to examine technical documents and to prepare Commission counsel Doug MacAdams for the technical proceedings, and to similarly inform Commissioner Anderson on important matters. Key elements from Breaks' interviews

with Rzepczynski concerning warning advice on population proximity to underground gas storage would soon become a point of public controversy with the Anderson Inquiry, fomenting attention, intrigue and denial, ultimately responsible for The Friends' boycotting the Commission in early September 1990 and in catapulting the technical phase of the Commission into a smoking tailspin.

NATURAL GAS ENGINEERING

Production and Storage

Donald L. Katz

*Late Professor of Chemical Engineering
The University of Michigan, Ann Arbor*

Robert L. Lee

*Assistant Professor
of Petroleum Engineering
The New Mexico Institute of
Mining and Technology, Socorro*

I.T.U. Kütüphaneleri
Dönme: 57965
Kayıt No: M.29394
Fiat: _____
U D G: _____

TN
880
K38
1990



McGraw-Hill Publishing Company

New York St. Louis San Francisco Auckland Bogotá Caracas Hamburg
Lisbon London Madrid Mexico Milan Montreal New Delhi Oklahoma City
Paris San Juan São Paulo Singapore Sydney Tokyo Toronto

ABOUT THE AUTHORS

Donald L. Katz, who died May 29, 1989, was Emeritus Professor of Chemical Engineering at the University of Michigan and a retired Consulting Engineer. He earned his doctorate in chemical engineering at the University of Michigan in 1933 and then worked for Phillips Petroleum Company, initiating a research program in oil and gas production. Returning to the University of Michigan in 1936, he developed a research program in phase behavior of light hydrocarbons, served as chairman of the Department of Chemical and Metallurgical Engineering, and was elected by the AIChE as its 1959 President. In 1959 he directed a national educational project to introduce the methods of using computers in instruction to engineering teachers.

He was coauthor of some 250 papers and several books, including the *Handbook of Natural Gas Engineering*. Recent papers have concentrated on the underground storage of natural gas, an area where he served many gas companies as consulting engineer. In the Public Service Sector, he chaired or served as panel member on 14 committees, such as NAS-NRC Advisory Committee to the U.S. Coast Guard on Hazardous Materials and the Committee on Air Quality and Power Plant Emissions requested by the Senate Public Works Committee.

Dr. Katz was declared one of the 30 "eminent Chemical Engineers" by the AIChE and "a Distinguished Member" of the Society of Petroleum Engineers. He received 17 national honors and awards, was elected by the National Academy of Engineering (1968), and received the National Medal of Science from President Reagan in 1983.

Robert L. Lee is an assistant professor in the Petroleum Engineering Department of the New Mexico Institute of Mining and Technology. He holds both a B.S. and M.S. degree from Oregon State University and a Ph.D. from the University of Michigan, Ann Arbor. All three degrees are in Chemical Engineering.

*It is very much a public meeting for the public to express their views. ... We'll record them. We are going to keep a tape of what is going on, so that if we have to go back and listen to what you've said. Again, we will do so. ... [Rob Tweedie is heard whispering to David Anderson on the audio tape] ... Rob Tweedie, the Commission secretary, has asked me to suggest to you that you mention your name before you speak so that we'll be able to get back to you with any information we have on the subject that you raise.*⁶⁵⁰

*The News
Maple
July 4/90*

*Maple
July 4/90*

Apathy about gas drilling sends the wrong message

Letter of the Week

Editor, The News:
I attended the recent meeting put on by the Fraser Valley Petroleum and Natural Gas Exploration Commission in Maple Ridge last week.

It sounded rather boring but I was mildly interested in the fact that somebody was going to drill a neat hole in our community, capping the escaping gas and piping it down to the U.S. for big bucks.

When I got there, there were about 20 people who, like me, didn't seem to know much about drilling for natural gas.

But as the evening wore on, I became increasingly more concerned at the tremendous amount of power that the provincial government and the consortium of three huge gas companies have.

I found out that the Minister of Energy, Mines and Petroleum Resources had sold sub-surface exploratory rights without informing me or any other property owner that this had been done. This means that under the Petroleum and Natural Gas Act, the drilling company has full legal access to your land and can operate on your land whether you want them to or not.

I found out that the maximum number of drilling rigs allowed was 16 per one square mile, each

one drilling to an average depth of 10,000 feet.

A quick calculation and that equals 500 tubes per rig, which equals a lot of heavy equipment and subsequent noise.

I then discovered there is a clear potential for groundwater contamination through either hydrogen sulphide gas, drilling fluids -or both- and that if damage does occur, there is no legal obligation for the drilling companies, the municipalities, or the provincial government to provide you with water.

We are on our own.

I learned a little about underground storage tanks and the leakage that could come over a period of time, and about property devaluation, increased traffic, road damage, noise, 24 hours of drilling seven days a week.

I came away stunned at the thought that our pristine rural lifestyle could be ruined forever.

To the glee of the drilling companies, and dismay of the local residents, that out of all of Maple Ridge and Pitt Meadows only about 20 people showed some concern, I can only assume that the commissioner will report back that this area is not too concerned about local drilling.

**Len Burgess,
Ruskin**

Though Commission secretary Rob Tweedie reminded Commissioner Anderson on June 18th to instruct the public to first provide their names when speaking at the microphone, the Commissioner neglected to do so at the other public hearings, such as the Chilliwack hearing on July 9th.

Glen Breaks' mother, Irene, however, volunteered to identify herself at the Chilliwack meeting.

My name is Irene Breaks, and I live in Langley. Three generations of my family lived and farmed in the Chilliwack area since approximately 1880. I was born in Sumas Prairie. And I want to speak to you about the Jackson Prairie gas storage complex which my husband and I visited last week.

This storage area is nine miles from Chehalis, Washington. As we entered Chehalis, we smelled raw gas and it became stronger as we approached the gas compressor station. As I have severe asthma, I found it very difficult to breathe [sound of Irene coughing] and it is still affecting me. And my throat burned. I carry with me a portable ventilator, or nebulizer, which I had to use several times that day and night and had trouble the following day. I would not be able to live in a gas drilling or storage area. We would have to sell our home immediately as these attacks are very severe and sometimes fatal. There are many other people, both old and young, with respiratory problems. They

⁶⁵⁰ Opening remarks by Commissioner David Anderson at the June 18, 1990, public hearing. Audio transcript.

too would be severely affected and may be forced to relocate. We have a 36-acre beef farm with 63 beef cattle which we have put a great amount of care, hard work and money into. If we had to relocate at this time in our lives, it would be most difficult as my husband and I love our home and farm. I would therefore ask you, Mr. Anderson, to please recommend to my government that they not allow drilling and storage in the Fraser Valley.

Al Vickers' commented:

I would just like to say I just made two visits to the Jackson Prairie facility in southern Washington State. And over the weekend, I was witness to observing 72 wells in a five square mile area. If the latter two [public] comments were taken to task, they would say there was only two, or rather five, because there was five square miles, one per each of the square miles. There were 72. And the people in charge of the project indicated to me and my friends that there is an unlimited number that they were expecting in the future.

At the end of the Chilliwack hearing, Vickers gave a color film slide presentation about his recent week-long visit investigation of the Jackson Prairie underground gas facility. In fact, Vickers had taken a leave of absence from his teaching position to make the special journey. He had an enthusiastic travelling companion, Friends' member Dr. Bill Esdale, then retired from his practice as chief of medicine at the Vancouver General Hospital. They travelled many hours by vehicle to Lewis County in southern Washington State near to the Oregon border and booked a hotel room. On his return, Vickers had his color slide films quickly processed at the former Kodak building in North Vancouver at the bottom of Mountain Highway Road not too far from where he taught at a local high school. Vickers didn't have proper time to rehearse his slide presentation for the July 9th hearing in Chilliwack. The transcript of his presentation is included as **Appendix B** of this report, a segment of which is provided below.

The following description of the Jackson Prairie storage area is from a paper presented to the Anderson Commission during the Preparatory Sessions.

The Jackson Prairie underground gas storage project was initiated in the early 1960's by Washington Natural Gas Company, the Washington Water Power Company, and Northwest Pipeline Corp. The 3,000-acre storage field is located 9 miles southeast from the city of Chehalis in western Lewis County.

The Jackson Prairie underground gas storage project is the only underground gas storage project in the Northwest. Its capacity is currently in excess of 26 billion cubic feet, which if contained at normal temperature and pressure, would require a container approximately 1 mile in diameter and 1,187 feet in height, or about equal to the volume of 388 [City of Seattle] King Dome Stadiums.

Most of the 366 underground storage projects in the United States utilize depleted oil or gas reservoirs; however, the Jackson Prairie project used brackish-marine aquifers contained in the upper Eocene Skookumchuck Formation. Fifty other underground gas storage projects in the United States store gas in brackish and saline aquifers. It was found that the sandstone at Jackson Prairie was saturated with brackish water, so that some of it had to be pumped from the "dome" structure in order to create storage for gas. Water removal wells are located around the perimeter of the project to withdraw water from the lower portion of the structure, thus creating a cap of void space at the crest of the "dome." Operators of the storage project have a permit from the State Department of

Warning against Valley gas drilling

by Pauline Martin

An Aldergrove woman who experienced two oil well blowouts on her Fort St. John property pleaded with a commission of inquiry meeting in Chilliwack recently to recommend against gas drilling in the Fraser Valley.

Margaret Ormston, who had up to four drills and one pumping station on her 300-acre farm, said one blowout contaminated a stock pond used to feed her cattle and she was subsequently forced to sell out and move to the Fraser Valley.

Her new home is situated within one kilometre of one of three proposed drilling sites by B.C. Gas, Conoco Canada, and Dynamic Oil.

Ormston was one of more than a dozen people who made submissions to inquiry commissioner David Anderson, whose mandate is to hear from the public and the oil companies and make a recommendation to the B.C. government by Sept. 30.

Most of the crowd of about 50 were from the Delta, Langley and Aldergrove areas located near the proposed drilling sites, but some Chilliwack residents expressed their concerns about possible future drilling in this area.

Yarrow resident and father of three Bruce Standeven told the commission: "I can understand the demand for natural gas, but I wonder if it's worth the risk. Are we opening a door that shouldn't be opened?"

And Yarrow resident Joy Richards told the commission that several of her relatives died of cancer in Alberta near a natural gas drilling site there.

Conoco geologist Bob Springs sat tight-lipped throughout the three-hour meeting and said afterwards that it's frustrating to hear misinformation

about drilling and be unable to dispute it until the next stage of the inquiry.

"We don't have a chance to respond. It bothers us that people come to the meeting and leave with that viewpoint," he said.

Ryder Lake resident Otto Goetz was one of only two people who spoke in favor of the drilling project. An electrician and organic farmer, Goetz said he's familiar with the stringent regulations the gas industry must follow and praised the initiative as environmentally friendly.

"I'm quite confident they're doing the right thing," he said.

Goetz said spreading fertilizers made from petroleum products does more harm to the environment than drilling sites and stressed the need to increase natural gas consumption if the Lower Mainland wants to reduce fuel emissions from gas-powered vehicles.

Goetz also said that in the event of an earthquake, "Chilliwack is all supplied by gas... we probably have more gas coming out of the system than they would out of the ground."

Friends of the Fraser Valley member Al Vickers was quick to leap on Goetz's comments and said, unlike gas wells, gas pipelines can be shut off at both ends in the event of disaster.

Vickers presented a slideshow — complete with recorded noise from generators — of a drilling site in Jackson Prairie, Washington which he recently visited.

Vickers said the U.S. site contains 72 drill sites in a five-square-mile area, with no residential or farm land nearby.

He said an employee at the plant told him of a 1966 incident where drilling

teams hit an underground gas storage tank. The subsequent explosion caused a leak that ran out of control for three days and forced the closure of the highway. He said the sound of escaping gas could be heard 12 miles away.

Vickers then asked the commission to imagine a similar situation in the Fraser Valley — heavily populated and rich in agriculture.

"We're not against the oil industry making a profit or giving us good fuel. We are against drilling in the Fraser Valley," he said.

Commissioner Anderson said he will be visiting drilling sites in California to study technology used for drilling in earthquake zones. He will also visit sites in Oregon, Pennsylvania and near Lake Erie, where demographics near the drilling site are similar to the Fraser Valley. Anderson also hopes to visit France, considered the world leader in natural gas storage, where a four-month supply of fuel is available at any given time.

The concerns raised at the meeting included earthquakes, drinking water contamination, noise and odor, and accusations that residents aren't being given the full story by gas companies or government.

Ormston, who contacted the Ministry of Energy Mines and Petroleum Resources after the well blowouts on her property, said she was told there have only been two blowouts in the history of oil and gas exploration in the province.

"I find it hard to believe they both occurred on my property," she said.

The final meeting for public input takes place tonight (July 11) in Aldergrove. From Aug. 27 to Sept. 8, there will be two weeks of technical hearings, taking place in Delta and Langley.

Province of
British Columbia

Commission on
Fraser Valley
Petroleum Exploration

Commission Correspondence Files

No. 105, 20611 Fraser Highway
Langley
British Columbia
V3A 4G4
Telephone: (604) 533-0667
Facsimile: (604) 533-5451

*Rec'd Jul 31/90
Eliz
Put in letter file
rather than
cards. Treat
as letter!
- put on list!*

Please complete the following if you wish to be placed on the commission mailing list:

NAME: BRUCE STANDEVEN
SARDIS B.C.

Please note any special area of concern or comments in the space below.

After attending the meeting in Chilliwack, I was shocked at the behaviour of one of your representatives, actually ridiculing the comments and concerns of citizens who live in this area! One of my biggest fears is that the drilling and oil companies are so powerful that they will do what they want in spite of all this. I sometimes get the feeling that these meetings are held just to passify the common folk. I think that whoever has the most money has the most power, and whoever has the most power, will win. PROVE TO US THIS IS NOT TRUE.

Ecology to release 50,000 gallons of brackish water a day into the Cowlitz River at favorable flow conditions.⁶⁵¹

Concern about gas well drilling in the
Fraser Valley. One proposed gas well is very
close to my home at Old Yale Rd. & 40th.
Ave. Our concern about safety, water
contamination, our environment and our
way of life could be in jeopardy. Their
is too much of a risk & our government
should not let the Gas Co. gambling with
our life & life style. Also 4 schools located
in approx. 1 mile radius. ① Murrayville
Elementary, ② North Otter Elementary, ③ Peterson Rd.
Elementary, ④ Poppy D.W. Secondary. The Langley
Hospital is very close, in a case of blow out
or explosion! I am against gas drilling or
storage here.
JMC, Makos

As we are dependent on a well for
our drinking Water we are concerned that
in the event of a problem caused by
Gas well drilling we would be in
serious trouble as there is no guarantee
that the oil companies would be able
to correct the problem nor would we as
individuals be able to sue said companies
for compensation for our losses
L Ferguson

⁶⁵¹ Submission T-50, Jackson Prairie Gas Storage Project, Chehalis Washington, by Fred H. Wurden and Donald M. Ford, Washington Geologic Newsletter, Volume 5, Number 3, July 1977.

Friends' member Paul Dickenson came to the microphone and calmly inquired about the Anderson Commission's itinerary to visit underground gas storage facility locations in areas far afield. Dentist Dickenson was becoming more astute in his craft of observation and interpreting the complex information about the petroleum industry that the Friends were busily mining. He was a technician. He found a strategy, and carefully and skillfully focused his comments and questions. He patiently waited to spring the question after Anderson's lengthy response.

Dickenson: Good evening, Mr. Commissioner. Paul Dickenson from Aldergrove. What I would like to do is ask you a question if I could about how you are going to proceed. I understand that between the public meetings and the technical meetings you are going to do a certain amount of travelling. Have you got that well enough planned to get some idea of where you will be going?

Anderson: I could quickly outline some of the things, Paul. I guess I should really turn to the page of the handout which describes the various stages of the Commission's hearing. Once we finished, as I mentioned earlier, the identification of issues after the ten meetings in total that will have been held, it will be issues of research. Now, Tony [Fogarassy] is in charge of research and he will be finding people to advise, people to give comment, people to present papers. And indeed, this will be a to-and-fro situation. We are obviously very interested in anything that you or Bob Spring or anybody else might provide. And, I guess I should say that even at this stage, which we have about a hundred documents in the [Langley and Victoria City] offices which anyone can come and look at. I take no responsibility for how good or bad they are, or what point of view they represent, but we have been trying to get information for the research that goes on at this stage three.

Now, as far as travelling goes, I managed to get down to Jackson Prairie a few minutes or days ahead of Mrs. [Irene] Breaks and I did have a look there. And we did have an opportunity of discussing things with Washington State officials. Tony and I will be doing the same thing in Oregon where that have another and more modern facility about 70 or 80 kilometres west of Portland. The hope is that would be next week. But it is not 100 percent final. Following that there is storage in Ontario, and there has been indeed quite a bit of gas drilling in Ontario. And the area in question is not totally dissimilar to this. The shores of Lake Eerie and the Niagara Peninsula, where there is a fair amount of population, a population which also commutes to urban areas as well as totally rural agricultural occupations. So, we want to have a look at that in Canada.

Let me see. We have hopes of getting to Pennsylvania which is a major storage area.

Dickenson: Yes.

Anderson: And, Los Angeles, where drilling takes place in an earthquake zone, and substantial amounts of drilling has been done. California has been one of the major producers of American oil. And indeed, California supplied all of the oil for all of British Columbia's needs for fifty years, more than fifty years. So, we want to take a look at the drilling that has been taken place in earthquake areas and what we find out there. Two very differing views have been expressed this evening about the effects of earthquakes and perhaps Los Angeles will give us some clues as to what risks might be. So, that's the travel plan.

Dickenson: I had heard that you might get as far afield as Britain and France.

Anderson: Well, both Britain and France have substantial amount of drilling in areas not dissimilar to this [the Fraser Valley]. Nothing is identical. We don't really know about it yet because there isn't the technical information from underground. As Tony mentioned in response to a question a few moments ago. But there is a fair amount of drilling in southern England. There has been a search for storage there as well. In France there is very substantial storage. There is indeed at any time some four months supply of gas underground in France, in storage. And on any winter's day as much gas comes out from storage to supply the communities as comes through the pipe from delivery systems. So, it would be nice to see from what is perhaps, the world leader, namely France, when it comes to storage. But the trip is not nailed down by any matter of means at this point. We are waiting to hear from Gaz de France. And if we do when they invite us, and the Provincial Secretary is generous enough to send us, we would go and see it.

Dickenson: I must admit, I have some concern that you might spend this time and these funds going around to places where storage has been relatively successful. And, I would like to make the point, very strongly, that you should make a definite opportunity to look at places where it has been not so successful as well. I understand there are such places. I would like to give you one name: the town called Herscher [Dickenson carefully spells the name to Anderson], H-e-r-s-c-h-e-r, in Illinois. I understand that they set up a storage facility there and ran into a great deal of trouble with it.

Anderson: That's great. We are not trying to choose successful areas. We are trying to choose areas which have had major experience. And, indeed, we will be going to areas of the United States specifically. Pennsylvania was one area we are expected to hear other than good news.

Dickenson: I think the negative side of the question should be pursued because it would be all too easy just to get a lot of glowing reports about people's successes which they are no doubt proud of.

Anderson: Well Paul, that is very much on our mind. And the travel plans are not just to go to the successful areas. On the other hand, for example, with drilling in earthquake zones. It is the closest and perhaps, I don't know what has been successful or unsuccessful, every well. We are looking for wells which have failed in California or had problems. So, we are not just going down there and to say, ah, there are 50,000 wells that have been successful and 50 which have not been. And say those are the figures and therefore we are only going to look at only the majority. We are going to try and focus on the problems because that is our concern here. If we were going to focus on what was successful, we wouldn't bother going.

Dickenson: Whatever information you are going to get will be available to everybody at the technical hearings?

Anderson: Yes, that is correct, or indeed before that, hopefully.

Anderson dodged investigating Dickenson's concerns about Herscher, Illinois. He made no response statement about it. He made no promise. In two days, at the final scheduled public hearing on July 11, the Anderson Commission would state and promise nothing yet again. Dickenson's question was like John the Baptist, preparing 'the way.'



July 6, 1990

The Honourable Jack Davis, P.C., M.L.A.,
Minister of Energy Mines and Petroleum Resources,
Parliament Buildings,
Victoria, B.C.,
V8V 1X4.

Dear Minister,

RE: COMMISSION ON FRASER VALLEY PETROLEUM EXPLORATION

Despite the short time allowed for the meetings, they have gone fairly well. Numbers range from 240 (at the initial meeting in Aldergrove) to about 25. Most have attracted about forty people, a few of whom attend regularly. The major issues of concern are possible well water contamination and the risks of drilling in an earthquake prone area. Leakage from gas storage is also frequently mentioned, as is the general inadequacy of evacuation plans.

The next phase is to evaluate the concerns that have been raised, and travel to observe gas storage facilities in the US, Ontario and (the world leader in this field) France. Following that I will hold technical hearings in Delta and Langley with invited experts to provide information on the issues. If all goes as planned, this phase will be in late August and the first two weeks of September. Thereafter I will write a report. If this admittedly tight schedule is not delayed, this would be in late September and early October. I would thus be able to present it to you in late October.

There have also been criticisms of a lack of publicity on the drilling proposals. Despite our best efforts with paid advertisements and by having me more available to the press than I would otherwise have wished, such criticism appears to be unavoidable. We are spending over 50 thousand dollars on advertising the public and the technical meetings, but I am sure it will only reach a portion of the Valley's population. Incidentally, the companies are also spending a considerable amount on advertising.

In brief, despite a short time frame, I believe the inquiry process is proceeding well, and the expected schedule can be in large part adhered to. Through an extensive schedule of public meetings the fear, animosity, and concern of some residents so noticeable during the first part of the year, have been significantly reduced. The technical hearings can be expected to further focus attention on substantive, rather than emotional or fanciful concerns.

Yours sincerely, David Anderson
Commissioner
Commission on Fraser Valley
Petroleum Exploration

*“Obviously as you’ve noted [referring to the presentation by Eric Peterson, City Manager, Blaine, Washington] this evening the groundwater issue is perhaps, if there is an overriding issue, the overriding issue.”*⁶⁵²

*“My name is Joe Murphy. I live on South Bradner Road. I was born in B.C. sixty-one years ago. And I’ve travelled all over the world and I’ve bragged to half the world about the democracy I live in. What I see and hear tonight – this is my second meeting – is an insult to every Canadian that lives in this Fraser Valley or in British Columbia. How much power do these damn oil companies have to force us to come here and defend our way of life? There is no damned reason in the world why you should be here or why we should be here if we had a government that was looking after our interests!”*⁶⁵³

*“Mr. Commissioner. My name is David McRae. I have to take issue with what the last gentleman said. I was a geologist for a number of years. And I have absolutely no faith in the veracity of any of the extractive industry companies. Every dealing I have had with them was one where I could not trust anything they had to say that involved their profits. Their whole issue is the bottom line of dollars. They set themselves up with a beautiful PR [public relations] company or department that snows the public to the Nth degree. And I would warn you to be very careful in evaluating anything they tell you, because they are slick, they are careful, they hide the truth.”*⁶⁵⁴

*“My name is Ken Jones. I live in White Rock. I was an Alderman a few years ago at a time when we faced the first attack on our residencies by the gas companies with the idea of putting in gas storage under our feet. We fought that and made it very clear to industry that they were not welcome anywhere in the Fraser Valley. But they don’t seem to get the message. They just change the names. They just bring in new outfits. The government thinks they can sell another lease off and make a fast buck. And we have to get out and do the battles all over again. Thank you to The Friends of the Fraser Valley that have put all of the effort and work into this researching, and into the presentations, and into this awareness program that they have made into going around this community and throughout our Valley and getting the support.”*⁶⁵⁵

*“I would like to thank the people in my community for coming out in such vast numbers tonight. I think Mr. Chairman I would like you to take that back to [B.C. Premier] Mr. Bill Vander Zalm and let him know precisely how the people in Langley and Aldergrove feel about the proposals that this consortium is putting in this area. We don’t want it now! We don’t want it ever!”*⁶⁵⁶

At the outset of the Provincial Inquiry, the Anderson Commission had not scheduled a tenth public meeting. It was promised by Anderson at the second, June 18th public hearing in response to a request by Friends’ member Margaret Ormston to hold a final hearing in Aldergrove.⁶⁵⁷ As the next seven meetings

⁶⁵² Commissioner David Anderson, audio transcript, public hearing, July 11, 1990.

⁶⁵³ Audio transcript, public hearing, July 11, 1990.

⁶⁵⁴ Audio transcript, public hearing, July 11, 1990.

⁶⁵⁵ Audio transcript, public hearing, July 11, 1990. Jones is referring to BC Hdyro’s 1977-1978 proposals for underground gas storage in the south Surrey and White Rock areas, narrated in *The Third Wave* chapter.

⁶⁵⁶ Al Vickers, audio transcript, public hearing, July 11, 1990.

⁶⁵⁷ In a June 15, 1990 letter to Aldergrove resident Sheila Puls, Anderson also promised to “make sure that another meeting takes place” in Aldergrove.

ran their course, the Friends, who attended and presented at each meeting, were busily preparing for that final hearing event. The Friends, who were chasing down the facts, were as much prepared as they could be!

David Anderson reported in an October 4, 1990, letter to Elwood Veitch, the Social Credit party MLA and Minister of International Business and Immigration, that "approximately 220 people" filled the Aldergrove Kinsmen Community Hall:

Most of those in attendance were associated with the group Friends of the Fraser Valley and were hostile to the prospect of exploratory drilling. Many of the presentations were highly emotional, as the press accounts make clear. There was considerable criticism of the sale of leases, permits, and licences in the Fraser Valley, and there was criticism that they had not already been cancelled by reason of public opposition. Along the same lines, there was criticism of the existence of the Commission. The argument

was straightforward--as drilling should not take place, looking into the issues involved was a waste of time and money. There was little substantive criticism of the procedures adopted by the Commission in this inquiry, which had been discussed in May with the Friends of the Fraser Valley and the consortium, and adopted at the first public hearing on June 12.

On July 10th, the day before the final public hearing, Glen Breaks and lawyer Charles Maclean travelled by vehicle from Langley to downtown Vancouver for a meeting with Paul Gronert at the B.C. Utilities Commission (BCUC) office. Gronert was formerly employed with B.C. Hydro's Gas Division as a construction planning engineer, a Gas Division now privately owned by B.C. Gas Inc. Breaks made his case and spilled the beans in Gronert's office, summarizing key points from his research and telephone interviews with Walter Rzepczynski about underground gas storage. "I presented him with a great deal of



COMMISSION OF INQUIRY INTO FRASER VALLEY OIL AND GAS DRILLING

Invitation to a Public Meeting in Aldergrove

The Government of British Columbia has appointed Mr. David Anderson to conduct a wide-ranging inquiry into the implications and risks of drilling for gas and oil and of storing gas in the Fraser Valley.

The terms of reference for the Commission include the proposed exploration program of the Fraser Valley Gas Project group and any future developments that might result from a discovery.

They extend to:

- possible risks to public health.
- the adequacy of existing regulations governing drilling.
- areas which should be excluded from drilling activity.

- methods of avoiding or minimizing the risks and impacts of drilling, production and gas storage.

A final meeting to hear concerns of the public will be held at 7:30p.m., Wednesday, July 11 1990 at the:
Kinsmen Community Centre
26770-29th Avenue
Aldergrove.

Those wishing to make their views and opinions known are cordially invited to attend. The hearing will be informal.

Please inform the Commission offices as soon as possible if child care is needed.

David Anderson, Commissioner,
Commission on Fraser Valley Petroleum Exploration,
#105-20611 Fraser Highway, Langley, B.C.
V3A 4G4

Telephone: 533-0667

Fax: 533-5451

information – including a paper written by the above-mentioned petroleum engineer.”⁶⁵⁸ The two Friends went to the BCUC because they learned that if B.C. Gas Inc. wished to build underground storage, the application could only be approved by the BCUC through a quasi-legal public hearing process. The Friends were covering all the bases.

On July 11th, hours before the public hearing, Breaks was on the telephone yet again with Rzepczynski asking more questions and clarifying concerns. Breaks approached the hearing microphone that evening and recited the following from a prepared statement:

Glen Breaks: I’ve been researching natural gas engineering and in particular, the underground storage of natural gas, for several months now. My primary source of information has been a book, published in 1990, entitled “Natural Gas Engineering, Production and Storage” by Dr. Donald Katz and Robert L. Lee. Dr. Katz, who passed away in 1989, was a professor of chemical engineering at the University of Michigan and a retired consulting engineer. He was co-author of 250 papers and several books, and over the years received 17 national honours and awards. He was awarded the National Medal of Science from President Ronald Reagan in 1983. He pioneered many of the techniques and concepts now commonly used in the natural gas storage industry. To discredit Dr. Katz would be to discredit the entire petroleum industry.

In the chapter on monitoring and safety, Dr. Katz tells us that given the expected 30 to 50-year lifetime of a storage facility it is foolhardy to say, as B.C. Gas has repeatedly said, that leakage into the local user’s water supply and homes will not occur. He also recommends that a policy of acquisition of surface lands above gas storage zones be followed, in order to reduce and control hazards due to leakage. The consortium at the Jackson Prairie facility are now following this 1990 recommendation.

Dr. Katz gives this advice to anyone currently operating a storage field with residences on it. He states, any land in the storage area that enters the market through the normal course of events might then be procured, especially if there are any residences near.

He goes on to describe the type of home that should be built above a storage facility, if such an activity is unavoidable. He states, “it would be preferable to have the homes on concrete pads without basements, and this new type of construction might well be advised in gas storage areas.”

He describes how corn dies when gas leaks into the soils and includes a photograph of this occurrence. He also states, “instances are known where a water well point driven into the ground 2 to 3 three feet gives enough gas to ignite a small torch.”

He suggests purchasing the land and residences and then leasing the land for agricultural purposes is an ideal usage of storage area because you can easily compensate a man for just his dead corn crop. You cannot repay him for the loss of his family.

I have also talked with other storage experts, by phone, and learned a great deal. In actual fact, there are only a handful of experts in this industry.

⁶⁵⁸ Three pages of information written by Glen Breaks, titled “July 11, 1990,” and received by the Commission on September 4, 1990.

I talked with Walter Rzepczynski at some length. I have also received and read Walter's paper on aquifer storage development. Walter is known all over the U.S. for his work in this industry and was recommended to me by several geologists. Tom Bahumian, a geologist who specializes in natural gas storage and works for the Federal Energy Regulatory Commission [F.E.R.C.] in Washington, D.C., told me that Walter knows more than anyone else in the U.S. about aquifer storage.

Walter's advice on locating a storage facility is consistent with that of Dr. Katz's. He recommends that the facility not only be unpopulated in itself but also that it be away from any populated area. He goes on to say that it is doubtful that the construction of an aquifer storage facility would be economically feasible at today's prices. He also tells us that as many as six to eight out of a total of 55 facilities built in the U.S. to date were abandoned due to high leakage. His own company has had to abandon two of the aquifer storage facilities out of the thirteen they originally built.

He told me you cannot tell if a field will be successful by testing, despite B.C. Gas's assurances in this regard. He said you must undergo the "acid test" at full pressure and full volume, and incidentally, full investment, to know if the field will succeed or not. He knew of many others who had developed aquifer storage and later wished they never had, due to all the problems encountered.

He also told me that in three to four years down the road, the gas has sometimes found a unique way out of a storage area.

On today, July 11, 1990, he told me about an aquifer storage development he was involved in where he had an intuitive feeling that something was wrong, even though the data didn't indicate so. He expressed concern to Donald Katz, also involved with the project, but Katz said everything looked okay. Two months later, gas appeared where it should not have been. He did not elaborate further. His message was that the data does not tell all in such a risk-prone development.

Obviously, these experienced and expert people are telling us that these facilities should be located away from population and that there is great potential of danger associated with these developments.

It does not take a Commission to understand these recommendations. My concern is that it may take a Commission to overlook these recommendations. Thank you.⁶⁵⁹

Breaks' revelatory presentation received a one-half minute long applause from the audience. The Commissioner, however, remained silent, and gave no follow-up comments. Commission counsel MacAdams and research assistant Tony Fogarassy, both of whom sat next to the Commissioner, also witnessed the presentation.

After three more speakers by The Friends had finished their presentations, Glen Breaks returned to the microphone:

With regard to water well contamination. I was speaking recently with an engineer at an aquifer storage plant in Herscher, Illinois. He told me that they did have a fairly severe caprock leakage at that facility.

⁶⁵⁹ The audio transcript of Glen Break's presentation varies slightly from Breaks' written text. I.e.: "He also tells us that as many as 10 of a total of 60 facilities built in the U.S. were abandoned due to high leakage." Breaks may have edited his July 11th presentation at a later date.

The way they handle it [the leakage] is they have a vent system which vents the gas out of the next, a secondary caprock layer when the pressure reaches ninety pounds pressure above the discovery pressure of that aquifer. Then it is vented on up. Then it eventually ends up at the 150-foot depth where they have a vent that works at a nine-pound pressure differential. And then its recycled and pumped back down into the original storage zone.

And I asked him if there were any problems related to that, you know, due to the fact that the upper zone was only 150-foot in depth. And he told me that they had turned quite a few [drinking water] wells sour over the years, but they were operating the field at a lower pressure, and that was helping considerably. Although they still have 38 farm wells which they regularly sniff for gas, and several wells in the village of Herscher itself, which are considered hot wells, they sniff those as well.

So, the danger of contamination to our groundwater is not just a figment of imagination. It is going on. This is the first aquifer storage facility that I have really delved into in any depth, and that is what I found.

Representatives from two of the three members of industry's tripartite consortium,⁶⁶⁰ including consortium legal counsel C.B. Johnson,⁶⁶¹ were most likely distraught by the intriguing details uttered from both Mr. Breaks and by the many points raised by his fellow Friends' presenters. In his first delivery, which included quotations and advice from petroleum experts, Breaks twice challenged B.C. Gas Inc., calling into question the private utility corporation's repeated promises and assurances to the public against underground gas storage leakage and groundwater contamination. From warnings and advice stated by two U.S. petroleum experts, Breaks now called into question the wisdom of B.C. Gas' expansive gas storage area proposals to be situated directly below large, inter-municipal, residential populations.

The Fraser Valley Gas Project

Answering the most frequently asked questions about natural gas exploration.

Working with communities is an important part of natural gas exploration. The Fraser Valley Gas Project believes that a better understanding of local and environmental concerns will assist everyone in making the right decisions. The following are the most frequently asked questions about the project.

Q Is gas exploration likely to contaminate groundwater?

A No. To prevent contamination, we use a special double-hulled pipe system with a 100 ft. long outer protective steel casing pipe and a 1,500 ft. long inner pipe through which the drill passes. Both pipes are also separately encased in cement to a depth of 1,500 ft. to ensure that any drilling exploration is completely isolated from exposure to groundwater. This is the same system used in north-eastern B.C., where over 7,000 gas wells have been drilled without a single reported case of groundwater contamination. To verify the absence of contamination, all water wells close to Fraser Valley drill sites will be tested before and after drilling.

Dynamic Oil Limited BC Gas Naturally. CONOCO

⁶⁶⁰ Bob Spring from Conoco was absent from the hearing.

⁶⁶¹ Stated in Johnson's October 20, 1990 Affidavit, 'allegations hearing' Commission exhibit SP-26.

A memo found in the Commission's records reveals that Commission secretary Tweedie inappropriately handed over the original July 11 audio cassette tape recordings to Fraser Valley Gas Project public relations representative Karla Mebs just after the evening hearing ended. No doubt she was asked to do so by her consortium bosses attending the hearing. Mr. Tweedie should have automatically denied Mebs' request and should instead have had the Commission make the copies in days following, for proper fear that the original tapes be lost, damaged or even altered.

Re: Audio Tapes Commission Meeting July 11, 1990. Just a quick note to thank you for allowing me to dash off with the original audio tapes of the above noted meeting. I have made the necessary duplications for our offices and I am pleased to return the originals to the Commission. I look forward to seeing you next week. And once again thank you for the tapes.⁶⁶²

Undoubtedly, the petroleum consortium would have consequently made transcripts of the July 11th hearing audio tape copies which it obtained. Consortium member B.C. Gas, with the largest petroleum lease interests in the Fraser Valley, would have a special interest in carefully listening to the tape copies and in going over the transcripts, as the corporation was preparing its strategy and arguments for the scheduled late August technical hearings to advocate its proposals for a minimum of two underground gas storage facilities.

Another clue about the consortium's interest in the audio tape, was stated in an October 20, 1990, affidavit by the consortium's lawyer, Cal Burton Johnson with law firm Russell & DuMoulin, who "attended the public hearing conducted by the Commission at the Kinsmen Centre in Aldergrove on July 11, 1990."

While in attendance at the Kinsmen Centre on July 11, I heard Glen Breaks address Commissioner Anderson and the audience that was present. During his presentation Mr. Breaks made reference to a person named Walter Rzepczynski and attributed to Walter Rzepczynski a number of statements respecting underground natural gas storage.

I have listened to an audio tape recording of the public meeting of the Commission which took place in the Kinsmen Centre in Aldergrove on July 11, 1990. The presentation made by Glen Breaks to the Commission at the public hearing on July 11, 1990, is almost word for word the same as the contents of the document entitled "Aldergrove Public Meeting July 11, 1990", excluding the addendum on page 3.

Breaks' embarrassing information, including insights from petroleum expert Walter Rzepczynski, which had been hidden from public knowledge, was a direct threat to B.C. Gas' interests. While digging up the truth, Breaks however was only scratching the surface, and would soon be collecting more information. B.C. Gas likely resorted to a strategy of dirty tricks by first attempting to silence Breaks through its legal department. A threatening legal letter concerning Rzepczynski was delivered to the door of Glen Breaks' home sometime after the last public hearing. Glen Breaks chose to ignore the gag order. According to accounts by Breaks and The Friends, B.C. Gas hatched a plan through its American consultant to lean on gas storage expert Walter Rzepczynski in order to call into question Breaks' interviews with him. That strategy, narrated in Section 21 of this chapter, would cast public, media and the Commission's doubt on Breaks' reputation, with the same doubt cast towards The Friends of the Fraser Valley.

⁶⁶² Karla Mebs, Fraser Valley Gas Project, to Robert Tweedie, July 13, 1990.

**Comparison of David Anderson's correspondence,
with change of language in similar paragraphs**

October 4, 1990

Hon. Elwood Veitch, M.L.A.
Minister of International Business and Immigration
Parliament Buildings
Victoria, BC
V8V 1X4

Dear Minister:

Re: Commission on Fraser Valley Petroleum Exploration

The nine public hearings began on June 12 and ended with a meeting in Aldergrove on July 11. Unlike the meetings at the other eight valley locations, this one was well attended, with approximately 220 people present. Most of those in attendance were associated with the group Friends of the Fraser Valley, and were hostile to the prospect of exploratory drilling. Many of the presentations were highly emotional, as the press accounts make clear. There was considerable criticism of the sale of leases, permits, and licences in the Fraser Valley, and there was criticism that they had not already been cancelled by reason of public opposition. Along the same lines, there was criticism of the existence of the Commission. The argument was straightforward--as drilling should not take place, looking into the issues involved was a waste of time and money. There was little substantive criticism of the procedures adopted by the Commission in this inquiry, which had been discussed in May with the Friends of the Fraser Valley and the consortium, and adopted at the first public hearing on June 12.

October 17, 1990

Mayor John Les
District of Chilliwack
8550 Young Road
Chilliwack, BC
V2P 4T1

Dear Mayor Les:

Re: Commission on Fraser Valley Petroleum Exploration

Presentation of the consortium's proposals and the nine public hearings began on June 12 and ended with a meeting in Aldergrove on July 11. Unlike the meetings at the other eight valley locations, this one was well attended, with approximately 220 people present. Most of those in attendance were associated with the group Friends of the Fraser Valley, and were hostile to the prospect of exploratory drilling. Many of the presentations were emotional, as the press accounts make clear. There was considerable criticism of the sale of leases, permits, and licences in the Fraser Valley, and there was criticism that they had not already been cancelled by reason of public opposition. Along the same lines, there was criticism of the existence of the Commission. The argument was straightforward--as drilling should not take place, looking into the issues involved should not take place. There was little substantive criticism of the procedures adopted by the Commission in this inquiry, which had been discussed in May with the Friends of the Fraser Valley and the consortium, and adopted at the first public hearing on June 12.

Yours sincerely, David Anderson
Commissioner

DA/sym

Attachments

As Friends' chairman Ray Addington would later write to Commissioner Anderson in reference to "the oil and gas industry, which is not known for its charity:"

"... as you are well aware, the consortium has already seen fit to interfere with other sources of information and evidence disclosed to you by persons opposed to its proposal..."⁶⁶³

After Glen Breaks' second presentation, Gina Breaks, his wife, a nurse by profession, and mother to two daughters, came to the microphone. As witnessed by thunderous applause, it was the most powerful oral presentation delivered in all ten public hearing events. The written words from the transcript of her presentation below fail to impart the intense fire heard by her spoken words. Gina's passionate and pleading words lit the audience on fire!

Gina Breaks: My name is Gina Breaks, and I'm Glen's wife. And I'm really mad. And I think each and every one of you people here, and your neighbours and your friends in this area should be darned mad that we are put in this predicament.

When my husband came to see you, Mr. Anderson, roughly a month ago, with the amount of information that a carpenter – a carpenter! – and a nurse found out in their spare time. Because we both have jobs. We have family. We have a farm. We have a life other than this type of thing. You were amazed at the amount of material that Glen could put right on your desktop. Now, why are you amazed? You are not toying with some remote market strategy here. You are not toying with some boardroom business policy. You are toying with my life, and my children's lives, and my husband's life.

I heard [Dynamic Oil president] Wayne Babcock say: 'I had a dream about exploring the Fraser Valley for oil and natural gas.' Well, my husband had a dream about owning a farm when he was fifteen. What about us, and my friends here, and my neighbours here? And it is so wrong. I think it is just absurd that we all are going through this process. And month, after month, after month. And we have a lull. And we get into the technical hearings. And I understand about due process and that. And then we wait for your recommendation. And then if we are really lucky, you will make the correct recommendation. Remember, I am just a nurse. But I have read this information that Glen continues to get every day. And it's pretty obvious to me what the recommendation should be in an area like the Fraser Valley.

[Loud and continuous applause is heard. People stand up and clap for 45 seconds.]

As you can see a few other people share my opinion as well. And anyway. It is obvious what this recommendation should be. Then, we get to wait and continue our pathetic little lives while our government, our elected government, that is supposed to be looking out for our best interests, they make their decision. I think it is just absurd and I want to let you know that that is the way I feel. And you take that to my government. Because they are my government. I think they have forgotten about me, and my farm, and my husband, and my family. And I just want you to remember that Mr. Anderson. You remember that you are dealing with peoples' lives, and their lifetime investments, and their lifetime hopes and dreams.

⁶⁶³ R.J. Addington to David Anderson, October 22, 1990. The letter was sent under Kelly, Douglas & Company Ltd. letterhead, as Addington was its CEO. Addington was also the chairman of the Board of the Insurance Corporation of BC (ICBC).

And it is not just my farm. Because I live right across the street from one of the first [petroleum] wells. I live on 248th Street. It's everybody else's farm around me. And I think it is just disgusting that we are all here on a wonderful summer night. I mean these people, Dr. Ormston has a business, Charles Maclean has a business, Glen has a business, my in-laws have a right to a retired life after working hard all their lives. Mr. Vickers works as a teacher. Nobody is paying us. These oil people, they are paid to be here! Nobody is paying us. Nobody is recompensing us. But we care about it. You just remember that when you make your recommendation.

[More applause is heard.]

And, I also have a question. My youngest child is an asthmatic. And, from our research into compressor stations there is an allowable ratio of flow-through gas that escapes into the air. Now, my in-laws when they went down to Jackson Prairie [underground storage facility in Washington State] they could smell gas around this compressor station. What is my little girl going to do? And I want that really looked into. And Glen can get up and tell you, but that is a significant amount of raw natural gas that is allowed to go into our air. And that is an 'acceptable' level. What happens when it rises into an 'unacceptable' level? Thank you.

The first speaker of the evening was Sheila Puls.

Puls: I have a couple of concerns. My first one is, I was here at the presentation a month ago and I listened to the gas companies. And I can understand their theory of pumping gas out of an area they find gas, and then putting gas back in. That seems quite logical and maybe not what we want. But quite logical: where there was gas before there is a secure place to store gas.

My concern is they were also talking about finding an area that was suitable for gas storage where there was no gas now, testing it, and putting gas in to store it. I'm really concerned if they find the sort of strata where gas would normally be found and it's empty, where the gas that was there is gone. And I'm also concerned about how they can test that storage area to make sure that gas doesn't escape while they're testing it, because the only way I can see to test an area like that is to pump gas in. I'm really concerned about the leakage of gas in a built-up area like this.

Along with that follows the fact that I've heard a lot of people who know people – and I don't have the facilities to trace but maybe you do – that in the Ft. St. John area there is in fact a court case in progress where a gentleman had a well polluted with natural gas, installed a separator, and is now being sued by the gas company for using that gas to heat his home, because it's their gas and he has no right to use it. **This is in his own water well, having had a polluted well.** [Bold emphasis] I'm sorry, I don't know his name. But I do know there is a family up there, who have also bought a separator, who are waiting for the results of the court case in order to install it. So, maybe that can be traced through the courts. I have no means of tracing that.

At the June 12th hearing, Conoco's Bob Spring, stated that there were no instances of groundwater contamination by the petroleum industry in northeast B.C., that industry was blemish-free, statements also publicized by his consortium in full-page newspaper advertisements. Here was someone exposing that lie. Puls wrote a follow-up letter to Anderson on July 23rd and stated that the gas company in question was "suing a rancher." Anderson sent an August 8th letter of reply: "I have asked the Commission Secretary, Mr. Rob Tweedie, to ... track down the story of the lawsuit in question. It is an interesting twist to the

usual gas separation issues.” It is “interesting” to note that Anderson failed to properly identify the real “twist” in Puls’ presentation statement, namely groundwater contamination by a petroleum company.

White Rock Utilities Limited

September 12, 1990

Province of British Columbia
Commission on Fraser Valley
Petroleum Exploration
#105 - 20611 Fraser Highway
Langley, B.C. V3A 4G4

1235 Johnston Road,
White Rock, B.C.
V4B 3Y8

Telephone 536-6112

Att: Mr. David Anderson, Commissioner

Dear Mr. Anderson:

RE: Possible drilling for natural gas, and gas storage
in the Fraser Valley.

We wish to be recorded as being most concerned about the possible drilling for natural gas and on gas storage in the Fraser Valley area.

White Rock Utilities Limited was established in 1913. The company provides service to consumers in the City of White Rock, certain adjacent areas in the Municipality of Surrey, west of the city, and to the Semiahmoo Indian Reservation, south of the city.

We supply approximately 15,500 people with domestic water and fire protection in the City of White Rock.

The source of our water supply comes entirely from five wells, ranging in depth from 205' to 343' within the city boundry.

There has been much speculation on the origin of the underground aquifer we are currently using, but no one seems to know exactly where it comes from.

I am sure you can appreciate our concern about any possible threat of contamination to our underground source of water.

Yours truly,

C.E. Merchant
Manager



Commission Correspondence Files

Ray Addington, the chairman of the British Columbia Insurance Corporation (ICBC), the president of Kelly Douglas and Company Ltd. and owner of The Real Canadian Super Store, Super Valu, Shop Easy, and the Red and White Stores, and a chairman of the Friends of the Fraser Valley, approached the hearing microphone:

Addington: Mr. Commissioner. I am here to bring to your notice my deep concern, and that of my neighbours, the potential exposures to the dangers of our health, to our property, to our lifestyle, as a result of drilling for natural gas in the vicinity of where people live.

Now, we are told by the oil and gas companies that technology and regulations, when properly combined, can eliminate risks and that we should have no fear of potential dangers. Well, I am here to point out that with the best foot in the world, accidents endangering health and life and property

From the Anderson Commission Technical Exhibits

C-28

Aldergrove meeting
July 11, 1990

Mr. Commissioner:

My name is Ray Addington and I live at 554 - 248th Street in Aldergrove.

I am here to bring to your notice my deep concern and that of my neighbours for the potential exposure to dangers to our health, property and life style as a result of drilling for natural gas in the vicinity of where people are living.

We are told by the oil and gas companies that technology and regulations when properly combined can eliminate risks and that we should have no fear of potential dangers.

I am here to point out that with the best will in the world, accidents endangering health, life and property regularly occur because of human error whether it be from ignorance, lack of training, corner cutting, deliberate lying, a combination of circumstances or just bad luck.

regularly occur because of human error, whether it be from ignorance, it be from a lack of training, or corner-cutting, in deliberate lying, in a combination of circumstances, or just bad luck.

Now, I am here to bring to your notice, and to the notice of this meeting, a disastrous account in what was thought to be a well-conducted drilling operation by a major oil company [Amoco] in an area where government regulations were in fact in force. On April the 18th, 1973, the residents of a town called Williamsburg, in the State of Michigan, noticed to their horror a large number of craters were appearing on their property exuding natural gas into the atmosphere. Now, as soon as the presence of natural gas was definitely established, and the danger of fire was realized, families were evacuated from all the dangerous areas. The American Red Cross gave aid to persons made temporarily homeless, and many local citizens organizations also provided help. Hundreds of people were ordered to leave their homes immediately, for their lives were in danger. And even three months later there were people still unable to return to their homes because the health authorities could not declare it safe to do so. In all, there were 96 homes involved and property damage was mainly related to building foundations and water and sewage systems. All the road and rail traffic in the area had to be stopped for fear of explosion and fire. Three days later additional eruptions and craters appeared in the Acme Creek area some three and a half miles west of Williamsburg. Not more than fifty craters, not more than fifty feet across, were filled with bubbling muddy water, appeared in the ground at the Acme and Williamsburg locations. Hundreds of much smaller vents were also detected in the areas of eruption. Now, considering the magnitude and the circumstances of the gas eruptions it was in fact miraculous that there were no human casualties or injuries. Physical damage to buildings was in the area foundations, and damage by contamination to water and sewage systems by hydrocarbons was very considerable.

A REPORT ON THE WILLIAMSBURG GAS ERUPTIONS

STATE OF MICHIGAN
Department of Natural Resources
October, 1973

Ray Addington's submission
July 11, 1990

Occurrence of Gas in Water Wells. There were reported to be fifty substantial craters and hundreds of smaller blow-holes in the Williamsburg and Acme areas caused by the escaping gas, three of which developed around water wells. The most common type of gas involvement in water wells was the occurrence of gas bubbles in the water, and the build-up of gas concentration in surface soils around the well. Gas was usually detected in trace amounts around the well, and would increase over a period of hours or days, depending on the amount of gas present in the aquifer, and the type of soil in the vicinity of the well. Gas tended to rise around the outside of the well casing and spread laterally through the surface soils. Most of the gas, however, erupted in craters, blow-holes, permeable surface soils, swamps, and stream bottoms. The amount of gas present in the subsurface, and the degree of confinement by clay strata determined the severity of the eruption at the surface.

At least sixty-five water wells were affected by gas in the Williamsburg-Acme area. Fifty-four new wells were reported to be drilled, to replace the original wells. All wells affected by gas were vented, and equipment was installed to remove and vent any residual gas that may occur. Problems with gas in water wells will continue for an indefinite time and continued surveillance is necessary.

Williamsburg Gas Migration Newspaper Headlines April - May, 1973



**Natural Gas Appears
In Acme Water Supply**

A-14 VOL. 119, NO. 4 TUES., MAY 1, 1973

Editorials

THE STATE JOURNAL
Our 119th Year

**Full Probe
Needed In
Gas Leak**

**Another Town Threatened
By Explosive Gas Geysers**

70 Families Now Displaced

Probing a Tragedy

**Gas Threat Brings
More Evacuations**

Gas Leak Spread Feared

**Traverse City
May Be Periled**

**Natural Gas Shows up in
Tap Water and in Wells**

Williamsburg Is Like Ghost Town

**Gas Eruptions Continue;
Traverse City Worried**

GAS LEVEL CLIMBS

New Spout Rout 10 Families

PAGE EIGHT THE NEWS-PALLADIUM, SEVENTH EDITION, MOBILE, ALA. SATURDAY, APRIL 21, 1973
Explosions Feared At Our Geyser Town

**Gas Eruptions Have Forced
50 Families From Homes**

Evacuate Williamsburg from Gas, Craters

Amoco Caps Well Blamed
For Williamsburg Eruptions

**Heavier Gas Concentrations Spew
At Williamsburg; First Suit Filed**

**Lawmakers Want Independent
Investigation of Gas Eruptions**

The Governor of the State of Michigan was so alarmed that he immediately directed the Michigan Department of Natural Resources to make a report on the disastrous accounts of natural gas eruptions in and around the vicinity of Williamsburg. And I quote from the first page of this report:

The gas eruptions, now greatly diminished and nearly quiescent as of this writing, resulted in considerable property damage and environmental disturbances, and greatly endangered the lives of local citizens. The gas eruptions were quickly and tentatively identified as related to the drilling of an oil or gas well test several miles south of Williamsburg. ⁶⁶⁴

Detroit Free Press

ON GUARD FOR 141 YEARS

Vol. 142—No. 349

Sunday, April 22, 1973

METRO

John S. Knight's
Notebook

See Page 2, Section D

• • •

Thirty Cents

New Geysers Add to Blast Peril

BY JOHN MILLER
Free Press Staff Writer

WILLIAMSBURG — Continually increasing natural-gas leakage and several new found geysers heightened the danger of explosions Saturday as this northern Michigan community went through its fourth day of crisis.

New geysers outside the original mile-square area of concern forced officials to cordon off the entire southern two-thirds of this small township, an area of 4 square miles, and forbid entrance to anyone except law enforcement officers and gas safety experts.

Four more families were evacuated during the middle of the night, bringing the total of displaced families to about 50, according to Sgt. Tom Schmuckal of the Grand Traverse County Sheriff's Department.

A new field of geysers opened up about a mile southeast of Acme, a small town 3½ miles west of Williamsburg. According to Sgt. Schmuckal, "The whole ground is trembling and pulsating" in a circle 15 feet in diameter. Silt from seven geysers at that point began flowing into Acme Creek and on into the east arm of Grand Traverse Bay, a mile west of the creek.

During the night Friday, rain and fog held escaping gas so close to the ground that near-

explosive concentrations developed into the open atmosphere, an extremely unusual and dangerous occurrence. The temporary command post at the northwestern edge of the stricken area was almost evacuated, according to Sheriff Richard Weiler.

Relief seems nowhere in sight. Michigan Public Service Commission gas safety engineer Donald Bateman said: "Even if the source were cut off this instant, these (geysers) could percolate for several weeks."

"We are getting high gas readings from the original sources and higher concentrations in these buildings," he said, referring to the dozen homes immediately surrounding the town hall.

EFFORTS TO SAVE the hall from caving in appeared to have failed. "Right now I think they've lost it," Weiler said. A geyser erupted under the hall's foundation on Thursday and underlying soil has continued to erode since then.

Bateman said he thought the ground under Williamsburg had become totally saturated with gas. As a result, the geysers were spewing "more gas and less water" than previously.

Gov. Milliken toured the stricken area Fri-

— Sketch by Free Press Art Director DICK MAYER

How a well-drilling operation can cause mudholes and escaping gas.

Please turn to Page 6A, Col. 1

In their summary of findings they found, and I again quote:

1. The gas eruptions in the Williamsburg-Acme regions were caused by the subsurface escape of gas and liquid hydrocarbons from the Amoco Production Company's State-Whitewater "E" 1-22 well located in [Section 22, T.27N., R.9W.] Grand Traverse County.

And number 2, and I quote:

2. The escape of gas and liquid hydrocarbons to subsurface formations relates to what may be called a subsurface blowout. The subsurface blowout in the Amoco "E" 1-22 well was generated by adverse judgments and decisions or actions by Amoco Production Company and/or the drilling personnel in drilling.

⁶⁶⁴ A Report on the Williamsburg Gas Eruptions, October 1973.

Evacuate Williamsburg from Gas, Craters

Petosky News Review - April 19, 1973



WILLIAMSBURG, MICH: This is M-72 near this community of 150 where natural gas and water erupted suddenly from numerous spots in the ground within a two mile area. Today traffic is being detoured and the town's 50 families were being evacuated. Cause of the eruptions has still not been determined. (UPI Telephoto)

WILLIAMSBURG (UPI) — Williamsburg was evacuated today as mysterious craters — some as wide as 25 feet — began spreading through this tiny northern Michigan community.

State officials said they "suspect" a nearby oil drilling operation may be to blame.

The Grand Traverse County Sheriff's Department said it would ask Gov. William G. Milliken to declare a state of emergency if the situation continued to worsen.

Mystery Holes 25 Feet Wide, Suspect Nearby Well Fields

Investigators from the state Department of Natural Resources (DNR) were on the scene. "At this point we don't know how to assess it," a DNR spokesman in Lansing said.

"We suspect, but I emphasize that we only suspect, it comes from escaping gas from an AMOCO (American Oil Co.) well there which is being drilled below Williamsburg in Whitewater Township."

25 feet. Early reports placed the number of holes at about 20. New craters were forming, however, as the day wore on. They were said to encompass an area of more than two square miles.

One of the first precautions taken by State Police was to close off a 15-mile portion of M 72 in the area where the craters were first noticed. Evacuation began Wednesday night and by mid-morning, some 50

See Evacuate page 14

Say Magruder Names Mitchell, Dean In Bugging; Hint \$100 G Hush Money

WASHINGTON (UPI) — The Watergate raid and named remain silent—are expected to then-Attorney General John N. Mitchell and White House Counsel John W. Dean III as admitted helping plan the fellow planners.

capital—following Nixon's own and G. Gordon Liddy, who at statement that "major developments" were brewing—that for the Nixon campaign and high administration officials who later was one of the might soon be indicted in the Watergate affair. January

And I want to repeat this: "by adverse judgments and decisions or actions by Amoco Production Company and/or the drilling personnel in drilling and coring operations associated with drilling into the potential pay section of the well."

Gas Leak Spread Feared

Lansing State Journal

April 23, 1973

Traverse City May Be Periled

WILLIAMSBURG, (AP) — Sandbagging operations were set to begin early today at Acme Creek, just below the site of the latest of many gas eruptions that have endangered this tiny village in the northwestern Lower Peninsula.

Silt from the creek has been flowing into Grand Traverse Bay, muddying the water, and officials here say they fear the gas, which has been bubbling up from the ground since Wednesday, may spread ten miles underground to endanger Traverse City, a town of 18,000. The silt could travel into the bay, harming aquatic life.

SHERIFF RICHARD Weiler said workmen also would put snow fences across Acme Creek and devise a filter of hay on the fence to trap silt particles.

Weiler said artificial settling basins would be created below the eruptions to trap the silt pouring out of the blowholes before it got to Grand Traverse Bay.

Officials said Sunday more gas and less water is coming from the blowholes and that may be a sign gas is venting fast enough to prevent it from spreading.

MEANWHILE, authorities were hampered in their efforts Sunday by sightseers. The gawkers caused many problems, officials said, stopping on Michigan 72 and trudging across fields to see the eruptions.

Geologists have been unable to say how fast the gas is traveling underground. But geologist Stanley Dyer said the slope of the underlying rock in the area points the escaping gas toward the bay.

Bill Mullendore, a Department of Natural Resources spokesman, said there has been "no damage to wildlife and no damage to underwater life either."

PHONES And electrical service were shut off Sunday from the area in which gas concentration is the heaviest as a precaution against explosions. Cars also were banned.

Gov. Milliken, from his home ten miles away in Traverse City, announced Sunday that he was making extra fire-fighting equipment available through the Department of Natural Resources and the National Guard.

A. Gene Gazley, director of the DNR, said foam equipment from the U.S. Coast Guard

station in Traverse City was ready for emergency use, and a Coast Guard helicopter is available for surveillance.

MEANWHILE, SEVERAL county officials have announced their intention to file suit against Amoco Production

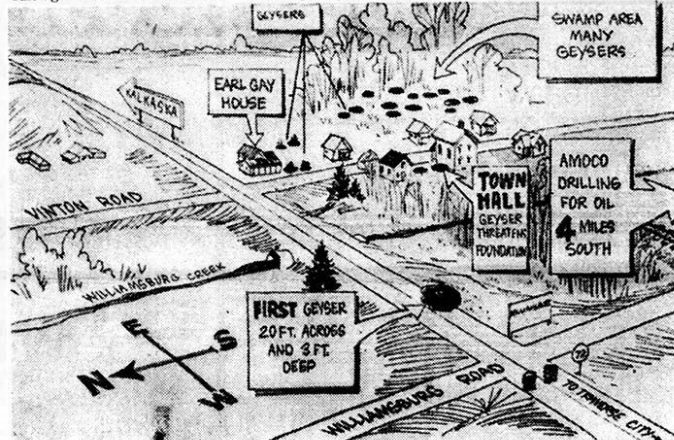
Co., the drilling subsidiary of Standard Oil of Indiana, whose well four miles south of here has been blamed for the eruptions.

But Amoco has denied its well is the culprit.

"All geological strata has

been tested at the company's well," said R.B. Lafever, Amoco district superintendent, "and no gas was evident."

THE COMPANY plans to dig shallow relief holes as a precaution.



Map pinpoints Williamsburg gas leak problems.

A REPORT ON THE WILLIAMSBURG GAS ERUPTIONS

STATE OF MICHIGAN
Department of Natural Resources
October, 1973

Ray Addington's submission
July 11, 1990

Evaluation of Damages to Ground-Water Aquifers. Gas moving through sub-surface ground-water aquifers can create damages to aquifer systems if there is sufficient gas pressure to affect permanent changes to natural hydrologic conditions which would decrease the ability of ground-water aquifers to produce water, or if it remains in the aquifer to cause continuing hazardous conditions to wells over a period of time. A complete assessment of damages to ground-water aquifers has not been made as of the time of this report because there are still new problems with water wells which are occurring four months after the initial gas blow-out.

Some water wells in Williamsburg ceased flowing during the gas eruptions. This was due to the decrease in artesian head caused by water flowing from several craters which punctured the confining layer over the upper aquifer. As of the date of this report, all wells which are known to have stopped flowing are reported to have resumed flowing. Gas present in ground-water aquifers, migrating into water well systems, has contributed considerably to hazardous conditions and will continue for an indefinite period until all gas has migrated to the surface. Some isolated pockets may be trapped in the subsurface, and could cause gas problems for future wells. There is no information on the number, location, size, and depth of any trapped gas pockets which may exist. It is assumed that most of the gas has migrated to the surface and much of that which remains is migrating at a slower rate through less permeable sediments. However, existing wells may have periodic surges of gas and future wells may encounter pockets of trapped gas for an indefinite period.

There are recent reports that water from some of the wells has a taste similar to kerosene. Full details on the nature and extent of this condition are not available at the present time. There is a good possibility, however, that the poor tasting water may be due to the presence of gas condensate in the ground water. Gas condensate consists of a series of gases heavier in specific gravity than methane, which could impart a taste and odor to ground water as opposed to methane which is tasteless and odorless. The presence of gas condensate in the Amoco 1-22 well was noted by G. D. Ells, geologist, Oil and Gas Section. It is impossible to predict just how long these conditions will exist, nor is it possible to locate areas where gas will be encountered, other than those areas which are known at the present time. All water well drillers have been notified of possible future gas problems and have been supplied with information on proper authorities to contact if such a problem should arise".

Now, item 3 states:

3. Certain Rules promulgated [under Act No. 61, Public Acts of 1939, as amended,] were infringed during the drilling and coring of the Amoco "E" 1-22 well.

In the report it identifies that Amoco knew there was a problem on the 14th of April and did not, as regulations prescribe, advise authorities immediately. This caused the population to be exposed to the life endangering gas eruptions from craters which were only noticed on the 18th of April.

Item number 4 states:

Endangerment to life and property did occur, along with actual environmental, natural resource and property damage. Fortunately, there was no loss of human life. And whilst it was thought there was environmental and ecological damage, it appeared to be of short duration.

Hydrocarbons in gaseous and liquid form and in a yet to be determined amount were lost into subsurface rock formations.

In fact, Mr. Commissioner, 17 years later there were still new problems with gas in water wells in the area as the released and lost gases shift around. Item 5 states:

5. The State of Michigan and local government agencies were burdened with unusual and yet to be fully determined expenses generated by the Williamsburg-Acme gas eruption events and subsequent related activities.

Natural Gas Shows up in Tap Water and in Wells

Petoskey News Review - May 4, 1973

WILLIAMSBURG (UPI) — Natural gas is turning up in water wells and tap water in the Williamsburg area where gas eruptions from craters in the ground have forced the evacuation of nearly all residents.

James Woodruff, deputy director of the Michigan Public Service Commission, told the State Natural Resources Commission at a hearing in Gaylord today that while the gas in the water supply is small, it is complicating the already touchy situation in the Grand Traverse County area.

When asked by commissioners when residents would be permitted to return to their homes, Woodruff said:

"As soon as it is safe, but absolutely no sooner. The situation is still bad."

Woodruff told the commission there are still several active and moderately active gas geysers especially in the Bunker Hill Road area southwest of Williamsburg.

Richard Burgess, vice president of the Northern Michigan Exploration Co., a subsidiary of Consumers Power Co., said

emergency rules issued by the Department of Natural Resources (DNR) will probably be sufficient to prevent further gas leaks.

The new DNR rules require an intermediate string of casings on wells to guard against leakage. Burgess said while the extra casings "will impose a large cost burden," gas drillers welcome the requirement on a permanent basis.

He said Northern Michigan Oil and gas drillers arrived at an informal agreement under which they will ask the state to lease larger land units for drilling so that several companies can work cooperatively.

If the cooperative proposal is successful, he said, it could mean a reduction of up to one-half the number of operations required to drill a well.

I noticed [Langley] Mayor Beales here. And I hope he remembers that. You know, the town of Williamsburg, just for overtime for the police, firemen, and that sort of thing, paid \$250,000 American.

Now, Amoco is recognized by the oil and gas industries as a responsible company. And the regulations set by the State of Michigan are said to be appropriate and in line with the practices on this continent. So why did this happen? And why were the residents' lives endangered? Why were their properties put at risk? And why were their water sources polluted for who knows how far into the future? Well, this report made by the director of Natural Resources of Michigan sums it up rather well, and I'll quote him. He says:

Risk is part of the life blood of the oil and gas industry. It cannot be eliminated because of a multitude of unknowns. It should, however, be reduced whenever possible. The operations of

Amoco were not directed toward this goal. Casing should have been run immediately upon encountering indicated circulation loss.

GAS LEVEL CLIMBS

New Spout Rout 10 Families

Detroit Free Press - April 24, 1973

BY JOHN MILLER
Free Press Staff Writer

WILLIAMSBURG — Another natural gas blowhole erupted 3 1/3 miles west of here Monday, forcing 10 more families to evacuate their homes.

Grand Traverse County Sheriff Richard Weiler, who saw gas spewing from the new hole, said: "The density was so great (the gas) was visible."

Within this tiny northern Michigan community, now virtually deserted, gas concentrations from 100 to 150 spurting mud geysers have reached their highest levels yet.

Officials hoped that increased leakage from existing geysers would lessen the chances of new geysers sprouting up farther west, which would endanger populous Traverse City and Grand Traverse Bay.

The gas is thought to be escaping from a well being drilled four miles south of Williamsburg by the Amoco Production Co., a subsidiary of Standard Oil of Indiana.

Amoco officials revealed for the first time Monday that their well caved in at the 4,200-foot level nine days ago. Because of the cave-in they Please turn to Page 2A, Col. 1

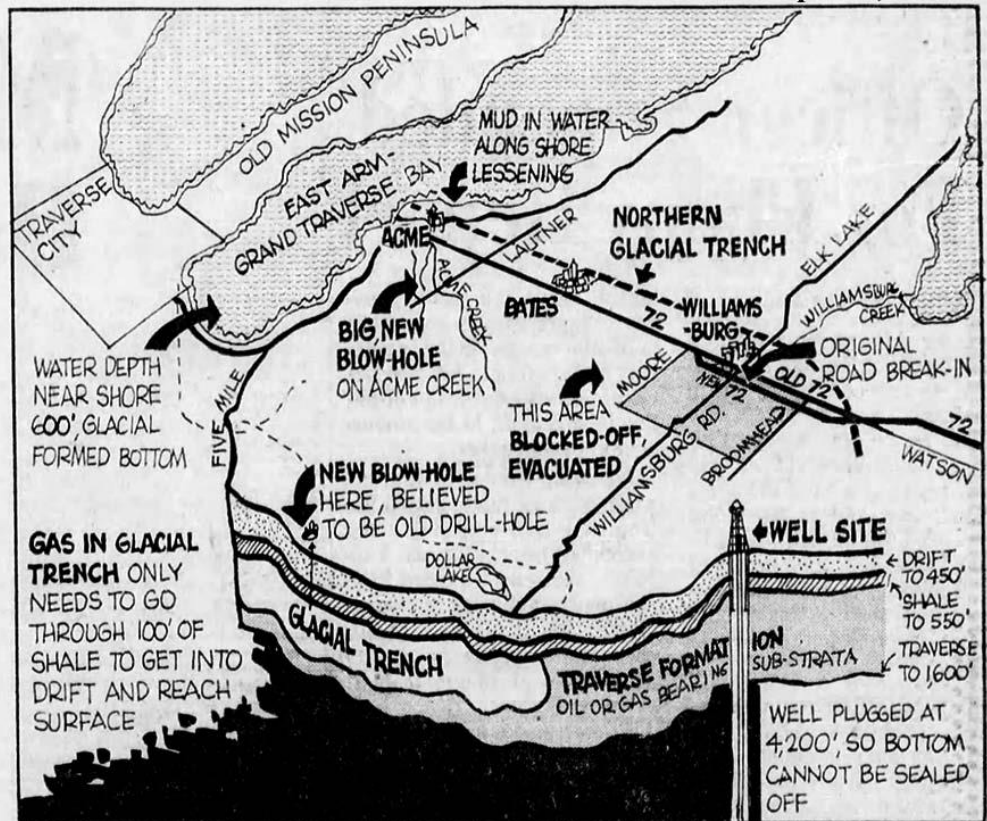


Diagram by Free Press Art Director DICK MAYER

Map shows two glacial trenches, one running westward on a line north of Williamsburg, the other following a similar path south of Williamsburg. The southern trench shows the underground strata through which the gas is escaping to the surface, causing the blowholes or geysers which threaten the area.

Now, the voluminous report I am quoting from extends to about fifty pages with much detail and all aspects of this disastrous and this disgraceful affair. I'll give you [the Commission] a copy but I should like to relate to this meeting some of the irrevocable damage that residents of Williamsburg now have to contend with in respect to their water supply. As a result of the groundwater issues, the report says:

Gas present in ground-water aquifers, migrating into water well systems, has contributed considerably to hazardous conditions and will continue for an indefinite period until all gas has migrated to the surface. Some isolated pockets may be trapped in the subsurface, and could cause gas problems for future wells. Existing wells may have periodic surges of gas and future wells may encounter pockets of trapped gas for an indefinite period.

There are recent reports that water from some of the wells has a taste similar to kerosene. It is impossible to predict just how long these conditions will exist, nor is it possible to locate areas where gas will be encountered, other than those areas which are known at the present time. All water well drillers have been notified of possible future gas problems and have been supplied with information on proper authorities to contact if such a problem should arise.



Sky-Blue Waters Muddied

Grand Traverse Bay has long been a postcard place, its waters lying in layers of darker and darker hues of blue because of the bay's several hundred-foot depth.

But Tuesday the erupting gas geysers that have endangered Grand Traverse County for a week clouded the bay with silt and mud, turning the waters near its shoreline into a settling pond.

The gas, erupting from nearly 3,000 feet below the ground in what is thought to be a runaway gas well, is leaking into porous rock formations and ancient glacial trenches. Then, under tremendous pressure, it is pushing mud up through artesian wells and into the area's trout streams which drain into the bay.

Detroit Free Press
April 25, 1973

See Story on Page One

Free Press Photos
By Alan Kamuda

Aerial photo shows mud from streams and wells (lighter areas) flowing into Grand Traverse Bay

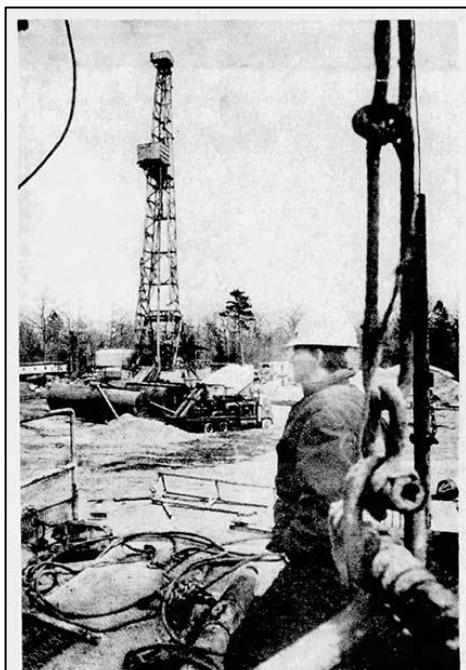
And I think they've all been recommended to be non-smokers in the future. In summary, they say:

At least sixty-five water wells were affected by gas in the Williamsburg-Acme area. Fifty-four new wells were reported to be drilled, to replace the original wells. All wells affected by gas were vented, and equipment was installed to remove and vent any residual gas that may occur.

But they also go on to say: "Problems with gas in water wells will continue for an indefinite time and continued surveillance is necessary."

And, as I said before, seventeen years later there are still problems with gas exuding from water wells. Now, I'll not impose upon you further details from the report because you can read it yourself.

But what I must do is to advise you that the potential risk to residents within several miles of gas wells is not a figment of the imagination and is not something we residents are prepared to accept. Particularly since the need for additional supplies of natural gas for British Columbia does not exist, nor is it likely to exist.



Petoskey News Review - April 26, 1973

WILLIAMSBURG, MICH: An American Oil Company official watches as workmen continue to pump cement into well E-122 in an attempt to stop gas and water eruptions three and one-half miles away in Williamsburg. The well is believed to be connected with the eruptions that have caused the evacuation of 64 families. (UPI Telephoto)

In whatever field of accidents that you investigate, you find that regulations and good corporate intentions are always eliminated and made impotent by the human factor.

For example, it is an established fact that 80% of all flying accidents result from pilot error. And yet the training, the regulations and the corporate care are of the highest standard. Analysis of all road accidents in B.C. identify the contributing factors as 81% human action

Safe Casings Ordered On State Gas Wells

More pictures on Back Page
BY JOHN MILLER
Free Press Staff Writer

Detroit Free Press
April 25, 1973

WILLIAMSBURG — The Michigan Department of Natural Resources (DNR) issued an emergency order Tuesday intended to prevent recurrence elsewhere of the kind of natural gas eruptions that have periled this town and forced residents to flee.

The temporary DNR order, which takes effect Friday and lasts three weeks, requires drillers of all new wells to install a layer of protective casing extending below porous rock formations through which gas from a well leak can escape.

As officials of the Amoco Production Co. tried and failed Tuesday in their first effort to control a runaway well thought to be the source of the gas, the Grand Traverse County Board of Commissioners asked Gov. Milliken to declare a moratorium on all drilling in their county.

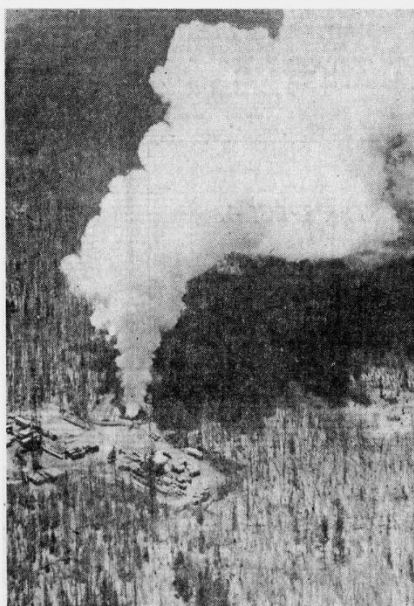
Meanwhile, new geysers of gas and bubbling mud were discovered near Williamsburg and concentrations of gas in existing gas-mud craters continued to increase.

Mud from the geysers has been draining into area streams and wells and flowing into Grand Traverse Bay, turning its shoreline murky.

A crater 50 feet in diameter opened Tuesday in front of the Earl Gay residence, the first Williamsburg home endangered when the crisis began last Wednesday.

It was the third to form in Gay's yard and officials fear that if the craters spread and connect, the foundation of the home could collapse.

The Gay family is one of 64 which have been evacuated.



Gas is burned as part of Tuesday's effort to control the well

A-14 VOL. 119, NO. 4

TUES., MAY 1, 1973

Editorials

THE STATE JOURNAL
Our 119th Year

Full Probe Needed In Gas Leak

The strange episode of leaking natural gas in and around the tiny community of Williamsburg near Traverse City has set off a flurry of charges and denials about who or what was responsible and the situation calls for full state investigation.

During the past several days the area has become a cauldron of natural gas eruptions spewing to the surface from deep underground, creating sinkholes which endanger public and private buildings and have caused mass evacuations.

Some Department of Natural Resources (DNR) officials have suggested the leakage resulted from gas well drilling by an oil company. Officials of the company, Amoco, have denied their well was the source of the gas. Meanwhile, a noted Michigan conservationist, Ford Kellum, has blamed both the DNR and the oil company for inadequate precautions in the drilling methods.

Law suits have already been filed by some residents in the area and no doubt various state legislative committees may also be looking into it as well as the attorney general.

One thing certain is that the natural gas seepage in the northern Michigan community has created a hazard to life and property. Also at stake in the situation is the question of environmental protection versus the need to find new energy sources.

The DNR, as the chief environmental protection agency in Michigan, faces a stern challenge to thoroughly investigate causes of the Williamsburg disaster and take tough regulatory steps to see that it doesn't happen again.

Heavier Gas Concentrations Spew At Williamsburg; First Suit Filed

Petoskey News Review - April 26, 1973

WILLIAMSBURG (UPI) — sources, said no letup in the already present gas-and-mud-spewing geysers was expected for at least three days.

"The gas already in the ground will still come out of the ground," Mullendore said. "It's not like turning off a faucet."

Mullendore said the only thing that can be assured was "no more gas would be leaking from that hole."

The first of what is expected to be several lawsuits has been filed against Amoco in Grand Traverse County Circuit Court.

The owners of the Acme Trailer Park asked for \$2.5 million in damages, plus court costs, in charging Amoco and a subcontractor, Cactus Drilling Co., with negligence in drilling the State Whitewater E-1-22, the well that was plugged and believed to be the culprit in the gas escape.

Gerald A. Auger, M. Kristine Auger and W. Jan Bonek, owners of the park, allege that the two companies were guilty of negligence that caused damage to their property and to the na-

tural resources of the area. No date had been set for a hearing on the suit.

In the meantime, Grand Traverse County Sheriff's Deputies reported another gas leakage two miles east of Traverse City, the closest the highly dangerous gas had come to the area's largest city.

Sgt. Tom Schmuckel said the new gas leak was discovered in a water well.

Mullendore said more gas and less mud and water was spurting from the potholes, heightening the fire threat in the fragile

situation. "Some of the first craters are blowing practically pure gas at this point," Mullendore said.

One hundred sacks of cement were forced down the Amoco well to form a solid plug Wednesday and Amoco officials said a protective casing was to be put all the way down the shaft to insure "no chance of a gas leak."

DNR officials said there would be a three-day waiting period before any effect could be measured in the community, but that See Williamsburg page 13



The News-Palladium

Michigan's Biggest Buy . . . For Reader And For Advertiser

FINAL EDITION

BENTON HARBOR, MICH. FRIDAY, APRIL 20, 1973

28 PAGES

15c

WEATHER FORECAST
Mostly cloudy today with chance of showers or thundershowers.

TEMPERATURES

Readings from Thurs. noon to Fri. noon:

12 n	61	3 a.m.	57
6 p.m.	62	6 a.m.	54
9 p.m.	58	9 a.m.	62
12 m.	58	12 n.	66

High, 66, at noon Fri.; Low, 56, at 6 a.m.

Geyser Puzzle Getting Worse

50 Families Evacuated

WILLIAMSBURG, Mich. (AP) — Natural gas eruptions have forced some 50 families to evacuate their homes near Williamsburg, and officials are not sure what is causing the bubbling craters.

Grand Traverse County authorities said geyser activity increased Thursday, with a new geyser erupting one mile from the original one which appeared the previous day.

Numerous potholes and geysers have erupted near the northwestern, Lower Michigan community, honeycombing an area about four miles in circumference, officials said.

Families began evacuating before sunrise Thursday, and as gas accumulations spread more were forced to leave.

State Police and sheriff's deputies cordoned off the area because of accumulating gas. Power was shut off and smoking banned for fear of explosions from sparks.

One large crater—20 feet across and two to three feet deep—cut across Michigan 72,



EXCITEMENT UP NORTH: Firemen in photo at left investigate geysers of natural gas and water that have mysteriously sprung



up in the little northern Michigan town of Williamsburg. Many families have been forced to evacuate their homes because of the danger of fires and explosions. In photo at right, State Police Sgt. William Ogden stands beside a bubbling crater along Highway M-72 near Williamsburg. State officials are trying to determine the cause of the geysers. (AP Wirephoto)

Mitchell Appears Before Jury

WASHINGTON (AP) — before a grand jury investigating the Watergate case. Mitchell appeared today at 11 a.m. in court in Washington.

campaign planned the Watergate wiretapping over his veto. Mitchell testified yesterday.

carried out through public statements and news leaks, over which of them is responsible for

victed of the crime. Magruder has been unavailable to newsmen, but his lawyer says he in-

plans at all three meetings. Dean was present at one or more of the meetings, Mitchell

that Mitchell has said privately if he had known of the Watergate plans "he would have tried



The News-Palladium

Michigan's Biggest Buy . . . For Reader And For Advertiser

FINAL EDITION

BENTON HARBOR, MICH. THURSDAY, APRIL 26, 1973

40 PAGES

15c

WEATHER FORECAST
Fair tonight; increasing cloudiness Friday.

TEMPERATURES

Readings from Wed. noon to Thurs. noon:

12 n	61	3 a.m.	41
6 p.m.	62	6 a.m.	33
9 p.m.	45	9 a.m.	58
12 m.	41	12 n.	58

High, 64, at 1 p.m.; Low, 33 at 6 a.m.

Oil Expert Says Drilling Rules 'Too Lenient'

Retired State Biologist Blasts His Former Employers

TRAVERSE CITY, Mich. (AP) — When the state demands more rigorous safeguards from oil companies, says a prize-winning wildlife biologist, behind the natural gas eruptions which plague this northern Michigan area in-

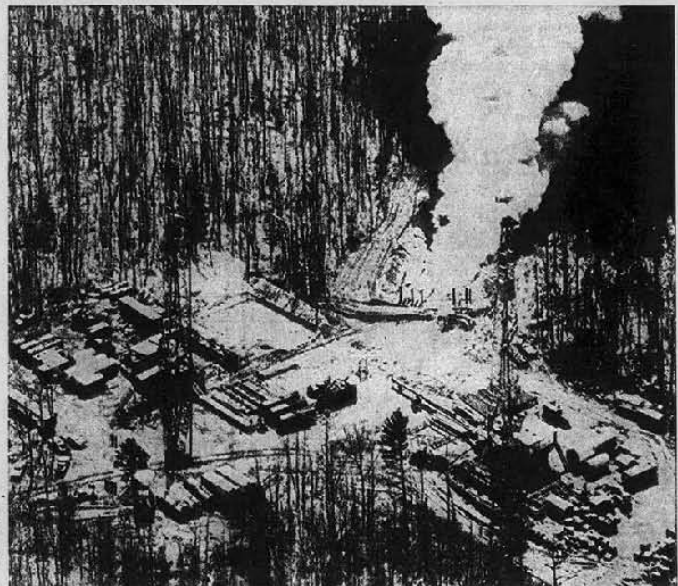
terably well crop up again. And, says Ford Kellum, the gas eruptions which led to the evacuation of this small community could have been avoided in the first place.

In laying the blame for the danger of the blowups of this oil

industry—and the American Oil Co. specifically—the retired Department of Natural Resources biologist blasted Amoco for not immediately revealing an uncontrolled well, and DNR officials for being "all

Kellum, a resident of Traverse City, was named Michigan Conservationist of the Year in 1971 for his work in reforming the state's oil drilling regulations. And the geysers of mud and gas which have caused families, scattered streams and endangered wildlife make him mad.

Kellum makes no secret of the fact he believes the gas problem resulted from an Amoco Production Co. well four miles from Williamsburg which went out of control a week ago Sunday.



PROBLEM GAS WELL: This aerial photo of Amoco Production Co. well 122 shows "blow" or burst of gas (far right) pushed up by mud pumping operation designed to stop gas eruptions. The eruptions near Williamsburg created blowholes when leaking gas

escaped through porous rock formations pushing mud up through artesian wells and into streams and forcing evacuation of the town. Drillers said they have succeeded in sealing the well off. (AP Wirephoto)

and human condition. Whereas only 3% are only caused by the vehicle condition and 16% by the environment.

Therefore, it is totally unacceptable for the oil companies to assure us that corporate intentions and regulations will protect us from the risks associated with drilling for gas. There is risk and we are not prepared to be exposed to this risk which is totally unnecessary.

I've approached Lloyds of London to cover us against such risks, and they will not do so. And we have not heard from the oil and gas company directors that they, and their heirs and successors, will cover us, and our heirs and our successors against such risks. Nor is it appropriate to expose any part of the Fraser Valley to such risks.

On May 8, 1990, the GVRD [Greater Vancouver Regional District] issued its report on the prospects for the future entitled "Choosing the Future." They forecast that within 20 years time the population of the Lower Mainland will increase by nearly one million to almost two and a half million people. Specifically, the Langley area will increase from 70,000 in 1986 to 160,000 in twenty years time. Now the area south of the Fraser River from 275,000 to 530,000 people.

In conclusion Mr. Commissioner, I contend it is reckless and totally irresponsible to drill for gas in such an environment. And my neighbours and I will do everything possible to prevent it happening in our area.

—O—
A survey by Atty. Gen. Frank Kelley of the Williamsburg area riddled with natural gas eruptions could result in court action against the oil company suspected of causing the eruptions accidentally.

A spokesman for Kelley said the attorney general's trip Tuesday to the northern Michigan community was made "with an eye to possible court action."

Gas concentrations from 100 to 150 spurting mud geysers have reached their highest levels yet in the week since they first started erupting, state officials said.

State officials have said they suspect the gas is escaping from a well being drilled four miles south of Williamsburg by the Amoco Production Co., a subsidiary of Standard Oil of Indiana.

The Evening News
April 25, 1973
—O—

Lawmakers Want Independent Investigation of Gas Eruptions

LANSING, Mich. (AP) — Two state representatives say the Department of Natural Resources is a possible target of its own investigation into the cause of gas eruptions near Williamsburg in Grand Traverse County.

Reps. Michael A. Dively of Traverse City and Ralph Ostling of Roscommon, both Republicans, took issue Thursday with the governor's office for allowing the DNR to probe the cause, believed to be a faulty well drilling operation belonging to Amoco Production Co.

The DNR has power to conduct sales of oil and gas leasing rights in northern Michigan and to require and oversee safe well drilling procedures.

"This could be a conflict of interest situation," said Dively, who said a federal agency or "some outside, independent agency" ought to probe the cause instead.

"We want a totally objective look into this very serious matter ... and we feel that this can only be accomplished by someone completely removed from the situation," Dively and Ostling said in a joint statement.

A preliminary study the DNR was to hand over today to the attorney general's office says an "industrial accident" and ensuing gas leak at Amoco's well four miles south of Williamsburg is "the most probable cause" of the eruptions over much of Grand Traverse County.

Amoco has plugged the well hole since the first eruptions occurred several weeks ago.

Gov. William G. Milliken also said further sale of oil and gas lease rights will be delayed until the DNR completes its investigation.

The DNR earlier said it would seek approval from its Natural Resources Commission for sale of oil and gas lease rights in 25 counties, but the department told Milliken Thursday it is withdrawing the request.

"We may find out no one is to blame," Dively said. "But if the DNR came out with a report like that, it would sink like a lead balloon because they have an ax to grind."

Dively praised the DNR's director, Gene Gazlay, saying, "I frankly think Gene Gazlay would be willing to admit that he blew it if he did, but I'm sure some of the other people in the department would not be willing to admit that."

Gazlay said the department is "appraising the possibilities of bringing in outside expertise," including federal authorities.

The Natural Resources Commission was urged by several groups, Thursday at its monthly meeting in Gaylord to seek a moratorium on drilling leases.

"Perhaps ... existing leases should be considered non-drilling leases and new drilling leases should be negotiated before more drilling is allowed," said a spokesman for the Williamsburg Area Coordinating Committee.

Ironwood Daily Globe
May 4, 1973

The audience applauded for a lengthy time after Ray Addington finished his poignant presentation. The Michigan report had been tracked down by Glen Breaks and other Friends who, on a number of occasions, journeyed from Langley to the multi-story Vancouver Public Library, located at that time in downtown Vancouver on the northeast corner of Burrard and Robson Streets. It was the largest public library in the Lower Mainland, with the largest collection of books, reports, periodicals, newspaper clippings and newspaper clippings indexes, and had helpful and resourceful reference librarians. It took a lot of effort to track down the Williamsburg incident, to discover the existence of the report, to retrieve a copy of it, and to prepare for the July 11th presentation.

Probing a Tragedy

Detroit Free Press
May 9, 1973

THE PEOPLE OF Michigan need an independent investigation in addition to the one being conducted by the state Department of Natural Resources to find out just what went wrong near Williamsburg that led to the natural gas eruptions.

The DNR is too closely linked in public minds with the industry which it regulates and which it now must investigate. The investigation must, in fact, be aimed at decisions made and reports filed by DNR personnel. Lingering doubts will follow any report based only on DNR review.

Apparently there is no federal agency with authority to conduct such an investigation, so it is up to Gov. Milliken to find an independent organization and authorize the investigation. It is a specialized field but there is some expertise available in organizations such as the Lake Michigan Federation, which is headquartered in Chicago but which has several branches in Michigan.

The study should also go beyond finding out what happened in the particular Williamsburg situation which has left 71 families homeless and left the area near Traverse City pocked with craters. A drilling mishap at a well being dug by Amoco is generally considered the cause of venting gas in the area. Just what happened there and whether any blame is to be assigned must be determined.

The study should also provide the governor, the Legislature and the DNR with advice on the best possible safety regulations to prevent similar situations in the future.

*Submitted by Ray Addington
Aldergrove meeting
July 11, 1990
(C-28 of Commission record)*

A REPORT ON THE WILLIAMSBURG GAS ERUPTIONS

STATE OF MICHIGAN
Department of Natural Resources
October, 1973

Addington's summary revelations from the 1973 government report documenting gas migration and groundwater contamination in the State of Michigan was compelling and contradicted the petroleum industry's claims, or lies, about groundwater contamination.

Located south of the town of Williamsburg by about four miles, Amoco's exploratory oil well blew out after tapping into a deep, highly pressurized methane deposit. After the blowout was capped, spider arms of methane gas migrated through underground formation cracks extending more than seven miles distant from the well bore, causing a widespread, unmitigated public and ecological disaster.

AN ANALYSIS OF THE
AMOCO STATE WHITEWATER 'E' 1-22 WELL
AS THE CAUSE OF THE
NATURAL GAS ERUPTIONS
AT WILLIAMSBURG AND ACME, MICHIGAN
IN APRIL 1973

T-53

For
FRANK J. KELLEY
ATTORNEY GENERAL
STATE OF MICHIGAN
LANSING, MICHIGAN


By
MOODY AND ASSOCIATES, INC.
Meadville and Harrisburg, Pa.
Columbus, Ohio
October 1974

Respectfully submitted:

John T. Walker
John T. Walker
Special Oil and Gas Consultant

Craig G. Robertson
Craig G. Robertson
Project Manager

Approved:
Richard E. Wright
Richard E. Wright, AIPG
Executive Vice President



27 years before Ray Addington, Glen Breaks and Al Vickers (in his visit to and presentations on the Jackson Prairie underground storage facilities) raised legitimate concerns on the proximity of underground gas storage to large population centres, similar sensible concerns had been raised by Washington State legislators in response to gas companies seeking locations for underground gas storage in Washington State. Following an intense debate on the evening of March 12, 1963, the Washington State House defeated several motions challenging proposed amendments to Bill 464 on “underground storage of natural gas,” a Bill which “gives the gas companies the right of eminent domain under certain conditions in acquiring storage site.” Representative Edward Harris, chairman of the House Utilities Committee, stated the amendments “intended to “harpoon” the Bill,” because in his mind the “storage projects would represent an investment in the state of up to \$20 million,” and “provide new jobs.”⁶⁶⁵

“One amendment would have prohibited underground gas storage within five miles of any city and 10 miles of cities of more than 50,000 population. Others [amendments] would have made gas companies liable for damage from explosions, permitted a local referendum on permitting the storage and prohibited storage within a mile of a school, institution or dwelling.”⁶⁶⁶

After Third Reading, the House passed Senate Bill 464 – “Authorizes natural gas companies to condemn private property for underground gas storage” – on March 13th by a wide margin of 90 to 6. A month later, the Washington Natural Gas Co., the Washington Water Power Co., and the El Paso Natural Gas Co. began a joint venture and “geological testing of a 4,000-acre tract in southwestern Washington.”

George M. Brunzell, president of Washington Water Power, said Friday [April 19th] the area to be tested has a potential for storage of between 15 and 20 billion cubic feet of gas. It is at Jackson Prairie, about nine miles southeast of Chehalis.⁶⁶⁷

As debated in 1963, the proximity to population and danger themes related to underground gas storage became central arguments by the Fraser Valley Gas Project consortium in the two months following the July 11th hearing. To validate their arguments, it was alleged that the consortium had to get Glen Breaks’ American underground gas expert witness to fall into line. Explained in Section 21, *The Rzepczynski (Population Proximity) Affair*, this would turn out to be a nasty battle.

The groundwater issue was so often raised during the July 11th hearing that Commissioner Anderson remarked to Blaine City Manager Eric Peterson, after Peterson raised the issue of keeping Blaine’s groundwater safe from petroleum exploration, “Obviously as you’ve noted this evening the groundwater issue is perhaps, if there is an overriding issue, the overriding issue.”

Anderson promised Addington that the Commission would visit the Williamsburg accident site in the State of Michigan and promised to have a regulatory member from Michigan to appear before the Commission. “We will be attempting to probe that accident for any lessons it can give to British Columbia,” Commissioner Anderson stated to Addington.

However, the Commissioner made no similar promises to Glen Breaks after hearing of disturbing groundwater contamination problems from underground gas storage facilities in the State of Illinois. The Commission’s innocent or deliberate failure to visit the State of Illinois in its July to August 1990 itinerary visits of American, Canadian, and European underground gas facilities would later prove to be a

⁶⁶⁵ *Financial Responsibility Bill Advances After Rough Go*, Spokane Chronicle, March 12, 1963.

⁶⁶⁶ Longview Daily News, March 12, 1963.

⁶⁶⁷ *Jackson Prairie Test for Natural Gas Storing Set*, Longview Daily News, April 20, 1963.

poisonous mistake. In fact, as narrated in Section 22 of this chapter, David Anderson would eventually have to make a special, personal trip to Illinois in mid October 1990 to placate the explosive, political issues raised by The Friends with the media on groundwater contamination.

Addington's reference to his seeking liability insurance coverage advice from Lloyds of London, an international insurance agency, would later be a subject of discussion on August 30, 1990, during the fourth day of the Commission's technical hearings. In fact, the Commission had not properly prepared background research on this subject for the August 30 session and was later chastised by Addington for not doing so. Because of Addington's criticism, on October 17th the Commission hired Copper Roof Management "to carry out a study of insurance coverage available to property owners residing over underground natural gas storage facilities."⁶⁶⁸

Towards the end of the July 11th public hearing, Al Vickers stated the following:

Vickers: I would like to discuss very briefly what is known as interstitial water. The way that the [Washington State] Jackson [Prairie] storage [facility] works is they have to remove water out of the ground from lower formations. And that water is inevitably, always, contaminated either with salt or other residues. And they have to remove that water. And in its place, they put back gas. Now, the water which they remove must be stored somewhere or must be disposed of. Now, it is called, I believe, interstitial water. Tony [Fogarassy], I guess you would know. And it is made up of water that is there, and also water that will be impregnated with natural gas from the formation that they fill.

I would like to know if this consortium has thought very much about it. Is it going to be trucked out? And if so, where? And what will they do when they dispose of it at that far site? Now, in Jackson Prairie, Mr. Anderson, as you know, as you have been down there yourself. We know that they go into ponds, they are disposed into a diffuser pit, and they are then by gravity feed dropped into fifteen or twenty shallow wells in thirty feet of depth. I would suggest that that is precisely what the elevation is between here and [the town of] Lynden [Washington State] is, between here and Blaine. Is it their intention to do precisely what they've done at the Jackson Prairie site? Are they for instance going to pull it up and drop it into the Lyndon aquifer, and into the Blaine aquifer? Because if it is, our good friends, and they are our friends, to the south should know what they are getting into.

Now, if they don't do that, then a technician has told me what they will do. They will dispose it into what is known as a 'wet well,' or a 'disposal well,' or a 'waste-water well,' better known as a sewer well. It is contaminated. Now the main plan of this consortium will most likely not be to dispose of this contaminated water into formations that are below the storage area, since below it could leak up into the storage area itself, and that would defeat the purpose. It is most likely that they will put into what is known as 'uphold storage,' and I would like to know if that is what is going to happen. 'Uphold storage' is storage areas above the gas storage reservoir. And if they pump that water into those formations above the storage it can get into the water that we drink. The water will migrate upwards, I've been told, and in time will penetrate the groundwater systems of Langley, White Rock, Blaine, Abbotsford and Lynden. That is what I would like this Commission to investigate. In

⁶⁶⁸ Letter from Erika Sabo, president, Copper Roof Management Inc, to David Anderson, October 19, 1990.

other words, I want to find out where that water is going to go. I think it is a critical state, a critical situation that must be answered.

And one last technical question with respect to water contamination. There is such a thing as 'formation bonding,' which is the bonding between the outside of the well and the actual formation it is going through. It is my understanding that this is precisely what went wrong at Williamsburg [Michigan State]. The formation bonding was not there, and the gas came up on the outside edge of the piping and produced sinkholes. Now, the engineer from whom I got this information late this afternoon has told me that such things have happened in Alberta. He said indeed they don't happen much, but you tend to notice them when they happen. And I said, how do you know this? He said a half-ton pickup truck will go out of site. A rig will go out of site. And so, Mr. Chairman, I want you to investigate that. The gas can go anywhere, and it will go anywhere. And I have a great concern. The waters in this area can be contaminated in many, many, different ways. And it is not as simple as the consortium has told us.

Al Vickers concerns about the transfer removal and dumping of contaminated geologic formation waters were spot on, legitimate. Before Washington State legislators passed Senate Bill 464 in March 1963, they were not informed of what the three-gas corporation consortium would require in developing the Jackson Prairie storage site. The 'problem' was first publicized in a full-page feature article in the Daily Chronicle newspaper on October 24, 1964, concerning the consortium's "salt-water lake:"

Another unique feature of the project has been the creation of a one and half acre 100,000 gallon salt-lake, 15 feet deep. The salt water is removed from the storage area, stored in the lake temporarily and then re-pumped into the ground below the gas storage zone.⁶⁶⁹

Five months later, the Lewis County courthouse held a public hearing on March 15, 1964, for approval of the consortium's proposal to pump the contaminated underground salt water, some already stored in the 15-foot-deep pond, into the Cowlitz River east of Toledo. By this time the consortium had drilled 16 wells over the 3,000-acre project lands.

Bernard T. Poor, executive vice president of Washington Natural Gas, said the project has the authorization of the State Department of Natural Resources. Poor said it has been determined that the dilution of the salt water with the fresh water in the Cowlitz River will be so great it will have no detrimental effect on fish.⁶⁷⁰

The three firms have indicated that a minimum of 600,000 gallons a day to a maximum of 800,000 gallons daily might be pumped into the stream. The utility firms have proposed constructing a 5 and a half-mile 6-inch diameter pipeline from Jackson Prairie to the Cowlitz. ... Whereas it is proposed to pump up to 800,000 gallons of salt water daily into the river, the minimum Cowlitz flow on record is about 36 million gallons daily.⁶⁷¹

[Chamber of Commerce meeting at the St. Helens hotel] Guest speaker Paul Hoglund, superintendent of the engineering and gas supply department for the Washington Natural Gas Co. ... explained the salt water is half the strength of sea water and is diffused in the Cowlitz within 40

⁶⁶⁹ *Gas Storage Creates Salt Lake in County*, the Daily Chronicle, October 24, 1964.

⁶⁷⁰ *Into River: Salt Water Pipe to Drain Gas Area*, the Daily Chronicle, March 4, 1965.

⁶⁷¹ *Pollution: Salt Water Line to Cowlitz is Studied*, the Daily Chronicle, March 9, 1965.

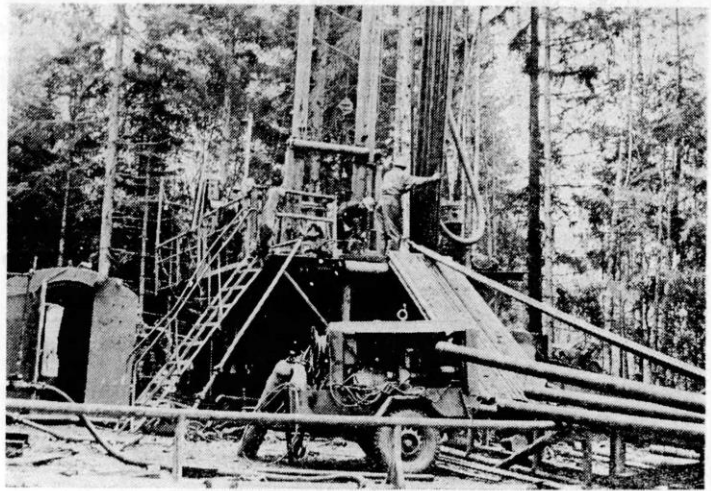
feet of entering the stream. He also added that the salmon, steelhead and smelt in the river are all salt water fish.

The Lewis County commission Monday approved an application for a 49-year franchise to permit the construction of 5 and half-mile pipeline from Mary's Corner to the Cowlitz River. Hogland said the salt water will not pollute the Cowlitz River of damage fish in the stream. Both the State Pollution Control Commission and the Department of Conservation have approved the salt-water dumping. Both sent representatives to the public hearing on the matter Monday morning.⁶⁷²

When a short pipeline to the Cowlitz River is completed in about two weeks to carry off the salt-water saturating most of the stone, more gas will go into the project. The water's been there a long time — since the Eocene epoch of geological time about 50 million years ago.

The geological structure, a dome of ancient marine sediments, was discovered during an exploration for oil and gas by the Continental Oil Company several years ago. No oil was found and only small, non-commercial amounts of gas. But James Tanner, a transplanted Texas oil man and promoter, heard about the dome. He believed it could be used to store gas being piped into

the Northwest for use at peak period when natural gas demand was greatest. Gas is stored in similar formation in the Illinois basin and in depleted oil sands in the Southwest and in California.⁶⁷³



DRILLING WELL NO. 37

This drilling rig is a familiar sight on Jackson Prairie, site of an underground natural gas storage project. Depth for this gas injection well is set at 2,460 feet. A four-man crew operates the machinery. Center is James Harris, with Doc Wilson reaching for pipe.

Underground Formation Used To Store Natural Gas

BY RICHARD SPIRO
Daily News Staff Writer

Beneath the surface of Jackson Prairie, unseen and largely unknown, is stored at this moment approximately 2½ billion cubic feet of natural gas.

The site — about six miles north of the Toledo -Winlock area, and a hefty stone's throw from Mary's Corner—overlays a dome of porous rock. And like a busy squirrel hoarding nuts against the onset of winter, a partnership of three companies uses it to store natural gas to meet winter demands.

This storage vault is not an underground cavern, but a water-bearing sandstone formation that lies below gas-tight domes of harder rock. Gas flows freely in this open-grained rock strata.

The only natural storage vault in use in the Pacific Northwest, the project is operated by a partnership of Washington Natural Gas Co., Washington Water Power and El Paso Natural Gas.

Like most of the nation's 283 such storage sites, it was discovered during an unfruitful search for gas and oil. An act of the 1963 Washington State Legislature authorized the underground storage of gas on Jackson Prairie, and the project was begun.

37TH WELL ON WAY

A drilling crew is presently sinking the 37th well into the vast dome. This is part of continued development of the area

which will be completed in 1968 at a cost of \$10.7 million.

The wells fall into three categories, injection, water withdrawal, and observation.

In the first classification, gas

is injected in summer months, then withdrawn to meet the greater demands of cold weather.

Other wells are used to siphon off water and make room for the gas to flow into the sandstone formation. The Jackson Prairie dome is the first where it was necessary to contend with salt water.

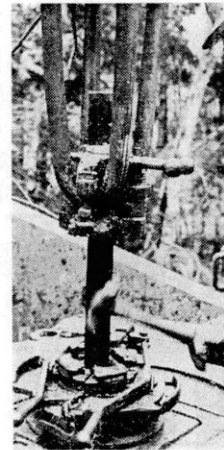
Only half as salty as the ocean, it must still be diffused before it is deposited in the Cowlitz River. This is accomplished by holding it for five days in a 100,000 barrel reservoir, then piping it to a gravel bank 25 feet below the river surface.

SALT CHECKED

Repeated checks are made to determine the salt content of the water. State pollution agencies and the fisheries department work together with the three-company partnership.

Finally, there are four observation wells, used to determine if sufficient water is being removed to provide room for the inflowing gas.

Injection—from cross-country pipes—and withdrawal work is handled by two solar compressors. Constructed something like a jet motor, their combined



PIPE GOING DOWN—

Clamp is tightened with a sledge hammer before another section of pipe is added. The process will be repeated until the desired depth—2,460 feet—is reached.

⁶⁷² Jackson Prairie Gas Storage Plan Told; Sale Line Franchise OK'd, the Daily Chronicle, March 16, 1965.

⁶⁷³ Natural Gas Being Pumped into Lewis County Formation, the Bellingham Herald, March 31, 1965.

[The State Pollution Control] Commission Director Roy M. Harris said the state has set a limit on the amount of salt water than can be put into the river, **to keep it safe for fish and for water supplies.** ... "It's like putting a teaspoon of salt into a bathtub full of water," he said. "You can't even tell it when it disperses."⁶⁷⁴

By October 1965, 250 gallons per minute of formation salt water was being pumped into the Cowlitz River. Was the State Pollution Control Commission sampling the formation water for other harmful parameters, such as radioactivity? By June 1967 the consortium was drilling its 37th well. On January 16, 1968, the consortium posted a "Notice of Industrial Waste Discharge Permit" for an additional 300,000 gallon per day discharge into the Cowlitz, for a daily total of 1,300,000 gallons of formation water.

By 1989, after hundreds of new coalbed methane wells were drilled, the Alabama Department of Environmental Management (ADEM) held a public hearing on March 14, 1989, in Columbiana, attended by "some 200 people." Edgar Hughes, with the ADEM Water Division's Industrial Branch, said permits to discharge salty formation water would "ensure water quality protection" for the Cahaba River. However, Alabama Attorney General Don Siegelman, who stated the dumping of formation water would "could change the characteristics of the Cahaba River forever," was concerned "about the number of wells, the quantity of the salt, and making the permit valid for the life of the drilling project." The ADEM also convened two earlier hearings "on a Tuscaloosa company's plans to dump salt water into branches of the Black Warrior River."⁶⁷⁵

The Alabama Attorney General made these remarks because the Florida-based Legal Environmental Assistance Foundation [LEAF] was suing Alabama's Department of Environmental Management over the pollution of Alabama's Warrior River by the dumping of formation waters. LEAF executive director Suzi Ruhl stated on March 20, 1989, that "federal laws passed in the late 1970s prohibit oil and gas companies from discharging extraction, production and exploration wastes into lakes and streams."⁶⁷⁶ LEAF's legal challenges about the dumping and contamination of groundwater sources would work their way through the courts for the next 12 years, with the George W. Bush administration ultimately passing the 'Haliburton Loop-Hole' in 2005, exempting the petroleum industry from federal legislations on the protection of surface and groundwater sources.

Similar public concerns were being raised at the same time about dumping formation waters into other streams and rivers from coalbed methane exploration in the States of New Mexico and Colorado. As petroleum companies were experimenting with hydraulic fracturing techniques in coalbed methane formations, they were adding secret toxic chemical and petroleum-based additives, toxics which would migrate into and pollute groundwater drinking sources.

Saltwater Being Pumped Into Cowlitz Called Safe

OLYMPIA (AP) — Saltwater being pumped into the Cowlitz River in Lewis County from an underground area has not caused the salt content of the river to reach anywhere near a danger level for plant or insect life, state scientists said Tuesday.

Scientists for the State Pollution Control Commission reported that preliminary results of a study showed the saltwater, being pumped into the river near Toledo at the rate of 250 gallons a minute, is not damaging fish food in the salmon nursery of the river.

They said the water is going through a sandbar along the river first so it will be diffused into other water before it reaches the river.

The water is being pumped from an underground area to make room for natural gas storage. The commission study of its effects is being financed by a combine of three utility companies developing the project. The study will cost \$2,336.

Daily Chronicle - October 9, 1965

⁶⁷⁴ *Natural Gas Firm Pumping Salt Water into Cowlitz*, Longview Daily News, May 14, 1965.

⁶⁷⁵ *Official: Drilling Waste Won't Harm Cahaba*, The Montgomery Advertiser, March 16, 1989.

⁶⁷⁶ *LEAF sues to halt salt discharges*, The Anniston Star, March 21, 1989.

In Al Vickers' first occasion at the microphone that evening, he provided information published by the Ministry of Energy, Mines and Petroleum Resources on gas supplies in northeast B.C., challenging government and industry's rationale necessity to drill for gas in the Fraser Valley.

Vickers: I would like everyone to understand that the Friends of the Fraser Valley have done an awful lot of research, some of which you have already heard tonight. You will hear more of it with my presentation and more with others tonight as well.

I would like everyone in this room to know, as well I would like Mr. Vander Zalm to know too, Sir, that there are no shortages of natural gas in this beautiful province. The industry however, who is again with you tonight, will tell you that the sick, the handicapped, the infirmed and the elderly are going to suffer in future months in the event of a gas shortage. Now, I want you all to hear me very clearly. Now, I predict, Mr. Al Vickers, the voodoo man of Aldergrove, that these boys can actually make their point clear this winter by just turning down a few valves. And if they do so say, heh

folks, I told you we were right, there are shortages. But we got you beat folks. We are going to be looking out for that.

I want this audience to understand that the Ministry of Energy, Mines and Petroleum Resources in their Annual Report of December 1988 ... reported that there was 2.3 trillion cubic feet of natural gas in the northeast fields for people like you and I, and they estimated at that time that that would run for 25 years, it would last us for a 25-year supply.

Since that time, the industry and the Ministry have

bragged that they have found in excess of seven trillion cubic feet of natural gas in the northeast sector of British Columbia. They have so much gas they don't know what to do with it. They sure as hell don't have to come down here and find more in my back yard. They have capped 1,400 wells and better in the northeast sector because they can't get rid of it.

And ladies and gentlemen, their own professionals have stated, and this is Mr. Jim Gray, the vice president of ⁶⁷⁷... [there is a break in the audio recording, and a small audio segment is missing

Calgary Herald - February 16, 1990

Canadian Hunter plans active drilling

By Henry Cybulski
(Herald writer)

Calgary-based Canadian Hunter Exploration Ltd. is going to spend more than \$200 million this year on exploration and development — about 90 per cent of it in Alberta and British Columbia.

The amount is similar to last year's and will result in the drilling of 160 wells in Western Canada and 20 in the United States, company executive vice-president Jim Gray said Thursday following a speech to the Canadian Institute of Energy.

He added much of the activity will be focused in two areas along the Alberta-B.C. border north of the Rockies where Canadian Hunter and its partners have made huge finds.

Earlier, Gray told CIE members that he was exceedingly optimistic about Canadian exploration prospects, noting the drilling density here is only about 10 per cent of that in Texas.

"We have marvelous explora-

tion potential in Western Canada."

Gray also noted that the natural gas sector is in for a period of exceptional growth — largely spurred by increasing export prospects.

"I've truly never felt as positive going into a 10-year period as I am over the prospects for the natural gas industry."

The reasons include demand growth resulting from environmental concerns over "dirty" fuels and tightening supplies in the U.S. that have already led to localized shortages.

"The gas bubble for all intents and purposes is gone."

Last year, Canada supplied about eight per cent of U.S. needs, or 1.4 trillion cubic feet.

"People want more of it and we have it and we can find more. Natural gas is strategically where it's at."

Other factors that bode well for the domestic natural gas sector are the various pipeline expan-



GRAY: Optimistic outlook

sion proposals that have been put forward and the U.S. drilling sector's inability to expand rapidly following years of contraction.

"It isn't likely the United States can turn it around very quickly."

BUSINESS IN THE USSR

Active associates wanted to join existing organization that is doing business in the USSR. Should have good connections in the business or financial community —

⁶⁷⁷ Jim Grey was the vice president of Canadian Hunter Exploration, a member of the second competing Fraser Valley petroleum consortium.

until the next side of the cassette tape begins] ... pipeline access into some of the more remote regions. A second reason is the lack of markets in B.C. he [Jim Gray] said. Lack of markets! That means we don't "lack" natural gas. A lot of it is going east out of British Columbia and that is good. A lot of it is also going southwest down the Coast into California. And I suggest Sir that is why we are here tonight. So, we have no shortages. The markets in this area are inadequate. And we have a delivery system too that Westcoast Energy Corporation in their annual report of March of this year stated that they were allotting \$100 million to complete the second pipeline from the northeast sector of northeast British Columbia where all the gas is down to here in the Lower Mainland. And they are within sixty miles of completing that delivery system.

The Friends had already summarized Vickers' concerns about natural gas supply four months previous, when Friends' member Margaret Ormston was quoted in the Langley Advance newspaper criticizing Canadian Hunter Explorations, one of the two consortium members:

Langley residents will be victims of political play-making afoot in the petroleum industry, says Margaret Ormston, spokesman for drilling protest group Friends of the Fraser Valley.

Conflicting information about the availability or non-availability of natural gas in northern B.C. has Ormston and her colleagues questioning plans to drill in the Fraser Valley.

Although a billion-dollar gas find in northeastern B.C. was reported on March 10th, Canadian Hunter vice-president Jim Gray had been quoted two weeks earlier, saying shortages in the next few years will cause the doubling of natural gas prices by 1995.

Ormston said it seems unlikely that Gray, whose company is coordinating the development, was not aware at the end of February of engineering studies that now enable him to predict a reserve of one trillion cubic feet.

"It seems more likely that political games are being played in the petroleum resource industry, with price and the ability to export huge quantities of gas being the keys," said Ormston.⁶⁷⁸

Vickers was correct. There were new, enormous gas discoveries afoot in northeast B.C., and things were looking rosy for the petroleum industry. Canadian Hunter's involvement in recent discoveries amounted to four out of the seven trillion cubic feet of natural gas alone referred to by Vickers.

[Canadian Hunter Jim] Gray also noted that the natural gas sector is in for a period of exceptional growth – largely spurred by increasing export prospects.

"I've truly never felt as positive going into a 10-year period as I am over the prospects for the natural gas industry." "The gas bubble for all intents and purposes is gone." "People want more of it and we have it and we can find more."⁶⁷⁹

Another billion-dollar-plus natural gas field has been discovered in British Columbia's northeast. "The Border-Ring field has estimated recoverable reserves of one tcf (trillion cubic feet) of gas," said Jim Gray, a vice-president with Canadian Hunter Exploration Ltd., the company coordinating the development of the field. "It's the most active field in Western Canada."

⁶⁷⁸ *Friends fear gas drilling politics*, Langley Advance, March 14, 1990.

⁶⁷⁹ *Canadian Hunter plans active drilling*, Calgary Herald, February 16, 1990.

The Border-Ring field straddles the B.C.-Alberta border about 160 kilometres north of Ft. St. John but is 80 percent on the B.C. side.

Canadian Hunter heads a consortium, including Inland Gas and Oil, Trans Mountain Pipe Line (both subsidiaries of B.C. Gas), and Esso Canada, a unit of Exxon Corp., that will develop the field.

Just over a year ago, Canadian Hunter, the drilling arm of resource giant Noranda Inc., and BP America, the wholly owned subsidiary of British Petroleum Plc, unveiled a \$1 billion oil and natural gas development in the Brassy oil field about 30 kilometres southwest of Dawson Creek.

The Brassey field, an extension into B.C. of the giant Elmworth field in Alberta, contains 20 million barrels of oil worth about \$500 million and three trillion cubic feet of gas worth \$4 billion.⁶⁸⁰

The March 10, 1990, Vancouver Sun article mentioned that B.C. Gas Inc., a member of both Fraser Valley petroleum consortiums, was also a consortium partner in Canadian Hunter's Border-Ring field discovery. Canadian Hunter, in its Brassy Oil Field, was temporarily capping its natural gas wells. And Westcoast Energy, who owned the gas distribution pipeline to southern B.C., which Vickers referred to, was also conducting natural gas exploration through its subsidiary, Westcoast Petroleum Ltd., including an exploration block adjacent to Hunter's Border-Ring.⁶⁸¹

Big natural gas discovery by Canadian Hunter group

By Tamsin Carlisle

National Post
March 13, 1990

Financial Post

CALGARY — After drilling frantically all winter, a consortium led by **Canadian Hunter Exploration Ltd.** has announced a huge natural gas find in a remote trans-border region of northern Alberta and British Columbia.

The Border-Ring field, roughly 180 kilometres northeast of Fort St. John, B.C., contains gas worth about \$1.25 billion at current prices, Canadian Hunter's executive vice-president Jim Gray estimated.

In an interview yesterday, Gray said the discovery consists of a single large gas pool containing about one trillion cubic feet of natural gas. The gas field, first discovered in 1978, covers an area roughly 70 kilometres by 12 kilometres, 80% in British Columbia and 20% in Alberta.

He said the gas will be brought on stream late next year, after Canadian Hunter and its partners **Inland Gas & Oil Ltd.** and **Trans Mountain Pipe Line Co. Ltd.** (both subsidiaries of BC Gas) have built a plant to process 80 million to 100 million cubic feet of gas a day. The field should produce gas for about 25 years, Gray predicted.

Canadian Hunter, the oil and gas subsidiary of **Noranda Inc.**, holds a 70% stake in the development consortium, which has been responsible for about half the intense exploratory drilling in the Border-Ring area over the past two years. **Esso Resources Canada Ltd.** and **Interhome Energy Inc.** also

have been drilling in the area.

Gray said Canadian Hunter has drilled between 70 and 80 wells this past winter, and plans to return this fall to drill more wells to firm up reserve estimates. The consortium will start laying pipe for a local gas gathering system and will begin building an all-weather road into the area during the coming winter, he added.

The Border-Ring discovery will add at least 30 million cubic feet a day to Canadian Hunter's gas production, boosting it roughly 15%, Gray estimated. Most of the new gas will be destined for export, he said.

But Wilf Gobert, research director of Calgary-based **Peters & Co. Ltd.**, doubts that gas produced from the field will add much to Canadian Hunter's bottom line.

"It's fairly costly gas in a remote area. An awful lot of money will have to be spent to develop it," he noted.

Esso spokesman Rick Preston said the cost of the gas plant, roads and pipelines will be about \$65 million.

Nonetheless, northeastern British Columbia and neighboring parts of Alberta continue to hop with oil and gas activity. Roughly 1,500 geologists, engineers and rig hands flocked to the inhospitable Border-Ring area at the peak of last winter's drilling season, Gray said.

Last year, Canadian Hunter unveiled the Brassey oilfield, a huge oil and gas discovery south of Fort St. John containing an estimated 20 million barrels of oil and three trillion cubic feet of gas.

An unidentified male citizen came to the microphone and questioned the statements made by industry during the June 12 public hearing.

I was here a month ago when the gas and oil companies made their quote "presentation." And I should say that I was quite impressed with their presentation. I thought it was very slick, very well

⁶⁸⁰ *Billion-dollar natural gas field discovered in northeast BC*, Vancouver Sun, March 10, 1990.

⁶⁸¹ *Westcoast Energy shifts to natural gas exploration*, Vancouver Sun, March 27, 1990.

done. And if they had been selling a product that I wanted to buy I would have bought it. But ever since I heard about this project, and since then up until this evening the whole thing gets more and more absurd. I just can't reconcile why it is that the people of the Fraser Valley have been put in this situation. As speakers before me have said, it is absolutely absurd that we should have to come out here and defend our right to live and be happy and run businesses and raise families in the Fraser Valley. I don't think there is any question that this project poses a direct threat to those things I have just listed.

I think the onus should be on the oil and gas companies, B.C. Gas particularly, to demonstrate beyond any reasonable doubt the pressing need that they tried to sell us for this exploration in the Fraser Valley. A couple of things that I remember from that first meeting, that information meeting, was that B.C. Gas said there was a pressing need to even out the demands for gas supply in the Fraser Valley. That is, in the wintertime we are running short, and in the summer-time we have an over abundance. And they went on to say that an alternative to storing gas in the Fraser Valley would be to build another pipeline from the northern part of B.C. where we've heard is an abundance of gas that is just sitting there, build another pipeline to supply the Fraser Valley. The reason that was given for that not being a viable option was cost. Okay, perhaps that is a reason, but I don't think it is a valid one in this case. I heard tonight, and I couldn't believe it when I heard it, that that pipeline is nearing completion. Is that true? Then this is bullshit what we are getting from the gas companies. [Applause] How can B.C. Gas equate the kind of risk that they are asking us to take with the cost of building, or just completing, this gas pipeline. It just doesn't make sense. Its absurd to me.

Another thing that I remembered, and I think I remember B.C. Gas, or one of the members of the gas companies, making a statement to the effect that they must develop the gas and gas wells and gas storage in the Fraser Valley now because with the development that is bound to take place, and the pressing need for the population to expand up the Valley, that it would become impossible in the future to make this development if they don't do it now. That is absurd. That's a reason to go ahead and inflict this kind of risk on the Fraser Valley when in the future the risk is evening greater? It doesn't make any sense.

Glen Breaks approached the microphone for a third time.

Breaks: I might be able to shed some light on the way that, on the motivation of B.C. Gas in regard to this project. B.C. Gas is regulated by the [B.C.] Utilities Commission. I've talked with John Thrasher with B.C. Gas and Mr. Pellett of the [B.C. Utilities] Commission. My understanding is as follows.

B.C. Gas makes no direct profit from gas sales. Gas is basically sold at cost. They make their profit on equipment and operating costs. And this is a guaranteed percentage. I didn't get [obtain] that percentage. And I asked Mr. Pellett about the proposed storage site, specifically if the costs were at \$150 million instead of the proposed \$100 million. Would the company still be allowed these costs? He said, yes, they would have to apply for that, but usually yes, they would be covered. And when I asked if there would be any costs related to an environmental mishap those costs would be deemed operating costs. He at first said no. I then pointed out that the environmental problem might be through no fault of B.C. Gas, but just a part of the risks of the operation and may require equipment. For example, pumps, relief valves, personnel costs, etc. to alleviate the problem. Now, would that

not be an operating cost? Now, he pointed out that it would most likely never happen. Now, I said, okay, hypothetically if it does, what happens then? Well, he said, the public or gas consumers would indeed pay, and the company would make their standard profit margin on that environmental problem. So, you can see that there is absolutely no risk on their part, neither financial, health or environmental. He did tell me though the rate increases would be kept small and spread over several years.

So, we've now gone full circle from a 15% savings to small rate increases spread over several years. Now I asked him if all expenses were allowed, or if in his experiences some were disallowed. He said, oh yes, some companies do run the risk of incurring disallowable expenses. For example, the West Kootenay Power & Light Company was recently disallowed a portion of their Hearing expenses. I had to think a minute about that. That actually means when you ask for more money you are paid the cost of asking [the BCUC] plus a profit on that cost. But in this case, they got a little carried away and they were disallowed a portion of the costs. So, of course, for real hard costs, you know pumps, wells, personnel, clearly those costs will be met by the gas consumer. So, no matter what happens, whether this gas storage project works out to be cost effective, or it's abandoned like 8 out of 55 in the U.S. have been after full investment, the company will still walk away with a full profit.

Al Vickers came back to the microphone.

Vickers: I would like to say that all the Fraser Valley communities have been suffering recently from illusions put out by the consortium of the three that we all know so well. And they are putting out illusions of need for more gas. And these people are putting out the illusions and yet they are themselves outsiders. They do not live in this Fraser Valley. And I think that is a sham and I want you to take that to my Premier and tell him that the jinks are up with those people. We know exactly what they are up to.

Secondly, I would also like to allude to what Mr. Glen Breaks has just said, in terms of the pricing. It would appear to me from what Mr. Breaks has said that the more these people spend the more money they make. And the money they spend is my money, because the rates will go up. And indeed, the rates will not go down, they will go up, not down. They have been caught clearly tonight with their fingers in the cookie jar. And its my cookie jar and I want the Premier to know that we don't want that to happen.

A local dairy farmer came to the microphone.

Mr. Commissioner. My name is Bruce Jackomasi. I live down on Zero Avenue, approximately a mile from one of the proposed sites of the exploration. I've lived on this place for some fifty some odd years and my father was there before I was. We operate a large dairy farm and this year we hope to grow along with dairy farming some forty acres of cauliflower. We irrigate. We raise a lot of pure-bred livestock. I am very, very concerned about the possibility of having natural gas stored underneath our farm.

Further to that, I am very concerned with the whole procedure that is taking place in the whole question of natural gas exploration. There have been many speakers tonight and in other public hearings explaining the dissatisfaction, the upheaval from homes, and all and all that is going on about why we have to go through with all of this. It is very, very clear to me, and it should be very,

very clear to you, that this whole question is going to disrupt a lot of families. I noticed on the back of this [paper] that was handed out tonight that you have the power of coming through with some Interim Procedural Rule. It seems to me that it is very clear that you don't need [the Preparatory and Technical] Phase 3 and Phase 4. [Applause] I think that Mr. Commissioner you should do the honourable thing and put this thing to rest. And you should advise the government so.

I'd like to remind you that also our governments some time ago came out with the book to study the ways to produce and market the stuff that we produce on the farms. It was a book called the *Blue Book*. It was put out by the Ministry of Agriculture. And they sent one of their Deputy Ministers, Ross Houston, throughout the Province to explain to the producers what they wanted to do. This also was a terrible, terrible mistake! And they did the honourable thing by disbanding the *Blue Book*. And the same thing should be done with this whole procedure.

Oil field wastes create numerous hazards for livestock

David Anderson Commission
Exhibit C-31

Oklahoma has approximately 6 million head of cattle and more than 90,000 oil wells. This type of agricultural-industrial interface poses unique problems in many oil-producing states.

WILLIAM C. EDWARDS, DVM
Oklahoma Animal Disease Diagnostic Laboratory
Oklahoma State University
Stillwater, Oklahoma 74708

IN OIL-PRODUCING STATES, the proximity of livestock to oil exploration and production sites often results in poisoning of animals from ingestion of crude oil, condensate, salt water, caustic chemicals, and heavy metals. In 1982 there were 587,472 oil wells in the United States producing an average of 14 barrels per well per day.¹ In that same year, 94,753 wells in Oklahoma produced 148,273,000 barrels of oil. The average drilling site will use three to five acres of land. Taking into account dry and abandoned oil wells, Oklahoma, with its 69,919 square miles, averages more than two well sites per section of land.

Approximately 500 cases of suspected poisoning due to oil field wastes are investigated at the Oklahoma Animal Disease Diagnostic Laboratory each year. Most of these cases present the potential for litigation. Ingestion of petroleum hydrocarbons, salt water, and heavy metals are relatively easy cases to confirm using standard analytical methods.² The presence of petroleum in rumen contents and lung tissue, and significant concentrations of heavy metals in tissues are frequently confirmed.

Cases in which livestock are exposed to oil, salt water, or caustic chemicals, but do not die acutely, are more frustrating to diagnose. Affected animals lose weight and become unthrifty. In these cases, parasitism, poor nutrition, and other debilitating diseases must be considered. Chemicals may alter the animal's rumen flora and enzymatic actions that cause impaired digestion of carbohydrates, synthesis of B vitamins, and conversion of cellulose to volatile fatty acids. Often, these animals have liver, kidney, and lung damage.²

This paper describes the various aspects of the petroleum industry that are potential hazards to livestock and wildlife.

5 – 19. The Big Lie about Storage at Jackson Prairie

Avery said Anderson shares the concern of the project that present gas storage facilities in the U.S. at Jackson Prairie may no longer be available to Fraser Valley users after 1996, because of the great growth of natural gas use in Washington State. “This option has an uncertainty over which the provincial government and B.C. Gas have very little control.”

The LNG (liquid natural gas) storage facility near Deas Island is above-ground but is only “very useful” for sudden peak demands on a daily basis. It is not sufficient for peak winter demands when use jumps by 12 percent or more, and these are the times when B.C. Gas brings supply back across the border from Jackson Prairie. ⁶⁸²

Avery said the need for storage exists now and is being met by storing gas underground in Washington State’s Jackson Prairie facility. ⁶⁸³

We ship gas to southern Washington state and store it underground at Jackson Prairie and have been doing so since 1983. Presently, we have begun to negotiate with other storage owners in the United States because the Jackson Prairie storage field will not meet the increased demands for natural gas of our customers and residents in our immediate future. ⁶⁸⁴

[Energy Minister] Davis said this [petroleum exploration in the Fraser Valley] would offset the province’s current reliance on the Jackson Prairie underground storage facility at Chehalis, Washington. ⁶⁸⁵

Once the actual search for natural gas or oil begins, exploration companies will also be looking for a potential underground gas storage area. This is vital since utilities such as B.C. Hydro now have to rent gas storage at Jackson Prairie in Washington. ⁶⁸⁶

The [Energy] ministry hopes companies will find an underground reservoir for the storage of natural gas. Gas would be stored in the reservoir during the summer for use in the winter, to reduce the Lower Mainland’s reliance on the Jackson Prairie natural gas underground storage facility in Chehalis, Washington. ⁶⁸⁷

National Energy Board hearings into B.C. Gas’ application to store gas in the U.S. and re-import it to Canada during the winter will begin July 10 in Vancouver. BCG seeks a three-year licence to export 6.5-billion cubic feet of gas, to be stored in the Jackson Prairie facility near Chehalis, Washington. BCG spokesman Maurice Favell said B.C. Hydro used Jackson Prairie before the utility was taken over by Inland Natural Gas Co. Ltd. ⁶⁸⁸

The National Energy Board has issued a license to B.C. Gas that will allow it to export natural gas to Washington State for storage. B.C. Gas had requested an export/import licence to ship 183.9 million cubic metres of gas for storage in the Jackson Prairie storage facility near Chehalis,

⁶⁸² *Gas supply needed, say producers*, The Aldergrove Star, February 7, 1991.

⁶⁸³ *Gas officials optimistic*, Langley Times, February 5, 1991.

⁶⁸⁴ Cam Avery, BC Gas Director of Corporate Communications, June 12, 1990 public presentation.

⁶⁸⁵ *Province pleads for petroleum development in Fraser Valley*, The Province, November 2, 1986.

⁶⁸⁶ *Drilling in the Delta*, The Province, March 1, 1987.

⁶⁸⁷ *Oil exploration to begin on Surrey/Delta farms*, The Leader, February 25, 1987.

⁶⁸⁸ *B.C. Gas seeks OK for U.S. Storage*, Vancouver Sun, June 9, 1989.

*Washington. The gas will be re-imported to Canada during the peak winter season. The license expires April 30, 1992.*⁶⁸⁹

In the company of a few Friends of the Fraser Valley, volunteer member and Langley municipality practicing dentist Paul Dickenson travelled west by vehicle to the municipality of Delta and arrived at the Delta Town and Country Inn ahead of the early afternoon scheduled meeting of the David Anderson Commission's first technical hearing on Monday, August 27, 1990. Dickenson had pen and paper ready. What soon followed as the clock started ticking at the 2:05 commencement of the Hearings would take Dickenson by complete surprise.

Dickenson listened very carefully to the evolving dry, technical language and discussion by government witnesses under oath being questioned by Commission counsel Douglas MacAdams: about the new signing and price constraints of the Free Trade Agreement; about recent market deregulations and accompanying new petroleum exploration initiatives; about the government's new 1989 policies of pricing and export of natural gas; about gas security supply and demand, about contractual agreements; about the Ministry of Energy's new "implementation of the Natural Gas Core Market Policy;" about the Minister of Energy's contractual and discretionary power to override gas exports in lieu of domestic demands; about government royalties; about gas transportation costs, and the like.

As MacAdams sought to unravel the complexities associated with industry's need for a gas storage facility or facilities in the Fraser Valley, he asked Rebecca Vermeer, the Ministry of Energy's economist for ten years, "So, have British Columbia consumers ever done without or gone short [of natural gas]?" Vermeer answered, "the customers, for firm customers, no."

<u>PROVINCE OF BRITISH COLUMBIA</u>	
<u>COMMISSION ON FRASER VALLEY PETROLEUM EXPLORATION</u>	
<u>TECHNICAL HEARINGS</u>	
Town & Country Inn Delta, B.C.	
AUGUST 27, 1990	
COMMISSIONER - DAVID ANDERSON	
Commission Counsel - Doug MacAdams Commission Secretary - Robert Tweedie	
<hr/> PROCEEDINGS <hr/>	
TOTAL REPORTING SERVICE LTD. (604) 682-1030	
<u>INDEX OF WITNESSES</u>	
<u>AFTERNOON SESSION</u>	
Opening Remarks by Commissioner Anderson	1
Ministry of Energy, Mines and Petroleum Resources	6
<u>Panel</u>	
Dave Johnson Bruce Hanwell Gerald German John MacRae Bou van Oort Joan Hesketh Rebecca Vermeer Ken Kindjerski	
* Ministry Overview	10
* Petroleum Geology in British Columbia	83

⁶⁸⁹ *B.C. Gas to be stored in U.S.*, Vancouver Sun, August 2, 1989.

MacAdams then moved on to the Ministry of Energy's exhibit, *British Columbia Underground Storage Policy*. He asked Joan Hesketh, the Ministry of Energy's Director of Oil and Gas Policy Branch, if her Ministry was "in favour of underground storage?" "That is correct," she replied.

MacAdams then directed discussions of the Ministry's exhibit reference to "inefficiencies," which Vermeer related were caused by "seasonally-fluctuating demand" of natural gas. "We have very high demand in the winter and very low demand in the summer," Vermeer stated, and to "average out" the "unit cost of those type of services," the industry could "draw gas in the summertime and put that into storage."

At this point, Bou van Oort, Manager of the Energy Ministry's Reservoir Engineering, who was formerly employed "in the oil and gas industry for 26 years," entered the fray to discuss the "inefficiencies" of Westcoast Energy's "700 mile" gas pipeline that travels from northeast B.C. to the province's major domestic and industry markets in southwest B.C. Van Oort said, "having a storage facility close to where the market demand is, would help tremendously in achieving that [inefficiency] objective." Vermeer then added that "if you have storage, for example, closer to the market ... you achieve a much higher degree of security of supply to that market."

MacAdams then moved the discussion to the Jackson Prairie underground gas storage facility in southwest Washington State which gets much of its injected pool supply from British Columbia, a subject that heavily occupied the Commission's proceedings in days to come.

VERMEER: The underground storage arrangement that B.C. Gas has with Jackson Prairie storage is such that they send the gas in the summertime to Jackson Prairie, and in the wintertime gas that would have otherwise go and flow through the Westcoast system to the export market would be diverted in exchange for that gas into the B.C. Gas delivery area.

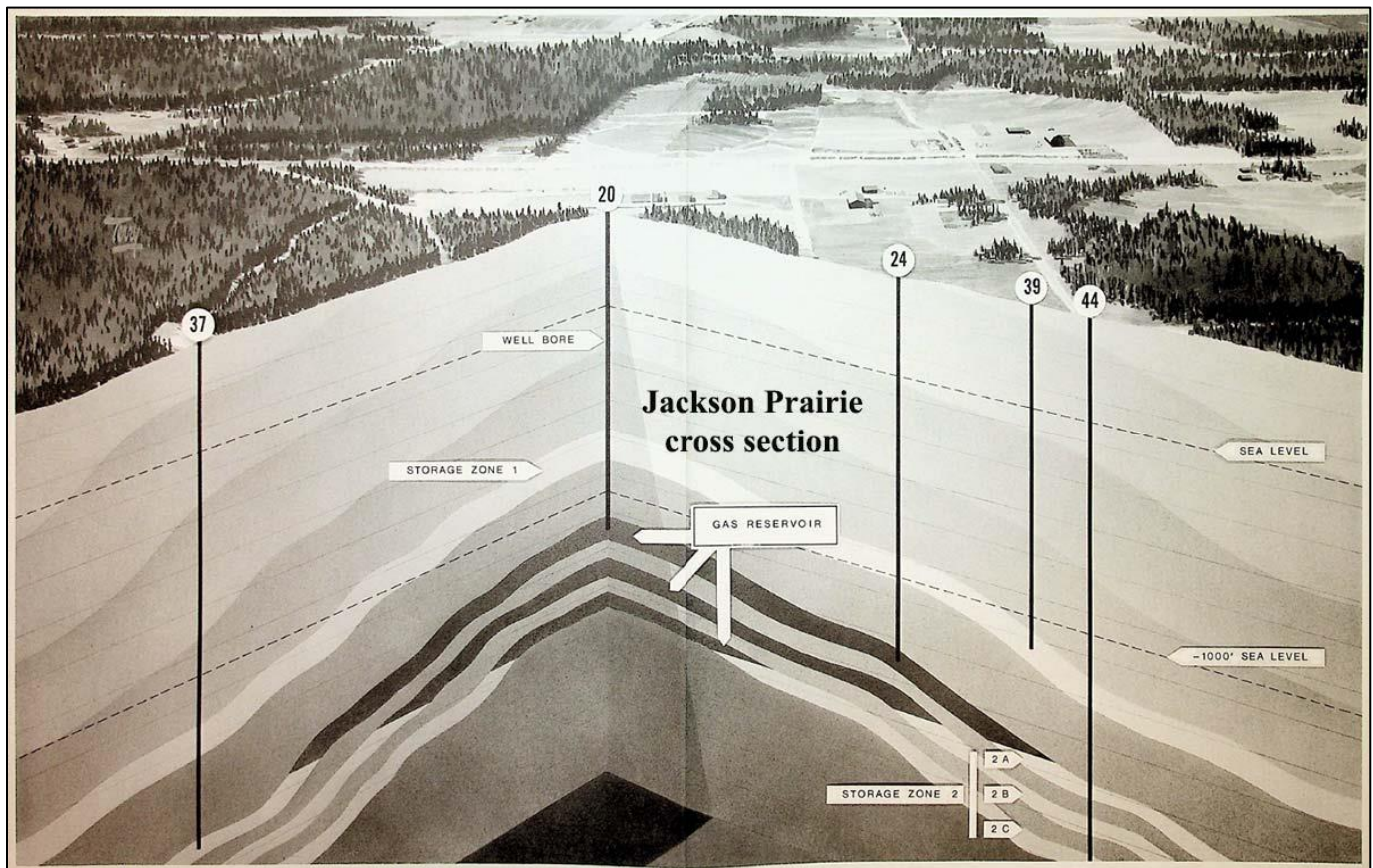
So, you have B.C. Gas sends its gas to the U.S. That gas will be drawn upon in the wintertime to service the export market in the Pacific Northwest or wherever other market you will go, and B.C. Gas gets instead the gas that would normally flow to the export market to be delivered to its service area.

Most other people attending the Monday hearing at this point would have been fast asleep listening to the drone of technical questions and language. But, at this point, Dickenson started to take a keen interest. 'What's that they are saying,' he would have thought, as the discussion continued.

MACADAMS: "But by "they," you're referring to British Columbia gas, right? When you say they have a contract, you're referring to British Columbia?"

VERMEER: "B.C. Gas, I should say, B.C. Gas has a contract with Jackson for storage at Jackson Prairie."

After Rebecca Vermeer stated that when B.C. Gas sends "the gas in the summertime to Jackson Prairie, and in the wintertime gas that would have otherwise go and flow through the Westcoast system to the export market would be diverted in exchange for that gas into the B.C. delivery area," Commissioner Anderson interrupted the discussion between MacAdams and Vermeer. "I have just one question here, counsel," he interjects.



ANDERSON: It seems to me that the discussion turns around B.C. Gas, B.C. Gas using the storage facility in Jackson Prairie, essentially by saying to the Americans, well fine, you use it, you use that storage facility, we'll take more out of the pipeline. But you prefaced your remarks by saying that if there were a break in the pipeline. And so, if there were a break in the pipeline, it appears to me that the storage facility of B.C. - - of Jackson Prairie would be of no use to B.C. Gas whatsoever.

MS. VERMEER: That is correct Mr. Commissioner.

ANDERSON: Thank you.

MR. MacADAMS: Thank you for that, **as the physical impossibility of taking gas from Jackson Prairie to the tap in Vancouver or in Langley** [bold emphasis] I think is something that we will have to return to throughout the course of the Commission.

ANDERSON: Yes.

MR. MacADAMS: And that's the Ministry's understanding. **The molecule of gas in Jackson Prairie cannot be delivered to Langley; am I right in that?** [Bold emphasis]

MS. VERMEER: That is correct.

Dickenson couldn't believe his earthly ears and had to shake his head. He realized that B.C. Gas Inc. and the Ministry of Energy had been peddling a big lie. He also realized that the Commission was not properly calling out the government and the industry on this lie. He gazed around at the audience and noticed that nobody else had raised their eyebrows.

After the 5:02 p.m. "dinner adjournment" of the afternoon's proceedings, Dickenson informed his fellow Friends of his take on the matter. The members said that they didn't catch what he noticed. Dickenson's debriefing now caught the attention of The Friends.

2

THE DAILY NEWS
Longview, Washington

Tuesday, April 28, 1970

Jackson Prairie gas storage field due expansion

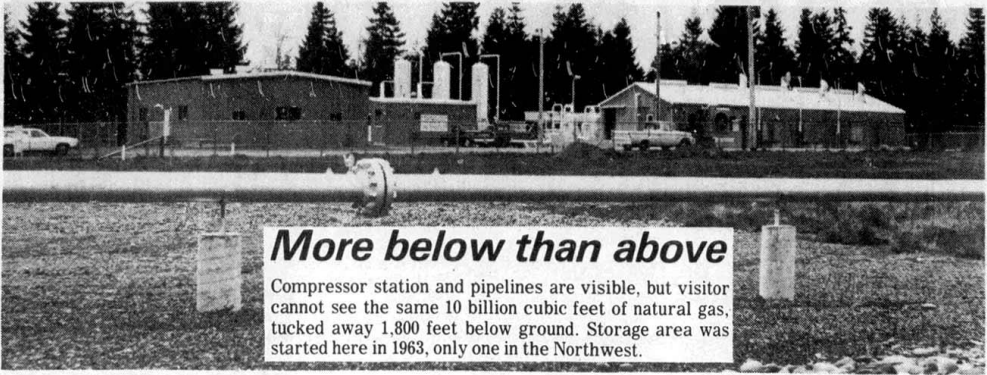
By **RICHARD SPIRO**
Daily News Staff Writer

MARY'S CORNER — The underground gas storage fields on Jackson Prairie are slated for expansion during this decade, to supply the demands of a growing Pacific Northwest population.

So says Jesse Stevens, field superintendent for Washington Underground Gas Storage Project's central compressor station, on Zandecki Road near Mary's Corner.

"It will be a natural expansion to keep pace with needs," Stevens said, and added that tests will be made in an attempt to determine what is the capacity of the underground reservoirs. About 10 billion cubic feet is presently stored now, and it may go to 20 or 30 billion.

This is the only underground storage of natural gas in the Northwest, about 1,800 feet beneath the surface. The sandstone layers were saturated with ocean water in an ancient time when the Pacific Ocean covered the entire area.



More below than above
Compressor station and pipelines are visible, but visitor cannot see the same 10 billion cubic feet of natural gas, tucked away 1,800 feet below ground. Storage area was started here in 1963, only one in the Northwest.

Moisture in the gas is removed in three dehydration towers, before being sent into the pipelines. Bulk of the gas being stored has come from fields in British Columbia, although it can also be received from Farmington, N.M.

Washington Power Co. is the operator of the project, and this company is one of the owners. The others are Washington Natural Gas Co. and El Paso Natural Gas Co. The storage reservoir is maintained to enable gas companies to maintain an even, uninterrupted flow of gas during periods of peak demands.

The largest population, the greater the demand — and the need for larger storage facilities.

Four days later, Friday August 31, Commission counsel MacAdams questioned Gary G. Ely, the vice-president of Marketing, Sales and Gas Supply for the Washington State Power company, one of three companies that own and operate the Jackson Prairie field operation, about B.C. Gas Inc.'s lease agreement with the storage facility. The matter about not being able to export gas back to British Columbia gets a little confusing after MacAdams asked the following:

Returning to the least cost regulatory obligation, are you in the position in which you have regulators who have the power to say to you, look, it's all very nice for you to be leasing to British Columbia Gas, and thereby providing storage capacity for British Columbia consumers, but, if you take back that storage capacity from B.C. Gas, you will thereby be in a position to benefit your own, that is Washington State consumers, and we hereby order you to do so?

Especially when paired up with the following part of the transcript four pages later:

Mr. MACADAMS: Is there any physical impossibility you know to prevent delivery of gas from British Columbia to Jackson Prairie, storage of it there, and of redelivery of that gas to British Columbia, to satisfy British Columbia peak load demands?

MR. ELY: Well, when you say any physical impossibility, if enough money was thrown at it, assuming you would build a pipeline down and a pipeline back, whatever that costs, yes, you could get gas into the project and gas back out of the project in B.C. Currently the way the system is configured, as I had mentioned earlier, it is dependent upon the amount of gas that's flowing south through Sumas, being dropped off in Seattle, and the amount of gas that's needed on down in the

Excerpts from Commission file, "Jackson Prairie"

Jackson Prairie Underground Storage Facility

February 13, 1989

Storage area covers 3,000 acre area, most of it under lease, which allows surface use for pasture lands, crops, tree farming and residential. The facility itself takes up about a 2 acre site and is two miles from the main transmission line.

There are 77 wells in all, 29 of which are gas wells. Observation and water wells are 2,000 ft., domestic water at 100 ft.

70% of supply comes from Canada through Sumas and Kingsgate. Remaining 30% comes from Rocky mountain U.S.

Jackson Prairie has permits which allow them to dispose of waste water (not over 75 degrees; not over 20,000 salt ppm) into Cowlitz River - 1,800,000 gallons per day for 240 days a year - through diffuser system wells which are 1/4 mile from the river. The wells are shallow, 40 feet,

Greatest concern is disposal of groundwater and isolation from groundwater. Also escaping gas. Chehalis has had to be evacuated at least twice due to escaping gas, once in 1965 for 13 hours.

State does not monitor ins and outs - left to FERC, nor does it monitor leaks, reservoir safety etc. which is also left to the feds, through U.S. Army Corps of Engineers, Ferc. States Department of Ecology does some tests.

Tenure and regulations are regulated separately. State land Commissioner is elected separately and does not answer to government. He is on Oil and Gas Committee. Land is owned by federal and state governments and by private individuals, often ownership is unclear. Also Indian lands which are separate states.

Eminent Domain:

Basically allows an area to be developed for underground storage if the operator has gained access to 65% of the rights. i.e. it prevents small rights owners from blocking access to storage

All interest owners are advised, notice is published three weeks in a row.

If written requests there is a public hearing

Storage has to be - in public interest

- practicable
- free of developable minerals or oil or gas
- covered by adequate liability insurance
- cannot pollute fresh water
- cannot interfere with mineral extraction

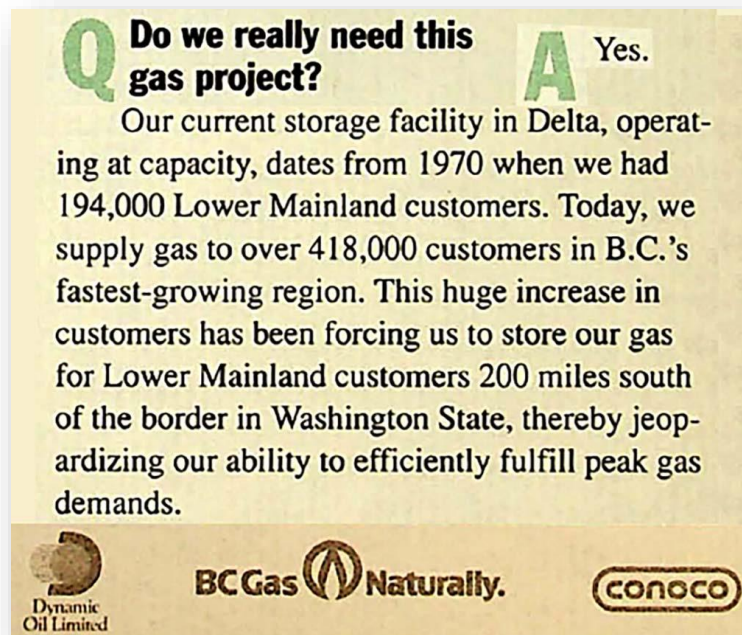
Portland area. Pipelines can be expanded, and I would assume, with enough money, however amount that is, that you actually in fact you compress gas and move it northward versus moving it south through the pipeline as it currently does.

MR. MacADAMS: Do you know of any analyses, however tentative, that have been done of the costs involved in configuring the system such that British Columbia gas could physically be moved south, stored, and moved north again?

MR. ELY: I personally do not know of any studies that have been done.

Statements made by both government and B.C. Gas Inc. (previously, B.C. Hydro) representatives to the public since the mid-1980s about the Jackson Prairie storage site were that the function of that facility was as a backup supply for Lower Mainland customers during the wintertime, when natural gas was in greater demand. As The Friends now clearly understood, those statements were a fabrication, an epic myth, yet another lie. The lie was being told to hide the fact that British Columbia had excess gas, and that excess gas was being exported. The lie was generated for the recently formed B.C. Gas Inc. to make a cosmetic addition to British Columbia's gas supply chain.

In its July 30, 1990, submission to the Anderson Commission, BCG-1, *Benefits of Fraser Valley Storage*, B.C. Gas' document states:



Q Do we really need this gas project?

A Yes.

Our current storage facility in Delta, operating at capacity, dates from 1970 when we had 194,000 Lower Mainland customers. Today, we supply gas to over 418,000 customers in B.C.'s fastest-growing region. This huge increase in customers has been forcing us to store our gas for Lower Mainland customers 200 miles south of the border in Washington State, thereby jeopardizing our ability to efficiently fulfill peak gas demands.

Dynamic Oil Limited BCGas Naturally. CONOCO

In the winter months (November through March) BCG supplements the Westcoast capacity with other sources of gas supply. These other sources are our liquified Natural Gas (LNG) Plant, leased storage in Washington State (Jackson Prairie), leased storage in Northeast British Columbia (Aitken Creek), and several short-term winter-only sales contracts from producers. The LNG Plant is the only winter peaking supply sources that is firmly under our control. The other peaking sources are under short-term contracts which expire within the next six years.

If an underground storage field were developed in the Fraser Valley, it would eliminate our reliance on Jackson Prairie and most of the short-term peaking contracts. (Page 2)

Today, customers of BCG are completely dependent on the Westcoast Pipeline System for their gas supply. The LNG plant can supply 25% of the Lower Mainland winter daily demand but only for four days. The gas stored at Jackson Prairie is redelivered to BCG through a Westcoast / Northwest Pipeline exchange. (Page 7)

Excerpt from B.C. Gas September 1989 edition of it's GasLife brochure:

The closest to us is Jackson Prairie in Chehalis, Washington, some 380 km from Vancouver. Each summer we buy about two billion cubic feet (BCF) of gas and store it at Jackson Prairie. But having our own underground storage facility would allow us to purchase larger amounts of gas during off-peak summer months when prices are lower and extra transportation capacity is available on the Westcoast pipeline.

In B.C. Gas Inc.'s 1989 Annual Report, page 12:

The careful management of peak day requirements can result in significant savings for the Company. Underground storage is one alternative. This is a safe, environmentally beneficial counterpart to the way gas is found in nature. Storage capacity can keep costs down since it enables the Company to purchase gas at reduced prices during the summer months. As well, underground storage allows us to make more efficient and therefore more cost-effective use of the entire delivery system. It also provides an important source of supply in event of pipeline service interruption, significantly adding to security of supply for our customers.

Your Company currently contracts for underground storage in two locations. At Aitken Creek in northeastern British Columbia we purchase gas from an underground storage field for the delivery of 45 MMCFD. At Jackson Prairie in Washington State we rent underground storage capacity to provide delivery of 61 MMCFD. Both contracts have recently been renewed for five years. In addition to our underground storage, we purchased 17 MMCFD from other producers on short term peaking contracts for winter supply. In the Lower Mainland your Company is currently investigating a major new opportunity for underground storage.

On page 63 of Commissioner Anderson's final January 1991 report on Fraser Valley petroleum exploration, he states that the "B.C. Gas [Inc.] storage capability, and the B.C. Gas [Inc.] owned gas that is pumped into the facility in summer" at Jackson Prairie, "does not result in this stored gas ever returning to B.C. for use by consumers in the province." In this important acknowledgment it is also important to note that while Commissioner Anderson often found no hesitation in criticizing The Friends of the Fraser Valley about other matters in his Allegations and final reports, he yet fails to reveal, frame and chastise in his final report that both government and industry had previously lied to the public about this matter, something that he, and his advisors, were aware of.

Jackson Prairie Storage

A potential alternative to a Fraser Valley storage facility is underground gas storage in Washington State. At present there is a storage facility at Jackson Prairie, near Chehalis, some 80 kilometres south of Olympia, Washington. One of the three companies which own and operate this facility has leased space in it to B.C. Gas. Thus at the present time B.C. Gas does have storage. It should be noted, however, that this B.C. Gas storage capability, and the B.C. Gas owned gas that is pumped into the facility in summer, does not result in this stored gas ever returning to B.C. for use by consumers in the province. Instead, when B.C. Gas requires extra supplies for the Lower Mainland market, it provides gas from its storage to U.S. gas utilities, principally Northwest Gas of Portland, and in turn gas coming through the Westcoast pipeline that was originally destined for Northwest Pipeline is diverted to the Lower Mainland market.

(David Anderson Final Report, page 63)

5 – 20. The Travelling Anderson Commission

Two and half months had passed since government implemented the Anderson Commission when the Phase One public hearing sessions ended on July 11th. A five-month timeline limit had been imposed on Anderson for a final recommendations report to be completed by end September 1990. The budget and timeline were like a template of the recent 1989 Douglas MacKay Coquitlam gas pipeline route Commission which Douglas MacAdams also served as counsel. Though designed to be a quick in-and-out Inquiry, there was still a lot of technical leg work to do as the clock was ticking away at the half-way point.

While the public hearings convened, Commission researcher geologist Tony Fogarassy was busy preparing witnesses and documents for both the Preparatory Sessions scheduled for early August and for the technical hearings scheduled for late August. He was also busy arranging quick and dirty tours for the Commission members to visit underground storage sites in the United States, France, Italy, Great Britain, and Canada.

The Commission's visitation scope, however, was unbalanced, weighted toward examining underground gas storage facilities only. That prejudice stemmed from the Commission's Terms of Reference, Section 2, "The Commissioner is directed to enquire into, investigate, review and report on: ... (c) exploration, development and natural gas storage experience in other jurisdictions and areas of a similar nature."

Government avoided a similar directive for the Commission to visit and investigate **upstream oil and gas operations** "in other jurisdictions," many of which were relatively close at hand in northeastern B.C., and throughout Alberta and Saskatchewan. This 'oversight' was most peculiar because the petroleum industry was now on the hunt for oil and gas in the southwestern corner of B.C., the main driving force since 1982 and the focus of public opposition in the Fraser Valley. Prior, the main driver was for underground storage in the Fraser Valley as proposed by B.C. Hydro in the 1970s. Though the table had turned by the early 1980s, underground storage was still in the cards. The Terms of Reference omission was among the oldest tricks in the books. For instance, when federal and provincial agencies wrote the Terms of Reference in 1969 for the four-year-long inter-agency comprehensive study of Okanagan Basin water resources, they purposely avoided investigating physical interactions of water runoff and clearcut logging practices. By the time a public involvement study group noticed the controversial discrepancy in 1972, it was too late, with the forest industry conveniently dodging a major political bullet.⁶⁹⁰

The Commission visited two isolated well sites in the Peace River area,⁶⁹¹ one of which was to examine a directional deviated drilling operation, a method sometimes adopted to bypass geological private property disputes, a theme which Commissioner Anderson was aware of.⁶⁹² The Commission also visited the Pembina Oil Field in the Drayton Valley, Alberta, the site of the infamous December 1982 Amoco blowout. With no Terms of Reference guidance authority to visit oil and gas operations and to interview local authorities and affected residents, the Commission relied upon biased materials and witness accounts

⁶⁹⁰ Refer to Will Koop's 2013 on-line report, [The Big Eddy](#), Chapter 4, *The Mystery of the Missing Reserves*, for a narrative on the Okanagan Basin study.

⁶⁹¹ The Poco N. Pine 5-12-85-18 Well (deviated well), and the Trilogy Inga c-58-B/94-A-13 Well.

⁶⁹² This concern was raised during the Technical Hearings: Transcripts, Volume 2, August 28, 1990, pages 366-368.

from Alberta's regulatory authority, the Energy Resource Conservation Board (ERCB), to comment upon environmental and health impacts related to oil and gas exploration.

John Ahern

To fill some of this informational gap, the Commission hired John Norman Ahern on July 11, 1990 "as a research assistant and advisor to the Commissioner, more especially in respect of regulatory and liability issues," to "advise the Commissioner on comparable oil and gas regulations in other jurisdictions, and to "prepare such draft regulations and legislations as the Commissioner may require."⁶⁹³

Objective: Research aspects of liability pertaining to drilling and natural gas storage.

Groundwater contamination is the major issue; ancillary issues include anything related to blow-out (i.e., Lodgepole, Williamsburg).⁶⁹⁴

THIS AGREEMENT made the 11th day of July, 1990,	
BETWEEN:	
HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA represented by the Commission of Inquiry into Fraser Valley Petroleum Exploration, David Anderson, Commissioner (hereinafter called the "PROVINCE")	
OF THE FIRST PART	
- and -	JOHN NORMAN AHERN, of the City of Victoria, in the province of British Columbia (hereinafter called the "CONTRACTOR")
OF THE SECOND PART	
<u>Schedule "A" - Services</u>	
The Contractor will:	
<ol style="list-style-type: none">1. Act as a research assistant and advisor to the Commissioner, more especially in respect of regulatory and liability issues.2. Advise the Commissioner on comparable oil and gas regulations in other jurisdictions.3. Prepare such draft regulations and legislation as the Commissioner may require.4. Attend to such research and to prepare such reports and memoranda which the Commissioner requires to fulfill the terms of reference.5. Attend the Commission hearings.	
NAME NOM	John Ahern (Contract)
No.	

Ahern had been "an RCMP Officer in Alberta for eight years" where he "performed numerous investigations of crimes against oil sites, crimes on oil sites, of oil and gas sites, and also some involvement with the Lodgepole blowout."⁶⁹⁵ The catastrophic Amoco oil well blowout of December 1982 in the Drayton Valley lasted for 68 grueling days, with the wind sending clouds of poisonous H₂S (hydrogen sulphide) gas towards the City of Edmonton, extending as far away as the province of Manitoba. The blowout investigations that followed would not only lead to the formation of the Pembina Institute, an advocacy group, but also responsible for major government review processes and reports, biased conclusions of which mostly favored industry. Because of increased local opposition and unrest in many sectors of Alberta as gas and oil well fields were being discovered and developed, petroleum corporations, after expanding their public relations departments, began new wholesale strategies in the early 1990s to control and manipulate the public through the creation of synergy group participation programs.

John Ahern travelled to Olympia in Washington State from July 24 - 26 to research "administrative codes of the U.S. states," and also to Calgary, Alberta, July 31 to August 2, where he met with Robert (Bob) Pelzer, Conoco's lawyer associated with its Houston legal department, and "representatives of Conoco, B.C. Gas, and B.C. Gas's legal counsel, MacLeod Dixon."⁶⁹⁶

⁶⁹³ July 11, 1990, contract Agreement with the Province of British Columbia.

⁶⁹⁴ Source: *File: AG Legal, Groundwater, John Ahern*, Commission records.

⁶⁹⁵ Commission Technical Hearing, August 30, 1990, Volume 4, page 627.

⁶⁹⁶ Commission Technical Hearing, August 30, 1990, Volume 4, page 628.



JOHN AHERN

Re: Terms of Reference 2(f), 2(h) (i) and (iii)

Regulations/Statutes:

- 1) Drilling - key on groundwater protection, setback distances, noise abatement ("noisy" rigs!)
- 2) Underground Storage - key on groundwater/inspection/safety
Re: Williamsburg catastrophe - the classic underground blow-out, event is documented in Commission library.

Jurisdictions:

British Columbia, Alberta, Ontario, Michigan, Pennsylvania, Washington, France and Italy.

=====

Objective:

As per terms of reference to prime commission counsel, Doug MacAdams, on legal and regulatory issues related to drilling and underground gas storage. Research may be incorporated into the Commission report.

Required:

Memo - hard hitting. Touch on as many tangible issues as possible. Memo will be circulated to the Conoco - BC Gas - Dynamic consortium and other interested parties.

Time Frame:

All the time you can devote until August 20th, 1990. Please attend the public hearing July 11th at 7:30 p.m., Kinsmen Community Centre 26770 29th Ave., Aldergrove.

Resources:

- 1) Thompson and Lewis - Oil and Gas Law in Canada.
- 2) Hunt and Lucas - Energy Boards, etc (Canadian Institute of Resources Law - Calgary).
- 3) Conoco - Mr. Robert (Bob) Pelzer (403) 260-2400 V.P. and General Counsel.

N.B. Liability issues will be covered by Blair Lockhart, the Ministry of Attorney General.

Contract: Rob Tweedie, Commission Secretary, will set you up when you're in Langley next week.

T - 30**Regulation of Petroleum Exploration in the Fraser Valley: Options for Reform - Prepared by John N. Ahern**

A major component of Ahern's research was in writing a 286-page "discussion paper" report, *Regulation of Petroleum Exploration in the Fraser Valley: Options for Reform*, which was presented as Exhibit T-30 during the Commission's Technical Hearings.

I am currently preparing a research paper on various statutes, regulations and by-laws which would potentially regulate proposed drilling activity in the Fraser Valley area. This paper will be used by Commissioner David Anderson in the preparation of his recommendations to the government of British Columbia on gas exploration, drilling and storage in the Fraser Valley.⁶⁹⁷

The discussion paper addresses four major topics: existing regulations applicable to exploration and development of petroleum and natural gas in the Fraser Valley, regulations applicable to natural gas storage, reform of minimum distance and spacing regulations, and reform of operator's liability.⁶⁹⁸

Ahern's petroleum regulation "reform" paper would remain as an in-house discussion document. It is not known if the Ministry of Energy, Mines and Petroleum Resources later took some of Ahern's research reforms seriously for regulatory adoption in northeast B.C.'s oil and gas patch, or what industry thought of it and perhaps helped to obfuscate.

PROVINCE OF BRITISH COLUMBIA
COMMISSION ON FRASER VALLEY PETROLEUM EXPLORATION

David Anderson, Commissioner

645 Fort Street
Suite 413
Victoria, B.C.
V8W 1G2

20611 Fraser Highway
Suite 105
Langley, B.C.
V3A 4G4

Phone: (604) 356-9742
Fax: (604) 356-9747

Phone: (604) 533-0667
Fax: (604) 533-5451

REGULATION OF PETROLEUM EXPLORATION IN THE FRASER VALLEY:

OPTIONS FOR REFORM

Prepared by:
John N. Ahern
Victoria, B.C.
V8N 5M4

August 20, 1990

Technical Hearing 7, August 30, 1990

Witness:

John Ahern, Legal Consultant

Subjects Discussed:

Regulatory and Statutory Frameworks Governing Exploration, Drilling, and Production of Hydrocarbons and Storage of Natural Gas

Gas drillers face no noise rules

Langley Advance - November 21, 1990

The Editor,
Langley Advance,

Dear Sir,

"There are no provisions in the **Drilling and Production Regulations** requiring noise abatement in petroleum and natural gas operations, probably because most such operations have been conducted in remote areas where there was little point in requiring operators to incur the additional associated expense."

The foregoing is part of a report prepared and presented to the commission on Fraser Val-

ley Petroleum Exploration on Aug. 20th, 1990, by John N. Ahern, a consultant.

Within the confines of our beautiful Fraser Valley, the Gas Consortium plans to drill dozens and dozens of wells, pounding steel onto steel, 24 hours a day.

We are aware of the potential for unbearable noise pollution. We are not fooled by the slick propaganda in expensive ads produced by the Natural Gas Consortium.

Patricia Trapp

⁶⁹⁷ Letter to City of Langley from John Ahern, legal researcher for the Commissioner, July 20, 1990.

⁶⁹⁸ Ahern report, excerpt from Chapter 1, Purpose and Scope of Paper.



Energy Resources
Conservation Board

640 Fifth Avenue SW
Calgary, Alberta
Canada T2P 3G4

Telephone (403) 297-8311
Fax (403) 297-7040

22 August 1990

Mr. Tony Fogarassy
Commission on Fraser Valley
Petroleum Exploration
No. 105, 20611 Fraser Highway
Langley, British Columbia
V3A 4G4

Dear Mr. Fogarassy:

Enclosed for your information are the following:

1. Copies of the six brief statements John Nichol and I would like to read as part of the evidence we will give to the Commission. I have indicated on each of these, who will read the statement.
2. A copy of the public consultation section from the Shell application to the recent Caroline hearing (Proceeding No. 890971, Exhibit S3, Section 5). John and I thought this would be particularly interesting to the Commission as this major sour gas development is located in a relatively populated area.

Please feel free to distribute this material, or any of the material attached to John Nichol's 17 August 1990 letter, as you feel may be appropriate.

Yours truly,

E. J. Morin
Board Member

cc: J. R. Nichol, Manager
Drilling & Production Department

Function and Role of the ERCBC in Alberta

The function and role of the ERCBC are set out in the purposes sections of the statutes that it administers. Paraphrasing these somewhat, the Board is responsible for ensuring the orderly, efficient, economic, safe, and environmentally sound development of the energy resources of Alberta.

The resources consist of approximately 90,000 producing and suspended oil and gas wells, 600 gas plants, and 200,000 kilometres of pipelines. Coal mines, and electrical generating plants and transmission facilities are also under the Board's jurisdiction.

The Board is organized into 17 departments, each headed by a department manager who report to six Board members, including a Chairman and Vice Chairman. Most of the staff of 750 geologists, engineers, technicians and clerks are located in the Board's Calgary office. In addition, we have approximately 100 field inspection staff located at eight field offices scattered throughout the province. We also have a laboratory and a core storage facility.

Commission Correspondence Files



National Research Council Canada
Conseil national de recherches Canada

HYDROGEN SULFIDE IN THE ATMOSPHERIC ENVIRONMENT:

SCIENTIFIC CRITERIA FOR ASSESSING ITS EFFECTS
ON ENVIRONMENTAL QUALITY

**ASSOCIATE COMMITTEE ON
SCIENTIFIC CRITERIA FOR
ENVIRONMENTAL QUALITY**

Anderson
Commission
Exhibit C-31

NRCC No. 18467

1981

ISSN 0316-0114

Province of
British Columbia



Ministry of
Energy, Mines and
Petroleum Resources

Parliament Buildings
Victoria
British Columbia
V8V 1X4

*rec
12/15/90*

Mr. David Anderson
Commissioner on Fraser Valley
Petroleum Exploration
Ste. 413, 645 Fort Street
Victoria, British Columbia
V8W 1G2

901099

November 22, 1990

Dear Mr. Anderson

FLARING OF GAS IN BRITISH COLUMBIA

Thank you for your letter of October 30, 1990,
regarding flaring of gas in British Columbia.

The last calendar year for which comprehensive
statistics on gas flaring are available from the Ministry's
Supply and Disposition reports is 1988. During that year,
the following breakdown of flaring is provided:

Flaring in	Millions of cubic metres	Billions of cubic feet
Field	114	4.0
Gathering system	3	0.1
At gas plants	10	0.4
TOTAL	127	4.5
Total Gas Produced	10853	384.2

The volume flared in absolute terms appears
noteworthy but as a percentage of total gas production, it is
very small.

Yours sincerely,

B.E. Hanwell
Director
Engineering and Operations
Branch

Commission Correspondence Files

13 Sites

As listed in Appendix G of David Anderson's final report, all in all the Commission visited thirteen underground gas storage facilities in the June to August 1990 period, eight in North America and five in Europe:

- Italy – the Ripalta and Sergnano facilities, Milan;
- France – the Gournay Sur Aronde, Chemery, and Beynes facilities;
- Missouri – the Laclede facility near St. Louis;
- Michigan – the Kalkaska facility near Traverse City;
- California – the Montebello and Playa del Rey facilities near Los Angeles;
- Oregon – the Mist facility near Portland;
- Washington – the Jackson Prairie facility near Chehalis;
- Ontario – the Tecumseh facility near Sarnia;
- British Columbia – the Aitken Creek facility near Ft. St. John.

In the Appendix G list, Anderson's final report provides no dates of the Commission's visitations to the thirteen facilities, and no names of accompanying Commission members. In fact, there is little information on these costly visits in the Commission's records. No field notes, diaries, or written summaries were found. The only information found were billing receipts for flights and accommodation, a few newspaper articles summarizing the visits, scribbled notes, and preparatory and thank you correspondence primarily by Tony Fogarassy who scheduled the events. In contrast to this fog, there were numerous pages of summary descriptions in Anderson's final report, most of which cast glowing, unabashed narratives on the underground storage facilities' operations.

A chronological itinerary of Commission members and the Commissioner's visitations, and who the Commission met with, was reconstructed from the Fogarassy correspondence materials, featured below.

5 – 20 – 1.

North America

Calgary

Fogarassy flew to Calgary and met with Jim Brown and Gil Graff of Shell Canada in Calgary, Alberta on Wednesday, May 30, 1990. There are no details stating the purpose of this meeting, or of the meeting the day before. Fogarassy had been employed by Shell Canada in 1984-1985, and it is possible that he was there to pick their brains about certain matters. On Tuesday, May 29th, Fogarassy met with Paul Vautour of Chevron Canada Resources Ltd.:

Thank you very much for organizing and being a part of my meeting with Chevron last Tuesday. I found our discussion most useful and informative. David Anderson and I shall be in Calgary Thursday, June 21. I have contacted Charlie Stewart and I hope he'll be in touch with you. I have enclosed a copy of our first notice of meeting. You are forever on our mailing list! Please pass my regards to Mr. Mike Hardin of Cominco (Vancouver) who will be attending your environmental law course. He's a U. of C. grad who principaled my wife, Blair, two summers back.

The Jackson Prairie Visit (June 28-29)

Departing at 6:20 am from the Victoria airport, David Anderson, Tony Fogarassy and Don Dempster arrived at the Seattle airport at 7:45 a.m. on June 28. Dempster was head of the Development Engineering Section of the Engineering and Operations Branch of the B.C. Ministry of Energy, Mines and Petroleum Resources (EMPR). Correspondence files indicate that Dempster was Fogarassy's main contact at EMPR, and that Dempster arranged other EMPR representatives to appear at the Technical Hearings in late August.⁶⁹⁹ Was it appropriate, or under what circumstances would Dempster be allowed to accompany an 'independent' Commission? Was he there as a government chaperone? Was he there to monitor the discussions, or perhaps nudge them? Dempster would also accompany the Commission's western U.S. tours of the Oregon State Mist and the California State storage facilities.

Plate 4: Jackson Prairie Gas Storage Project, Chehalis, Washington State. Situated near Interstate 5, this aquifer storage facility occupies 2.5 ha of farmland. Currently, B.C. Gas Ltd. leases 16.67% of the available underground storage space.

**Image from Anderson Commission
Final Report, page 97**



The trio drove a "large" Budget rental car to meet with a Jim Jenson who gave them a tour of the Jackson Prairie facility south of Chehalis. The following day, June 29, the trio met with Bill Lingley and Ray Lasmanis. Lasmanis was state geologist and Manager of the Division of Geology and Earth Resources with the Washington State Department of Natural Resources, and Lingley was the regulatory programs manager with the same Department Division. Lingley would later appear as a witness during the second to last day of Commission's Technical Hearings on September 5.

⁶⁹⁹ Tony Fogarassy to Peter Ostergaard, Assistant Deputy Minister, August 1, 1990.

The Oregon Mist Tour (July 18-19)

David Anderson, Tony Fogarassy and Don Dempster arrived at the Portland, Oregon airport at 9:30 a.m. on July 18. At 10:30 am, the trio met with Dwayne Foley, the Northwest Natural Gas Company's vice president of Gas Supply, before being escorted to the Mist Storage Field by the Company's staff, Sandy Hart (environmental engineer), Clayton Roth (storage engineer), and Randy Friedman (contracts administrator). On the way they stopped for lunch at the Spar Tree restaurant in the town of Pittsburg. When they arrived at the Miller Station site at the Mist Storage facility at 1:15 p.m., they met Northwest Natural Gas Company's Nick Potts (storage superintendent) and Tim Williamson (plant manager) for a tour of the premises. Bill Prehm, the Production and storage engineer for the Oregon Natural Gas Development Corporation, was also on the tour. The parties returned to the Company's office by 4:30 p.m., and the Commission trio went to the Chumaree Hotel in Salem, south of Portland City, where Commissioner Anderson enjoyed a swim in the Hotel's pool.

Explained in a letter from Fogarassy to M. Michel Dussaud of Sofregaz corporation in France making accommodation arrangements for the upcoming European tour, Anderson requested lodgings "with a swimming pool," as he was "a keen swimmer (and a Canadian Olympic silver medalist in rowing in 1960)."

At 9 a.m. on July 19, the trio met with Tom Meehan, with the Siting and Regulation Division of the Oregon Department of Energy, and with Dennis Olmstead, petroleum engineer / geologist with the Oregon Department of Geology and Mineral Industries. According to rough notes, Olmstead's Department approved all petroleum wells in Oregon, and Meehan's Division was in charge of standards for permitting underground reservoirs.

In a July 23 letter to David Anderson from Bill Prehm, he writes:

It was a pleasure meeting with you, Don and Tony last week. I was very pleased to discover that Canadian regulatory officials educate themselves before making critical decisions. I feel that this is a very responsible approach.

OREGON'S HOME-GROWN ENERGY

The underground storage facility is located near Mist, Oregon, 60 miles northwest of Portland. In 1979, Oregon's first commercial quantities of natural gas were discovered in the region. Since then the field has been actively developed. By late 1987, 27 reservoirs had been discovered and 32 billion cubic feet (bcf) of natural gas had been extracted out of the approximate 50 bcf in proven gas reserves.

After the gas has been extracted from the reservoirs, they can still be useful. Relying on proven technology, NNG is now putting natural gas back in the ground for use at a later date.

In 1987, natural gas was injected into two large depleted reservoirs in the Mist gas field. Called the Flora and Bruer pools, they serve as natural gas warehouses and will allow NNG to more readily respond to fluctuations in the energy demand of its customers.

HISTORY

Storing gas underground is not new. The first experiment storing gas underground occurred in 1915 in Ontario, Canada. The following year, Iroquois Gas Company stored gas for winter use in the Zoar Field near Buffalo, New York. It remains the oldest continuously used gas storage facility. In all there are now 440 storage facilities with a total capacity of 8.3 trillion cubic feet. They are operated by about 90 different companies in 26 states and five companies in three Canadian provinces.



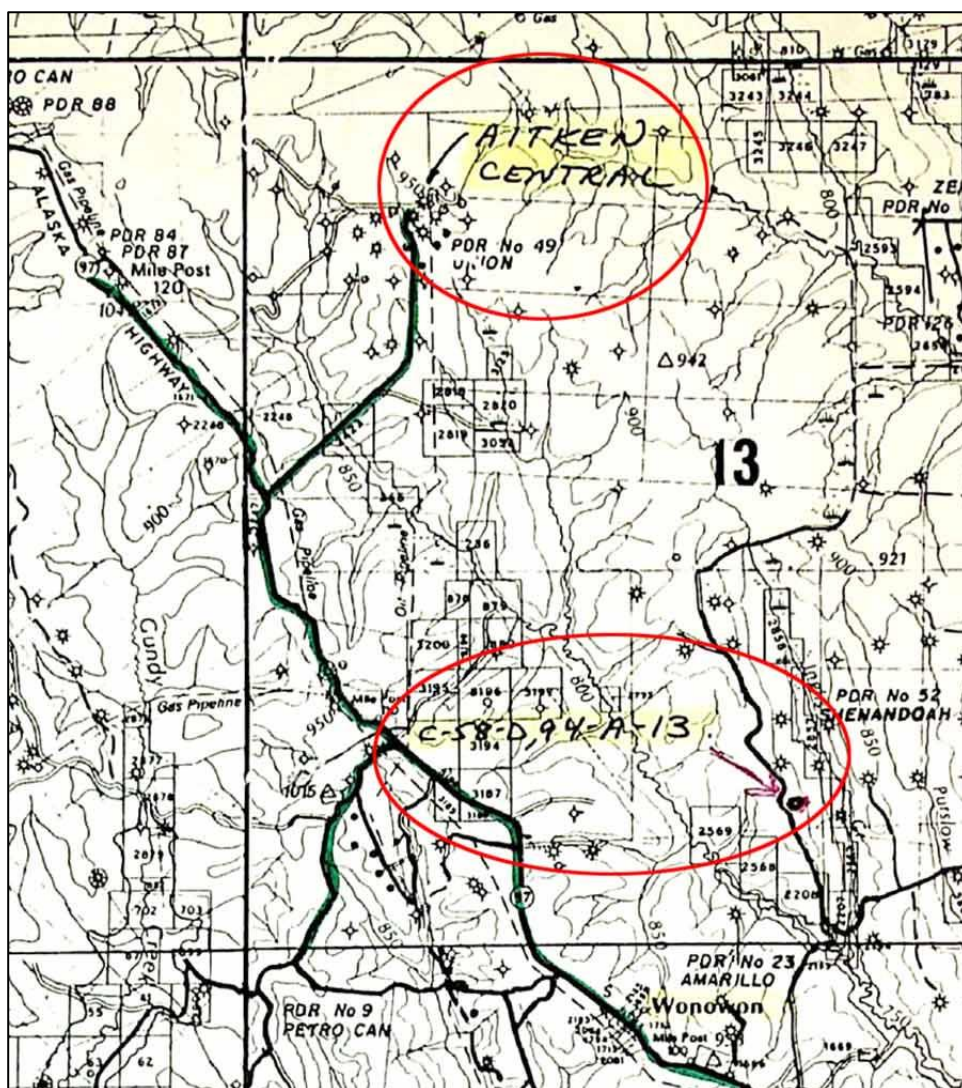
Fort St. John Tour (July 20)

David Anderson, Tony Fogarassy and Robert Tweedie caught the 6 a.m. flight from Victoria airport and arrived in Ft. St. John at 9:10 a.m. on July 20. They were escorted by EMPR staff and were either helicoptered or driven by vehicle to mile post 115 on the Alaska highway, and then northeastward up a dirt road to Unical Canada's Aitken underground gas storage facility, situated at the headwaters of the Blueberry River in an isolated pocket of the northern taiga forestlands. Unical Canada Resource's manager of production, Dale Brand, gave the visitors a tour of the facility. Unical's Aitken Creek storage plant is connected to Westcoast Energy's gas pipeline grid. Westcoast's Fort Nelson pipeline had been recently routed to the Aitken facility where gas was pumped into it for storage during the summertime. The storage facility was the only one in British Columbia. It began operating in 1988 and was a former oil pool / reservoir that had been drained or depleted of its ancient supply.⁷⁰⁰



Image from Anderson Commission
Final Report, page 97

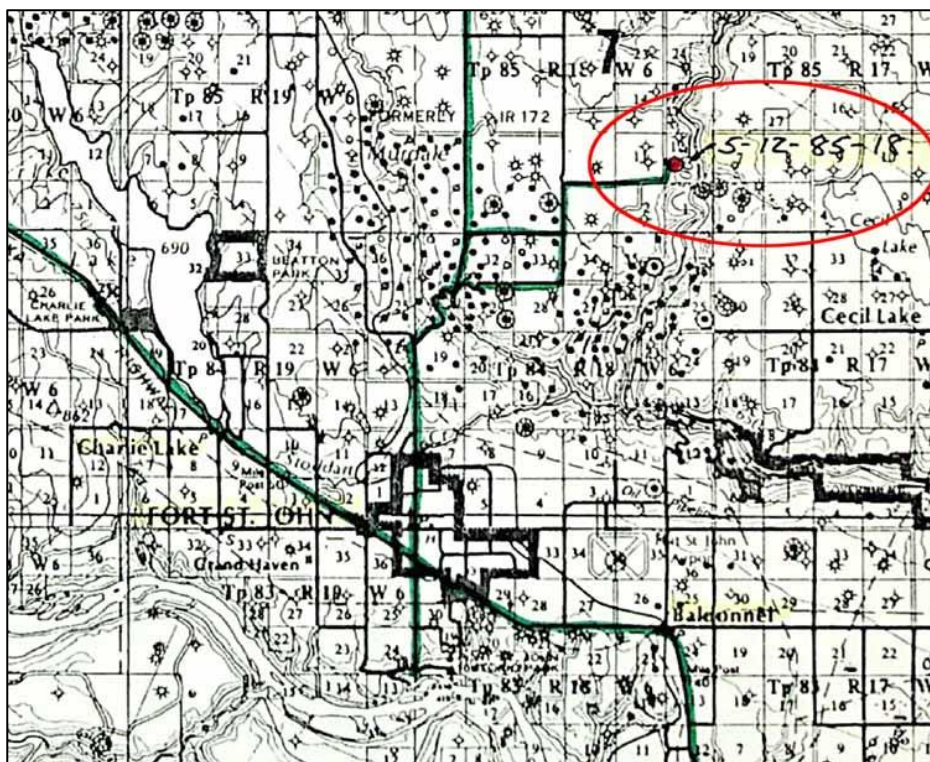
Plate 3: Aitken Creek gas storage facility, northeast British Columbia.
Operated by Unocal Canada Resources, Aitken Creek is the province's only underground gas storage facility.



⁷⁰⁰ See Technical Hearing transcripts, Volume 7, September 5, 1990, pages 1427-1436, for discussion of this topic.

They also visited a drilling operation, the Trilogy Inga well c-58-B/94-A-13, northeast of Wonowon mile post 100, just across and north of the bridge over the Blueberry River.

They were also escorted to observe a directional or deviated drilling well site some 15 miles north of Ft. St. John, the Poco N. Pine 5-12-85-18 well, near to Margaret Ormston's former rural, and oil polluted, property. The trio caught a late 9 p.m. flight back to Victoria.



The Los Angeles, California Tour (July 23-24)

On the trip to California, David Anderson and Tony Fogarassy, who were once again accompanied by Don Dempster, arrived at the Los Angeles airport before 3 p.m. on July 23. They then had a meeting with Ed Santiago and Ken Carlson with the California Department of Conservation's Division of Oil and Gas. Scribbled notes indicate that the representatives informed the Commission of "downhole safety devices," "regulations pertaining to storage," "earthquakes / storage" in an "active faulting area," and an "emergency response plan." Afterwards the trio met over dinner with Alexandra Alexander, the political / economic officer at the Canadian Consulate General office in Los Angeles, and with Alexandra's boss, the Consul.

Bret Lane, the drilling superintendent with the Southern California Gas Company's Storage Operations, sent Fogarassy a copy of an itinerary for July 24th "tour with the members from the British Petroleum Commission" of the two storage facilities. On that morning, the Commission members were given a tour of the "Montebello station including compressor building and facilities," and a "tour of 2-3 townsite wells." Later that morning, the Commission was escorted to the Playa del Ray facility, where a tour was given of the "station including compressor building and dehydration facilities." In the early afternoon before Anderson's 3 p.m. flight to Chicago, they were given a "tour of selected townsite and urban area wells." On the tour were Don Murray, Jim Haskins, Dave Zenega, Jim Tierney, and Rick Phillips the manager of Storage Operations for the Southern California Gas Company.

The Michigan – Williamsburg – Kalkaska Tour (July 25)

On their flight from Los Angeles, Anderson and Fogarassy arrived at Chicago, Michigan airport at 9 p.m. on July 24. Don Dempster had flown back to Victoria, not accompanying the duo's trip to the east. The next morning on July 25, they caught a 9 a.m. flight to Traverse City some 350 km to the northeast, and arrived at 11:15 a.m. From Traverse City, an oil town in Grand Traverse County located on the south end of the Grand Traverse Bay on the northeast part of Lake Michigan, they travelled by vehicle to the town of Williamsburg located sixteen kilometres to the east on highway route 72.

It's not clear if they first met with two Williamsburg residents, or if they met the residents later during their return journey from the town of Kalkaska to Traverse City. In Williamsburg, the site of the 1973 Amoco blowout disaster and gas migration contamination of groundwaters – the topic of which was covered in Section 5-18 of this report, *July 11, 1990: The Final Public Hearing* – they briefly met Earl Gay and Margaret Beckwith, the latter of which gave Anderson "original newspaper clippings" of the disaster, clippings which Anderson later returned to Beckwith by mail.

In the town of Kalkaska, about 20 kilometres east of Williamsburg, ANR Storage Company's G. Michael Weston, manager of Field Operations, Gary C. Michalski, manager of Facility Planning, and G. Robert Lange, manager of Reservoir Engineering and Geology, gave Anderson and Fogarassy a tour of the three Kalkaska area storage facilities located near the town: Rapid River, Cold Springs 12, and Cold Springs 31 storage sites.

According to Mark Nida's August 1990 submission materials (T-51) to the Commission's technical hearings, there were a total of 52 storage fields in the State of Michigan, covering a total area of 305,664 storage acres, and with a total of 2,460 operating wells (see map on following page).

The Commission duo had a very short visit, lasting just over six hours for travelling and visits. They had to make time in order to catch the 6:25 p.m. flight from Traverse City to Detroit. In a July 30 letter to Robert Lange, Fogarassy wrote:

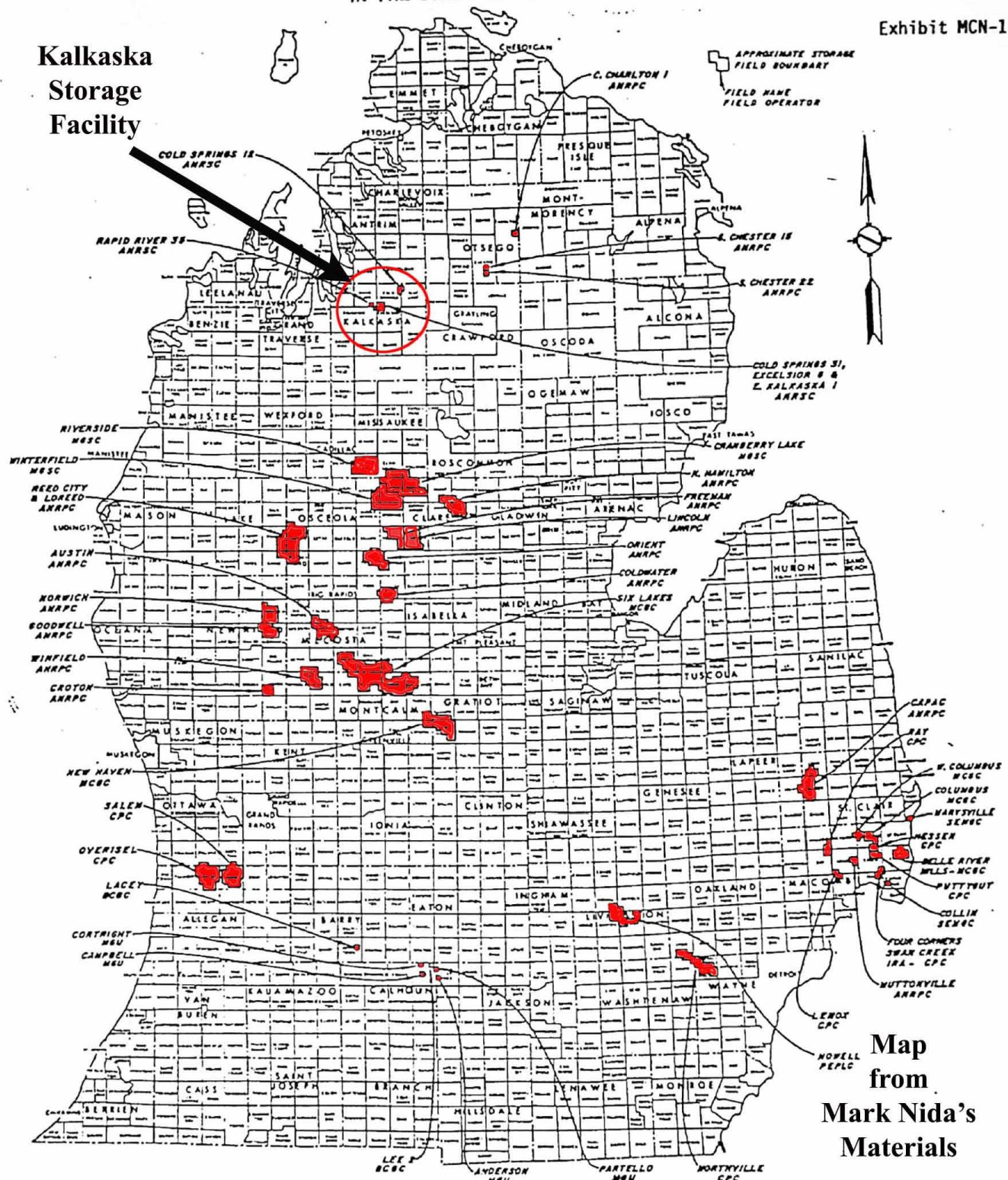
BIOGRAPHY	
Education	MARK C. NIDA <i>T-51</i>
B.S. in Geological Engineering from Michigan Technological University in 1982	
Employment:	Michigan Public Service Commission
I have been with the Michigan Public Service Commission staff since May 1983 and worked on production, gas proration, pipelines, and gas storage projects. I have attended numerous short courses during the past seven years.	
I make recommendations to the Commission by presenting expert testimony in gas storage cases pertaining to safety, public convenience and necessity, maintenance of operations and procedures of storage fields and groundwater impact and monitoring programs. I have conducted case studies and testified to reservoir engineering geophysical interpretations, and geological and depositional environments of gas reservoirs in Michigan regarding production, d proration and storage. I have provided expert testimony in gas pipeline certification cases from an engineering and environmental perspective and made recommendations to the Commission. I have served on numerous technical committees regarding production, proration, and drilling through gas storage fields. My responsibilities include inspection of gas production and storage facilities. Presently, my title is Gas Storage Specialist for the staff of the Michigan Public Service Commission.	

Thank you for allowing David Anderson and me to tour your Kalkaska area storage facilities. We found the trip most informative. Our only regret was that we needed much more time. The Commission's major concerns are focusing on groundwater contamination issues, H₂S and induced micro-seismic events due to injection/withdrawal cycles. Michigan's groundwater regulations are, of course, quite stringent and consequently Mark Nida of the Michigan Public Service Commission will be testifying in early September in Vancouver.

APPROXIMATE GAS STORAGE FIELD BOUNDARIES IN THE STATE OF MICHIGAN

Exhibit MCN-1

**Kalkaska
Storage
Facility**



The Ontario Tour (July 26-27)

Departing from the Detroit City airport, Anderson and Fogarassy arrived at the Toronto airport at 11 p.m. on July 25. In Toronto the following day, July 26, they met with Paul Ross, president of Congas Engineering Canada Ltd., and with Art E. Wootton, the assistant to senior vice-president of Business Development with Consumer Gas Company Ltd., and project manager with Congas Engineering.

On July 26, they were given a tour of the Tecumseh gas storage facility in Sarnia located at the southern tip of Lake Huron, which is 250 kilometres west of Toronto, and not far from Detroit City. It is not known how they travelled to Sarnia, either by air or vehicle. Tecumseh Gas Storage Ltd., which operates the Tecumseh storage facility, was a joint venture of Imperial Oil and of Ontario's Consumers Gas Company Ltd, "Canada's largest gas distributor:"

The world's first recorded underground storage project was undertaken near Welland, Ontario in 1915. Natural gas was injected into a partially depleted sandstone gas reservoir during low demand periods and withdrawn during periods of peak consumption. Gas was first stored in a pinnacle reef near Sarnia in 1942. ... In Ontario, 19 underground gas-storage fields are now operated by four separate companies.

Tecumseh's storage facilities are located about 9 miles south of Sarnia, Ontario, in an area of valuable agricultural land. Storage operations began in 1964 and have expanded from an initial annual contract volume of 7 billion cubic feet to 71.5 billion cubic feet in 1989 and from initial peak day deliverability of 135 million cubic feet to 1 billion cubic feet in 1989. ... Over 20% of Consumers Gas annual sendout is now stored in Tecumseh's reservoirs. ... Tecumseh now operates 108 wells, located on 8,468 acres of farmland in five designated storage areas. The wells are connected by 29.8 miles of pipeline gathering-system to a compressor station of 36,400 horsepower.⁷⁰¹

After their tour, Anderson and Fogarassy had to scurry back to Toronto to catch the 6:35 p.m. flight back to Vancouver that July 27.

UNDERGROUND STORAGE AN ESSENTIAL COMPONENT OF ONTARIO'S NATURAL GAS SUPPLY

Congas Engineering Canada Ltd.
August, 1990

The world's first recorded underground storage project was undertaken near Welland, Ontario in 1915. Natural gas was injected into a partially depleted sandstone gas reservoir during low demand periods and withdrawn during periods of peak consumption. Gas was first stored in a pinnacle reef near Sarnia in 1942. As Ontario's gas market expanded, the pinnacle reefs became the preferred reservoirs for storage due to their superior reservoir characteristics.

In Ontario, 19 underground gas-storage fields are now operated by four separate companies. All of these pools were depleted gas reservoirs which were discovered and produced by the petroleum industry in the normal course of exploration.

⁷⁰¹ *Underground Storage, an Essential Component of Ontario's Natural Gas Supply*, by Congas Engineering Canada Ltd., August 1990, pages 1, 3.

*You had to be shamed, by us, into visiting the major gas storage site on this Continent in Illinois [in late October 1990], rather than wasting time and the public's money on trips by you and your staff to Paris, France; Milan, Italy; and England, as you have done. How was the view from the top of the Eiffel Tower? Could you see Langley from up there?*⁷⁰²

*I will not comment on your lecture on the costs of your exercise which I find a piece of effrontery on your part having regard to the trips you and your staff have made at public expense to study the problems of the Fraser Valley in such exotic locations as Paris, Milan and the United Kingdom.*⁷⁰³

*We asked you Mr. Commissioner, to visit Illinois where there are several well-known problem underground gas storage fields. Chicago and environs seemed to have no appeal, but a visit to Paris, France was made, which has fewer storage areas than a single company in Illinois. France has a known reputation for technical secrecy, but doubtless more attractions.*⁷⁰⁴

A14

Abbotsford, Sumas & Matsqui News — Wednesday, August 22, 1990

Gas commission explores drilling in Europe

by Marty Warman
MetroValley News Service

Members of a commission investigating oil and gas exploration in the Fraser Valley are assessing the impact of the petroleum industry on highly populated areas in Europe.

Speaking from the commission office in Langley, Tweedie said chairman David Anderson and technical adviser Tony Fogarassy travelled to Europe last week, spending Aug. 15 in Milano, Italy, where they saw a number of storage fields.

The commission wants to make a firsthand assessment of areas of Europe where residential, commercial and agricultural activities coexist with drilling and storage, he said.

"Part of this is certainly assessing the noise and visual impact, and

issues such as water contamination and insurance," Tweedie added.

The most important issue the commission is investigating is the impact of drilling and storage on people, he said. "How do people coexist with drilling and storage? Are they worried about sitting on top of a storage site — how does the farmer feel about it — how does it affect his property values? These are the questions we're asking."

Many of the sites commission members visited were places where agricultural interests, drilling and storage, exist side by side.

"Ontario has corn, Italy has corn, France has corn and asparagus" Tweedie added. "There are lots of places where they've seen drilling and agriculture together."

Gaz de France has "unbelievable expertise" in the use and storage of gas in highly populated urban areas, Tweedie added, and has storage facilities just outside the city of Paris. Within the city, Gaz de France oversees a geothermal operation, drilling for steam in the heart of the city.

Finally, commission members will visit Witch Farm near Southampton, England, the largest on-shore oil production facility in Europe, designed to protect the sensitive environment of a coastal city Tweedie added.

Commission findings in Europe will form part of a series of technical hearings beginning Monday, Aug. 27 at the Town & Country Motor Inn in Delta, located at the junction of Highways 17 and 99.

Officials from Gaz de France will give expert testimony the following week when hearings move to Langley Conference Centre, 20381-66th Ave.

Most of the sessions are scheduled for afternoon and evening hours. For a complete list contact the Commission on Fraser Valley Petroleum Exploration office at 533-0667.

Friends of the Fraser Valley, a Langley-based environmental group opposed to exploration and drilling will also make presentations at the hearings.

⁷⁰² An Open Letter to David Anderson: Delivered at the Re-Opened Hearings on the Oil and Gas Inquiry, Friends of the Fraser Valley, October 22, 1990.

⁷⁰³ Letter to David Anderson from Ray Addington, October 22, 1990.

⁷⁰⁴ Friends of the Fraser Valley News Release, September 4, 1990.

The Tour de France (August 12 to 17)

*Industry has proven that modern drilling technology is safe even in highly populated areas. There need be no concern for groundwater contamination, atmosphere or lifestyle disturbance. One of the most recent examples is the city of Paris where exploration and drilling for oil is currently taking place safely and with strong encouragement from the French Government.*⁷⁰⁵

*One of the most interesting trips was to France, where Gaz de France and their consulting firm, Sofregaz, prepared an extensive four-day schedule which included a visit to what they claim is the world's largest aquifer gas storage facility, at Chemery, in the Loire Valley. Two other gas storage fields were also visited - one at Gournay-surAronde, and the other at Beynes, in the Isle de France region. Very helpful briefings also took place at the experimental station of Gaz de France in Paris.*⁷⁰⁶

As Commission Counsel Doug MacAdams finished drafting his first version of the Procedural Rules on June 6, 1990, Tony Fogarassy sent out a letter of inquiry the same day to M. Michel Dussaud, Sofregaz' director of underground storage in France, commenting that the Anderson Commission was already planning to "visit France for the week of August 13th" to inquire about Gaz de France's storage facilities. Fogarassy stated:

The Province of British Columbia has recently created an inquiry commission to evaluate the affects of natural gas drilling and underground natural gas aquifer storage, near Vancouver. Mr. Pierre Thouin, of Soligaz in Montreal, recommended I contact you with respect to aquifer storage, particularly storage in populated areas.

Fogarassy said to Dussaud:

We are seeking any technical and promotional material which Gaz de France/ Sofregaz would be willing to send to aid in our inquiry. As France is the undisputed world leader in aquifer storage of natural gas, we would appreciate any information on socio-economic, land-use policies/ problems, risk analysis, French government laws and regulations etc. I have attached a copy of the Commission's terms of reference. ... As well the Commission will interview technical experts on drilling and underground storage. To this end we may invite to Vancouver a Gaz de France/ Sofregaz underground storage expert to articulate the experience of France.

Mr. Thouin stated that possibly Sofregaz would be able to meet with the Commissioner and myself in technical and regulatory discussions. We are quite keen on visiting your head office and storage facilities.

How and why Fogarassy contacted Pierre Thouin in Montreal is not known. Nevertheless, there is an interesting story here. Soligaz was created four years prior in April 1986, the name of a new consortium



⁷⁰⁵ Letter from Wayne Babcock, president of Dynamic Oil Limited, to Darlene Sherwin, Aldergrove, April 6, 1990.

⁷⁰⁶ Form letter from David Anderson to the Mayors of the Fraser Valley, October 17, 1990.

comprised of “the provincial Crown corporation Soquip (Societe quebecoise d’initiatives petrolieres), Gaz Metropolitan Inc., SNC Group Inc., and Alberta Natural Gas Co.”

The consortium’s objectives are to build a natural-gas liquids (NGL) fractionation plant in Montreal East and to convert an existing oil pipeline between Sarnia, Ontario, and Montreal to accommodate the NGL. ... the pipeline ... is owned and operated by Interprovincial Pipe Line Ltd.⁷⁰⁷

In September 1986, Montreal-based Noverco Inc., a “financial company and a management company,” “became the new parent company of Gaz Metropolitan Inc.,” with Noverco already “a participant” in the Soligaz consortium. Noverco was “interested in buying into natural gas supply companies in Alberta, to assure its supplies upstream,” and was also interested in “natural gas exploration.”⁷⁰⁸ In early 1988, when the Montreal petrochemical company Petromont Inc. joined the Soligaz consortium, Soligaz proposed building “underground storage caverns ... in east end Montreal to accept the liquid imports.”⁷⁰⁹ Soligaz’ scheme was eventually rejected in June 1991 by Quebec’s Bureau d’Audiences Publiques sur l’Environnement (BAPE):

The BAPE report made public in May [1991] concluded that the \$230-million Soligaz project to store and process liquid natural gas in Varennes posed unacceptable risks to local residents and the environment.⁷¹⁰

BAPE stated the \$210-million project to store and process liquid natural gas could produce a catastrophic explosion and should not be near homes. As proposed in Varennes, it would lie within one kilometre of homes.

The day after the board announced its decision, provincial energy Minister Lise Bacon lashed out at the report, saying it would cost Quebecers jobs. “Should we take into account fish over there in Varennes or the children who have fathers without jobs and don’t have any meals before they go to school?” she said.

But Christian Simard, head of the Union Quebecoise pour la Conservation de la Nature, said pitting jobs against the environment is false. Soligaz ignored environmental assessment rules in choosing the site and produced an impact study that was full of holes, he said.⁷¹¹

The irony and intrigue are not lost here. While Fogarassy relied on Thouin’s contact Doussaud in France concerning “storage in populated areas,” Quebec’s environmental regulator would reject Soligaz’ storage proposal as being far too dangerous and too close to a large population centre. Nagging questions remain: did Soligaz contact Sofregaz / Gaz du France to conduct assessment of its underground storage proposal in Montreal, and is this why Thouin made the contact recommendation to Commission researcher Tony Fogarassy?

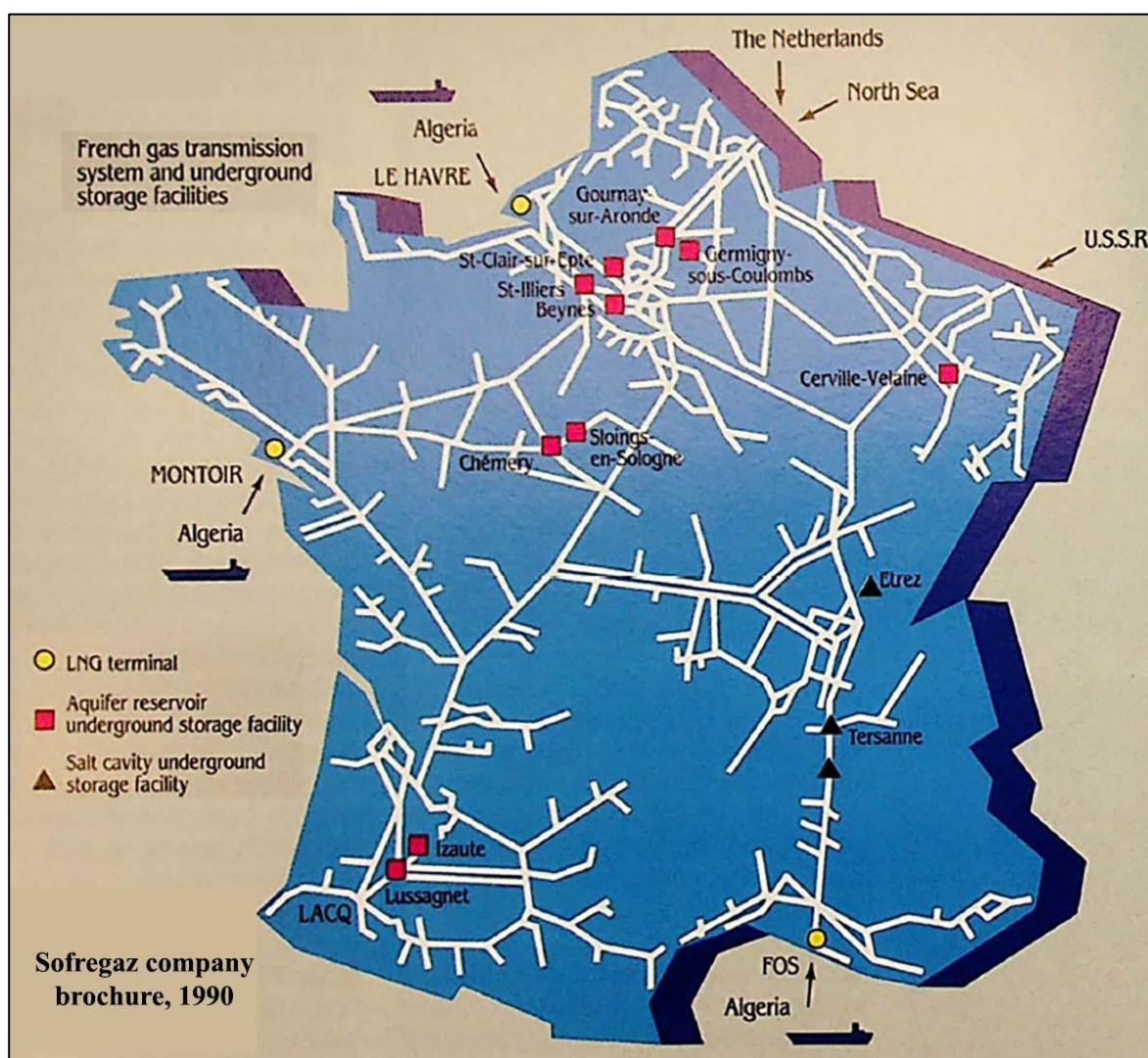
⁷⁰⁷ *Pipeline project taking shape*, The Gazette, April 29, 1986.

⁷⁰⁸ *Noverco wants Boston linked to gas network*, The Gazette, September 19, 1986.

⁷⁰⁹ *Soligaz could act soon on pipeline plan - \$50 million investment in storage facility would be first step*, The Gazette, May 9, 1988.

⁷¹⁰ *Group defends Soligaz project*, The Gazette, June 4, 1991.

⁷¹¹ *Soligaz blamed for project’s delay*, The Gazette, June 11, 1991.



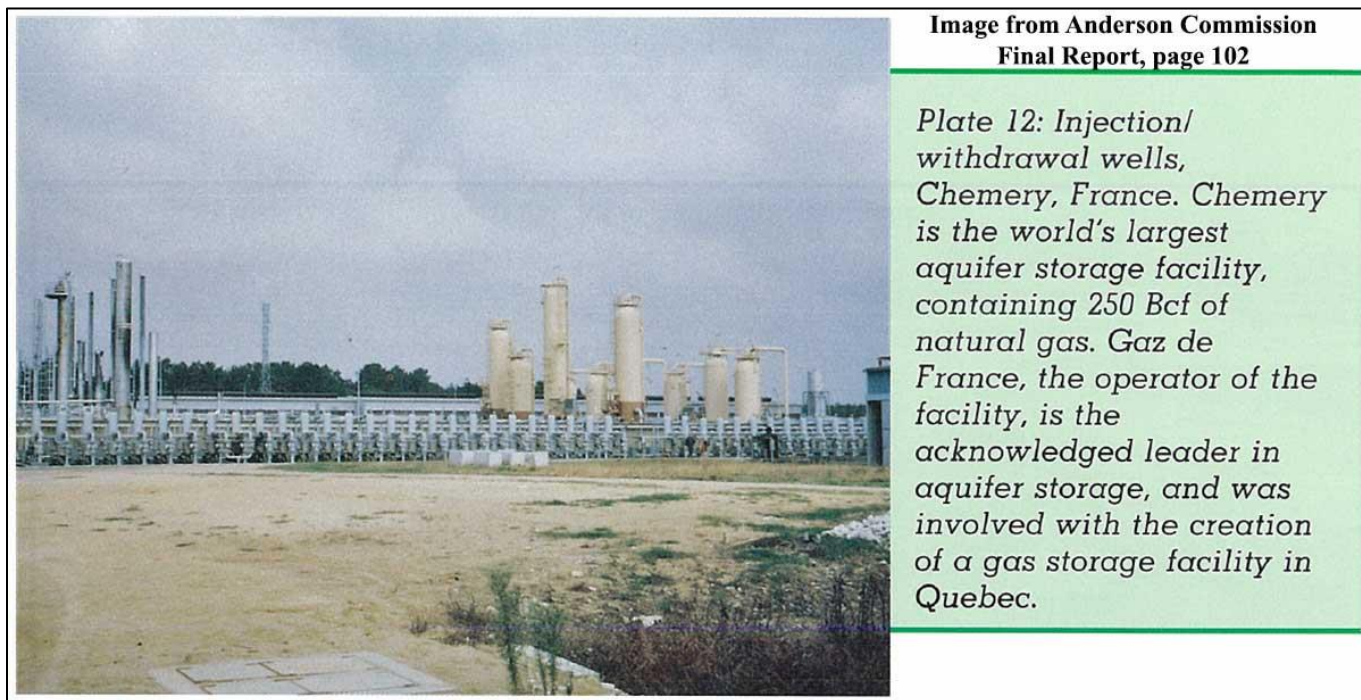
The Anderson Commission's records included a glossy Sofregaz company brochure, *Underground Natural Storage Facilities Operated by Gaz De France*. It explained that France's "small gas production plants ... have completely disappeared," whereby Gaz de France was relying on gas imports from Algeria (31%, at three French seaport terminals) and from gas pipeline contracts linked to the Netherlands (10%), Norway (20%), and the U.S.S.R. (27%) ⁷¹² to feed its thirteen underground storage facilities, facilities operated by a total of 262 vertical wells. Eleven of the thirteen storage sites were in aquifers, and two in salt cavities. At the September 5, 1990, Technical Hearing, Yannick Guerrini (from Gaz de France) boasted that the Chemery (Loir et Cher) aquifer facility, about 170 km southwest of Paris in the Loire Valley, which stores 7 billion cubic metres or about 212 bcf (billion cubic feet) of gas, was "in the Guinness Book" as the largest storage facility in the world. ⁷¹³

Sofregaz' organizational brochure listed extensive international contracts for Economic Studies, Production and Treatment, Liquefied Natural Gas / Liquefied Petroleum Gas, Pipelines (gas transmission, oil, off-shore installations, chemical products, and underground storage. For underground storage,

⁷¹² Gaz de France signed a 25-year agreement with the Soviet Union in January 1982 for purchase of 282 billion cubic feet of Siberian gas per year. The new gas pipeline to western Europe was scheduled for completion in 1984.

⁷¹³ Hearing transcript, pages 1266-1267.

Sofregaz had a total of 33 international contracts: two contracts in Italy; one in the United Kingdom; one in Spain; one in Algeria; two in Iraq; one in Sweden; two in Denmark; five in the United States; three in Canada; three in Yugoslavia; one in West Germany; one in Belgium; and a confidential contract in the Netherlands. Gaz de France was a gigantic and influential multinational corporation with 30,000 employees.



M. Michel Dussaud sent a letter addressed to David Anderson in late February 1991 just after the Commission shut down its operations.

We would like to announce that Sofregaz, the consulting-engineering company of the Gaz de France group has incorporated a subsidiary in the U.S. This subsidiary will develop U.S. business in the field of natural gas, from the wellhead to the end-user.

Sofregaz U.S. intends to market Gaz de France's know-how in the U.S. where the emphasis will be on underground storage, SCADA systems, natural gas network design software, and polyethylene gas distribution technique. Our range of services includes consulting, engineering, project management, and turnkey construction. Moreover, we also envisage providing our clients with financial engineering including project financing, leasing, etc.

As former manager of Sofregaz' Underground Storage Department and newly appointed President of Sofregaz US, Michel Dussaud will be located in the main office in Houston.

In addition, Sofregaz has entered into a joint marketing agreement with ANR Storage of Detroit. Sofregaz U.S. will open an office in Detroit, and an engineer, Francois Labaune will be assigned as of mid April 1991.

ANR Storage Company is a subsidiary of the Coastal Corporation, a Houston based energy holding company.⁷¹⁴ ANR Storage was formed in 1978 as a separate entity for the exclusive purpose of developing on an equity basis and providing storage service to third-party customers.

Sofregaz and ANR Storage have agreed to offer their combined services and expertise to clients in the U.S. (limited to aquifers) as well as abroad (limited to oil and gas fields).

We look forward to serving you, even better than in the past.⁷¹⁵

What Dussaud may have meant in the last sentence of his letter to Anderson is not clear. Given the glowing and praiseworthy comments Anderson gave of Gaz de France's storage operations in his final January 1991 report, Gaz de France may have used the Anderson Commission as an opportunity to help stimulate its own investment and asset goals.

Dussaud gave a presentation, "New Techniques in Underground Storage of Natural Gas in France," at the May 2-13, 1988, NATO ASI (Advanced Study Institute) international conference at the Middle East Technical University in Ankara, Turkey.⁷¹⁶ His conference presentation was published in the conference's proceedings, collected and authored by the American underground storage expert and professor emeritus, M. R. Tek, "Underground Storage of Natural Gas: Theory and Practice." The Anderson Commission had a copy of Tek's book in its small Langley office library. In fact, Mr. Tek would later appear as a witness at the Commission's Technical Hearings on September 4, 1990, the same day when the Friends of the Fraser Valley announced a boycott of the Anderson Commission.

Anderson and Fogarassy arrived at the Charles de Gaulle international airport at 2 p.m. on Saturday August 11. Anderson's wife, Sandra McCallum, arrived at the same airport the following day, August 12, at 11:10 a.m. Explained in an August 7, 1990, letter to M. Michel Dussaud, Sofregaz's manager of Underground Storage, Fogarassy would "return to Canada on Saturday, August 18th," but "Mr. and Mrs. Anderson will be spending an additional week touring southern France." The Andersons arranged a holiday event out of the Commission's tour. According to McCallum's air flight vouchers, Sandra Anderson returned to Vancouver on August 26, at 10:05 p.m., the night before the very first day of the Commission's Technical Hearings held at the Town & Country Inn in Delta, just south of the Vancouver International Airport. The vouchers did not mention Anderson's name, but this author has assumed that he accompanied his wife on the same flights back to Vancouver.

Fogarassy also wrote:

Thank you for the Best Western hotel voucher and tentative itinerary for our upcoming visit to France. Your tentative program appears very comprehensive. The Commission has visited a number of storage facilities in Canada and the U.S.A. and is looking forward to a review of French technology.

We have isolated a number of issues through our public hearings held in June and July. I have included a list of these concerns for your information.

⁷¹⁴ Anderson and Fogarassy had met with ANR staff during their one-day July 25 visit to Michigan.

⁷¹⁵ Letter from Michael Dussaud, Sofregaz US Inc., Houston, Texas to David Anderson, February 21, 1991.

⁷¹⁶ Published in Review of World Wide Storage Projects, NSSE (NATO Science Series E), Volume 171.

We have found the issues relating to groundwater resources to be the major concern. In addition, issues such as brine disposal; subsidence and induced seismic events due to injection/withdrawal cycles; emergency response planning in event of underground blowouts reaching potable aquifers or the surface; noise and air pollution related to drilling, workover and storage activity; and land use conflicts between drilling/storage activity and encroaching residential and commercial developments.

The potential of aquifer storage (in Tertiary age arkosic sandstones) in the Fraser Valley is very high. Thus, we have a large desire to be fully appraised of the attendant difficulties of petroleum and reservoir engineering techniques of aquifer storage. The Gournay-sur-Aronde field visit will be of great interest. We shall arrive at the GdF Research Centre, 361 avenue de President Wilson, 9:00 a.m. Monday, August 13, 1990.

Fogarassy and Anderson had a day off on Sunday and is when Anderson would mostly likely have met his wife at the Airport. From information faxed by Dussaud to Fogarassy on July 12, 1990, the Wednesday of August 15 was a national holiday. Fogarassy then made arrangements to fly Anderson and himself to Italy on Tuesday night August 14, and to return the following evening.

Their reservation at the Best Western Hotel on Avenue Fremiet in Paris, however, did not come with a swimming pool, as originally requested by Fogarassy in a July 13 letter to M. Michel Dussaud: "Our only request is that we stay in moderately priced lodgings with a swimming pool. Mr. Anderson is a keen swimmer (and a Canadian Olympic silver medalist in rowing in 1960.)" Dussaud replied on July 31 that the Best Western "is a convenient hotel with a moderate price but no swimming pool. Hotels with swimming-pool are quite seldom in Paris and very expensive."

On Monday August 13, Anderson and Fogarassy had a day long meeting, interrupted by a 2-hour lunch, at Gaz de France's Research Center at 361 Avenue du President Wilson. At 7:30 a.m. on Tuesday August 14, they were escorted from the Best Western Hotel to visit the Chemery storage field, where they arrived at 10:30 a.m. After lunch, they visited "a drilling site at Soings-En-Sologne." They returned to their hotel at 5 p.m.

The Trip to Italy (August 15)

That same evening, Anderson and Fogarassy caught a flight to Milano, Italy. There is little information in the Commission records about this excursion, except what is found in correspondence materials and in Anderson's final report.

On June 6, 1990, the same day Fogarassy wrote to Dussaud, he also sent a letter to his colleague "Chip," Cipriano Carcano, who lived in Bergamo City in northern Italy, some 45 kilometres northeast of the City of Milan. Fogarassy may have met Chip, and his other colleague described below, during his 1985-1987 contract in Tripoli, Libya, with Mobil Oil Libya Ltd. AGIP, the Italian national petroleum company, had contracts and operations in Libya.

I am working this summer in Victoria/Vancouver on a government inquiry evaluating the affects of drilling and natural gas storage in and around Vancouver.

Presently, I am gathering information on aquifer storage (Le., land-use and socio-economic affects, possible groundwater contamination problems, etc.). I know Italy has storage at the CORTEMAGGIORE field 75 km south of Milano (in Miocene-Pliocene sandstones) and in the BRUGHERIO field, 6 km south of Milano, which is a coarse clastic reservoir.

I am wondering if AGIP has conducted any studies (engineering or socioeconomic) that is available to the public and that the Commission can use here in British Columbia. I'd appreciate any and all help! Any information, whether AGIP's or from the Italian government, dealing with drilling and storage in populated areas would be most useful. In fact, we may ask an Italian expert to fly to Vancouver to act as a technical expert. Gaz de France has been drilling and storing gas in and around Paris for almost 40 years and we will almost certainly invite one of their representatives to Vancouver.

AGIP (Azienda Generale Italiana Petroli) was the Italian state petroleum company that was formed in April 1926. In 2003, it became a "subsidiary of the multinational petroleum company Eni, when Eni acquired Agip Petroli S.p.A." ⁷¹⁷

Fogarassy also sent a separate letter on June 6, 1990, to another colleague, Roberto Quagliaroli, who lived in the village of Cerro Al Lambro, about 20 kilometres southeast of the City of Milan. Quagliaroli, a geologist, was working in the country of Gabon, Africa, a former French colony, in the seaport town of Port-Gentil, a centre for the petroleum industry. The letter was almost identical to the letter sent to Chip. According to two faxes sent to Fogarassy from Quagliaroli on July 10 and July 12, he made arrangements with AGIP for the Commission to tour two gas storage facilities, the Ripalta facility and the Sergnano facility. Fogarassy wrote again to Quagliaroli on July 17:

The major concerns identified through the recently completed public hearings process are ground water contamination (potential underground blowouts) emergency evacuation plans and seismicity issues. If AGIP has any material (already in the public domain) that it may wish to send to the Commission, to be placed in our research library, it would be of course most gratefully received.

Again, on August 8:

We have been informed August 15th is a French holiday. Therefore, we would like to arrange a visit to Milano to discuss storage with AGIP. We are most interested in groundwater and microseismicity issues. A short tour of a representative storage facility would be appreciated. We would fly into Milano on August 14th (Tuesday evening) and return August 15th (Wednesday evening) to Paris.

Anderson wrote the following in his final Commission report about his short trip to Italy:

The Italian underground natural gas storage facilities were visited in mid-August. One of the areas visited (with two underground natural gas storage facilities) is flat and very fertile river bottom land, essentially rural, with small villages and farms above the storage facilities. Corn is the major crop. As in California, France and Britain, the colours of the facility were chosen to merge with the local landscape. Treed areas assisted in concealment. The day that the facility was visited was the Feast of the Assumption. The most noticeable noise when standing inside the fenced gravel pad of

⁷¹⁷ Source, Wikipedia, "AGIP."

the storage facility was the tolling of bells from the village church about seven hundred metres away, calling the faithful to the feast day service.

No doubt there are times when the noise impact is reversed, and the church hears the compressors of the storage facility, rather than the storage facility hearing the bells of the church; however, the degree of integration of the facility into the rural landscape was quite remarkable. This was a far, far cry from the out-in-the-open and spread-out facilities of Alberta or the Peace River, or for that matter, the storage facility of Jackson Prairie in Washington State. The integration of the facility into the landscape is not simply marginally better; it is orders of magnitude better.

Back to France (August 16 to 17)

Back in Paris, on August 16 at 8:30 a.m. Anderson and Fogarassy were escorted from the Best Western Hotel to Beynes for a “meeting at the Well Maintenance Group Center,” where “drilling techniques,” and “environment protection during drilling” were the main topics for discussion. After a two-hour lunch beginning at 1 p.m., they were escorted back to the Best Western in Paris.

On Friday, August 17 at 8:30 a.m., Anderson and Fogarassy were escorted to the Gournay-Sur-Aronde for a tour of Gaz de France’s Gournay-Sur-Aronde gas storage field. After a two-hour lunch starting at 12:30 p.m., they were escorted back for their final night in Paris.

Fogarassy departed by his lonesome from Paris on August 18 at 12:50 p.m. for a connecting flight at Frankfurt, and arrived in Vancouver at 1:35 p.m., and on to Victoria City by 4:45 p.m. the same day.

Meanwhile, the Andersons were off for a little holiday in southern France. It is not known where they visited or stayed. Assumably, the trip was not on the government’s tab. Their holiday would be short but sweet, as Anderson had one final formal visit on his European itinerary.

The Trip to the United Kingdom (August 24)

In Anderson’s short visit to the United Kingdom, there was only one piece of correspondence found in the Commission’s records revealing the date. It was found in an August 8 letter from Fogarassy responding to a July 27 letter from Paul W. King, the Commercial Counsellor of the B.C. Ministry of International Business and Immigration at the British Columbia House in London.

Thank you for the publication entitled “Development of the Oil and Gas Resources of the United Kingdom.” Commissioner David Anderson would like to visit the Witch [sic, Wytch] Farm field (British Petroleum) in southern England. We have heard this drilling and production facility has been designed to conform to very rigorous environmental codes and regulations.

Commissioner Anderson has only one possible date for a one-day visit. This is August 24th (Friday). Commissioner Anderson would fly in from Paris where he has meetings arranged with Gaz de France. We would appreciate your thoughts on flights; a connection to Southampton may be the answer. We are attempting to contact Mr. Fred Mackay at British Petroleum to convey a similar message and request.

On July 31, Garde B. Gardom, B.C. House Agent General, wrote to Fogarassy explaining that B.C. House in London “have now received a wealth of BP [British Petroleum] material from Mr. Neil A.C. Hirst at the U.K. Department of Energy:

- Notes on UK Gas Storage Facilities;
- Poole Bay Appraisal Drilling: Vol. One, Environmental Assessment; Vol. Two, Environmental Review;
- A short guide to the Wytch Farm Oilfield Development;
- Wytch Farm Oilfield Development - Furzey Island Environmental Review, Jan. 1986;
- Wytch Farm Oilfield Development - Land Management Proposals;
- Wytch Farm Oilfield Development - Environmental Impact Assessment, Vol.3, Production Facilities;
- Wytch Farm Oilfield Development - Visual Impact Analysis;
- Wytch Farm Oilfield Development - Main installations - map;
- Wytch Farm Oilfield Development - Purbeck - Southampton Pipeline Environmental Impact Assessment.

With the package of documents sent to the B.C. House in London, Neil Hurst wrote the following to Garde Gardom on July 31:

The majority of exploration and development activity in Southern England concerns the large Wytch Farm oil field (300 MMBbl recoverable reserves). This is environmentally sensitive as it is situated in a region of outstanding natural beauty and scientific interest which is also heavily populated. Production has recently been increased in steps from an initial rate of 6,000 Bid to 60,000 Bid as a result of the “Phase 2” expansion project. The enclosed document from BP shows the large number of environmental issues that had to be addressed before the development could proceed.

Our experience with onshore gas storage in is limited to salt caverns, however we have in the UK the only offshore gas storage project in the world. An overview of these projects is attached, in addition we would be happy to answer more detailed questions on both of these subjects.

When Garde Gardom, Q.C., became Agent General at B.C. House in London ⁷¹⁸ on June 6, 1987, succeeding Agent General Alex Hart, he became an avowed emissary for industry, with emphasis on “using B.C. as a base to springboard into the free trade arrangement with the U.S.” ⁷¹⁹ Business ties had long been established between the United Kingdom and British Columbia, at that time arranged through the Pacific Division of the Canada-U.K. Chamber of Commerce.

Gardom was first elected as Vancouver Point Grey riding MLA in 1966 for the B.C. Liberal Party and held that riding for 20 years until he announced his retirement in September 1986, a month before the provincial election. In May 1975, following the defection two other MLA colleagues, Gardom jumped

⁷¹⁸ BC Premier Richard McBride swung a deal with the Queen in 1913 for a 99-year lease of the London City property for \$150,000, called the British Columbia House. By 1914, BC House in London was no more.

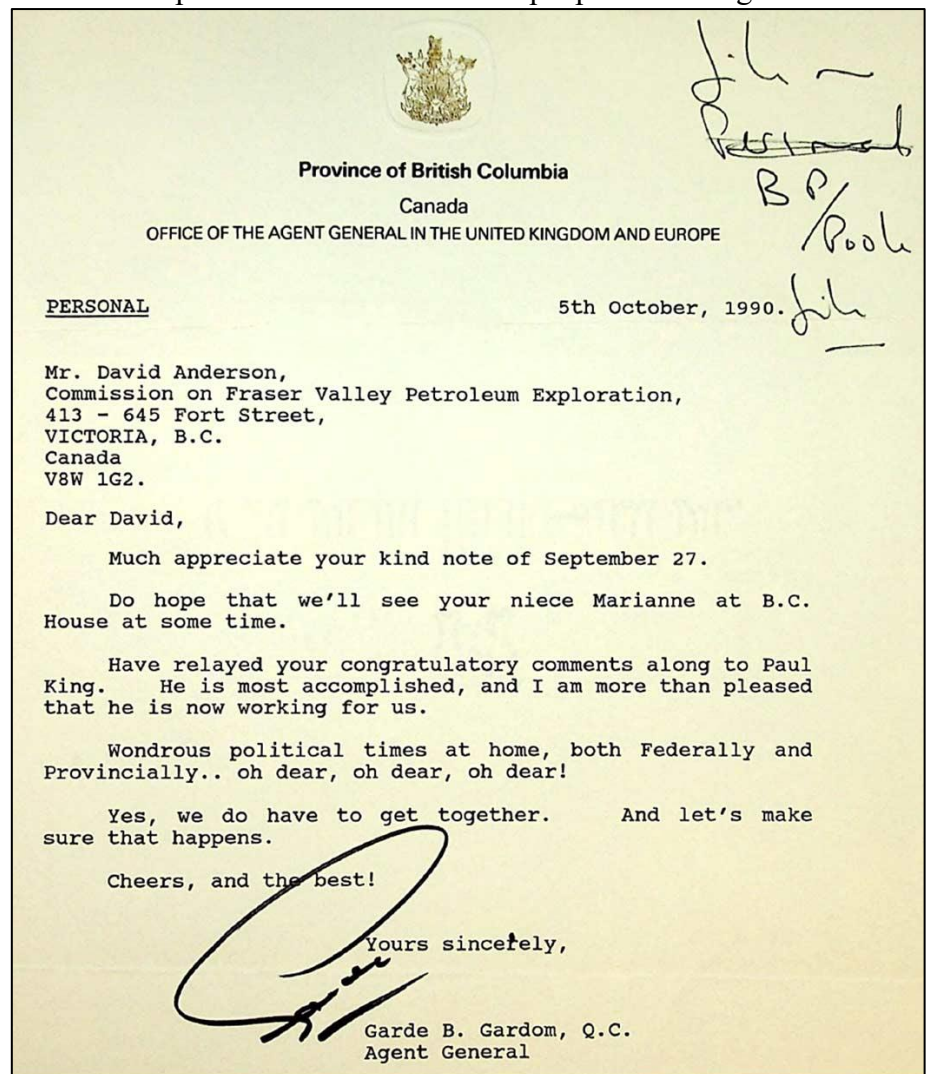
⁷¹⁹ *B.C. and the EEC – Let’s not miss boat in Europe*, Vancouver Sun, November 25, 1989. And, *Trade mission planned*, Richmond Review, June 1, 1988.

ship from the provincial Liberal Party – which Victoria MLA David Anderson had been leader of since April 1972 – to join the Social Credit Party.

While Liberal MLAs Pat McGeer and Allan Williams have been talking about reorganizing the so-called “free enterprise” parties into some kind of firm coalition for more than a year now, nevertheless their resignations from the party – and the likelihood of Garde Gardom’s defection as well – still caused considerable shock waves.

Since all three say they want a unity party (“a free competitive enterprise government” – Gardom; “a moderate free enterprise government” – McGeer; “realignment of the free enterprise parties” – Williams), it seems certain that all three will soon take out Social Credit memberships.⁷²⁰

After the December 11, 1975, provincial election, marking the defeat of the New Democratic Party administration, Social Credit Party Premier Bill Bennett rewarded Gardom (who had a former law practice with partner Jack Volrich) with a prestigious Cabinet post as B.C. Attorney General. During the 1980s, Gardom “has been at the forefront of dispute between B.C.’s native peoples and the government over the issue of land claims.”⁷²¹ Gardom was later appointed as B.C. Minister of Intergovernmental Relations, and for six years served as Government House Leader. In 1986, Minister Gardom and Energy Minister Tony Brummet had pressured federal Energy Minister Marcel Masse to lift the 16-year moratorium on the West Coast offshore oil and gas exploration. In May 1989, Gardom led representatives from five B.C. forest companies on a trade mission to the Soviet Union, Czechoslovakia, and West Germany on forestry products and technologies.



⁷²⁰ *From Titanic to Devil's Island?* Times Colonist, May 10, 1975.

⁷²¹ *Gardom quits politics but backs Vander Zalm*, Vancouver Sun, September 25, 1986.

Elwood N. Veitch, Minister of International Business and Immigration, wrote a letter to Anderson on September 27, 1990:

It has been brought to my attention by Mr. Geoff Artz, Director, Trade and Investment, that you recently visited the offices of B. C. House, London. I am delighted that you are utilizing the services abroad of the Ministry of International Business and Immigration.

Trade and investment are key factors in the British Columbia economy. That is why the Ministry of International Business and Immigration and the British Columbia Trade Development Corporation are keen to attract investment into the Province and to increase British Columbia exports. It is also why the Ministry has a presence in a number of key centres around the globe.

Anderson replied to Elwood Veitch on October 2, 1990.

My time in England was short, and Paul [King] did a fine job arranging a tour of the British Petroleum Wytch Farm oil field, Europe's largest. He also took the trouble to accompany me on the visit, which was most helpful. While not directly on the subject of my trip, I must add that I found his discussion of events in the United Kingdom and the European Community to be most perceptive.

In early February 1991 as the Commission was shutting down its operations, Anderson sent Paul King a copy of his final report and wrote the following in his letter about his aim to have an "effect on the attitudes of the opponents of drilling:"

Last Friday the provincial cabinet released my report on Exploratory drilling for Gas in the Fraser Valley. A copy is enclosed. ...You will note that I have written enthusiastically about the Wytch Farm visit. It was certainly one of the most impressive of the visits to petroleum facilities that I made. I might add that my description has had absolutely no effect on the attitudes of the opponents of drilling, but I hope that those who are keeping an open mind may find it of interest. May I thank you for all your help in arranging the Poole trip.⁷²²

The Anderson report included glowing comments about his short tour of the Wytch Farm oil field:

From the point of view of integration into the landscape and low aesthetic impact, the Wytch Farm oil field (Figure 15) near Poole in southern England was the most striking of the facilities visited. The area is a tourist destination and retirement center and is listed by the British Government as an Area of Outstanding Natural Beauty, adjacent to both Sites of Special Scientific Interest and National Nature Reserves. The fleet of yachts at moorings in the harbour (Britain's largest protected water area) rivals those of both Victoria and Vancouver. From a land utilization and sensitivity point of view it is perhaps the most different area one could find from the North Slope of Alaska, or the deserts of Libya or Saudi Arabia, or, for that matter, the Peace River country of northern B.C.

Despite the area's sensitivity, in the past few years British Petroleum has established Western Europe's largest on-land oil production facility in the area. Very little is visible. The design of transportation corridors, deviated drilling, the use of screening trees and shrubs such as rhododendron, excavating pads for facilities with raised berms on their perimeter have virtually

⁷²² Letter from David Anderson to Paul King, British Columbia House, Office of the Agent General in the United Kingdom, London, February 8, 1991.

Image from Anderson
Commission Final report,
Chapter 8, *Aesthetics*

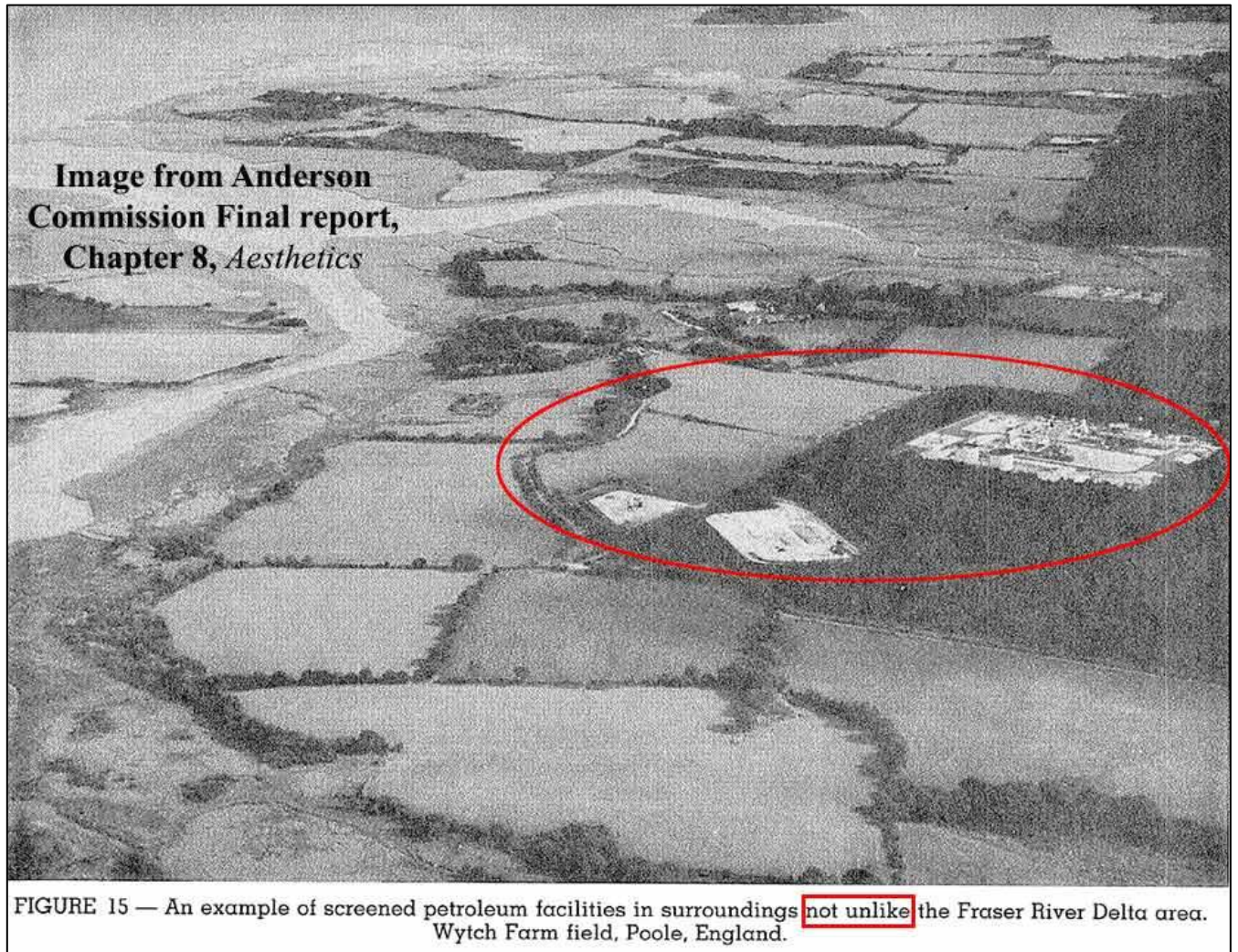


FIGURE 15 — An example of screened petroleum facilities in surroundings **not unlike** the Fraser River Delta area. Wytech Farm field, Poole, England.

hidden the facilities. Even military camouflage netting has been used to shield views of the facility while vegetation was growing.

Much of the facility is located on 300 metre by 600 metre Fursey Island in Poole Harbour. The facilities occupy approximately one sixth of the surface area and are virtually undetectable from the waters around the island. Despite being the centre of a major industrial undertaking, the island is also home to one of the last remaining colonies of the British red squirrel. Golden pheasants and other birds were noticed at the edges of the fields and woods. With the exception of the industrial pads themselves, the island is a country park. The efforts made went far beyond the masking of the visual impact of the facilities as in California, and instead entered the realm of sophisticated English landscape architecture in the tradition of Capability Brown. A visiting British Columbian cannot but think of Mrs. Jenny Butchart, who turned an eyesore industrial quarry into one of the province's loveliest gardens. The results are different; Fursey Island is not the Butchart Gardens. However, the same spirit and vision is present in the work of the landscapers commissioned by British Petroleum.⁷²³

⁷²³ Final report, Chapter 8, page 106.

The Shaping of Commissioner Anderson's Bias

Following the narrative in the Commission's final report of January 1991 about the Wytch Farm oil field visit in southern England, the report **concluded that Commissioner Anderson's visitations to storage facilities in North America and Europe convinced him that "drilling" and "production activities" could "be located ... in any setting:"**

In short, the experience elsewhere has altered the Commissioner's early summer perception of drilling natural gas and production from activities that belong away from populated areas to an industry that can be located, with proper care and attention, in any setting; wild, rural, rural / residential or urban. To judge the effect of the industry in a populated area on the basis of experience in the Peace River would be a mistake. More appropriate examples of industry integration into rural, rural/residential and urban settings exist.⁷²⁴

Though Anderson failed to sway "the attitudes of the opponents of drilling," as he stated in his February 8 letter to Paul King, the "opponents" collective and continuous "attitudes" did, nevertheless, sway the Social Credit Cabinet to reject underground gas storage in the Fraser Valley immediately after the Anderson report was published in late January 1991. As stated in his introduction:

It should be noted that the terms of reference do not require the commission to recommend whether exploratory drilling should or should not be allowed. ... A decision as to whether drilling should or should not proceed is a wider matter, which requires consideration of issues which can best be described as political

The conclusion in the final report about Anderson's "altered ... perception," and his hope in his letter to Paul King for those keeping an "open mind," is instructive. Because if we take what was said in the Commission final report at face value, **it means that by the time Anderson returned to British Columbia on the evening of August 26 from his European tour he had already made up his mind to favour underground gas storage.** Anderson had made up his mind without having attended or participated in the Preparatory Sessions (August 13 – August 24), and before the Technical Hearings began the following day on August 27.

My job is not to favour drilling, nor is it to oppose it. My task is to examine the evidence presented to me objectively and to make fair and unbiased recommendations to government.⁷²⁵

⁷²⁴ Final report, Chapter 8, page 107.

⁷²⁵ September 25, 1990, letter to Ruth Schultz, Victoria, from David Anderson.

5 – 21. The Rzepczynski (Population Proximity) Affair

*To provide focus to the testimony of the technical hearings, preparatory sessions with the witnesses took place in the weeks prior to the technical hearings. This involved extensive use of telephone conference calls, with the witnesses, with representatives of the consortium and with the Friends, as well as the Commission's lawyer and technical advisor. ... The first serious sign of difficulty with the Friends occurred at these preparatory sessions. I was not in attendance, but Commission counsel and my technical advisor informed me that they found a level of suspicion and distrust.*⁷²⁶

*This lawyer for B.C. Gas [C.B. Johnson] then caused a Mr. Howard Griffith, an employee of Texas Gas in the U.S., to contact our informant (who is dependent on the gas industry for his livelihood). We do not know what was said between these two, but we do know that immediately thereafter during a telephone conversation with us, our informant, in an embarrassed fashion, withdrew permission for his name to be used.*⁷²⁷

*In our conversation of this morning, I believe I mentioned that Doug MacAdams questioned witnesses on the issue of whether underground storage should be under populated areas. Rzepczynski's paper covers the matter in much the same way. But whether he discussed it on the telephone with Breaks is a matter of fact on which we must rely on the recollections of Breaks and Rzepczynski. No one else was on the phone but the two of them.*⁷²⁸

*To return to Mr. Rzepczynski and his conversations with Mr. Breaks, what exactly was said is a matter that only the two of them could know, as nobody else was a party to their conversation. All I know is that a two month investigation found that wherever it was possible to check Mr. Rzepczynski's statements with independent witnesses, his statements checked out. Further, what Mr. Breaks claims he said is inconsistent with everything that Mr. Rzepczynski had previously written, or what people who know him recollected as being his views. Mr. Breaks' statements simply did not check out. A careful investigation determined that his allegations were fabrications.*⁷²⁹

*I personally have never stated that witnesses were tampered with, but that a source of information was pressured into withdrawing his support. After being contacted by one of the consultants [Griffith] who testified for B. C. Gas before the Commission, this person [Rzepczynski] requested that his name no longer be used in connection with this project. This occurrence was first brought to the attention of the Commission on August 18 and then again on August 25, 1990. At that time three representatives of the Friends of the Fraser Valley met with the Counsel for the Commission and discussed this situation. We were told that nothing could be done about this problem. We were also advised to be very careful as to whom we talked to about it as we could lose credibility by discussion of this event.*⁷³⁰

We are not afraid of Mr. Anderson, nor of his threats and bullying letters, even when they are delivered to our doors by his minions. We will not be intimidated but will continue to fight this

⁷²⁶ Letter to Elwood Veitch, Minister of International Business and Immigration, from David Anderson, October 4, 1990.

⁷²⁷ Friends of the Fraser Valley news release, September 24, 1990.

⁷²⁸ Fax letter from David Anderson to Fabian Dawson, esquire, The Province newspaper, December 4, 1990.

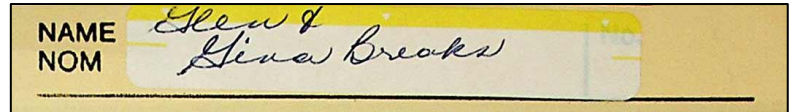
⁷²⁹ Letter from David Anderson to Mr. & Mrs. J. Murphy, Abbotsford, January 28, 1991.

⁷³⁰ Letter from Glen Breaks to David Anderson, October 18, 1990.

*lunatic scheme to pump gas beneath our homes and communities in any proper way we can for as long as necessary.*⁷³¹

When Aldergrove resident and Friends of the Fraser Valley volunteer researcher Glen Breaks interviewed Walter Rzepczynski on several occasions via long distance telephone calls from May to July 1990, he would never have guessed the trouble and controversy that would follow.

In preparation for the Anderson Inquiry public meetings and technical processes, Breaks went to great lengths to investigate problems associated with underground gas storage. There were thirteen pages of Break's notes found in a Commission file, called "Glen & Gina Breaks,"



summarizing his interviews and findings, information that Breaks' mother, Irene, hand delivered to the Commission's Langley office on September 4, 1990, just prior to the Friend's announcement that evening of their boycott of the Commission. Three of the thirteen pages with Breaks' title, "A list of some storage fields bearing a more thorough investigation," are included in **Appendix C**.

One of Breaks' key relevant issues he tracked with petroleum storage experts was proximity of underground gas storage facilities to population centres. Narrated above in Section 16, *After the First Hearing*, Breaks found the smoking gun, whereby:

Walter recommends that a project of this nature [namely, the Fraser Valley underground gas storage proposals] should not only be unpopulated in itself but, if possible, should be away from any population. This is in agreement with Dr. Katz's recommendations.

Breaks' insider information, which he shared with members of his fellow Friends, and separately with the Commission on July 11, 1990, contradicted assurances and statements made by B.C. Gas Inc. to the public. This is where that story begins.

Before telling that tale, something else of significance should first be mentioned. On January 11, 1993, a peer-reviewed research paper was published in the Journal of Petroleum Science and Engineering, called *Gas Migration from Oil and Gas Fields and Associated Hazards*.⁷³² The four California-based petroleum academic authors wrote the following in their abstract:

The migration of gas from oil and gas formations to the surface is a problem that greatly affects those surface areas where human activity exists. Underground gas storage facilities and oil fields have demonstrated a long history of gas migration problems. Experience has shown that the migration of gas to the surface creates a serious potential risk of explosion, fires, noxious odors and potential emissions of carcinogenic chemicals. These risks must be seriously examined for all oil and gas operations located in urban areas.

This paper presents the mechanics of gas migration, paths of migration and a review of a few of the risks that should be considered when operating a gas facility in an urban area. The gas can migrate

⁷³¹ Friends of the Fraser Valley news release, September 24, 1990.

⁷³² Journal of Petroleum Science and Engineering, 9 (1993), pages 223-238.

~~CONFIDENTIAL~~
JULY 11, 1990

Rec'd Sept 4
- Glen

NAME
NOM

Glen Breaks

My name is Glen Breaks.

I've been researching natural gas engineering and in particular, the underground storage of natural gas, for several months now. My primary source of information has been a book, published in 1990, entitled "Natural Gas Engineering, Production and Storage" by Dr. Donald Katz and Robert L. Lee. Dr. Katz, who passed away in 1989, was a professor of chemical engineering at the University of Michigan and a retired consulting engineer. He was co-author of 250 papers and several books, and over the years received 17 national honours and awards. He was awarded the National Medal of Science from President Ronald Reagan in 1983. He pioneered many of the techniques and concepts now commonly used in the natural gas storage industry. To discredit Dr. Katz would be to discredit the entire petroleum industry.

In the chapter on monitoring and safety, Dr. Katz tells us that given the expected 30 to 50 year lifetime of a storage facility it is foolhardy, to say as B.C. Gas has repeatedly said, that leakage into the local user's water supply and homes will not occur. He also recommends that a policy of acquisition of surface lands above gas storage zones be followed, in order to reduce and control hazards due to leakage. The consortium at the Jackson Prairie facility are now following this 1990 recommendation.

Dr. Katz gives this advice to anyone currently operating a storage field with residences on it. Any land in the storage area that enters the market through the normal course of events might then be procured, especially if there are any residences near.

He goes on to describe the type of home that should be built above a storage facility, if such an activity is unavoidable. He states "it would be preferable to have the homes on concrete pads without basements, and this new type of construction might well be advised in the gas storage areas."

in a continuous or discontinuous stream through porous, water-filled media to the surface. The primary force in this migration of gas is the difference between specific weights of gas and water.

In the Conclusions section of the 1993 paper, the authors state their recommendation more clearly than what was written in their summary abstract:

4. Underground gas storage facilities have demonstrated a long history of gas migration problems. Gas migration hazards, however, are aggravated in those facilities where pressures are increased to levels beyond the original oilfield pressures. **Experience has shown that gas storage facilities can create a serious risk of explosion and fire and should not be placed under urban settings.**

[Bold emphasis] It is virtually impossible to assure that the gas will not migrate to the surface. Especially in the case of earthquakes, the fault plane zones may become more permeable and there could be an upsurge of gas to the surface. The potential fires, especially in the presence of winds, could be disastrous and uncontrollable by local fire departments. In addition, the soil saturated with gas may lose its cohesive properties and convert to “quicksands”.

“... *should not be placed under urban settings!*” Here was Breaks’ real smoking gun. Had this paper been published a few years previous, The Friends of the Fraser Valley would have found vindication in their concerns about underground storage proximity to population centres, which, perhaps, may also have helped David Anderson become reluctant to conclude his final report recommendation support for underground gas storage in the Fraser Valley.

Introduced below, **Howard Griffith**, the Director of Storage Engineering and Geology for the Texas Gas Transmission Corporation, **stated the opposite to the Anderson Commission** in the final paragraph of his September 4, 1990, Exhibit T-46 prepared presentation:

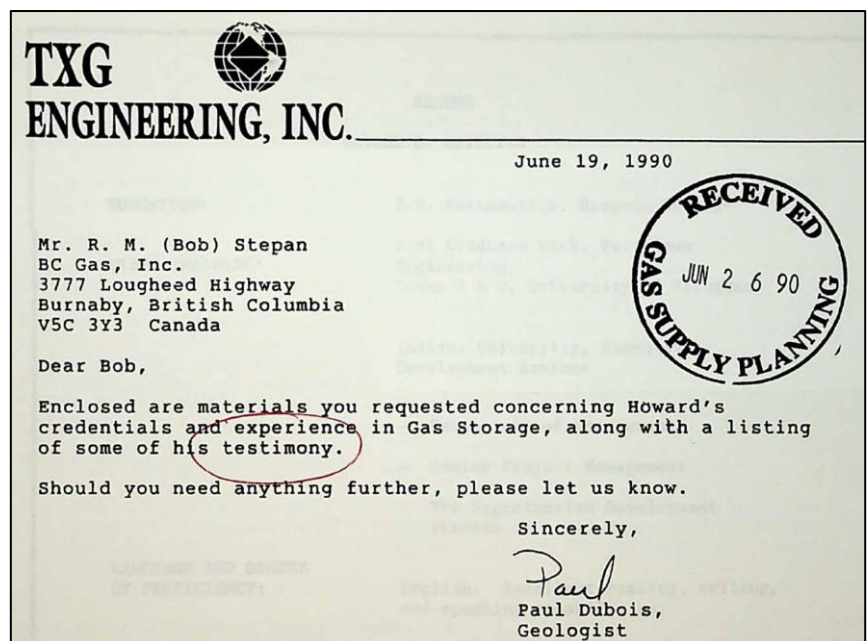
Storage is safe and compatible with the environment and can be in harmony with local residential concerns. Working together, local communities and utilities can and do contribute to providing for the continued secure supply of energy resources.

After Glen Breaks broke the news about Walter Rzepczynski on July 10 and 11, B.C. Gas Inc. apparently started doing some legwork to counteract Break’s revelation through their hired professional gun. The private corporation had to act fast because the Commission’s Preparatory sessions would begin in a month’s time, and the Technical Sessions two weeks after that.

Sometime in late May to early June 1990, B.C. Gas Inc. hired

Owensboro, Kentucky-based TXG

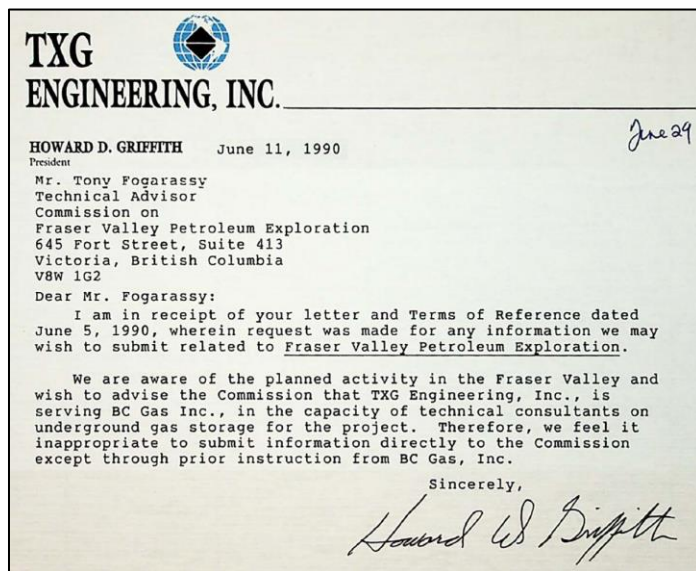
Engineering Inc. as the corporation’s “technical consultants on underground gas storage for the



project.”⁷³³ Bob Stepan, in the Gas Supply division at B.C. Gas, requested TXG Engineering’s geologist Paul Dubois to forward him TXG’s president Howard Griffith’s “credentials and experience in Gas Storage, along with a listing of some of his testimony.”⁷³⁴ Stepan received Griffith’s resume, which included a summary of “areas of testimony as an expert witness on underground gas storage:”

- **United states District Court, New Orleans:** Testified on behalf of Texas Gas Transmission Corporation in a take-or-pay case. Mr. Griffith was qualified to present testimony as an expert witness on underground gas storage matters. Transcript of testimony available.
- **Kentucky Department of Mines and Minerals:** Testified as an expert witness before the commissioners concerning the hydraulic fracturing of a gas storage reservoir.
- **Alaska State Senate - Committee on Right-of-Way Leasing:** Testified before this committee of senators and attorneys on the state of right-of-way leasing program on state and federal lands through the state of Alaska.
- **Kentucky Department of Mines and Minerals:** Testified as an expert witness before the commission concerning the safety of underground coal mining and the effect of subsidence in and around gas storage injection and withdrawal wells.
- **Federal Energy Regulatory Commission:** Mr. Griffith has testified on many occasions as an expert witness on natural gas storage. Testimony has been presented both written and orally. Subjects covered have included gas well deliverability, cushion gas requirements, inventory verification, buffer zone requirements, reserve estimates, etc.
- **Various District Courts in Kentucky and Indiana:** Testified as an expert witness on condemnation matters. All testimony was given before a judge and jury. Testimony covered all phases of underground storage, remaining reserves both oil and gas and the value of the taking.

Griffith, who died at the age of 70 on March 9, 2004, was a registered professional engineer in four States: Kentucky, Indiana, Ohio and Alaska. He was also a member of the International Underground Gas Storage Institute, the Society of Petroleum Engineers, the American Society of Professional Engineers, the American Gas Association (on the Pipeline Research Committee), the Southern Gas Association, the Kentucky Oil and Gas Association, and the American Management Association. He had been employed with the Texas Gas Transmission Corporation from 1955 to 1983, where he eventually served as the corporation’s Superintendent / Director of Gas Storage from 1974 to 1983. Stated in his written presentation to the Commission, he still held “the title of Director of Storage Engineering and Geology for Texas Gas Transmission.”



⁷³³ Letter from Howard W. Griffith, president of TXG Engineering to Tony Fogarassy, June 11, 1990.

⁷³⁴ Paul Dubois to R.M. (Bob) Stepan, June 19, 1990.

In this capacity I am responsible for the integrity of 11 gas storage reservoirs. Nine of these fields are converted dry gas reservoirs and two are aquifers. Five of the fields are in Indiana and six are in Kentucky.

Griffith served as vice president of operations with TXG Engineering Inc. from 1983 to 1986, and in January 1989 became its president and chief operating officer. In his presentation to the Anderson Commission, he stated that TXG Engineering is "an affiliate of Texas Gas Corporation and Transco Energy:"

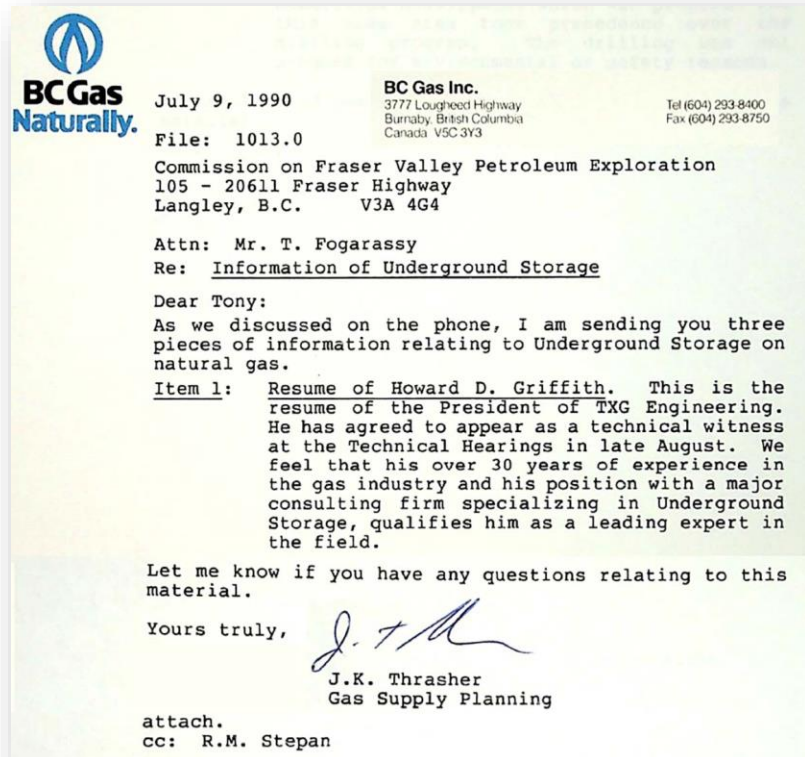
TXG Engineering is an international engineering consulting firm which provides engineering and management services to the natural gas industry. We are currently working on underground gas storage projects in the U.S., Canada and Denmark. Other natural gas related projects are being conducted in the U.S., Japan and Pakistan.

Griffith was also the president and chief operating officer of the Yukon Pacific Corporation, a division of CSX Corporation, where he "led the company to obtain key permits for the 800-mile Trans-Alaska Gas System," stretching from Alaska's North Slope to the port of Valdez. CSX was CSX Oil & Gas Corp, CSX Corporation, and CSX Energy Corporation, which announced in December 1989 that it sold Texas Gas Transmission Corporation, TXG Engineering and another affiliate, TXG Gas Marketing Co., to Transco Energy Corp. in Houston. Griffith's resume states that he had work experience in "Europe, Japan, South Korea, Republic of China, U.S.A., and Canada."

On July 9, J.K. Thrasher, with B.C. Gas' Gas Supply Planning, sent Tony Fogarassy a copy of Howard Griffith's resume:

This is the resume of the President of TXG Engineering. He has agreed to appear as a technical witness at the Technical Hearings in late August. We feel that his over 30 years of experience in the gas industry and his position with a major consulting firm specializing in Underground Storage, qualifies him as a leading expert in the field.

Thrasher also provided Fogarassy with a copy of the B.C. Minister of Energy's "Refusal of B.C. Hydro Application in 1979" document for underground gas storage in the southern region of the Municipality of



Surrey. Thrasher appended the following misleading interpretation note for Fogarassy's attention: "The drilling was not stopped for environmental or safety reasons."⁷³⁵

In early June, when Fogarassy learned of Griffith's contract as technical consultant to B.C. Gas, Fogarassy asked Griffith to provide him with information. Griffith replied in a letter: "we feel it is inappropriate to submit information directly to the Commission except through prior instruction from B.C. Gas, Inc."⁷³⁶ From the get-go, B.C. Gas Inc. and consultant Griffith were keeping a tight lid on the sensitive subject and on the narrative of underground gas storage.

Other than the three occasions that Glen Breaks first brought information about Rzepczynski to the B.C. Utilities Commission on July 10, his oral presentation to the Commission public Hearing event on July 11 in Aldergrove, and in a visit to the Commission office in Langley with his research notes, the earliest date that the name "Rzepczynski" appears in Commission records is on August 15, two days after the Preparatory sessions began. It was a letter addressed to Rzepczynski by Russell & DuMoulin, "the lawyers for The Fraser Valley Gas Project."

An organization called The Friends of the Fraser Valley opposes the proposed drilling program and opposes development of underground natural gas storage in the Fraser Valley. Mr. Glen Breaks, a member of The Friends of the Fraser Valley, has advised the Commission that he has contacted you. Mr. Breaks has provided to the Commission of Inquiry a document in which he attributes quotations to you. The document has also been provided to the British Columbia utilities commission by Mr. Breaks. The British Columbia Utilities Commission is the administrative body which regulates utilities in the province including B.C. Gas Inc.

Attached are the first two pages of the document distributed by Mr. Breaks. These two pages contain the quotations attributed to you.

On the first paragraph of the second page of the letter from the petroleum consortium lawyers the name Howard Griffith is introduced, stating that Griffith had been in contact with Rzepczynski.

I understand from Howard Griffith, a consultant to B.C. Gas Inc., that you dispute the accuracy of quotations attributed to you. The attached document has been made public by Mr. Breaks. **If the quotations are not refuted by you then the incorrect statements will remain as part of the public record.** [Bold emphasis] We request that you write to us advising if you made the statements to Mr. Breaks that he attributes to you. If you did not, but made a statement relating to the same subject matter, would you please advise what was said.

In Griffith's October 11, 1990, Statutory Declaration for Anderson's separate *Inquiry on Witness Tampering*, he testified that he was in B.C. Gas Inc.'s office in downtown Vancouver on August 13, 1990, for a "fifteen-minute" telephone call to Rzepczynski who declined to participate in a "speaker phone" meeting. Griffith said, "representatives of The Fraser Valley Gas Project and Mr. [Calvin B.] Johnson," a barrister with the Russell & DuMoulin firm, "were in the room with me." Griffith stated:

"My purpose in placing the call was to ensure Mr. Rzepczynski knew of the statements and views being attributed to him," and "at no time on August 13, 1990, and at no time since have I made any

⁷³⁵ Refer to *The Third Wave* chapter for the story.

⁷³⁶ Griffith to Fogarassy, June 11, 1990.

suggestion to Mr. Rzepczynski or to anyone else that I could influence his professional life in any way.”

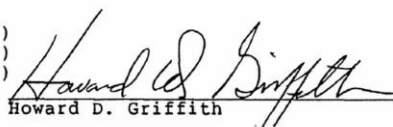
It is interesting that Griffith would state “at no time since” August 13, because, in fact, someone from B.C. Gas had contacted and spoken with Griffith about Rzepczynski at least eleven days previous. Griffith wrote in his affidavit that Russell & DuMoulin barrister, Calvin B. Johnson, sent him “on or about August 2, 1990 ... two pages of typewritten text,” namely Glen Breaks’ notes

which he submitted to the B.C. Utilities Commission on July 10. Consortium counsel Johnson sent Griffith the material under instruction after John Thrasher, B.C. Gas Inc.’s underground gas storage planning director, had first discussed the matter with Griffith (see below). It is likely that Griffith, or someone else Griffith contacted in his stead, had a discussion with Rzepczynski before August 2.

Lawyer Calvin B. Johnson stated in his October 20, 1990, affidavit submitted to the Anderson Commission’s Allegations sub-Inquiry that he “attended” the Commission’s “public hearing” at the Kinsmen Centre in Aldergrove on July 11, and “heard Glen Breaks address Commission Anderson” who “made reference to a person named Walter Rzepczynski and attributed to Walter Rzepczynski a number of statements respecting underground natural gas storage.”

It is important is to recognize that the Fraser Valley Gas Project consortium, more precisely, B.C. Gas Inc., considered Glen Breaks’ information to be serious enough to engage in a course of action to consult with Griffith about it, to which B.C. Gas directors decided on a linked strategy to involve its legal counsel on at least two occasions. Those executive decisions emanated from Fraser Valley Gas Project consortium staff and representatives listening to and transcribing copies of the audio tapes from the July 11 Commission public hearing in Aldergrove, whereby they isolated and flagged Breaks’ interview notes about Rzepczynski and notes from author and underground gas expert Dr. Donald Katz (who died on May 29, 1989) as significant items.

About a week after Glen Breaks’ and Charles MacLean’s one and half hour meeting on July 10 with Paul Gronert at the B.C. Utilities Commission office, Gronert arranged a meeting with John Thrasher, B.C. Gas Inc.’s underground gas storage planning director and handed over photocopies of Glen Breaks documents. Gronert wrote in his September 27, 1990, letter to Doug MacAdams that he “reviewed” Breaks’ “material” with “B.C. Gas Inc. staff,” mentioning “John Thrasher” as his contact. As Commission witness at the October 22 *Allegations* hearing, Gronert stated that “Mr. Breaks phoned me for the first time on July 3rd, and at that time, suggested that he might have some important evidence.” Gronert went on to say that Glen Breaks and Charles Maclean “had some hopes of bringing him [Walter Rzepczynski] as a witness.”

COMMONWEALTH OF KENTUCKY)	IN THE MATTER OF
)	INQUIRY ACT
COUNTY OF DAVIESS)	RSBC 1979 CHAPTER 198
STATUTORY DECLARATION	
I, Howard D. Griffith of 3800 Frederica Street, Owensboro, Kentucky, do solemnly declare that the facts set out in this statutory declaration are true, and I make this solemn declaration conscientiously believing it to be true and knowing that it is of the same legal force and effect as if made under oath.	
Declared before me in the Commonwealth of Kentucky this 11th day of October, 1990)  Howard D. Griffith
Given under my hand and seal of office, this 11th day of October, 1990.	

Mr. Douglas McAdams
205 Gladwin Centre II
2975 Gladwin Road
Abbotsford, B.C.
V2S 6W8



P.4
B.C.U.C.
File No. 200.12

3P-12.

Dear Mr. McAdams:

Re: Fraser Valley Underground Storage

Further to our telephone conversation of today's date I am sending you a copy of the material I received from Mr. Glen Breaks. This material was given to me on July 10, 1990 at a meeting in my office with Mr. Breaks and Mr. Charles R. Maclean, Q.C. The material consists of the following:

1. Two sheets of notes, presumably written by Mr. Breaks.
2. Fifteen pages copied from the text by D. Katz referred to in 1. above.
3. A paper entitled "Aquifer Storage Development". This paper does not state an author but Mr. Breaks indicates in his notes that it was written by "Walter Repcinsky" (sic).

As I mentioned to you, I told Mr. Breaks at the time I received this material that it would be considered public information and, in particular, that I intended to review it with BC Gas Inc. staff. I believe I even mentioned John Thrasher of BC Gas Inc. as my likely contact.

If you require anything further regarding this matter, please feel free to contact me.

Yours truly,

A handwritten signature in dark ink, appearing to read "P. H. Gronert".

Paul H. Gronert
Manager, Petroleum Engineering

Commission Correspondence Files

P.O. BOX 280, SIXTH FLOOR, 900 HOWE STREET, VANCOUVER, B.C. V6Z 2N3 CANADA, TELEPHONE (604) 680-4700, TOLL FREE 1-800-663-1386, FACSIMILE: (604) 6

MR. GRONERT: As I indicated earlier, I explained that in all likelihood I would be reviewing it with B.C. Gas. I mentioned that my contact there had been Mr. John Thrasher, who is one of their gas supply engineers, and that he and I had already been in contact over this project previously.

MR. MACADAMS: Did Mr. Breaks or Mr. MacLean, on learning this from you, exhibit any reluctance or anxiety about leaving [Rzepczynski's document] with you "Aquifer Storage Development?"

MR. GRONERT: There was some hesitation about whether they should give me the documents, yes.

MR. GRONERT: I reviewed the information and I have to say, I didn't see anything extremely alarming in it, but I felt nevertheless, there were a number of points raised that I would like B.C. Gas to respond to. ... Although, one of the things I also want to point out is that I tried to stress to Mr. Breaks at our meeting that with the Anderson Commission having its undertakings, it was not appropriate for the utilities Commission to be undertaking parallel inquiries, so what I was doing

was more an informal type of inquiry behind the scenes, you might say. So, anyway, I phoned John Thrasher of B.C. Gas and arranged to meet with him the following week to discuss this.

MR. MacADAMS: And did you in fact meet with Mr. Thrasher?

MR. GRONERT: Yes.

MR. MacADAMS: And did you, in fact, provide him with the documentation which has now been marked as an exhibit on these proceedings?

MR. GRONERT: Yes, he advised me at the meeting that he had hired Howard Griffith, who you referred to earlier this evening, as an expert consultant and that he felt the best way to get to the bottom of any apparent inconsistencies was to have Mr. Griffith review this material.⁷³⁷

There was only one instance of Glen Breaks' investigative revelations about Dr. Donald Katz mentioned in the newspapers before the Commission's Technical sessions in late August. It was published in the Langley Times by reporter Natasha Jones on July 4, 1990, "Gas leak only a question of when," with very damning information:

Research by South Aldergrove resident Glen Breaks has cast some chilling shadows over a consortium's bid to drill for natural gas in the Fraser Valley and to store it in underground reservoirs. His examination of the controversial plan led him to a book by Dr. Donald L. Katz, a foremost authority on natural gas. He was co-author with Robert L. Lee of *Natural Gas Engineering – Production and Storage*.

The data tells us that "it's not a question of whether there can be a natural gas leak, but when," Breaks said. Here's what the late Dr. Katz wrote: "Caution must be exercised in claiming that no gas will ever be found outside the intended well-gathering line-reservoir system."

Gas storage reservoirs developed either from original oil and gas reservoirs or aquifers can have a storage operation lifetime of up to 50 years. ... "From this time perspective, there is a reasonable possibility that over this period, gas from some of the wells will leak through the casing or cement to enter zones above the intended storage zone. A concern is that this gas eventually might reach water supplies and appear in the local user's water. Gas might even permeate the soil at the surface and enter homes or buildings to provide explosive mixtures."

Had Dr. Katz been alive, he would have undoubtedly been called as a witness for the Anderson Commission. So would Walter Rzepczynski, Katz's student, but that possibility was tactfully prevented.

UNDERGROUND STORAGE OF
NATURAL GAS IN ILLINOIS—1967

REFERENCES

- Katz, D. L., et al., 1959, Handbook of natural gas engineering: McGraw-Hill Book Company, Inc., New York, 802 p.
- Katz, D. L., 1966, Determination of non-recoverable gas when abandoning Troy Grove aquifer: Illinois Commerce Commission, open-file report, January 10, 5 p.
- Katz, D. L., Tek, M. R., Coats, K. H., Katz, M. L., Jones, S. C., and Miller, M. C., 1963, Movement of underground water in contact with natural gas: Am. Gas Assoc. Mon., New York, 323 p.

⁷³⁷ *Proceedings*, October 22, 1990, pages 1580 – 1589.

Katz was a professional pioneer in the petroleum world. In March 1945, Katz had “made an intensive study of the [Turner] Valley [oil and gas] field” in southern Alberta, when he “testified before the Natural Gas Utilities board” of Alberta: ⁷³⁸

Benefits to the oil producers of putting waste natural gas back into the gas cap area of Turner Valley are of a doubtful nature, Dr. Donald L. Katz of the University of Michigan testified Tuesday at the natural gas utilities board hearing. ... How beneficial the re-pressuring would be to future oil production would **depend on how much migration of gas from the gas cap area took place** [bold emphasis] and this in turn would depend on the permeability of the limestone and the differential pressure between the gas cap and the crude area, he said. ⁷³⁹

In 1953, Dr. Katz testified as a consultant for British Columbia’s Westcoast Transmission Company at a U.S. federal power commission hearing in Washington D.C. concerning a proposed 24-inch gas pipeline linking northeast B.C. to Washington and Oregon States for export market purposes. Katz estimated that:

Canada’s vast Peace River fields can produce nearly 6,000,000,000 cubic feet of natural gas daily if fully developed. ... The

Katz report indicates full development of the fields would require drilling of 154 wells in the Fort St. John area and 228 fields including Sunrise, Kiskatinaw, Charlie Lake, Airport, Tangent, Dunvegan, Rycroft, Gordondale, Belloy and Pouce Coupe. ⁷⁴⁰

DR. B. G. BALLARD DR. J. V. CHARYK DR. D. L. KATZ

Scientists, Engineers To Head UAC Conference On Saturday

Three prominent North American scientists and engineers will participate in a public meeting Saturday at 2:15 p.m. at the Jubilee Auditorium to focus attention on higher education at the University of Alberta, Calgary.

Guest speakers will be Dr. Joseph V. Charyk, under-secretary of the United States Air Force, Washington, D.C.; Dr. Donald L. Katz, chairman of the department of chemical and metallurgical engineering at the University of Michigan, Ann Arbor; Dr. B. G. Ballard, OBE, vice-president of the National Research Council, Ottawa; and Dr. G. W. Govier, dean of the faculty of engineering, University of Alberta.

Calgary Herald - February 12, 1962

⁷³⁸ *Valley Production Good 26 Years*, Edmonton Journal, March 13, 1945.

⁷³⁹ *Putting Gas Back of 'Doubtful' Value*, Edmonton Journal, March 14, 1945.

⁷⁴⁰ *Potential Output 6 Trillion Feet*, The Albertan, March 10, 1953. “Earlier witnesses had estimated Peace River reserves to be 2,800,000,000,000 cubic feet.” Vancouver Sun, March 10, 1953, *154 Wells Needed at Ft. St. John*.

Leading up to B.C. Gas contacting Griffith about Rzepczynski shortly after July 17, 1990, J.K. Thrasher, Manager of Gas Supply with B.C. Gas, sent Tony Fogarassy a list of exhibits on July 30 for the Preparatory session day-long meeting with the Commission scheduled for August 14:

- **BCG-1:** *Benefits of Fraser Valley Storage.*
- **BCG-2:** *Underground Gas Storage Safety Considerations.*
- **BCG-3:** *Jackson Prairie Storage Incidents.*
- **BCG-4:** *Leroy Storage Field Gas Migration/Control.*
- (Also attached are two copies of the AGA Engineering Technical Note entitled, *Underground Storage of Gas in the U.S. and Canada - 1989 Data.*)

On August 2, Thrasher sent Fogarassy a second list of exhibits:

- **BCG-5:** *Herscher Field - Gas Storage Facility.*
- **BCG-6:** *Gas Migration.*
- **BCG-7:** *Safety Comparison of Workers' Compensation Rates.*
- **BCG-8:** *Fuel Safety A Comparison Between Natural Gas, Propane and Gasoline.*
- (Also attached are two copies of Gas Metropolitan's June 1990 Newsletter, the Gaz News. This newsletter outlines Gaz Metropolitan's plans to store gas in Quebec's first underground storage reservoir.)

On August 13, Thrasher sent Fogarassy a final list of exhibits for the same meeting date:

- **BCG-9:** *Testing and Development of a Storage Reservoir.*
- **BCG-10:** *Regulation.*
- **BCG-11:** *Underground Storage Legislation.*
- **BCG-12:** *Subsidence and Seismic Events Related to Gas Storage.*
- **BCG-13:** *The Fraser Valley Gas Project Public Information Programs - Summary of Advertising and Public Information Materials.*
- **BCG-14:** *Noise Assessment Study.*

Fogarassy and Anderson would not attend the long meeting of August 14 with B.C. Gas staff, because on Friday, August 10 they were bound for Paris, France on the Commission's special European investigation tour of underground gas storage facilities. Only Fogarassy would return to the Fraser Valley office on Monday, August 20, and with Anderson returning on August 27. Assumably, in the absence of Anderson and Fogarassy, Commission Secretary Tweedie and Counsel Douglas MacAdams would have sat in on the 9 a.m. to 9:30 p.m. August 14 meeting. Oddly, there were no formal descriptive accountings or transcripts found in the Commission's records of the Preparatory session meetings, just bare-bone lists of meeting dates and random, scribbled notes.

Anderson stated in a September 20, 1990, correspondence with Langley NDP candidate Darrill Thompson: "At the preparatory sessions, at which I was not present, which form no part of the record, and which will not be part of my report to the government, more relaxed procedures were followed by Commission counsel."

Questions prepared by B.C. Gas
for Anderson Commission regarding
interview with Howard Griffith

*Questions Which
BC Gas prepared
for Counsel when
speaking to Mr
Griffith.*

AUG 13 '90 10:43

GAS MIGRATION

1. What is migration and what can cause it?
- *2. Does it occur frequently?
3. Where has it occurred in the past and in what respect?
- *4. Has it resulted in harm to local residents or their property?
5. Has it permanently affected ground water supplies?
- *6. Can corrective steps be taken to arrest migration?
- *7. What is the likelihood of migration incidents occurring today with respect to today's technology?

HERSCHER FIELD, NORTHERN ILLINOIS

1. Are you familiar with the Herscher Field?
- *3. Briefly describe the incidence of gas migration experienced and what caused it.
- *5. Did the situation get resolved?
- *7. How has the present level of technology and knowledge in underground gas storage development affected the likelihood of such incidents occurring today?

LEROY FIELD, UNITA CO., WYOMING

1. Are you familiar with the Leroy storage field and its development as described by M.R. Tek in his book entitled "Underground Storage of Natural Gas"?
- *3. Briefly describe the incidence of gas migration experienced at Leroy and what caused it?
- *4. Are these characteristics likely to be present in the Fraser Valley?

WILLIAMSBURG/MICHIGAN

(Whitewater 22)

1. When did this incident occur?
2. Was it related to underground storage of natural gas?
4. What type of formation did the incident occur in?
5. Do these formations occur in the Fraser Valley?
6. Was anyone injured or killed as a result of this incident?

TRACERS

3. Are all tracers radioactive?
4. Are there any naturally occurring radioactive materials within the earth's rock layers?
6. What happens when they are injected into a subsurface rock layer?
- *7. Do they disseminate and decay or do they remain radioactive for extended periods of time?
- *8. Do they pose any harm to the general population or those living in immediate proximity?
- *9. In areas where they are used, are there any regulatory controls governing their use?

Given Glen Break's July 11, 1990, presentation and written accounts about Rzepczynski and Katz, the complication B.C. Gas executives faced with the Anderson Commission's Preparatory Sessions and Technical Hearing phases was in constructing a favorable interpretation of Katz's 1990 book in B.C. Gas's relevant exhibits to the Commission, and how to manage the delicate subject about proximity to population centres from Glen Breaks' interviews with Rzepczynski. B.C. Gas had to convince the Commission on public safety of underground gas storage. In addition, the Fraser Valley Gas Project consortium had to counter or make irrelevant Friends' member Ray Addington's July 11 presentation about the 1973 Amoco blowout in Michigan State.

For instance, in B.C. Gas' BCG-6 submission, *Gas Migration*, prepared for the August 14 meeting:

The natural gas industry including underground storage has an excellent record of safety. In 1989 there were 423 reservoirs in the U.S. and Canada which delivered about 2.65 trillion cubic feet of gas.

There are no statistics known available that show the frequency of gas migration incidents. It is felt that the frequency is not great since few fields have been abandoned. To our knowledge, no fatalities have occurred in storage fields due to migration of gas below or above ground.

Good methods of inter-communication among operators in gas storage has facilitated the growth in knowledge on controlling gas migration. This informal record not only shows the relative infrequency of incidents of gas release, but also the ability of the operator to control any migration.

Storage field developments are of strategic and economic importance. To continue to meet these aspects a storage facility must be designed to be in service for an extended period of time. Occasionally, through the operational history of a storage reservoir, possibility may arise for potential migration of some quantity of stored gas. As stated by Dr. Katz and Lee in their recently published book on the underground storage of natural gas "There really is no reason to put a time limit on the life of a storage reservoir."

Certain fundamental points concerning natural gas storage demonstrate that injection of gas for storage presents no danger to drinking water sources. First, underground natural gas storage operations have long been regarded as an injection activity with a distinguished performance record. ... To assure the general public that the injection of natural gas for storage does not pose an endangerment to underground sources of drinking water, the gas industry has commissioned an independent consultant study on the subject. The study was "Impacts of Natural Gas on Drinking water Quality and Human Health, by Midwest Research Institute," 1979 (attached). In preparation, the consultant has conducted exhaustive literature and computer searches for any factual documentation of natural gas escaping from an underground storage well or aquifer, entering a ground water source and rendering that water unfit for human consumption or causing any adverse human health effects.

On September 22, 1990, the Langley Advance newspaper published a letter from Margaret Ormston, one of The Friends, with some insightful information:

As I suspected, the information that B.C. Gas and the oil companies did not reveal at the various public meetings in Aldergrove and Langley is much more interesting and threatening than what was revealed. The early stages of the technical hearings of the Commission on Petroleum Development

in the Fraser Valley have heard from B.C. Gas and its hired experts from Texas [Howard Griffith] and Hawaii [Rasin Tek] that suitable geological structures for underground gas storage exist in Langley.

The storage field would be under 2,000 acres of prime agricultural and residential land and would require at least 38 wells for observation, monitoring, injection, and withdrawal, a very far cry from the solitary well pictured in the simplistic presentations to residents. The network of pipelines and access roads may well be imagined.

An authority on gas storage, Donald Katz in a recently published book has written that: storage areas should be in unpopulated areas; leakage of stored gas into groundwater is not a matter of if but when; any homes that do exist above a storage area should be on concrete slabs to avoid leakage of gas into basements.

What does the provincial government think it is doing to allow even the consideration of such a foolhardy scheme: there are vast tracts of unpopulated land in British Columbia where a storage area could be sited, if such is an absolute necessity, not in a highly populated and growing area such as Langley.

On November 16, 1990, the Fraser Valley Gas Project's solicitor, C.B. Johnson, with the Russell & Dumoulin law firm, forwarded to the Anderson Commission "three copies of the final Summation of the Fraser Valley Gas Project." In the 56-page submission, the consortium relied upon a new "there-is-no-plan-at-this-time-to-develop-aquifer-storage" argument. It was a technical / legal strategy designed to take the pressure off Commissioner Anderson's final assessment report, arguing that considerations for a storage facility was not under the domain of the Commission.

Many of the expressions of opposition raised by the Friends of the Fraser Valley relate to the underground storage of gas. It is important to note that The Fraser Valley Gas Project does not seek to obtain from this commission a licence to construct or operate an underground natural gas storage facility. ... An underground natural gas storage facility of the type that might be undertaken by B.C. Gas would require an Energy Project certificate and an Energy Operation certificate. It was the evidence of the representatives of the MEMPR [Ministry of Energy, Mines and Petroleum Resources] that a proposal for underground storage would be subject to a thorough assessment under the Province's Energy Project Review process. For an underground storage proposal in the Fraser Valley this process would involve a public hearing by the B.C. utilities commission in which independent specialists would be appointed to the utilities commission.

The Project seeks to be permitted to drill exploratory wells in the Fraser Valley. B.C. Gas is involved with the exploratory drilling since it wishes to ensure that during the drilling the operator undertakes all procedures and tests that will assist in determining if a geological formation suitable for underground storage is present in the Fraser Valley. Exploratory drilling is necessary to make that determination.

This Commission of Inquiry cannot examine the details of a proposal for underground natural gas storage in the Fraser Valley since the project has not advanced to the stage where details of a proposal are available. ... While many of the comments of the Friends of the Fraser Valley in opposition to the Project make reference to aquifer storage, there is no plan at this time to develop aquifer storage. ... It is only if a gas reservoir of sufficient size is not encountered [by the drilling

program], and if an aquifer with suitable geological characteristics is located, that BC Gas would proceed with planning for underground storage of natural gas in an aquifer.

During the time of the ten Preparatory sessions (August 13 – 25), which some of The Friends of the Fraser Valley members attended, Glen Breaks was made aware of, surprised, and shocked by Walter Rzepczynski's 'change of heart.' In an October 18, 1990, letter to David Anderson, Breaks stated:

NAME NOM	<i>Walter Rzepczynski</i>	No.
-------------	---------------------------	-----

I personally have never stated that witnesses were tampered with, but that a source of information was pressured into withdrawing his support. After being contacted by one of the consultants [Griffith] who testified for B. C. Gas before the Commission, this person [Rzepczynski] requested that his name no longer be used in connection with this project. This occurrence was first brought to the attention of the Commission on August 18 and then again on August 25, 1990.

At that time three representatives of the Friends of the Fraser Valley met with the Counsel for the Commission and discussed this situation. We were told that nothing could be done about this problem. We were also advised to be very careful as to whom we talked to about it as we could lose credibility by discussion of this event.

August 18 was a Sunday, and August 25 a Saturday, the latter of which, according to Fogarassy's rough hand-written pen notes, is when Breaks attended a Preparatory session meeting. At that Saturday morning meeting were Breaks, Margaret Ormston, Paul Dickenson, Doug MacAdams and Fogarassy. The notes, from points 1 through 6, reference Breaks' accounts of problems encountered at U.S. underground storage

Excerpt from Glen Breaks' notes, highlighted by Anderson Commission staff

Walter said he is currently in charge of operation of 11 aquifer storage projects in Ill. He told me that his company has had to abandon two such facilities due to high leakage. He said he knew of many others who had built aquifer storage and later wished they never had, for just the same reason-high leakage. It is definitely not a sure thing, he told me, regardless of how much testing is done. You don't know if the field will be successful until after 3 to 4 years of actual operation, or until full pressure and full volume and thereby full investment is reached.

Imagine the cost to the consumers in this instance. Instead of the purported savings of 15%, we see considerable rate hikes to cover such losses. Remembr in the total history of aquifer storage, as many as 6 to 8 facilities have been abandoned out of the total of 55 built in the U.S. One could wonder why anyone would consider such a financially and enviromentally risky venture? The answer is that for states like Ill. there is no other way. They have extremely cold winters and almost no gas supply of their own. The old wells they draw on in La. are depleting and cannot meet the peak usage.

- map 23 states, no storage any kind.
- remainder 1/5 aq.
- Walter recommends that a project of this nature should not only be unpopulated in itself, but, if possible, should be away from any population.
- this is in agreement with Dr. Katz's recommendations. In his conclusions he explains that aquifer storage was developed in the Mid-West because no other choices existed. He states that it is question-

facilities. In other words, Glen Breaks was still busy investigating and sharing his findings with the Commission. The notes under point number 7 mention “Walter Rzepczynski.” They also state, “Glen [Breaks] on record to objecting of [Doug] Ball as witness.”

In a September 12 article in the Langley Advance, *Friends dispute gas expert’s testimony*, Friends chairman Al Vickers explained that The Friends arranged to have U.S. gas storage consultant Doug Ball come to the Fraser Valley who “told the Friends that the Fraser Valley would not be a suitable place for underground storage.” Ball appeared as a witness before the Commission on September 6, where he stated, “the Fraser Valley’s soil composition is ideal for underground gas storage:”

Vickers said that, after the Friends had paid for Ball’s trip up from Colorado, the consultant returned to the U.S. saying he would testify on their behalf at the technical hearings. Vickers said the next time they spoke to Ball however, he’d changed his tune.

“He basically said his rates were going to go up to \$15,000 U.S. and it put him out of the ballpark all of a sudden,” said Vickers. Vickers said the Friends then approached the Commission and requested that Ball not be called as a witness at the hearings; Vickers explained that the Friends had shared confidential information with Ball and, therefore, did not want him talking with the Commission or the gas companies involved in the proposal. Vickers said “disappointment” would best describe his feeling about Ball’s testimony. “‘Disappointment’ would be adequate considering we really don’t feel that the Commission has any credibility anyways,” said Vickers.

On the opposite side of the first page of the August 25 notes are scribbled “Doug [MacAdams] spoke to Glen one half hour ago!” “Won’t give Rzepczynski’s #.” On the third page are numerous references to gas “leakage” and “migration” problems in Illinois and Iowa, and reference to “monitoring wells.” “Manlove, Illinois – what really goes on there?” “Vincent, Iowa – Abandoned because of citizens group effort.” “No matter how much you test you can never be sure if structure will leak.”

Following point number eleven, which states “holes in the evidence ... experience of those living on storage aquifer; ethical issues – unsolvable?”, is the introduction of an audio tape of Glen Breaks’ telephone interviews with Lodene Clark of Long Point, Illinois. (The narrative about Lodene Clark is discussed in Section 24, *The November 27 Langley High School Meeting*.) Breaks refused to reveal Lodene’s name, which Fogarassy refers to as “Mrs. X” in his notes. She is a “little old lady,” “a real opponent,” “leakage occurring today – discussion. Details of field – this is a leaking field – water well fire – corn damage,” “mother of tape’s speaker [Lodene’s son] – has some documentation.”

In the afternoon, Fogarassy begins two more pages of notes under “Mrs. X, tape, possible witness.” He has 23 points scribbled on the two pages made while listening to the Breaks’ audio tape and from discussions at the session with Glen Breaks and the others. In the Ancona-Garfield storage area in Illinois, “3. Bubbling gas in water well;” “5. Gas monitoring in home! Gas detectors;” “7. Son dug well – hit gas – lit it – four-foot flame;” “10. Illinois E.P.A. – no interest;” “12. Illinois commence commission, flagged farm;” “13. Holes in ditches ... lawyer contacted to aid in pushing to seal up hole;” “14. Crop damage;” “15. Fear of explosion, damage – can’t build another house – puncture clay layer;” “16. De-gasser set up; lightning hitting the well causing explosions;” “20. Value of land reduced;” “21. Company wanted to buy farm;” “22. No action by company – her legal counsel said the problem would never be settled in court – it would take years. Nuisance. Negligence. Contract broken, lives endangered.” “23. Is she litigating? She’d be foolish to testify.” The Commission notes from Break’s audio recording exactly follow the

contents of Lodene Clark's comments from the copy of the old audiotape handed to this report's author from Glen Breaks.

Preparatory Session Notes
August 25, 1990, A.M.

(303)-444-2085²
B+11

A.M.

GLEN, MARYNOT, PAUL, DOUG, ME

- I have
- Blair

AUG 25/90

1) WAXING, MANHOUS,

Threshold pressure of uprock - ~~THE KATZ~~ → PAPER NOT ACCESSIBLE?

2) VINCENT-IOWA-1974 FAULT LEAKAGE

- CITIZEN'S GROUP SITU PROTECT DOWN

BOB
MEANS

3) RED-FIELD, IOWA

4) Detroit Grove, IL - Gerald Hagan, Prop. owner, bought out.

5) ANCONA - Grifield - vent to the atmosphere.

6) SOCIAL - LEAKAGE IN A FIELD

7) WALTER RZEPCHYNSKI, NAT. GAS PIPELINE Co. AMERICA

- DOESN'T LIKE 1.5 X Initial Roseman Pressure (ie France)
- 1.1-1.2 X is better
- too high

GLEN WILL
CALL - CONF CALL
REPORT

8) DAVID BANTON → GOLDER - Report/PITERS SENT.

→ ERIC PETERSON →

9) DOUG BALL → PRO-STORAGE // GLEN on record to
- IGNEOUS STORAGE OBJECTING OF BALL AS WITNESS

* 10) INTERVIEW STATUS - TELL HOW CALLS BUSINESS!

II) HOLDS-IN-THE-EVIDENCE.

- EXPERIENCE OF LIVING ON STORAGE (HOUSTON) WORK ON IT.
- ETHICAL ISSUES - UNSUBSTANTIAL? DAVID'S EXPERIENCE

TAPE

(A) ILLINOIS LEAKS / SPANSFIELD - NOT INVESTIGATED

ANCONA -

(815) 413-3336 RAY HANSEN (H+W) ✓✓✓

GANFIELD

PAUL SPEAKER - GLEN. @ 382 4677 (H)

STATE WATER GLEN SUM.

LARRY BAKER (H) 772-7756

- LITTLE OLD LADY. (ANOTHER TAP) A REAL OPPONENT

- LEAKAGE OCCURRING TODAY - DISCUSSION

DETAILS OF FIELD - THIS IS A LEAKING FIELD

- WATER WON FINE

- CORN DAMAGE

Preparatory Session Notes

August 25, 1990, P.M.

P.M.

MUS X.

TAPE

POSS. WITNESS

AUG 25/2

- 1) - ANCONA - GARFIELD
- 2) - Storage Field Active
- 3) Bubbling GAS in water well; quality is gone - admits to nitrate ^{harbors} _{pests}
- 4) GAS CO. is drilling right now. GAS is vented under clay layer.
- 5) GAS MORTUARY in HOME! GAS DETECTORS
- 6) 10' CLAY LAYER. CAN'T PENETRATE
- 7) SON DUG WELL - HIT GAS - HIT IT - 4' FLAME
- 8) UNDERGROUND STORAGE MID-60'S
- 9) 8-10 YEARS AGO - DRAINED HOLES TO CHECK FOR GAS
- 10) ILL. EPA. - NO INTEREST
- 11) Dept MINES & METALS; U. of ILL. TESTS RUN. WENT TO GAS CO.
- 12) ILL. COMMERCE COMMISSION FLAGGED FARM.
- 13) HOLES in DITCHES - PLUGGED SORT-OF. LAWYER COMING TO
AID IN PUSHING TO REPAIR SEAL UP HOLE
- 14) CROP DAMAGE
- 15) FEAR OF EXPLOSION, DAMAGE - CAN'T BUILD ANOTHER HOUSE - PUNCTURE CLAY LAYER
- 16) DE-GASSER SET UP; LIGHTNING HITTING THE WELL CAUSING EXPLOSIONS
- 17) GRAVEL ROADS - MAINTENANCE, SEALING OF WELLS, HAD TO RUN AROUND
- POLLUTION CITY OXIDIZED - 3/4 AWAY AT CITY STN?
- ODOURIZING STATION
- WORKOVERS EVERY SUMMER - W/ WITHDRAWAL IN WINTER
WATER IS RELEASED.
- ACIDIZING OF FM., CO'S HAD CASEMENT ^{ACID SPRAYED OUT} _{that} ^{is} _{asbestos}
- TILE FIELDS. OLD CLAY TILES ON HER FIELD - TILES BROKEN.
- ROADS STOP SURFACE WATER.
- 18) OBTAINMENT OF EASEMENT - SCHESTERS GOT EASEMENTS
- 19) SHE COMPLAINED → THEY SAID THEY'D ^{DRILL} BUILD MORE WELLS ^{SO AS} _{THAT} 70
MAKING FARMING MORE DIFFICULT
- 20) VALUE OF LAND. REDUCED.
- 21) Co. wanted to buy farm.

FOOT
NUISANCE
NEGLIGENCE

By summer of 1990, Glen Breaks was perhaps the only person in the world to have tracked down, to locate, and take a keen interest in Lodene Clark's experiences and tribulations directly with a leaking gas storage facility. Breaks had persistently gone to great lengths to examine numerous sources on this subject, all of which ultimately helped lead him to her. And, gaining trust in Breaks, Lodene faithfully told him everything she could. Breaks wisely audio recorded some of those interviews. Many other affected farmers and residents in the United States were not as keen as Lodene to communicate their tribulations to a stranger, let alone anyone else.

The Vancouver Sun, Monday, September 17, 1990 ★★

Gas field bubbles 'like wild kettle'

The cornfields of Illinois farmer Lodene Clark are percolating with natural gas.

"Our whole fields are bubbling like a wild kettle," Clark, 61, said in a recent telephone interview from Long Point, Ill. "Any time we penetrate 10 feet down, we get an outflow of (natural) gas."

"The gas company doesn't deny the possibility exists that the house could explode at any time."

Clark's 80-hectare farm, about 150 kilometres from Chicago, rests on top of the largest aquifer natural gas storage facility in North America, possibly the world.

In B.C.'s Fraser Valley, three companies — B.C. Gas, Conoco and Dynamic Oil Ltd. — have applied jointly to the provincial government for permission to conduct exploratory gas drilling at three locations next year. Two of the exploration sites — Murrayville (232nd Street and Old Yale Road) and Campbell

On Saturday, Sun regional affairs reporter HAROLD MUNRO investigated gas firms' proposal to store billions of cubic feet of natural gas in aquifers beneath the Fraser Valley. While gas firm executives say the process has been updated and is safe, critics of the scheme in the Friends of the Fraser Valley group fear it could spark an ecological crisis. In this report, Munro talks to a U.S. farmer whose land sits atop North America's largest natural gas aquifer.

River (0 Avenue and 256 Street) — are in Langley while the third is in Delta, near the foot of 104th Street on Boundary Bay.

The Commission on Fraser Valley Petroleum Exploration, appointed by B.C. Energy Minister Jack Davis, completed three months of public and technical hearings into the drilling proposal recently. Commissioner David Anderson expects to make his recommendations to Victoria by the end of October.

Drawing on such ecological disasters as the one besetting the Illinois

cornfields, many Fraser Valley residents and politicians, including Langley Township Mayor John Beales, fear gas exploration and storage could pollute well water, the drinking water source for Langley Township.

The Ancona-Garfield field, operated by the Northern Illinois Gas Company since 1968, is about 700 metres underground and contains 375 billion cubic feet of gas in area stretching about 48 square kilometres. By comparison, storage in the Fraser Valley would likely not

exceed 80 billion cubic feet of natural gas and would be buried at least 1,200 metres in a six to 12 square-kilometre area, according to gas company spokesmen.

Clark moved from her Illinois farm many years ago, but fears for the safety of her son and his family who still live there. The gas company has offered to buy the land but Clark says she does not want to let them get away that easily.

"We have a dug well that has bubbled since 1970," she said. "The gas company knew darn well something was going on but they didn't have the decency to tell us we may be in danger."

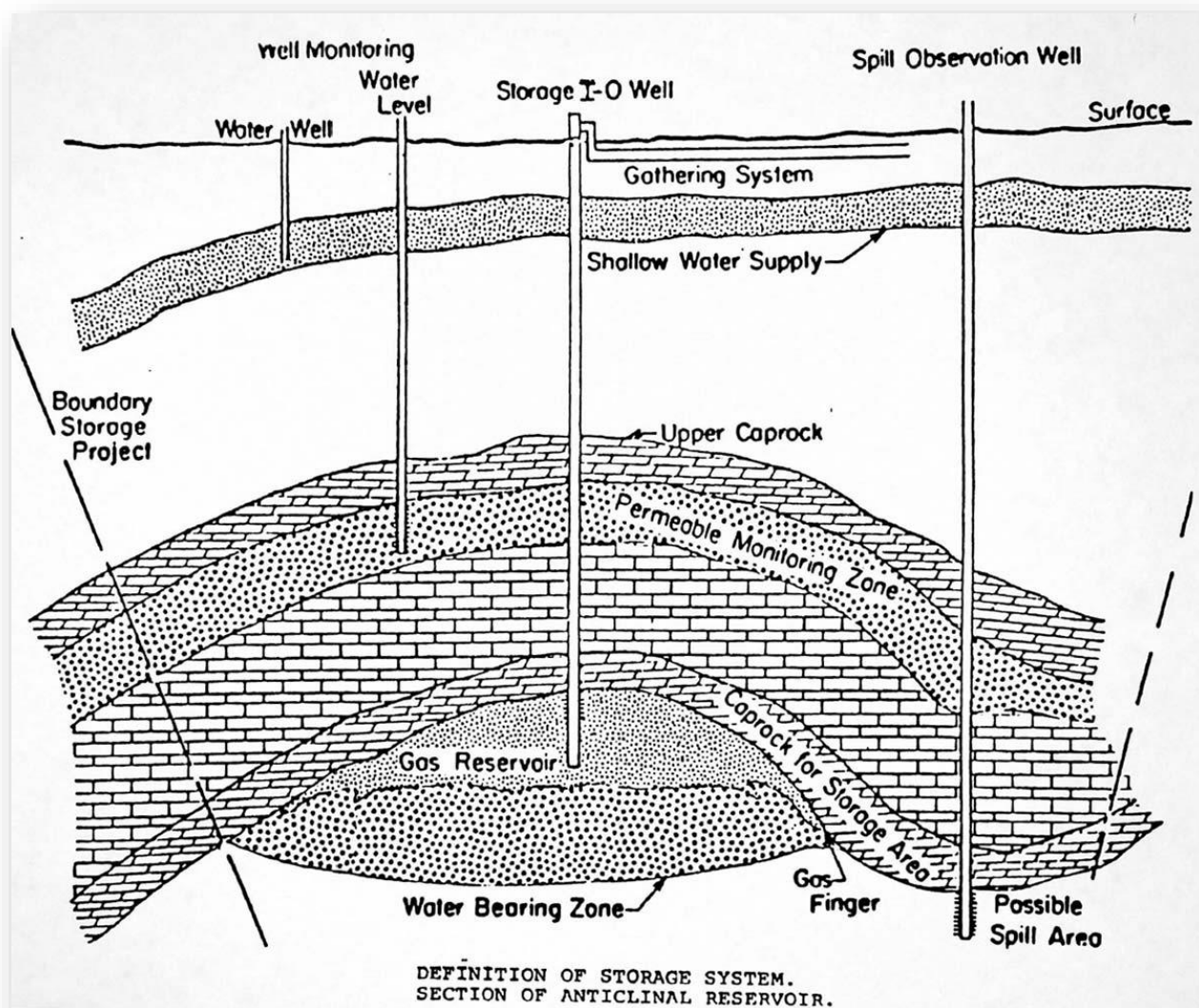
A home video obtained by The Vancouver Sun shows Clark touring her farm with stops at a number of wells and drill sites that hissed and bubbled. She said a 15-metre well dug by her son burned continuously when lit and could only be extinguished with a heavy asbestos blanket.

Breaks later lent the thirty-two-year-old cassette tapes to this report's author in early 2021. Small excerpts of the audio tapes were erased to conceal sensitive information, the same audio recordings Breaks played on a cassette machine for MacAdams' and Fogarassy' listening pleasures on August 25, 1990.

In a January 28, 2022, interview with Glen Breaks about the August 25 Preparatory session meeting, he remembered Counsel Doug MacAdams' response when Breaks mentioned to him that The Friends intended to invite "Mrs. X" (Lodene Clark) to come to the Fraser Valley. MacAdams responded by saying it wouldn't be a good idea, because it would harm and distract from the work of The Friends. Breaks was immediately puzzled by MacAdams' advice. When Breaks later informed and debriefed fellow members of The Friends about MacAdams' odd comments is when they became clued into and suspicious of MacAdams' motivations.

Fogarassy had a third meeting the same session day, Saturday, at 5 p.m. with Doug MacAdams. They made a long-distance call to Illinois and on speaker phone spoke with Ray Hibner, the "gas storage

regulator” with the Illinois Department Mines and Minerals.⁷⁴¹ From the notes: “Herscher; house blew up;” “various degrees of problems;” “unexplained gas migration;” “Anaconda Field – the Fault! Fault leaks to surface;” “Anaconda maybe should not have been permitted – the Fault was known;” “Complaints – Migration of stored gas; 2,000 feet to surface, pressuring up aquifer, boil up water;” “One year of regulating – no files except for Mrs. X;” “New people in State Department – don’t push issues – try to push remedial measures;” “Why not shut them down? Doesn’t know if he has the power – all rules and regs are not law – simply subordinate legislation – it is now all being re-written;” “Lower pressure of facility to remove migration;” “Northern Illinois gas; shove it through;” “Pushing reservoirs to the limit;” “Classic U.S. – balance money against aquifer pollution and safety;” “On 80 acres, put in 10 wells!”



⁷⁴¹ A September 7 memo from Fogarassy to David Anderson states that Hibner is “a very frank and reasonable individual,” whose “specialty is well water,” and “Anaconda-Garfield is his responsibility.”

In Fogarassy's rough notes for the morning of Monday, August 27, the day of the first Technical Hearing, is a statement from Glen Breaks: "Technical – Walter Rzepczynski will not testify." On the third page, noting the time at 10:10 a.m., are notes from Fogarassy's telephone call to Gerald Hamar, Illinois, close to the Troy Grove underground storage facility: "paid well for farm;" "bought out 20 years ago," "lots of rumors of groundwater pollution."

On Wednesday August 29, 1990, the third day of the Technical Hearings, Howard Griffith, at his Owensboro, Kentucky office, faxed a copy of a two-page letter sent to him on the same date by Walter Rzepczynski to C.B. Johnson at the Russell & Dumoulin law office on 885 West Georgia Street in downtown Vancouver.

Attached is a copy of a letter written to me in response to your letter of August 15, 1990, written Mr. Walter Rzepczynski. Mr. Rzepczynski's attorney advised him to write the letter to me. I have talked with Walter today and he had given me permission to use the letter any way necessary to clarify his statements. Please feel free to give a copy of the letter to the commission if you would like.

The following are excerpts from Rzepczynski's letter to Griffith:

He [Breaks] asked for information on gas storage and more specifically aquifer gas storage. I was very generous and sent him the paper I wrote on Aquifer Storage Development in 1983 and later revised in 1988. This paper is to be included in the AGA [American Gas Association] (GEOP) publication on Underground Gas Storage. This paper has not yet been made public and was considered a private report.

I also never made any quotes Mr. Breaks has attributed to me as saying or discussing with me.

I have never recommended or indicated to Mr. Breaks that aquifer storage or any other type storage facility should be away from any population.

I at no time conveyed a negative approach to aquifer gas storage development to Mr. Breaks in my telephone conversations with him. ... I would like to state that I have been very much for aquifer gas storage and feel proud in helping making it a successful industry.

Within a few days of the Fraser Valley Gas Project consortium's lawyer handing over Rzepczynski's letter to the Commission, Glen Breaks would have heard about the Rzepczynski rumors and then shared the matter with The Friends of the Fraser Valley membership. Breaks stated in an interview with this report's author that Russell & Dumoulin lawyer C.B. Johnson couriered a gag order to his home, ordering Breaks not to mention or comment upon Walter Rzepczynski. When Breaks showed the gag order to lawyer and Friends' member Charles Maclean, a criminal lawyer, he said that he had a special process at his law office in Aldergrove to deal with that sort of legal matter. He had a special, large-upper-case-letter-format engraved ink stamp with the word, "BULLSHIT." The letter was stamped and then sent back to the legal firm.

At this point The Friends understood that the consortium was playing 'hard ball' with Glen Breaks and his professional source. So, The Friends made a very quick strategic decision, and chose a specific moment and time to do so.

Sometime during the early afternoon of Thursday, September 4, during the Commission's proceedings, Glen Breaks' mother, Irene, delivered a small package to the Anderson Commission office in Langley, which Anderson's secretary, Elizabeth Svendsen, received. Inside was a cover letter by Glen Breaks: "Please note the enclosed technical submission consists of personal notes and as such may be difficult to follow in some sections." There was nothing to indicate to secretary Svendsen what The Friends were about to do that evening. The surrendered package would later speak for itself. In the package were: Glen Breaks' ten pages of presentation notes he had prepared for his Thursday September 6 presentation, the final day of the Technical Hearings; three photocopy pages that Breaks read to the Commission during the July 11 public hearing; and three pages with the title, "A List of Some Storage Fields Bearing a More Thorough Investigation."

On the last page of his July 11 presentation material, under the heading "Addendum – August 10, 1990," Breaks provided a four-paragraph add-on summarizing the recent heavy-handed tactics:

The petroleum engineer [Rzepczynski], whose name is blotted out in this copy, has been one of my best sources of honest information.

Approximately 6 weeks ago [July 10], I met with Paul Gronert of the Public Utilities Commission to discuss the high-risk nature of aquifer storage. I presented him with a great deal of information - including a paper written by the above-mentioned petroleum engineer. All this information was passed on, by Mr. Gronert, to B.C. Gas and then on to T.X.G. (Texas Gas) - a consultant on this project for B.C. Gas. The President of T.X.G., Howard Griffith, contacted my source and made him feel uncomfortable about helping us in any way. The result is that my source no longer wants his name used or associated with us in any way.

Since this petroleum engineer is highly regarded in his industry and thought of by many of his peers to be the most knowledgeable person in the U.S.A on the subject of aquifer storage – his exclusion substantially weakens our stand.

These heavy-handed suppression tactics by the President of T.X.G. should not be permitted in a fact-finding procedure such as the Fraser Valley Gas Commission.

Following what occurred that evening, Glen Break's confessionary statement appended to his July 11 Commission hearing presentation would have been examined and scrutinized by David Anderson and Doug MacAdams. However, this information was withheld from the Glen Breaks / Friends of the Fraser Valley exhibit evidence (1 through 8) ⁷⁴² collected by David Anderson and Doug MacAdams for the October 22 Witness Tampering Hearing, exhibits published in the November 1990 *Appendices to the Special Report on Allegations of Witness Tampering at the Commission Hearings*. In Appendix 7 of that report, *Letter from Mr. Glen Breaks to Commissioner Anderson, 18 October 1990*, Breaks confirms that his confessionary statement "was hand delivered to the Commission's Langley Office on September 4, 1990."

Instead of appearing in Exhibits 1-8, Break's confessionary statement was included as an appendix in Walter Rzepczynski's affidavit (page 48 of Commission Exhibit SP-10, marked as Exhibit 5), signed on October 8, 1990. Seeking Rzepczynski's affidavit, the Commission had sent him a bundle of 'evidence' sometime in September, including Breaks' complete package of information delivered by Irene Breaks to

⁷⁴² Entered as exhibits SP-1 through to SP-8 in the transcript of the hearing proceedings.

the Commission office on September 4. The Commission sent the identical package of information to Howard Griffith in preparation for his affidavit, Exhibit SP-09, signed on October 11, 1990, in which he appended the same material, marked as Exhibit 5. David Anderson stated in his November 1990 *Special Report on Allegations* that Doug MacAdams accompanied him on his special visitation trip in mid-October 1990 to Illinois, Missouri, Indiana and Kentucky, in which MacAdams “spoke to Mr. Walter Rzepczynski and Mr. Howard Griffith, both of whom provided him with sworn statutory declarations for the purposes of this investigation.”⁷⁴³

In a comparative analysis of the Rzepczynski and Griffith affidavits, there are grounds to suggest that one party may have copied, almost verbatim, the words from the other. Since Rzepczynski signed his affidavit three days prior to Griffith’s, it is likely that Griffith received a copy of Rzepczynski’s affidavit before signing his own. Here are the two versions, side by side:

Rzepczynski, October 8	Griffith, October 11
27. I have reviewed the three-page document headed up “July 11, 1990” and in particular the part marked “Addendum August 10, 1990”, the four-page press release dated September 4, 1990, the 10 page “Technical Submission” and the two-page press release dated September 24, 1990 all of which are collectively marked Exhibit 5. Any suggestions in those documents that witnesses or sources of information were pressured into silence ...	13. I have reviewed the three-page document entitled “July 11, 1990” and in particular the part marked “Addendum August 10, 1990,” the four-page press release dated September 4, 1990, the 10 pages “Technical Submission” and the two-page press release dated September 4, 1990, copies of which are collectively marked Exhibit “5”. In particular, I have reviewed the statements in Exhibit “5” alleging that persons in the natural gas storage industry have been approached by representatives ...

The Friends’ Boycott of the Anderson Commission

After the first week of technical hearings, Monday August 27 to Friday August 31, Al Vickers was busy contacting his media sources and helping to prepare a media release. He informed his media contacts of a major upcoming action by The Friends at the evening session of the Commission Technical Hearing for Tuesday, September 4 at the Langley Conference Centre. On that day, which was divided into three technical sessions, the Anderson Commission brought witnesses to testify on the theme of *Underground Storage of Natural Gas*. The evening’s schedule, which resumed at 7:05 p.m., included three final witnesses: Rasin Tek, B.C. Gas’ hired consultant Howard Griffith, and Paul Dubois (a geologist employed with Griffith’s consulting firm). Before any of these witnesses were sworn in to take the Inquiry Oath, Glen’s wife, Gina Breaks, approached the microphone. Behind her were television cameras, newspaper reporters and a full house of spectators. Commission counsel MacAdams later stated at the October 22 hearing that it was “a gathering of several hundred people.”⁷⁴⁴ She had handed out copies of The Friends’ four-page news release to the media and some members of the audience, which she was about to recite from. Anderson, who was initially delighted about the media attention, was about to be ambushed.

⁷⁴³ Page 12.

⁷⁴⁴ Proceedings, Volume 9, page 1621.

The following are selected quotes from the Commission Transcripts of Gina Breaks' presentation: ⁷⁴⁵

MS. BREAKS: Mr. Commissioner, Mr. Commissioner. My name is Gina Breaks, and on behalf of the Friends of the Fraser Valley, I rise on a point of order and information.

COMMISSIONER ANDERSON: Please, go ahead.

MS. BREAKS: We object to the process of this commission on the following grounds ...

The fact that the counsel [MacAdams] for the Commission has attended only two of the nine public meetings has resulted in his being ill-informed about the concerns raised by the public, and the particular topics that were requested to be dealt with in the technical hearings. We were informed by Commission counsel after the preparatory sessions that in his opinion the evidence accumulated up to that point, and which was to be presented at the technical hearings, indicated that the petroleum industry's project could be safely carried out in the Fraser Valley, raising a very strong apprehension of obvious bias. This has been evident at the technical hearings that we have been able to attend, which more resemble a public relations exercise than any honest inquiry.

The procedure which the Commission adopted compelling us to full disclosure of our information prior to the hearing, has placed us in a very disadvantageous position. Despite our limited funds and despite the limited time at our disposal, as most of us are involved in full-time occupations, we were able to make significant enquiries in Illinois, Washington, Michigan and Wyoming [States]. But persons within the industry in those areas who talked to us or suggested further lines of investigation have been contacted by the proponents and pressured and embarrassed into withdrawing their support.



During the early discussions on the procedures the

Commission was to follow, we were assured that all aspects of the problems raised in the public meetings would be investigated by the Commission, and that persons from outside the influence of the industry would be sought and subpoenaed, if necessary. One has only to look at the schedule for the technical hearings to see a large contingent of industry experts, and an equally large number of government bureaucrats that will between them bring a bias to the hearings. No government

⁷⁴⁵ See **Appendix D** of this report for Gina Breaks' complete transcript from *Proceedings, Volume 6*, pages 1140 to 1146.

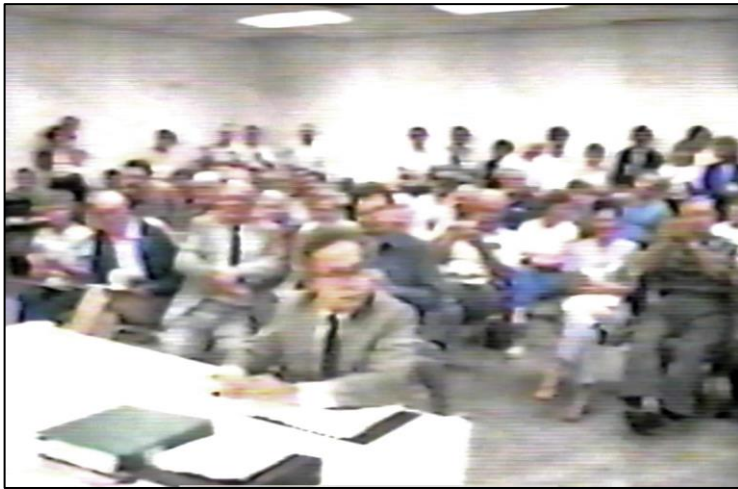


Photo snaps from an old VHS tape of a television broadcast of the September 4, 1990, technical hearing showing the audience watching Gina Breaks give her presentation to Commissioner David Anderson.



To the left of Gina Breaks, and behind her and out of sight in the bottom photo, is Howard Griffith, sitting at the table waiting to be heard during Commission counsel's later cross examination.



employee would risk his future by suggesting that any course of action other than that ordained by the party line be followed. What is unforgivable is that the Commission appears to have made no attempt to go beyond that party line.

We asked you, Mr. Commissioner, to visit Illinois, where there are several well-known problem underground gas storage fields. Chicago and environs seem to have no appeal, but a visit to Paris, France was made, which has fewer storage facilities than a single company in the State of Illinois. France has a known reputation for technical secrecy, but doubtless more attractions.

We sent you a letter dated the 8th of August 1990, directing your attention to a number of issues raised in the public meetings but not scheduled to be dealt with in the technical hearings. The issues covered such topics as real estate values, insurability, air quality and health concerns. These issues have been ignored, and do not form a part of these proceedings.

During our initial conversations with you we were assured that you would accept information from all sources, even anonymous telephone calls. Although our industry contacts in the United States have been silenced, we were able to find a lay person from outside the industry with very relevant information and experience. However, we were informed by Commission counsel [MacAdams] that evidence could be given by this person on one particular topic only, made subject to obligatory cross examination by industry counsel, and that all other information that this person would be able to give would be repetitive and would be better dealt with by other witnesses.

This is an extraordinary statement when one has observed the well-rehearsed, note-perfect and virtually identical renditions of the singular Mr. Ball, and Messrs. Tek, Griffith and Thrasher.

Mr. Anderson, we will no longer acquiesce in, nor condone this bizarre process you call a Commission of Inquiry, which has taken on the appearance of a well-planned whitewash (... INAUDIBLE DUE TO APPLAUSE...) deceiving the general public into believing that a full and proper inquiry has been made into a dangerous and unprecedented proposal, which can only be implemented at the expense of public safety, ground water, agricultural land and lifestyle in the Fraser Valley. We have so far taken part in this Commission in good faith, relying on your assurances of fair play. But the reality is so far removed from those assurances that we will no longer play any role in your farce.

We invite members of the public present at this hearing to join us in boycotting this and all future meetings of this Commission as a sign of our determination not to be a party to this whitewash. I invite you to join us in room 103 up the stairs if you have questions, and we can bring you up to date on what brought us to this decision. Shame on you, Mr. Chairman.

With that said, Gina Breaks, the media, and most of the audience vacated the conference room and headed upstairs to room 103. Commissioner Anderson tried to keep his composure and resumed proceedings with the evening's Technical Hearing. ...

COMMISSIONER ANDERSON: After those unsupported allegations I expect you would wish to leave. ... I would like to apologize to Messrs. Tek and Griffith, who have had no part in these proceedings to date, have provided no evidence whatsoever, for the comments made about them. And I may assure them that we intend to hear them this evening.

MR. MacADAMS: Mr. Commissioner, our panel this evening has, as its topic, underground storage of natural gas. And we will have the benefit of the evidence of Howard Griffith and of Rasin Tek, with Mr. Griffith being supported by Paul Dubois.

Vancouver Sun - September 5, 1990

Drilling foe urges hearing boycott

By HAROLD MUNRO
Sun Regional Affairs Reporter

A commission appointed by the provincial government to hold hearings into natural gas drilling in the Fraser Valley is a "farce," according to about 150 protesters who stormed out of a hearing in Langley Tuesday night.

Gina Breaks interrupted the technical hearing as it got under way Tuesday at Langley Conference Centre, urging a public boycott of the commission chaired by David Anderson.

The Commission on Fraser Valley Petroleum Exploration held a series of public hearings in June and July. Technical hearings held last week in Delta resumed Tuesday in Langley and are scheduled to continue until Saturday.

Anderson, the province's former oil-spill adviser, was appointed by B.C. Energy Minister Jack Davis on May 3 to head the inquiry into natural gas drilling and storage.

Breaks and others in a citizens' group of about 600 called Friends of the Fraser Valley say the hearings are stacked with gas industry representatives.

"One has only to look at the schedule for the technical hearings to see a large contingent of industry experts and an equally large number of government bureaucrats that will, between them, bring a bias to the hearing," she said.

Anderson countered that four of five expert witnesses suggested by the citizens' group are scheduled to give testimony at the hearings.



KEN OAKES

GINA BREAKS speaks at hearing into natural gas drilling Tuesday

"I guess I'm disappointed with what went on here," admitted Anderson. "I think the process has been fair.

"But I can understand their tactics — if there is no decision, they win. So I can understand why they would walk out on the commission."

Breaks, who lives on an eight-hectare Langley farm with her husband, Glen, and three young daughters, fears contamination of the water supply if the gas companies are permitted to store gas underground.

Residents of Langley Township rely on wells for drinking water.

The Breaks live about 1½ km from the centre of the proposed storage site, which would stretch eight to 10 square km underground and contain billions of cubic metres of natural gas.

The three companies that hold drilling rights in the valley — B.C. Gas, Conoco Canada and Dynamic Oil — say the risk of leakage is minimal.

The Friends of Fraser Valley contended Tuesday the hearing process

was further biased by counsel for the commission, Douglas MacAdams, who told them in August that evidence indicates the petroleum industry's project could be safely conducted in the area.

MacAdams admitted Tuesday he did suggest this to the citizens' group but couched his remarks by saying they were always subject to revision.

"I tried to be fully frank with the Friends of the Fraser Valley and the proponents (of drilling)," MacAdams said. "But the conclusion that that demonstrates bias on my part is completely unfounded."

Charles McLean of Aldergrove, a member of the Friends' steering committee, said the group is considering running Reform party candidates in the next provincial election on the issue of natural gas drilling.

McLean has been a Socred for 22 years but is disheartened by the lack of response to the group's concerns by local Social Credit MLAs Carol Gran and Dan Peterson.

"Neither of them has been to a single public hearing on this issue," McLean said. "All of our efforts must now be directed to the political front."

Supporters of the citizens' group were also urged Tuesday to write to Premier Bill Vander Zalm.

"We've got to get to Premier Vander Zalm," explained McLean. "The last time a proposal (to drill for natural gas in the valley) was brought forward in the 1970s he was mayor of Surrey and called it a kooky scheme and dismissed it."

As the Friends' boycott event unfolded, it would have been interesting to observe the expressions on the faces of Howard Griffith and the audience-seated petroleum consortium representatives. Playing hard ball has its own consequences. The consortium hadn't planned on a public boycott as an outcome, nor an unwanted, untimely delay of the Commission's duties, and unwanted public attention. The tactics would end up costing B.C. Gas' intentions dearly.

In my interviews with Glen Breaks, he recounted a story from Friends' member Paul Dickenson's impression of Howard Griffith after meeting and speaking with him at the Technical Hearings: "He's the type of person that if he was bitten by a snake, the snake would die."

Group won't attend

Editor: In your Sept. 1, 1990 edition, Marty Warman reports that the Friends of the Fraser Valley are to make a presentation on Thursday, Sept. 6 before the provincial Commission of Inquiry into Fraser Valley oil and gas drilling.

This, at one time, was proposed, but it is no longer the case.

Using a variety of excuses and rule changes, the commission has rejected or excluded all the evidence that the Friends were prepared to present to the technical hearings.

As a great deal of time, effort and expense went into preparing for this presentation. The rejection

has been most bitter, and under the circumstances seems extremely strange.

We cannot understand why the people who live in the Valley, and will have to live the rest of their lives with the burdens that these so-called experts are conspiring to impose on us, should be excluded from any part of the hearings.

Please let your readers know that we will not be presenting on Thursday. We sincerely attempted to present a case for the residents of the Valley in this part of the proceedings, but we were blocked.

Langley Times
September 5, 1990

Paul Dickinson
25036 4th Ave.
Aldergrove

Meanwhile, as the evening session of the Commission's Technical Hearings continued, upstairs from the conference hall at room number 103, the Friends held a press conference. It was big news!

Inquiry labelled 'whitewash'

Chilliwack
Progress
September 12, 1990

by Al Irwin,
MetroValley News

The commission of inquiry into gas exploration in the Fraser Valley was denounced last week as a "whitewash" by the Friends of the Fraser Valley.

The Friends, a group of valley residents concerned about the impact of exploration proposals by The Fraser Valley Gas Project, walked out of technical hearings of the Commission on Fraser Valley Petroleum Exploration, at Langley Conference Centre, Sept. 4.

Friends member Gina Breaks said her group would boycott further commission hearings because the group is convinced the process is biased in favor of the Gas Project, a consortium of B.C. Gas, Conoco and Dynamic Oil Ltd.

After the previous evening's boycott announcement, and as the Commission's seventh day of technical proceedings was about to begin on the afternoon of September 5, Commissioner David Anderson wanted "to clear up a couple of points." Some of these points were included in a one-page press release by the Commission later the same day, quoted in the transcripts of that day's proceedings.

First, I would like to express regret, disappointment that some members of the Friends of the Fraser Valley have decided to withdraw from further participation in the hearings of this commission. The Friends have been helpful in deciding on the issues of interest to the public, and I regret that some members have withdrawn.

Second, **I wish to confirm my decision of the 27th of August of 1990 that I will be travelling to Illinois and visiting underground gas storage facilities there.** [Bold emphasis]

Finally, I wish to indicate that based on the present schedule of hearings, research and inquiries, I anticipate completing my report during November. This, as you will recognize, will involve a request to the government for an extension of time, and that will be made in the next few days. ⁷⁴⁶

⁷⁴⁶ Proceedings, Volume 7, pages 1253-1254.

Anderson's plan to conduct a separate visit to the State of Illinois – a direct result of further evidence given to the Commission on August 25 during Anderson's absence – is narrated below in Section 22 of this chapter. Though Anderson stated that the Commission would need two additional months to complete his final report, circumstances about to unfold would extend that time to a total of four months.

As the Commission was holding its final day of proceedings at the Langley Conference Centre on Thursday September 6, Commission counsel MacAdams was at his law firm office on Gladwin Road in Abbotsford busy drafting two items to be "hand delivered" to the home of Gina Breaks: a three-page letter and a two-page Statutory Declaration. On that day, MacAdams faxed two separate drafts of these items to the Commission's Langley office to the attention of David Anderson. The two items, with MacAdams' signature, were finalized by the late afternoon and delivered to the Breaks' home. This was serious stuff.

At the outset of the Commission's evening hearing on September 4, 1990 you asked for and were accorded opportunity of making an unsworn statement. ... A number of allegations were contained in the statement you made. One of particular concern to us is found in the second paragraph of page 4 where these words occur: ... our industry contacts in the United States have been silenced For the Commission to protect its integrity and credibility and the integrity and credibility of other Commissions which are now underway or may in the future be established, we must inquire into your assertions that a person or persons with relevant information have been silenced. In order to carry out such inquiries, it is necessary to know the name of the person or persons you say have been silenced.

The Commission at this time requests from you an answer under oath to these two questions: 1. In the News Release and in your presentation of September 4, 1990 did you refer to one industry contact in the United States as having been silenced, or did you refer to more than one industry contact as having been silenced? 2. Was Walter Rzepczynski the industry contact or one of the industry contacts referred to in the *News Release* and in your presentation of September 4, 1990? Enclosed are two statutory declarations for your consideration. The one has been drawn on the assumption that Mr. Rzepczynski is the only industry contact you referred to; the second has been drawn on the assumption that Mr. Rzepczynski is one of more than one industry contact referred to by you. Please review these statutory declarations.

In a telephone conversation [from] MacAdams [to] Rzepczynski of September 5, 1990, Mr. Rzepczynski advised his August 29, 1990 letter could be released to Mr. Glen Breaks. We have taken the liberty of assuming Mr. Rzepczynski will have no objection to release of this letter to you and would appreciate your making a copy of it available to your husband.

Gina Breaks did not provide a written return or reply to Commission counsel's two items. It was a smart decision. MacAdams wrote another letter, dated September 13, which was also "hand delivered" to her home. He wrote:

No response to the request for information has come to our attention. Please advise whether or not you will be responding by way of statutory declaration as suggested in our letter of September 6 and 7, and if so, please advise as to when we should anticipate receiving your statutory declaration.

By September 14, as indicated in MacAdams's three-page letter sent by "process server" to the home of Al Vickers, the chair of the Friends of the Fraser Valley, Commissioner Anderson decided to take the

matter to another level. The letter began by stating that the Commission had not "received a response to date" from Gina Breaks about the items sent to her by counsel MacAdams.

We have also reviewed in the Chilliwack Progress of September 12, 1990 the report of a September 11, 1990 meeting in Yarrow which report was printed under the headline "Anti-gas lobby charges bias on study panel" and in particular these words in that report: "Friends' member Al Vickers charged last week that an individual from a gas consortium seeking the go-ahead for drilling in the Valley "leaned on" witnesses not to testify at the hearings."

As you will understand, charges that witnesses with information useful to the Commission have been made unavailable by the actions of the proponents or persons associated with the proponents are of great concern to the Commission.

Our instructions from David Anderson, the Commissioner, are to investigate the charges made by Mrs. Breaks and by Friends of the Fraser Valley, and the charges attributed to you in the Chilliwack Progress.

Our present request to you, in your personal capacity and in your capacity as chair for Friends of the Fraser Valley, is that you provide sworn information as to the following: (a) the names of the industry contacts in the United States you understand to have been silenced; (b) the person or persons in Illinois you understand have been pressured and embarrassed into withdrawing support; (c) the person or persons in Washington you understand have been pressured and embarrassed into withdrawing support; (d) the person or persons in Michigan you understand have been pressured and embarrassed into withdrawing support; (e) the person or persons in Wyoming you understand have been pressured and embarrassed into withdrawing support; (f) the name of the individual you understand "leaned on" witnesses not to testify at hearings of the Commission; (g) the names of the witnesses you understand were "leaned on" not to testify at hearings of the Commission.

Friends dispute gas expert's testimony

by Bruce Cox

Underground storage of natural gas in Langley is unsafe, despite expert testimony to the contrary, says Friends of the Fraser Valley chairman Al Vickers.

Vickers said one of the ex-

perts previously visited Langley and told the Friends that the Fraser Valley would not be a suitable place for underground storage.

Doug Ball, a U.S. gas storage consultant, testified on the last day of technical hearings of the Commission on Fraser Valley Petroleum Exploration. The hearings wrapped up Friday night at the Langley Conference Centre.

Ball told the Commission that the Fraser Valley's soil composition is ideal for underground gas storage.

Vickers said that, after the friends had paid for Ball's trip up from Colorado, the consultant returned to the U.S., saying he would testify on their behalf at the technical hearings.

Vickers said the next time they spoke to Ball, however, he'd changed his tune.

"He basically said his rates were going to go up to \$15,000 U.S. and it put him out of the ballpark all of a sudden," said Vickers.

Vickers said the Friends then approached the Commission and requested that Ball not be

called as a witness at the hearings; Vickers explained that the Friends had shared confidential information with Ball and, therefore, did not want him talking with the Commission or the gas companies involved in the proposal.

Vickers said "disappointment" would best describe his feeling about Ball's testimony.

"'Disappointment' would be adequate considering we really don't feel that the Commission has any credibility anyways," said Vickers.

Langley Advance
September 12, 1990



BILL KEAY

IDYLIC FARM LIFE of Glen Breaks and his family would change, he says, if gas-storage proposal goes ahead

By **HAROLD MUNRO**
Sun Regional Affairs Reporter

CRITICS of a proposal to store natural gas under the Fraser Valley say the technique that will be used has caused problems in the U.S., where underground gas has contaminated water tables, killed crops and made certain areas uninhabitable.

They are not reassured by claims by gas-company officials that research technology and monitoring equipment used today make aquifer storage — the system proposed for the valley — extremely safe.

Many valley residents and politicians say it is a potential ecological disaster that could pollute well water, the drinking water source for Langley Township.

"We know the municipality is going to develop into an urban area 50 years from now," said Langley Township mayor John

Under the surface

Vancouver Sun
September 15, 1990

Fraser Valley gas-storage proposal has residents, politicians in uproar

Beales. "Let's not build a disaster that is going to be underground in an urban area. It makes me a little bit nervous."

In the type of storage system proposed for the valley, natural gas is injected into an underground layer of water-bearing sandstone.

A solid layer of shale above the sandstone — the caprock — is supposed to prevent the gas leaking to the surface, while water in the sandstone expelled by the gas is supposed to seal the sides and bottom.

But valley critics say that at many such facilities in the U.S.,

gas has leaked to the surface or into the water table through dug wells, cracks in the cap-rock or because gas pressure exceeded the surrounding water pressure and migrated from under the cap-rock.

Glen Breaks, a Langley house builder who in recent months has spent more time researching gas storage than hammering nails, is worried.

He lives with his wife Gina and three young children on an eight-hectare farm about 1½ kilometres from the proposed Campbell River drill site, but says they will move if underground storage is approved.

"We are talking about a threat to my family's drinking water and the safety of my wife and children," he said.

Langley Social Credit MLA Carol Gran says she will oppose

Please see GAS, A5

Vancouver Sun
September 15, 1990

Under the surface

GAS *Continued from page one*

natural-gas drilling in the valley for as long as she sits in the legislature.

The other Langley MLA, Sacred Dan Peterson, has refused to take a position on the gas-company proposal until a B.C. commission into exploratory drilling makes its recommendations.

Three companies — B.C. Gas, Conoco and Dynamic Oil Ltd. — applied jointly to the provincial government for permission to conduct exploratory drilling at three locations next year. Two of the exploration sites — Murrayville (232nd Street and Old Yale Road) and Campbell River (0 Avenue and 256 Street) — are in Langley while the third is in Delta, near the foot of 104th Street on Boundary Bay.

The Commission on Fraser Valley Petroleum Exploration, appointed by B.C. Energy Minister Jack Davis, completed three months of public and technical hearings into the drilling proposal last week. Commissioner David Anderson expects to make his recommendations to Victoria by the end of October.

A group of about 600 valley residents called Friends of the Fraser Valley (FFV) has boycotted the commission since Sept. 4. The group, which is opposed to gas exploration and storage in the valley, charges the hearings were stacked with gas-industry representatives.

The chance of discovering natural gas at any of the three sites is about one in 10, says Conoco geologist Bob Spring, manager of the Fraser Valley Gas Project.

Whether gas is found or not, the trio of companies intends to seek permission from the provincial government to store compressed natural gas underground.

The industry measures natural gas in cubic feet. For example, it takes about 100,000 cubic feet (100 mcf) to heat an average Lower Mainland home for one year.

Natural gas is now delivered to the Lower Mainland and export markets from producing areas in northern B.C. via the Westcoast pipeline system. The line carried a record 412.5 billion cubic feet (bcf) in 1989 to the terminus facility at Huntington on the U.S. border.

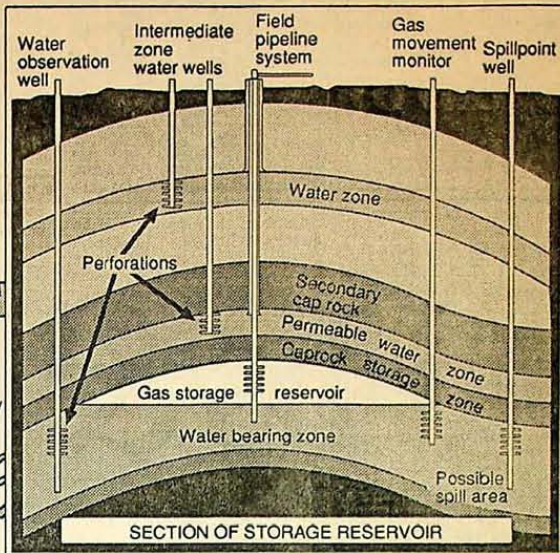
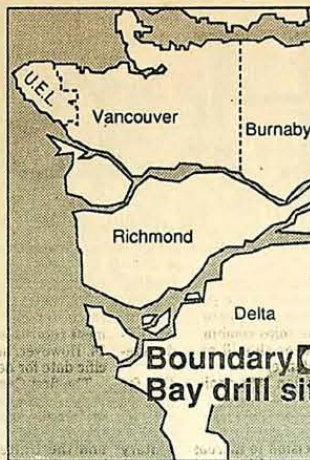
Sixty per cent of the gas is distributed to B.C. homes while the rest is piped to U.S. markets in Washington state.

B.C. Gas representatives told the commission a storage site in the Fraser Valley would improve the security of the Lower Mainland's gas supply in the event of a pipeline breakdown.

Less reliance on the pipeline would translate into an annual savings of about \$50 on a \$700 gas bill for B.C. consumers, according to the gas company.

Spring said a plan being considered by the companies is to store about 10 bcf of gas at all three proposed drilling sites, if conditions are ideal. He said underground areas about 1,000-1,500 metres below the surface, covering three square kilometres, would be needed to store that amount of gas.

Alternatively, the gas companies would consider using one of the sites, probably in Langley, to hold up to 80 bcf in a six- to 12-square-kilometre "gas bubble."



Aquifer storage starts with the injection of natural gas deep underground into a stable layer of porous sandstone where it forms a giant bubble shaped like an upside-down saucer.

The layer of sandstone is selected for storage after exhaustive drilling and seismic tests to ensure its porosity is the desired 15 to 20 per

cent.

A solid layer of shale on top of the sandstone forms a natural lid called a caprock that theoretically prevents the gas from migrating to the surface. Water in the sandstone pushed aside by the bubble of gas acts as the seal on the sides and bottom.

Cases testify to aquifer storage risk

There are about 50 active aquifer storage facilities in the U.S., some of which have leaked or are suspected of leaking with varying results:

- Corn farmer Gerald Hamer of Troy Grove, Ill., encountered a problem with his well a few years after a gas company began aquifer storage under his land in the 1960s. Hamer's well would explode on occasion when its submersible pump cut in, sending wooden planks on top of the well flying across the yard.

Gas inspectors determined the explosions were a result of a buildup of stored natural gas that had seeped into the water supply, he said. He was warned by the gas company that a similar explosion was possible in his house.

The gas company purchased the land and Hamer moved away, but he continues to operate the farm under a lease agreement with the company. The storage facility is still active.

- The entire town of Herscher, Ill., lost its water supply during initial injections of gas in the mid-1950s. Some of the water supply remains charged with gas and is unusable. Thirty-eight condemned farm water wells and other village water wells are still monitored for gas. The facility is operating at a reduced pressure.

- A field in Redfield, Iowa, reported a "severe blowout" two decades ago when an observation well was drilled into an area above the gas bubble that had filled

with migrating gas.

- To avoid potential contamination, resident farmers living on a gas-storage field in Leroy, Wyoming, were relocated to homes in another area in the early 1970s. Many of the farmers now commute to grow crops on their land.

- Bob Means was supervisor of a gas field in Manly, Ill., that he said was abandoned in 1970, costing the company millions of dollars, because of a leak in the caprock (the natural shell of non-porous rock atop the gas bubble that prevents gas from migrating to the surface). Another facility was built nearby but deeper underground.

- A facility in Waverly, Ill., was also abandoned because of caprock leakage and rebuilt at another location.

- An aquifer field was operated in Vincent, Iowa, for about 10 years in the late 1960s and early '70s before being closed down because of a leaky caprock.

- A facility in Brooksville, Ill., was abandoned in late 1960s because of caprock leakage.

- A facility in Lake of the Woods, Ind., was abandoned in late 1960s due to caprock problems.

- Ray Hibner of the Illinois department of mines and minerals said an underground storage site in Crescent City, Ill., was plugged in 1982 because, he suspected, it was leaking and costing the company too much money.

However, aquifer storage is a technique used at only about 50 of these facilities and was tried just once in Canada — without success — near Ottawa in the late 1960s.

Natural gas is injected mainly in depleted oil or oil-and-gas fields, which geologists say are generally more stable storage sites. The Alberta government does not permit aquifer storage.

Residents living near the proposed

drill sites are irked by provincial regulations that permit gas companies to install observation wells and run access roads on to private property without the landowner's consent. Gas-company officials say the wells would be unobtrusive.

A consortium of companies that operates a storage site near Chehalis, Wash., recently purchased surface land to satisfy property owners fearful of stored natural gas percolating through the soil.

Farmers in Illinois have received compensation from gas companies for corn crops killed by leaking gas.

Authors of a book published earlier this year titled *Natural Gas Engineering, Production and Storage* warn there is a possibility houses built on or near aquifer storage facilities could explode without proper monitoring.

"It would be preferable to have (these) homes on concrete pads without basements, and this type of new construction might well be advised in gas-storage areas," wrote Dr. Donald Katz and Robert Lee. "Monitors in basements that would detect low concentrations of natural gas could possibly be installed to provide adequate warning before gas reached the explosive limit, should gas ever enter a basement."

Katz, who died shortly before the book was published, pioneered many of the techniques still used in natural-gas storage. He was a professor of engineering at the University of Michigan and co-author of about 250 papers and several books. The author's notes in his final book says Katz received 17 national honors, including the National Medal of Science from President Ronald Reagan in 1983.

Natural gas at one storage facility in Texas migrated about 160 kilometres underground before resurfacing, said house builder Breaks, who belongs to Friends of the Fraser Valley.

The Commissioner and Counsel Declare War on The Friends

Al Vickers never responded. Commissioner Anderson and counsel MacAdams could have left the matter to rest and wisely handled the situation in another fashion. However, most likely fuming and embarrassed about the boycott, with added frustration about members of The Friends' silence to the letters baited by counsel MacAdams, they made the decision to hold a separate "special hearing" under the standing Commission's quasi-legal powers and would make the mistake, willing or otherwise, of emphasizing a wrongful assumption that multiple parties were 'leaned on.' This is when things started to get ugly and personal.⁷⁴⁷

Glen Breaks would later, yet again, remind the Commission in a letter four days before Anderson's "Allegations" Inquiry on October 22, 1990, that there was only one party, one source that he was referring to, namely Walter Rzepczynski.

October 18, 1990

Mr. David Anderson, Commissioner
Commission on Fraser Valley Petroleum Exploration
#105-20611 Fraser Highway
Langley, B. C.
V3A 4G4

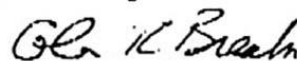
Dear Mr. Anderson:

I feel compelled to respond to your statement that people have been unwilling to answer your letters requesting information about possible witness tampering at the recent Fraser Valley Petroleum Commission Technical Hearings.

I personally have never stated that witnesses were tampered with, but that a source of information was pressured into withdrawing his support. After being contacted by one of the consultants who testified for B. C. Gas before the Commission, this person requested that his name no longer be used in connection with this project. This occurrence was first brought to the attention of the Commission on August 18 and then again on August 25, 1990.

At that time three representatives of the Friends of the Fraser Valley met with the Counsel for the Commission and discussed this situation. We were told that nothing could be done about this problem. We were also advised to be very careful as to whom we talked to about it as we would lose credibility by discussion of this event.

Yours truly,



Glen Breaks

⁷⁴⁷ Consider the following quote in Anderson's October 19 letter to Commission counsel Doug MacAdams: "Two days later I send a two-page interim report to the Minister pointing out that while many FFV [Friends of the Fraser Valley] executive members are no doubt honest people with legitimate concerns, the FFV has issued irresponsible and malicious falsehoods, is clearly led by persons with no regard for the truth, people whom I can no longer deal with effectively by reason of their vicious campaign of personal vilification and mendaciousness."

Seventeen days after the Friends announced their Commission boycott, David Anderson issued a press release on September 21 calling “on the public to assist in the Commission’s investigation of allegations that potential witnesses were pressured into remaining silent:”

Anderson said: At the outset of the Commission’s 4 September 1990 technical hearing at the Langley Conference Centre, a spokesperson for the Friends of the Fraser Valley charged that persons with information relevant to this inquiry were pressured by the Fraser Valley Gas Project consortium, the group proposing exploratory drilling for natural gas in the Valley, into remaining silent. These charges have been repeated in news reports since that date. They have been vigorously denied by the companies involved. These allegations are extremely serious. If substantiated, it may be necessary to reopen the technical hearings, or to reject part of the testimony already received.

In the light of the failure of those who have made the charges to provide support for their claims, and the failure of our inquiries elsewhere to shed light on the matter, I must ask any member of the public, and in particular any member of the Friends of the Fraser Valley, who has information which could assist in determining whether there is substance to these allegations, to contact the commission without delay.

Hours before the press release was issued, Douglas MacAdams faxed the following to David Anderson at 8:17 a.m.:

Now sent to you are two draft press releases. I do not pretend to be a skilled press agent. I do however think we need to have the thoughts set out in these drafts into the hands of the press.

The first, the one dealing with **silencing of witnesses**, [bold emphasis] I think is needed to enable you to deal with this issue in your [final Allegations] report. I expect you will be able to write that because there was no response to the four letters and to the public request for assistance, you have concluded there is no substance to these charges. But to be able to do this, you must make the public appeal. I think as well that this issue should be dealt with separately from the other issues. In this way you will have an uncluttered “this issue only” document which you can, if appropriate, append to your [final Allegations] report along with the letters and enclosures we sent to Mrs. Breaks and to Al Vickers.

The second and chatty one I expect will not be used by the press, but frankly is not intended to be used by the press. The purpose of this one is to have a document at hand which we can send to those such as elected officials and candidates for office who have been pressed to have a view on whether or not the Commission has been complete and fair in its work or who may be so pressed to take a stand. This document as well I say would be useful to have available to circulate to those who have expressed in a public way or to public officials concern about the Commission. Having it at hand will mean we are not required to respond individually to every voice, with the attendant difficulty of being charged with saying one thing on one occasion and a different thing on another. I recognize that this second longer press release needs working over before it is appropriate to be released.

On September 24, 1990, the Commission’s Victoria office was faxed a two-page press release by The Friends of the Fraser Valley, “Re: David Anderson press release September 21, 1990, Commission on Fraser Valley Petroleum Exploration – Subject: SILENCING OF POTENTIAL WITNESSES.” It clearly singled out to the Commission that there was only one person that “the oil and gas companies tampered

with,” namely “our informant.” The name of the informant, Walter Rzepczynski, was not cited in the news release:

The Friends of the Fraser Valley co-operated in good faith with the Anderson Commission on Fraser Valley Petroleum Exploration. After attending more than twenty sessions of hearings, the Friends came to the unanimous opinion that the public was being deceived by the operations of the Commission into believing that a proper inquiry was being made and hundreds of our members walked out of the Commission hearings never to return. Mr. Anderson and his Commission had lost all credibility and the Friends of the Fraser Valley were bitterly disappointed in him.

Since then, Mr. Anderson has seen fit to send process servers to the homes of the Friends of the Fraser Valley, frightening their children and embarrassing and harassing their families. We are not criminals but ordinary law-abiding people with legitimate concerns, trying to protect our homes and livelihoods from the greed of the international petroleum companies. We are not afraid of Mr. Anderson, nor of his threats and bullying letters, even when they are delivered to our doors by his minions. We will not be intimidated but will continue to fight this lunatic scheme to pump gas beneath our homes and communities in any proper way we can for as long as necessary.

The public can judge for themselves whether the oil and gas companies tampered with our information sources by considering the following facts:

The Friends of the Fraser Valley had great difficulty finding any experts who were not either directly employed by the oil and gas industry or dependent on them for consultation work, as was very apparent at the ‘impartial hearings’ with the so-called ‘independent witnesses’ called by Mr. Anderson his lawyer.

The Friends found one expert, Dr. Donald Katz, the acknowledged leading authority on underground gas storage, whose book contains alarming content on the dangers of underground gas storage. Sadly, Dr. Katz died shortly after his book was completed in 1989 so he could not be tampered with nor compelled to appear, even by Mr. Anderson.

The Friends did find a one-time student of Dr. Katz’ working in Illinois who was prepared to discuss the problems of underground gas storage with us and did so in over two hours of long-distance telephone conferences. The Friends were much encouraged by his information and advice and were considering raising the money to bring him from Illinois to the Fraser Valley to appear at the Commission hearings.

His name and the nature of his information was given to the British Columbia Utilities Commission and was then somehow leaked to the lawyers for the Fraser Valley Gas Project.

This lawyer for B.C. Gas then caused a Mr. Howard Griffith, an employee of Texas Gas in the U.S., to contact our informant (who is dependent on the gas industry for his livelihood). We do not know what was said between these two, but we do know that immediately thereafter during a telephone conversation with us, our informant, in an embarrassed fashion, withdrew permission for his name to be used. He also wrote a grovelling letter to Mr. Griffith beginning “Thank you Howard” which the lawyer for B.C. Gas triumphantly filed with the Anderson Commission.

Mr. Griffith of Texas Gas subsequently appeared before the Anderson Commission as an ‘independent’ witness, but volunteered no information on this matter, nor was he examined on it by

Mr. Anderson or his lawyer. Friends of the Fraser Valley had been advised by the Commission not to publicly discuss these exchanges.

Whether all this constitutes tampering is a matter of opinion. We country folk out in the Valley have a saying which goes something like this: "If it looks like horse manure and stinks like horse manure, the chances are IT IS horse manure."

A8 THE CHILLIWACK PROGRESS, Wednesday, August 29, 1990



— Photo by Michel Heroux

Bruce Standeven of Yarrow heads a group of local residents asking questions about the intent of natural gas drilling companies which have indicated an interest in the Fraser Valley.

Explosions, environment among drilling concerns

by Robert Freeman

Possible natural gas exploration in the Fraser Valley is raising concerns among Yarrow and Rosedale residents as a provincial commission holds an inquiry into the issue.

Yarrow residents will meet Sept. 11 at 7:30 p.m. at the Yarrow community hall to hear Al Vickers, a spokesman for a Langley residents group, Friends of the Fraser Valley.

A moratorium on exploration for natural gas reserves and storage sites was called while the government-appointed commission

in Delta, but that number could increase to 12 to determine whether underground storage is feasible.

He predicted "a proliferation of wells" with each taking up to eight weeks to complete.

It's important that people understand that this is "a test case," he said.

"If this consortium is given permission to go forward with their plans then there are dozens of companies out there waiting to come in."

He said the companies have to provide evacuation plans in case of an

uncontrolled natural gas flow, but if well water is contaminated there is no municipal, provincial or federal legislation protecting residents.

And companies are under no obligation to supply water if groundwater is contaminated, he said.

Drilling is "an on-going thing," he said, with periodic "flare-offs" to burn away residues.

"It's insanity," Vickers said, for residents to accept the risk of possible air and water contamination, gas leaks and the inconvenience of 24-hour drilling.

The Friends had given the Anderson Commission their answer on the issue of ‘witness tampering,’ identifying a single individual. However, this wasn’t good enough for Douglas MacAdams who stubbornly prepared and sent, via process servers, two more letters to the Friends. On September 24, a letter to Al Vickers wanting “authenticity” and “confirmation” that the press release was “in fact issued by your organization, Friends of the Fraser Valley.” On September 26 a letter to the home of Glen Breaks to “answer under oath this question: is Walter Rzepczynski the gas company employee in Illinois referred to in the Vancouver Sun of September 22, 1990?” Glen Breaks had been interviewed in the short Vancouver Sun article and didn’t name the “gas company employee in Illinois.”⁷⁴⁸ Once again, The Friends did not answer MacAdams’ letters.

In an October 15 article in the Vancouver Sun, *Man told of gas danger won’t talk at hearing*, Anderson, who failed to state to the Vancouver Sun reporter that the Friends had identified Walter Rzepczynski to the Commission, said:

This is frustrating because these individuals could simply give us the names of the people they are talking about.

He said he had letters hand-delivered to five members of the Friends of the Fraser Valley asking for verification of the allegations and got “no response whatsoever.”

He also issued a news release asking for information and wrote everyone who has had contact with the commission, asking them to come forward.

“These (efforts) did not result in any clear indication of who or what was involved.”

On September 25, Irwin Henderson, Director of Communications and Public Affairs with the Ministry of Energy, Mines and Petroleum Resources, issued a news release, *Fraser Valley Drilling Probe Extended*.

The B.C. government has granted Commissioner David Anderson’s request for a 90-extension to the inquiry into petroleum exploration in the Fraser Valley, Energy Minister Jack Davis announced today. “Anderson asked that his mandate be extended to the end of December so that he can complete his comprehensive terms of reference in an orderly way,” said Davis.⁷⁴⁹

There had been rumours of a possible provincial election slated for the late fall of 1990, and another for the Spring of 1991, rumours that were helping stir the pot in support of The Friends of the Fraser Valley. Matsqui Riding NDP candidate Dave Jatana “said last week that the provincial government should not risk groundwater and safety by allowing natural gas drilling and storage in the valley,” and “condemned “a built-in bias” which he blames for making it difficult, if not impossible for Valley residents to voice their legitimate concerns.”⁷⁵⁰ Jatana’s “built-in bias” words were first uttered by Langley Riding NDP candidate Derrill Thompson at a September 12 press conference.⁷⁵¹ In response, David Anderson sent Thompson a letter on September 20 “assuring” him “that at no time were the preparatory sessions not conducted in a fair and impartial manner,” and that “the objective of our procedures has been and remains to create a level playing field ... fair to all British Columbians.”

⁷⁴⁸ *Gas Commission seeks proof of hushed witnesses*, Vancouver Sun, September 22, 1990.

⁷⁴⁹ The words “and deal with unanticipated issues” at the end of Davis’ quote had been removed in the original news release draft.

⁷⁵⁰ *NDP candidate opposed to gas storage*, Abbotsford Times, September 26, 1990.

⁷⁵¹ *Drilling opposition has NDP support*, Langley Times, September 19, 1990.

With the possibility of an upcoming election, the New Democratic Party saw an opportunity to gain some valuable points. On Friday evening, October 11, 1990, the Fraser Valley West New Democrats held a fund-raising dinner event at the Aldergrove Community Kinsmen Centre. There, NDP leader, and former Vancouver City mayor, Mike Harcourt said:

The government created a recipe for a bunch of angry people by secretly selling drilling rights and then, after the fact, deciding that the situation should be discussed and setting up an inquiry.

"The process stank from the beginning," he said. "It's an example of how not to do things. It set everyone up for an angry confrontation."⁷⁵²

PROMISES CONSULTATION IN FUTURE

Aldergrove Star
November 15, 1990

Mike likes gas

By KURT LANGMANN

ALDERGROVE - Mike Harcourt told reporters that a proposal to store natural gas underground in the Fraser Valley was a valid concept but the NDP would have approached it a bit differently and would have done a better job of negotiating it than the present government.

Speaking to a small scrum of reporters after his Friday night speech to local party members, Harcourt said, "the process stunk from the beginning."

He charged that the energy ministry "awarded the rights secretly" and then set in process a study which "set everybody up". The rights

were sold by public auction to the highest bidder in 1988.

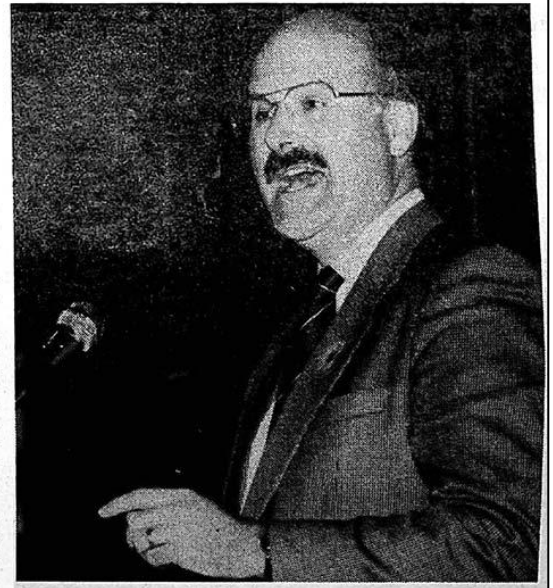
"Dan Peterson (Langley MLA) ridiculed our environment critic last March for asking for an environmental assessment," said Harcourt. "It's gone off the rails right from the start."

"The commission (on gas exploration) seems to have spontaneous change of hearing process."

However, Harcourt spoke glowingly of commission head, David Anderson. "I would not challenge the integrity of David Anderson... (but he has) two-and-a-half strikes against people accepting his recommendations", adding that VanderZalm has unfairly put him on the spot.

"I would prefer to see natural gas used in cars, in homes rather than oil, as well as industrial use. There's a legitimate public interest involved, but it's a severely impaired commission," said Harcourt.

He said the NDP would have consulted with affected property owners prior to sale of mineral rights in the area. However, he did not elaborate on how this might have pleased property owners here who wish to see no such proposal go through whatsoever, nor did he explain why an exploration company would spend money on seeking a proposal for properties to which they had no legal rights.



Thompson, who had listened to the concerns of his constituents and the Friends, wrote a long letter to David Anderson on September 25 with a series of questions, one of which asked the "legitimacy to the claim ... that potential witnesses from the U.S. ... were pressured into changing their comments?" Anderson responded in a four-page September 28 letter:

Your fourth question concerns the claim that potential witnesses were pressured into changing their mind. I cannot over emphasize the importance of this issue. Members of Friends of the Fraser Valley have made this claim in a very specific manner speaking of the proponents and speaking of persons in four United States states, Wyoming, Michigan, Washington, and Illinois. However as yet I have not received a reply to five letters to their chairman and spokespersons in which I have asked for details which would allow the Commission to investigate the claims. The first letter was dated on September 6, three weeks ago. I am enclosing a press release and various other documents on this. May I repeat, these extremely grave and damaging charges have been made, and as yet I have no information from those who have uttered the allegations. Until they reply, or until I obtain other information on the matters raised, it is not possible for me to determine whether there is legitimacy to these charges.

⁷⁵² No challenge to integrity of gas report, Langley Times, November 14, 1990.

I should add however, that it has stopped this inquiry dead in its tracks. Nothing can be done by me in the way of preparing my report until this matter is cleared up one way or another. At the present time I cannot rely on the testimony of any of the [Technical Hearing] witnesses, nor can I place reliance on the material provided by the proponents, who are specifically alleged to have coerced potential witnesses into not providing evidence to this Commission.

It is highly improper to try to influence the outcome of the fact-finding process by repeating the unsupported allegations of the past three weeks. As you may know, I have served as a Member of the House of Commons and as a Member of the Legislative Assembly of British Columbia, and I have some familiarity with the political process in this province, and the propriety of the attacks being made. All candidates want to get elected. All candidates know the temptation of accepting the support of special interest groups. But winning at all costs is not worth it. It is a Faustian bargain.

In his letter, Anderson, who was now in the public limelight and firing line, referred to The Friends of the Fraser Valley as “a special interest group.” This is the first and only instance of such a reference found in the Commission’s records. It was specifically because of The Friends, whose ‘special interest’ was to oppose and denounce petroleum exploration drilling and gas storage, that government created the Anderson Commission.

In another letter of October 19, 1990, to Dr. Edward Keyserlingk with the University of McGill’s Faculty of Law Centre for Medical and Legal Ethics, Anderson not only referenced “private interest groups” but cast aspersions toward The Friends of the Fraser Valley:

To date there has been no evidence to support the allegations, but as you can understand, a formal hearing to receive the affidavits denying the allegations from those affected is important for the record. Those who have made the allegations have not replied to our letters and have announced in the press that they will not attend. The matter of false allegations is not a matter we have discussed, but it may nevertheless interest to you. It is an example of the difficulty of incorporating private interest groups into the commission process, and the fact that the more vehement and less rational individuals, as well as the less honest, often take leadership roles in such organizations.

In this instance of the Commission’s correspondence records we have a glimpse of what Anderson frankly and honestly thought, reflecting his attitude and inclinations at this stage of his participation as a government Inquiry Commissioner. His statements “less rational individuals” and “less honest” draw attention to his crossing the professional, independent line of ethical boundaries.

With geologist researcher Tony Fogarassy’s departure from the Commission in early September to attend his second year of law at the University of B.C., David Anderson was looking for a new assistant. Irwin Henderson, the Director of Communications and Public Affairs with the Ministry of Energy faxed David Anderson the resumes of two candidates on September 26: David E. Fenn and Patrick L. McDonough. Both were “co-owner” partners of Victoria-based Policynet Communications Ltd., formed in 1988.

Here are the resumes of people who might help you – 2 young, energetic & versatile University of Victoria grads whom I’ve known since they formed their partnership 2 years ago. I have references from recent jobs if you’d like to pursue their taking some of the pressure off. Cheers.

Anderson hired David Fenn on October 1. Fenn's resume states that he served as a policy analyst with the Federal Treasury Board Secretariat in Ottawa from 1986 to 1987, a policy analyst with Consumer and Corporate Affairs Canada in Ottawa in 1986, a program analyst at the University of Alberta in Edmonton in 1984, and a research assistant at the University of B.C. from 1980 to 1983. Fenn, who would assist in preparing witnesses and materials for Anderson's Special Inquiry on Witness Tampering, appeared as Anderson's first witness at the October 22, 1990, Hearing.

On September 26, David Anderson was busy preparing a two-page form letter to be widely distributed "to some 550 people on the Commission's mailing list."⁷⁵³ Three draft versions were made in consultation with Doug MacAdams until the final version was ready for delivery on October 5. Explained in an October 5, 1990, cover letter from David Anderson's secretary Elizabeth Svendsen to Steve Peelking at the Daily Oil Bulletin publishing office in Calgary,⁷⁵⁴ "this is a copy of a letter being sent to everyone on our mailing list, which may be of interest to you:"

Dear _____.

I have appreciated the interest that you have expressed in the work of the Commission over the last few months. This letter is to request your help in dealing with a serious problem that the Commission currently faces.

At a session of the technical hearings of the Commission at the Langley Conference Centre on the evening of September 4, the charge was made that possible witnesses had been silenced, and that evidence had been suppressed. The words used were:

... we were able to make significant inquiries in Illinois, Washington, Michigan, and Wyoming, but persons within the industry in those areas who talked to us or who suggested further lines of investigation, have been contacted by the proponents and pressured and embarrassed into withdrawing their support.

and later:

... our industry contacts in the United States have been silenced ...

These allegations were immediately and categorically denied by the proponents of exploratory drilling, the Fraser Valley Gas Project group. Since that date the Commission has been attempting to obtain evidence to substantiate these allegations. Four hand delivered letters, the first dated September 6, have been sent to the spokesperson of the Friends of the Fraser Valley who made the statements above, and to the chairperson of the group, who had repeated the allegations. As yet, neither has replied.

These charges are extremely serious. If true, they may require the Commission to reopen the technical hearings to hear further evidence or to strike from the record testimony that has already

⁷⁵³ *Special Report on Allegations of Witness Tampering*, November 1990, page 10.

⁷⁵⁴ On Thursday October 18, 1990, the Daily Oil Bulletin published a notice, *Fraser Valley Commission Resumes Hearings*: "On Monday Oct. 22, the commission will begin proceedings on whether or not persons from Wyoming, Illinois, Washington and Michigan were pressured into remaining silent. As well, the commission will examine if government officials from Alberta, British Columbia, Canada, Washington and Michigan who testified did not provide honest opinions on the matters before the commission."

been received. It is therefore critically important that the Commission obtain whatever evidence may be available on this matter.

Faced with the failure of those who have made the charges to support the allegations that they have made, I issued a news release to the press asking members of the public to give what evidence that they may have; however, as you may not have seen the press stories to that effect, I am writing to you directly to ask for your assistance.

My request is not only with regard to the possible witnesses in Wyoming, Michigan, Illinois, and Washington. Even though the allegations quoted above are about persons in those states, and such persons are, naturally, the immediate focus of this investigation, I would be interested in any information of this type that you may have.

If you have any information concerning the silencing of possible witnesses and the suppressing of evidence pertinent to the Commission's work, please get in touch with the Commission by the end of the month at the above address and telephone numbers. On October 31st, after the Langley office closes, please contact the Commission's Victoria office, the address and telephone numbers of which are below.

It is difficult to exaggerate the seriousness of this to the work of the Commission. Since the allegations were made, it has not been possible to proceed with the analysis of the material received over the past five months on the risks and benefits of exploratory drilling. It is my hope that with your help the Commission will be able to determine what evidence of possible witness tampering there may be.

May I thank you for your cooperation in this matter.

5 – 22. Anderson's and MacAdams' Special Trip to Illinois

*Other Matters: 2. Letter to E. R. A. Edwards, Q.C.: we are writing to Bob Edwards to recommend an increase in budget to a level we think will permit preparation for a trip to Illinois, two days of travel, and two days in the field there. 3. Invitation from [Howard] Griffith: through Cal Johnson we have learned that Mr. Griffith's company would be pleased to have you see Leesville, Indiana, Greenville, Kentucky and Midland, Kentucky should you wish to visit those facilities.*⁷⁵⁵

*Travel to underground gas storage facilities in Illinois and Missouri, plus dealing with an allegation that some witnesses at the technical hearings of this Commission were pressured into testifying dishonestly, has delayed my schedule.*⁷⁵⁶

*Commissioner David Anderson visited [Lodene] Clark in her home recently as part of his commission of inquiry into gas exploration and storage in the Fraser Valley. But the meeting didn't go well. "I felt I was able to tell him some of the things that have happened to me. He didn't call me a liar but almost."*⁷⁵⁷

*Well, sometime, if you really want to do me a favour, photocopy a few things that you think would be pertinent. And some of these things that would have happened, and I don't know if I would use them, but I would certainly be interested in reading them. I haven't delved as you have. You've obviously done your homework very well. I respect you for that. We were unsophisticated.*⁷⁵⁸

When Commissioner David Anderson returned to the Lower Mainland from his European gas storage business trip add-on week of vacation in southern France, the very next morning, Monday August 27, both Commission counsel Doug MacAdams and research advisor Tony Fogarassy overwhelmed Anderson with news of "Mrs. X" in Illinois, briefing him about Glen Breaks' disturbing audio tape recording interviews they witnessed at the final day of the Preparatory sessions on Saturday August 25.

When Gina Breaks gave her boycott presentation to the Commission on the evening of September 4, wherein she confronted Anderson on not having visited "Illinois, where there are several well-known problem underground gas storage fields," and mocked Anderson for visiting France "which has fewer storage facilities than a single company in Illinois," Anderson announced the following during the September 5 technical hearing, making it sound all so routine:

Second, I wish to confirm my decision of the 27th of August of 1990 that I will be travelling to Illinois and visiting underground gas storage facilities there. This is a continuation of the familiarization visits to petroleum facilities and storage areas which over the summer have taken me to fourteen storage facilities in three Canadian provinces, four United States' states, and three European countries.⁷⁵⁹

⁷⁵⁵ Correspondence from Douglas MacAdams, Commission counsel, to David Anderson, September 25, 1990.

⁷⁵⁶ Letter from Anderson to Dr. Edward Keyserlingk, McGill University Faculty of Law, October 19, 1990.

⁷⁵⁷ *The air explodes around her home*, The Chilliwack Progress, February 6, 1991.

⁷⁵⁸ Quote from Lodene Clark, transcript from an undated audio interview with Glen Breaks, summer of 1990.

⁷⁵⁹ Proceedings, September 5, 1990, page 1254.

Anderson's "decision," that he purportedly made on August 27 for an additional visitation to Illinois, is nowhere to be found in Commission records. Reference to or discussion of such a "decision" does not appear in the transcripts of the August 27 technical proceedings, which include Anderson's opening remarks for that day where he states the need for an extension of the government's final report deadline for September 30, nor in any other Anderson utterances is there an allusion to a separate visitation. Nothing found in Commission media releases. No statements in the newspapers. What "decision" was Anderson possibly referring to? Assuming then Anderson's claim being correct, the only logical conclusion is that it must have been a private or in-house statement he made to fellow Commission staff.

Whatever the case, Anderson's stated necessity for such a visit was ultimately and undeniably linked to Glen Breaks' audio recordings of his interviews with Lodene Clark presented at the final day of Preparatory sessions on August 25, ignited nine days later by Gina Breaks' chastising statements made on September 4 before the Commission and its large audience.

Before August 25, the following are the only traces of information found about The Friends' stated concerns to the Commission about Illinois:

- In their 10-page August 8 list of concerns, under item "36, Herscher Storage Facility, Illinois, Migration of gas reservoirs, storage leakage."
- In Glen Breaks' July 11 statement at the audio recorded Commission hearing in Aldergrove: "With regard to water well contamination. I was speaking recently with an engineer at an aquifer storage plant in Herscher, Illinois. He told me that they did have a fairly severe caprock leakage at that facility."
- In Paul Dickenson's July 9 statement at the audio recorded Commission hearing in Chilliwack: "**Dickenson:** I must admit, I have some concern that you might spend this time and these funds going around to places where storage has been relatively successful. And, I would like to make the point, very strongly, that you should make a definite opportunity to look at places where it has been not so successful as well. I understand there are such places. I would like to give you one name: the town called Herscher [Dickenson carefully spells the name to Anderson] in Illinois. I understand that they set up a storage facility there and ran into a great deal of trouble with it."

Should Anderson have travelled to Europe from August 10 to August 26, leaving lawyer MacAdams in charge of the Commission fort during the Preparatory Sessions? It is an important question. Anderson's skipping out of the Preparatory sessions can be understood as a bad decision. Had he cancelled the extravagant European excursion, as he should have, he may have prevented the later controversial outcomes, with the bonus of being able to spend more time during his American tour to visit the problematic areas in Illinois. His duty, as it had been for the ten public hearings, should have been to participate in the Preparatory sessions. Anderson conveniently explained to Langley NDP candidate Darrill Thompson in a September 20 letter that the preparatory sessions "form no part of the record, and which will not be part of my report to the government," because "more relaxed procedures were followed by Commission counsel."

Given the timeline constraints of the Commission, did Anderson need to go to Europe, as The Friends correctly asked, and why did he go there? As narrated in Section 20 of this chapter, *The Travelling Anderson Commission*, on about June 6, 1990, Tony Fogarassy's contact, Pierre Thouin of Soligaz in Montreal, made the recommendation for the Commission to contact Michel Dussaud at Gaz de France. The trip to France would turn out to be an excellent public relations schmooze-fest for the giant company

and promotional opportunities for its new corporate subsidiary headquarters in Houston, Texas. As Dussaud wrote to Anderson on February 21, 1991, “We look forward to serving you, even better than in the past.”

Unlike the European visitations, there was no information folder found in the Commission records about Anderson’s and MacAdams’ special add-on trip to Illinois, no notes or narratives, no expense statements found. All that remains are references to the purposed trip in previous and later letters of correspondence, and in Anderson’s November 27 *Special Report on Allegations* and in Anderson’s final report of January 1991. No dates were provided in either of the two Commission reports on when Anderson and MacAdams departed, nor on what day they returned. Details of the trip seemed to have been cloaked in relative secrecy.

Because of the vacancy of information, the only information prior to the trip exists in scant letters of correspondence in late September and in a few newspaper articles:

Now that the information is public, I have made arrangements to visit the site in Illinois referred to, hopefully to speak to Ms. Lodene Clark and other residents in the area, to speak to company officials of the Northern Illinois Gas Company and speak to officials of the Gas and Oil Division of the Department of Mines and Minerals of the State of Illinois.⁷⁶⁰

It may be, however, that we will be asking you to meet with Commissioner David Anderson when he visits Illinois in October, and it may be we will ask you to assist in preparation of a sworn declaration confirming the information set out in your August 29, 1990 letter.⁷⁶¹

Anderson will be visiting the Illinois gas storage fields early in October and talking with regulators as well as the woman and family who have lived for the past 20 years above the field. A homemade videotape of this woman’s complaints about gas bubbling up into her water well was shown by the Friends at their Aldergrove Fall Fair booth. “I’ll go visit her, now that The [Vancouver] Sun released her name in last Saturday’s edition,” said Anderson. He said he was previously unable to make this commitment because the Friends refused to divulge her identity to the Commission.⁷⁶²

3. Trip to Illinois: in our view any visit to Illinois should include at least interviews with Mr. Rzepczynski, Mrs. Clark, Mr. Hibbner, Mr. Hamer of Troy Grove and municipal officials of Herscher. I put forward this list in the expectation you have included all these names on your list.⁷⁶³

The suggestion that Mr. Anderson should visit existing gas storage operations has been followed. He has visited these operations in Washington, Oregon, California, Ontario, Italy and France. He will also visit Illinois.⁷⁶⁴

Other Matters: 2. Letter to E. R. A. Edwards, Q.C.: we are writing to Bob Edwards to recommend an increase in budget to a level we think will permit preparation for a trip to Illinois, two days of travel, and two days in the field there. 3. Invitation from [Howard] Griffith: through Cal Johnson we

⁷⁶⁰ Anderson letter to Darrill Thompson, September 28, 1990.

⁷⁶¹ Letter to Walter Rzepczynski from Doug MacAdams, September 26, 1990.

⁷⁶² *Anderson takes Friends’ charges ‘very seriously,’* Aldergrove Star, September 27, 1990.

⁷⁶³ Letter to David Anderson from Doug MacAdams, September 23, 1990.

⁷⁶⁴ Letter to reporter Brian Calder from Bob Spring, Manager of the Fraser Valley Gas Project, September 27, 1990.

have learned that Mr. Griffith's company would be pleased to have you see Leesville, Indiana, Greenville, Kentucky and Midland, Kentucky should you wish to visit those facilities.⁷⁶⁵

September 25, 1990

Mr. Ted Hughes, Esq., Q.C.
Deputy Attorney General
Province of British Columbia
910 Government Street
Victoria, B.C.
V8V 1X4

Commission Correspondence Files

Dear Mr. Hughes:

You will recall that last week I mentioned the difficulty that the Commission is having with a group called the Friends of the Fraser Valley. Another press release arrived yesterday from the group. I have attached a copy of it so that you can appreciate its tone.

There is no reason to go over the press release point by point, except to mention that the individual from Illinois referred to but not named, Mr. Walter Rzepezyński, has written a letter categorically denying the allegation that he has been influenced by Mr. Griffith. Mr. Griffith has also vigorously denied the allegation that he improperly influenced witnesses. I will be in Illinois in approximately two weeks time, and I will be following up the charge of witness tampering.

Perhaps consideration should be given to the general question of the position that commissions should take if faced with persons determined to undermine a fair hearing process through unsubstantiated allegations. Stephen Owen and Peter Seaton may have opinions on this matter. This issue is related to the more general question of Commission procedures and safeguards, raised by Mr. Justice John Sopinka in a recent speech, a report of which is also attached.

If commissions are to continue to be used as a means of dealing with issues not effectively handled by the normal political process and by everyday public debate, it may be useful to consider what steps should be taken to hold those who wish to obstruct the process accountable for their statements.

Yours sincerely,
David Anderson

Attachments

cc: The Hon. Mr. Justice Peter D. Seaton, Chairman
Royal Commission on Health and Care Costs
Mr. Paul Williamson
Counsel to the Royal Commission on Health and Care Costs
Mr. Stephen D. Owen, Esq., Q.C.
Ombudsman for the Province of British Columbia
Mr. Douglas MacAdams
Counsel to the Commission on Fraser Valley Petroleum Exploration

⁷⁶⁵ Correspondence from Douglas MacAdams, Commission counsel, to David Anderson, September 25, 1990.

The only information found after their return is the following, beginning on October 19:

I am remiss in not following up our telephone conversation of two weeks ago. Travel to underground gas storage facilities in Illinois and Missouri, plus dealing with an allegation that some witnesses at the technical hearings of this Commission were pressured into testifying dishonestly, has delayed my schedule. ⁷⁶⁶

I enjoyed meeting with you and Mr. MacAdams at our Ancona office, and I hope you found your visit to our facilities informative and helpful despite the rainy weather. We at NI-Gas are proud of our storage operations and glad to discuss them with anyone. ⁷⁶⁷

The only information documented by Anderson about the Illinois trip appears in his November 27, 1990, *Special Report on Allegations*, and in his final Commission report of January 1991. In the November 27 report is the following:

Also, as a continuation of this effort to gather whatever evidence there might be, in early October Commission Counsel accompanied me on a visit to Illinois and Missouri, and in addition, Indiana and Kentucky. He spoke to Mr. Walter Rzepczynski and Mr. Howard Griffith, both of whom provided him with sworn statutory declarations for the purposes of this investigation.

This is the only instance in the Commission records stating that MacAdams had accompanied Anderson to Illinois. This is also the first instance from the records stating that the Commission did not just visit Illinois, but three other States: Kentucky, Indiana and Missouri. Anderson's final report of January 1991 makes no reference to his visiting Indiana, nor does it mention that MacAdams came with Anderson.

MacAdams had not joined Anderson in the previous Commission trips to northern British Columbia, to Alberta, to the States of Washington, Oregon, California, Michigan, and Ontario. MacAdams' special purpose in accompanying Anderson was most likely related to collecting affidavits from Walter Rzepczynski and Howard Griffith, and to speaking with both. This means that MacAdams was also present when Anderson visited Lodene Clark at her home in Long Point, Illinois.

In Douglas MacAdams' December 4, 1990, eight-page response letter to the Law Society of British Columbia concerning Glen Breaks' formal complaint about MacAdams, he reveals on page four that he "had met with him [Walter Rzepczynski] for most of the day on October 8, 1990 at his company's offices in Lombard, Illinois." This is one of the only clues of MacAdams' and Anderson's itinerary. October 8th is also the very day Rzepczynski filed his affidavit for Commissioner Anderson's *Special Report on Allegations of Witness Tampering*.

Why did the Commission visit these three other States, and who did they meet, and where exactly did they go? Once again, there were no documents found in the Commission records about the itineraries. The only record found, other than Anderson's final report, is Doug MacAdams' September 25 letter to Anderson (above) that the Fraser Valley Gas Project consortium's lawyer, C.B. Johnson, had opportunistically extended an invitation from B.C. Gas Inc.'s consultant, Howard Griffith, stating that his "company would be pleased to have you see Leesville, Indiana, Greenville, Kentucky and Midland,

⁷⁶⁶ Letter from David Anderson to Dr. Edward Keyserlingk, October 19, 1990.

⁷⁶⁷ Letter from David A. Cerotzke, vice president of supply, Northern Illinois Gas, to David Anderson, October 29, 1990.

Kentucky should you wish to visit those facilities.” The Fraser Valley consortium invited the Anderson Commission for a schmooze fest with Howard Griffith.

The Anderson report states that the Commission made a flight to Owensboro, Kentucky to meet with Howard Griffith, the president of TXG Engineering. There was no reference to visiting TXG Engineering’s three facilities as invitationally mentioned in MacAdams’ September 25 correspondence with David Anderson.

Here is what is stated about Illinois in the Commission’s January 1991 final report:

Thus a leak of natural gas into an aquifer is likely to have limited impact on the aquifer as a whole. Instead, the rising gas is likely to seek a path to the surface and exit in a limited area. Visits to the Ancona field and the offices of the Mines and Minerals Division in Springfield, Illinois, were made in October of 1990 by the Commissioner. Government officials and officials of the Northern Illinois Gas Company were questioned about the extent of the impact of the leak in that field. He was informed that two farms are affected out of the scores in that area above that particular gas storage facility.

At the present time, for instance, Northern Illinois Natural Gas is drilling near a property experiencing problems at Ancona, in the hope of intercepting the gas that is now routing itself to the surface through a well. Based on past experience of other companies, Northern Illinois officials are confident that this recapture plan will be successful.

The Herscher underground natural gas storage field, also in Illinois, has carried out a similar but much larger scale program of drilling to recapture leaked gas from above the faulted caprock of its main natural gas storage field. This interception, recapture and reinjection of gas was described by witnesses at the technical hearings as successful. The Laclede Gas Company dealt with a similar problem some years ago in Missouri in much the same way.⁷⁶⁸

Anderson’s vague reference to “two farms” and a “leak of natural gas into an aquifer” at the “Ancona field” was meant to be the summary of Anderson’s and MacAdams’ visit with Lodene Clark. This is explained in David Anderson’s return correspondence of January 22, 1991, to David Cerotzke, vice president of the Northern Illinois Gas Company. Anderson states in the letter that he mentioned Lodene’s “situation” in his final report, while avoiding mention of her name.


Dear Mr. Cerotzke: I do apologize for this belated reply to your letter of 29 October 1990 concerning our visit to the Ancona field. Despite the weather (West Coast people think we have a monopoly on that kind of rain!) we had a very interesting time.

With respect to Mrs. Lodene Clark’s farm, I have mentioned her situation only once in my report, and that reference is brief. The reference is to the effect that she, and the one other farmer who has gas in his well, are but two out of the many scores of farmers over your Ancona field. The fact that so few have problems from a gas leak demonstrates that the path followed by escaping natural gas from a caprock leak can be expected to be a narrow one, and that the aquifer as a whole is not likely to suffer harm. I state that your company is confident that drilling to intercept the escaping gas in a

⁷⁶⁸ Page 60.

higher collection zone will succeed, as it has been a generally successful method of dealing with the difficulty elsewhere.

he report is in the hands of the government but is not yet released; when it is, I will send you a copy.

**NORTHERN ILLINOIS GAS**
One of the NICOR companies
P.O. Box 190 Aurora, Illinois 60507-0190 Phone 708 983-8888
David A. Cerotzke
Vice President Supply

rec 11/09/90

October 29, 1990


Commissioner David Anderson
Province of British Columbia
No. 105, 20611 Fraser Highway
Langley, British Columbia V3A 4G4

Dear Commissioner Anderson:

I enjoyed meeting with you and Mr. MacAdams at our Ancona office, and I hope you found your visit to our facilities informative and helpful despite the rainy weather. We at NI-Gas are proud of our storage operations and glad to discuss them with anyone.

I do, however, have a favor to ask. Specifically, I would like to request that if you intend to refer to NI-Gas in general, or our Ancona/Garfield storage field in particular in any public reports, that you give us the opportunity to provide you with factual input to the extent that is appropriate. I make this request so that we in Illinois are not surprised by something that happens in British Columbia. We recognize, of course, that you may have no intentions of discussing our storage operations in your report in which case our request would be moot.


Sincerely,


David A. Cerotzke
Vice President

cc: Mr. Douglas MacAdams

Commission Correspondence Files

**Province of
British Columbia**

**Commission on
Fraser Valley
Petroleum Exploration**

file copy

Suite 413, 645 Fort Street
Victoria, British Columbia
V8W 1G2
Telephone: (604) 356-9742
Facsimile: (604) 356-9747

January 22, 1991

Mr. David Cerotzke, Vice President
Northern Illinois Gas Company
P.O. Box 190
Aurora, IL
60507-0190
U S A

Dear Mr. Cerotzke:

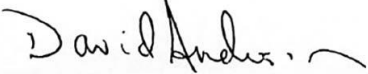
I do apologize for this belated reply to your letter of 29 October 1990 concerning our visit to the Ancona field. Despite the weather (West Coast people think we have a monopoly on that kind of rain!) we had a very interesting time.

With respect to Mrs. Lodene Clark's farm, I have mentioned her situation only once in my report, and that reference is brief. The reference is to the effect that she, and the one other farmer who has gas in his well, are but two out of the many scores of farmers over your Ancona field. The fact that so few have problems from a gas leak demonstrates that the path followed by escaping natural gas from a caprock leak can be expected to be a narrow one, and that the aquifer as a whole is not likely to suffer harm. I state that your company is confident that drilling to intercept the escaping gas in a higher collection zone will succeed, as it has been a generally successful method of dealing with the difficulty elsewhere.

The report is in the hands of the government but is not yet released; when it is, I will send you a copy.

You may be interested to learn that Mrs. Clark came to British Columbia in late November, and had some things to say about natural gas storage in general and your company in particular. I enclose a copy of a news story.

Yours sincerely,


David Anderson
Commissioner

Commission Correspondence Files

You may be interested to learn that Mrs. Clark came to British Columbia in late November and had some things to say about natural gas storage in general and your company in particular. I enclose a copy of a news story.⁷⁶⁹

In the October 29 originating letter to Anderson, David Cerotske asked for “a favor:”

Specifically, I would like to request that if you intend to refer to NI-Gas in general, or our Ancona / Garfield storage field in particular in any public reports, that you give us the opportunity to provide you with factual input to the extent that is appropriate. I make this request so that we in Illinois are not surprised by something that happens in British Columbia. We recognize, of course, that you may have no intentions of discussing our storage operations in your report in which case our request would be moot.

The air explodes around her home

The air is known to explode on occasion around Lodene Clark's property in Livingston County, Illinois.

Safety hazards, bad water and other concerns prompted the 62-year-old grandmother to fly out to the Fraser Valley late last year to tell residents about her problems with natural gas.

“I'm not an activist. I'm an old farm wife with two years of college . . . I'm willing to tell my story because I know what these gas companies are saying. I know there's another side of the story.”

Clark owns a house on top of one of North America's largest underground gas storage areas. The problem is that the gas reservoir leaks.

Clark first noticed the situation soon after storage began more than 20 years ago.

“In 1968, when this field was first going into operation, the well boiled. You could see the water boiling down there like a tea kettle would boil,” Clark said in a

telephone interview.

“The well got to be very bad quality water — almost undrinkable. It became so vile you couldn't even wash clothes in it.”

Gas began seeping through the ground and conditions got so bad that Clark began battling with the Northern Illinois Gas company. She got little satisfaction.

“They told me it was native gas (coming out of the well) and none of their concern.

“We used to put a vented pipe on it and actually burn it to embarrass the gas company.

But the gas company was difficult to spur into action. Company officials would sympathize with Clark, but always insisted it was gas native to the area that was seeping out, not gas they were storing, Clark says.

Company officials began digging shallow holes around her property in the 1970s.

By this time gas was leaking so badly that her son

would flip a match in each hole as he went out for his evening jog. He could navigate his way back to the house by the burning holes.

It was proven in 1989 that it was definitely stored gas leaking, but the troubles didn't end there.

“They plugged the holes. Then fissures in the land opened up. The fissures would boil,” she says.

Unfortunately for Clark, one of those fissures is under the house where her son now lives.

“Gas coming up and releasing into the surface is not ideal but it's not overly harmful.

But if it collected in a basement it would explode. If you dropped a match down the concrete well it would explode and blow the concrete cap off,” Clark says.

That very thing did happen to one of her neighbors, she says.

His pump house got covered with a heavy wet snow one time when he was on vacation. The snow sealed seeping

gas in the building. When he got back from vacation he turned on the taps, which caused the pump to kick in.

The resulting explosion blew the boards off the building and through the windshield of his car, Clark says.

Commissioner David Anderson visited Clark in her home recently as part of his commission of inquiry into gas exploration and storage in the Fraser Valley. But the meeting didn't go well.

“I felt I was able to tell him some of the things that have happened to me. He didn't call me a liar but almost.”

Clark wants to settle with the gas company. Among other things, she wants a new farm to replace her 80-acre operation.

Until she gets what she wants, she says the battle will continue.

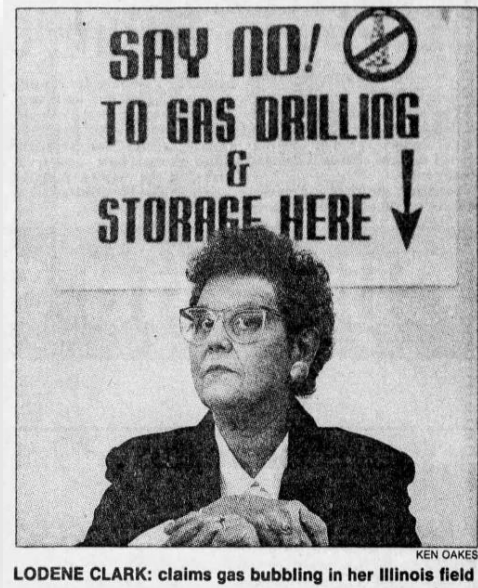
“The potential for someone being killed is very high,” she says.

Chilliwack Progress - February 6, 1991

Almost four months after the fact, Lodene Clark had something to say about Anderson's and MacAdams' visit to her home in Illinois. This is the only record found about this matter which occurred a week after the release of Anderson's final Commission of Inquiry report. The contents of the interview appeared in the February 9, 1991, edition of the Abbotsford News, *Illinois grandmother shares her story*, with Lodene stating that she had been snubbed by the Commissioner:

The air is known to explode on occasion around Lodene Clark's property in Livingston County, Illinois. Safety hazards, bad water and other concerns prompted the 62-year-old grandmother to fly out to the Fraser Valley late last year to tell their concern.

“I'm not an activist. I'm a farm wife with two years of college. I'm willing to tell my story because I know what these gas companies are saying. I know there's another side of the story.”



KEN OAKES
LODENE CLARK: claims gas bubbling in her Illinois field

⁷⁶⁹ The “news story” was the November 28, 1990, Vancouver Sun article, *Gas-storage foes to target premier*. Beside the article is a photo of Lodene Clark with a stern face with a sign behind her, “Say No! To Gas Drilling & Storage Here.”

Clark owns a house on top of one of North America's largest underground gas storage areas. The problem is that the gas reservoir leaks. Clark first noticed the situation soon after storage began more than 20 years ago. "In 1968, when this field was first going into operation, the well boiled. You could see the water boiling down there like a tea kettle would boil," Clark said in a telephone interview. "The well got to be very bad quality water – almost undrinkable. It became so vile you couldn't even wash clothes in it."

Gas began seeping through the ground and conditions got so bad that Clark began battling with the Northern Illinois Gas company. She got little satisfaction. "They told me it was native gas (coming out of the well) and none of their concern. "We used to put a vented pipe on it and actually burn it to embarrass the gas company." But the gas company was difficult to spur into action. Company officials would sympathize with Clark, but always insisted it was native to the area that was seeping out, not gas they were storing, Clark says.

It was proven in 1969 that it was definitely stored gas leaking, but the troubles didn't end there. "They plugged the holes. Then fissures in the land opened up. The fissures would boil," she says. Unfortunately for Clark, one of those fissures is under the house where her son now lives. "Gas coming up and releasing into the surface is not ideal but it's not overly harmful. But if collected in a basement it would explode. If you dropped a match down the concrete well it would explode and blow the concrete cap off," Clark says. The very thing happened to one of her neighbors, she says. His pump house got covered with wet snow one time when he was on vacation. The snow sealed seeping gas in the building. When he got back from vacation he turned on the taps, which caused the pump to kick in. The resulting explosion blew the boards off the building and through the windshield of his car, Clark says.

Commissioner David Anderson visited Clark in her home recently as part of his commission of inquiry into gas exploration and storage in the Fraser Valley. But the meeting didn't go well. "I felt I was able to tell him some of the things that have happened to me. He didn't call me a liar but almost." [Bold emphasis]

Clark wants to settle with the gas company. Among other things, she wants a new farm to replace her 80-acre operation. Until she gets what she wants, she says the battle will continue. "The potential for someone being killed is very high," she says.

The snubbing of Lodene Clark fits into the preconception picture painted by The Friends since at least late August 1990, that in the language communicated by both Anderson and MacAdams were indications they supported underground gas storage in the Fraser Valley before the Technical Hearings stage. Had Lodene publicly uttered her confession about Anderson during her first ever public presentation at the November 27 jam-packed public meeting, all hell would have broken loose.

On September 17, 1990, some three weeks prior to the Commission's excursion to Illinois, the Vancouver Sun published an article, *Gas field bubbles 'like wild kettle.'* It was the first expose on the mysterious "Mrs. X," Lodene Clark. The Friends had got permission from Lodene for Sun reporter Harold Munro to contact her and to tell her story to the world.

"We have a dug well that has bubbled since 1970," she said. "The gas company knew darn well something was going on but they didn't have the decency to tell us we may be in danger."

A home video obtained by the Vancouver Sun shows Clark touring her farm with stops at a number of wells and drill sites that hissed and bubbled. She said a 15-metre well dug by her son burned continuously when lit and could only be extinguished with a heavy asbestos blanket.

The Vancouver Sun, Monday, September 17, 1990 ★★☆☆

Gas field bubbles 'like wild kettle'

The cornfields of Illinois farmer Lodene Clark are percolating with natural gas.

"Our whole fields are bubbling like a wild kettle," Clark, 61, said in a recent telephone interview from Long Point, Ill. "Any time we penetrate 10 feet down, we get an outflow of (natural) gas."

"The gas company doesn't deny the possibility exists that the house could explode at any time."

Clark's 80-hectare farm, about 150 kilometres from Chicago, rests on top of the largest aquifer natural gas storage facility in North America, possibly the world.

In B.C.'s Fraser Valley, three companies — B.C. Gas, Conoco and Dynamic Oil Ltd. — have applied jointly to the provincial government for permission to conduct exploratory gas drilling at three locations next year. Two of the exploration sites — Murrayville (232nd Street and Old Yale Road) and Campbell

On Saturday, Sun regional affairs reporter HAROLD MUNRO investigated gas firms' proposal to store billions of cubic feet of natural gas in aquifers beneath the Fraser Valley. While gas firm executives say the process has been updated and is safe, critics of the scheme in the Friends of the Fraser Valley group fear it could spark an ecological crisis. In this report, Munro talks to a U.S. farmer whose land sits atop North America's largest natural gas aquifer.

River (0 Avenue and 256 Street) — are in Langley while the third is in Delta, near the foot of 104th Street on Boundary Bay.

The Commission on Fraser Valley Petroleum Exploration, appointed by B.C. Energy Minister Jack Davis, completed three months of public and technical hearings into the drilling proposal recently. Commissioner David Anderson expects to make his recommendations to Victoria by the end of October.

Drawing on such ecological disasters as the one besetting the Illinois

cornfields, many Fraser Valley residents and politicians, including Langley Township Mayor John Beales, fear gas exploration and storage could pollute well water, the drinking water source for Langley Township.

The Ancona-Garfield field, operated by the Northern Illinois Gas Company since 1968, is about 700 metres underground and contains 375 billion cubic feet of gas in area stretching about 48 square kilometres. By comparison, storage in the Fraser Valley would likely not

exceed 80 billion cubic feet of natural gas and would be buried at least 1,200 metres in a six to 12 square-kilometre area, according to gas company spokesmen.

Clark moved from her Illinois farm many years ago, but fears for the safety of her son and his family who still live there. The gas company has offered to buy the land but Clark says she does not want to let them get away that easily.

"We have a dug well that has bubbled since 1970," she said. "The gas company knew darn well something was going on but they didn't have the decency to tell us we may be in danger."

A home video obtained by The Vancouver Sun shows Clark touring her farm with stops at a number of wells and drill sites that hissed and bubbled. She said a 15-metre well dug by her son burned continuously when lit and could only be extinguished with a heavy asbestos blanket.

The article lit an enormous public fuse, forcing David Anderson to write the following in his September 25 response letter to NDP candidate Darrill Thompson:

In question eight you ask why residents that live over a leaking storage field in the United States were not invited to attend as witnesses. I am assuming that you are referring to Ms. Lodene Clark. The short answer to that question is that the Friends of the Fraser Valley refused to have her. The long answer requires me to mention that after listening to the tapes from this lady, provided by the Friends of the Fraser Valley, Commission counsel offered to have the person come to Langley as a witness, but pointed out that there were some important regulatory issues involved, and that one witness on this problem would not be enough to get the full story. As an example, he wished to know why, assuming there was in fact a dangerous situation at the residence of the person's son, daughter-in-law and grandchildren, that they had continued to live there for the twenty years since 1970, and, if there was danger, what the regulatory authority and company had done or were doing about it, or, if they had done nothing, why they had done nothing.

He therefore told the Friends of the Fraser Valley, (who would not give him the name of the person, and asked that he not try to find out, a request he respected), that it was a public inquiry, that the witness would have to be sworn, and that other witnesses knowledgeable about the incident would have to be called as well. The Friends of the Fraser Valley did not find this acceptable, and did not

provide us with the lady's name. Thus she was not called. The decision was that of the Friends of the Fraser Valley. Later, after the technical hearings had ended, they provided the lady's name to the Vancouver Sun who printed it in the weekend edition of two weeks ago, thus making it known to approximately half a million people, including, of course, the proponents. Now that the information is public, I have made arrangements to visit the site in Illinois referred to, hopefully to speak to Ms. Lodene Clark and other residents in the area to speak to company officials of the Northern Illinois Gas Company, and speak to officials of the Gas and Oil Division of the Department of Mines and Minerals of the State of Illinois.

Glen Breaks has a different version to Anderson's statement, "Commission counsel offered to have the person come to Langley as a witness." MacAdams may have stated what Anderson said he said after the publication of the article in the Vancouver Sun, but before then, at the August 25 Preparatory session, he advised the Friends against inviting Lodene to British Columbia. And in the Commission notes for August 25, as already narrated, was the following: "She'd be foolish to testify."

Missouri

Here is what is stated in the Anderson final report about Missouri, with a footnote reference about a previous "Personal communication between Commissioner and Laclede Gas Company, St Louis, Missouri, 10 October 1990:"

The Commissioner visited the site of an underground propane storage facility in Missouri. The caverns used were mined specifically for the propane storage. It contains some 33 million gallons of propane, the energy equivalent of 2.9 billion cubic feet of natural gas. It appeared to have greater environmental risks, as propane has different and less attractive properties than natural gas both as a fuel and for underground storage. For technical reasons there appear to be few advantages in substituting underground storage of propane for underground storage of natural gas, particularly when such substitution can only handle a small percentage of peak requirements.⁷⁷⁰

What relevance, one might ask, was there in Commissioner Anderson visiting a propane storage facility in Missouri, wasting his valuable time and taxpayers' money?

Indiana

With respect to Anderson's visit to Indiana, there is no reference to such a visit in Appendix G, *Commission Field Trips*, of his final report:

8. Illinois: (a) State Regulators and Illinois Commerce Commission Representative, Springfield; (b) Ancona Gas Storage Facility, near Chicago.
9. Kentucky: (a) TXG Engineering, Commission Counsel visit, Owensboro.
10. Missouri: (a) Laclede Gas Storage Facility, St. Louis.

What would prompt the Commission to visit Indiana, which was only referred to or mentioned once in the two Anderson reports? In Glen Breaks' "List of some storage fields bearing a more thorough investigation" which the Commission had a copy of in a Commission file labelled "Glen Breaks,

⁷⁷⁰ Page 43.

Friends,” there is a reference to “Lake of the Woods, Indiana – Facility abandoned due to cap rock leakage.” Breaks’ notes were sourced from page 569 of Dr. Donald Katz’ book, *Natural Gas Engineering*, under a bold heading, “**Gas Penetrating the Caprock in Aquifers:**”

Fractures or other anomalies are believed to be responsible for the few incidents of caprock leakage that have occurred. Herscher (Illinois, Galesville) has a continuous recycle to gather shallow migrated gas, and other reservoirs recycle gas to lower the upper zone pressure or remove gas from shallow zones. Shale-to-shale faults hold gas, and sand opposite sand at faults provides complete transmissibility as shown at the Troy Grove aquifer.

Water-filled observation wells in the upper zone would display a pressure rise when gas enters the water zone. A few aquifers have been abandoned because of caprock leakage: two examples, Lake of the Woods in Indiana and Brooksville in Illinois, have been documented in an AGA monograph [1-38].

When gas percolates to the surface, it causes vegetation to be stunted or die. It appears to interrupt the capillary moisture-gas system. Figure 14-5 is a photograph of corn fields with gas migration through the soil. Instances are known where a water well point driven into the ground 2-3 ft gives enough gas to ignite a small torch.

This was the only clue found in the archive records about the Commission’s possible interest in Indiana.

Gas Migration

The photocopied page from Donald Katz’ book in the Glen Breaks Commission file contains serious information on the dangers of gas migration. As Breaks discovered, an integral part of Walter Rzepczynski’s “35 years of experience” was formed through his tutelage and mentorship with Dr. Donald Katz, who had recently died on May 29, 1989. Breaks, who became a part/full-time, self-made, volunteer student of the engineering technical field of underground gas storage, had a copy of the 700-page book, *Handbook of Natural Gas Engineering*, co-authored by Katz. On the top left column of the photocopied page 569 are the following scribbled notes made by Commission staff: “Asked Bob S. [Bob Spring, manager of the Fraser Valley Gas Project consortium] to check into fields and obtain reports if any.”

The following page in Katz’ book, page 570, has a photo, under figure 14-5, with the caption, “Gas in soil preventing corn growth in localized area [Katz & Coats, 1-2],”⁷⁷¹ showing a small patch from a large corn field with the foreground part of the corn field dead and damaged.

Sixteen pages later, from pages 586 to 587, Katz discusses the consequences of gas migration from underground gas storage facilities at some length, information that originally stirred and stimulated Glen Breaks about the dangers of underground gas storage, information which he presented to the Commission, to the B.C. Utilities Commission, and to the media:

A 30-to-50-Year Lifetime for and Underground Gas Storage Reservoir. From this time perspective, there is a reasonable possibility that over this period, gas from some of the wells will leak through the casing or cement to enter zones above the intended storage zone. A concern is that

⁷⁷¹ Katz & Coats reference, Katz, D. L. and K. H. Coats, *Underground Storage of Fluids*, Ulrich’s Book Store, Ann Arbor, Michigan (1968), was stated in Katz’ book as “recommended reading.”

this gas eventually might reach water supplies and appear in the local user's water. Gas might even permeate the soil at the surface and enter homes or buildings to provide explosive mixtures.

ASKED
BOB S. TO
CHECK INTO
FIELDS
OBTAINING
REPORTS
IF ANY

Commission
Staff Notes
on copy of
Glen Breaks'
photocopy from
Katz's book

MONITORING, INVENTORY VERIFICATION, DELIVERABILITY ASSURANCE, AND SAFETY

569

GAS MIGRATING PAST SPILL POINTS. Reservoirs with moderate or high rock permeability ($k > 25$ md) may have gas pressing toward spill points, Figs. 14-1 and 14-2, as the end of the injection cycle is reached. Observation wells on such a route should detect the presence of migrating gas. This loss mechanism can attain high rates with no surface indications, especially when there are insufficient observation wells.

Gas may go down the axis of a reservoir structure when there is a high permeability for the crestal rock zone. In water drive carbonates, the permeability along the crest may be high, allowing water to move more easily, and gas to go along with water below the general gas-water interface within the bubble. Even sand deposits exhibit this phenomenon [14-15].

It is believed that any gas that passes a well completion will be detected by gas bubbling up through a water column of the observation wells.

GAS PENETRATING THE CAPROCK IN AQUIFERS. Caprocks for depleted gas or oil fields are believed to have proven seals at the discovery pressure level. However, aquifer caprocks need to be tested by gas injection as well as by core tests (Chapter 2).

Fractures or other anomalies are believed to be responsible for the few incidents of caprock leakage that have occurred. Herscher (Illinois, Galesville) has a continuous recycle to gather shallow migrated gas, and other reservoirs recycle gas to lower the upper zone pressure or remove gas from shallow zones. Shale-to-shale faults hold gas, and sand opposite sand at faults provides complete transmissibility as shown at the Troy Grove aquifer.

Water-filled observation wells in the upper zone would display a pressure rise when gas enters the water zone. A few aquifers have been abandoned because of caprock leakage: two examples, Lake of the Woods in Indiana and Brooksville in Illinois, have been documented in an AGA monograph [1-38].

When gas percolates to the surface, it causes vegetation to be stunted or die. It appears to interrupt the capillary moisture-gas system. Figure 14-5 is a photograph of corn fields with gas migration through the soil. Instances are known where a water well point driven into the ground 2-3 ft gives enough gas to ignite a small torch.

GAS MOVING DOWNWARD TO ZONES BELOW. Gas on occasion moves downward to a deeper zone for two possible reasons. In water-confined gas bubbles, water movement from the well takes place more easily in a deeper zone because of its high permeability (Fig. 14-6a). The second reason is that a low-pressure reservoir in a deeper horizon may provide a pressure sink to attract gas via incompletely cemented wellbores penetrating both a storage zone and the low-pressure zone below (Fig. 14-6b).

In developed aquifers on thick zones like the Mt. Simon in Illinois, there are thin layers of shale that have considerable but not complete continuity. Using delta pressures of 200 or 300 psia (1.38-2.07 MPa), gas may find a route downward

NAME
NOM

GLEN BREAKS
FUND'S

No.

7142
SEPT 6

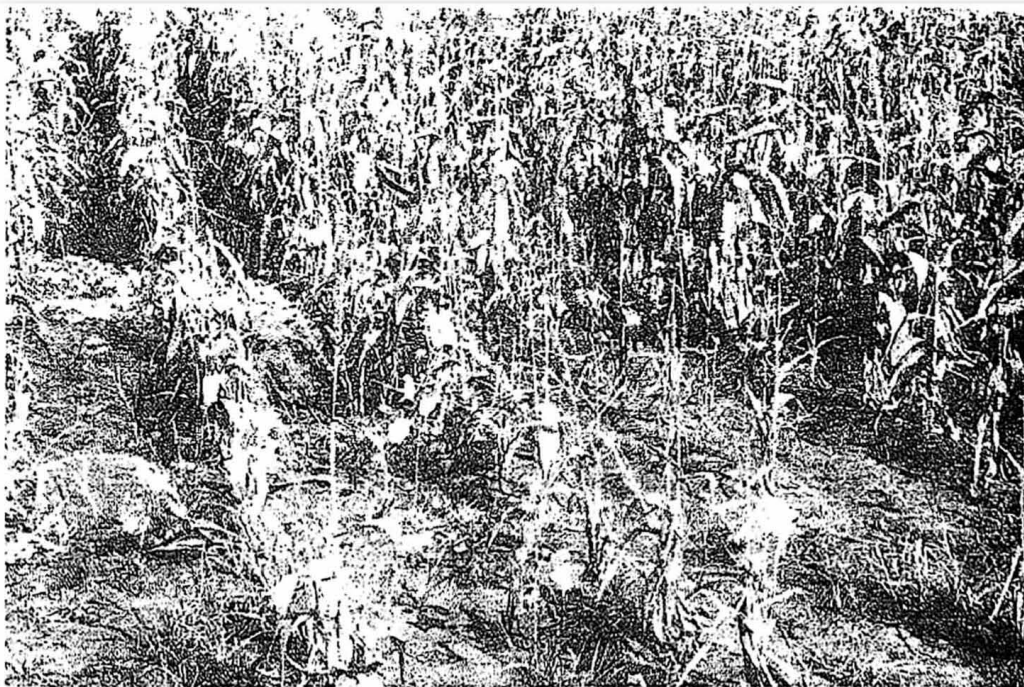


FIGURE 14-5 Gas in soil preventing corn growth in localized area [Katz & Coats, 1-2].

Above: photo from page 570 in Katz’s 1990 book, *Natural Gas Engineering*. Below, similar image of corn crop damage from gas migration caused from a leaking underground storage facility in Illinois, the image copied from an October 13, 2020 WCIA television feature on gas migration, part of a special series “Clear and Present Danger” (see Section 5-25 of this report on the story).



Many precautions are taken to minimize and hopefully eliminate such gas leakage, but it is foolhardy to say that such leakage will not occur in a reservoir being developed with a projected 30-to-50-year lifetime. The question then may be raised as to what policies and activities should be carried on by the gas storage organizations to minimize the hazards to people and property involved, both the public and workers associated with the storage project. The gas storage industry has a good safety record with few serious accidents.

Land Use Plan. A variety of arrangements are made between the land owner and the gas storage - operator relative to the land use. Some portion of the land is normally purchased by the gas storage operator to be used for plant sites or, in some cases, the entire surface may be purchased. Storage rights for the underground strata may be purchased along with rights of ingress and egress for pipelines and wells. For agricultural use, the latter procedure seems appropriate, provided attention is paid to water supplies and particularly the basements of the homes in the area of the gas storage reservoir. Would gas entering the water supply of a given residence cause combustible gas mixtures to accumulate in the home and provide a hazard? Double-tank pump systems with intermediate venting may be used. It would be preferable to have the homes on concrete pads without basements, and this type of new construction might be well advised in gas storage areas. Monitors in basements that would detect low concentrations of natural gas could possibly be installed to provide adequate warning before gas reached the explosive limit, should gas ever enter a basement.

On occasions, gas has bubbled through low ditches or ponds and permeated the soil, causing damage to vegetation. However, adequate recompense can be made for such damage and it is not the type of hazard of concern here, since the presence of the gas would be obvious, permitting corrections and the recompense.

Managers of gas storage fields adjacent to villages or cities should be concerned if subdivisions are planned in the storage area, or close enough to wells so that any leak is as likely to cause an incident in a home as to be detected by the monitoring procedures. Would it be possible to include an agreement in the purchase of the storage zone that the land would not be converted from agricultural to residential use? Probably not, but many operators learn to cope with urbanization of storage field areas by monitoring.

Recommended Policies. It is recommended that a policy of storage acquisition and operation be followed to permit the maximum control over hazards should some leak occur in the storage field. A monitoring procedure with annual review of the situation in each field should be followed, with all parties to the storage operation in attendance. Follow-up checks should be made to see that decisions from the review meetings are carried out. Likewise, attention should be given to casing strings, annulus pressures, and corrosion in wells. Review of pressure observations in the monitoring of water zones above the storage level also is important and should continue with a high level of precaution.

Ownership of the land by the storage operator, with subleases for agricultural use or other appropriate land uses, appears to be a good policy when it does not bear an undue economic burden. Acquisition of land in the storage area might be carried out for fields currently in operation. Any land in the storage area that enters the market through the normal course of events might then be procured, especially if there are residences near any facilities. Education programs for the residents of the area, along with monitoring of water streams, is important. Early reporting of any unusual

happenings that might be construed as evidence of gas in the soil or water should be encouraged, and appropriate means for this reporting should be provided.

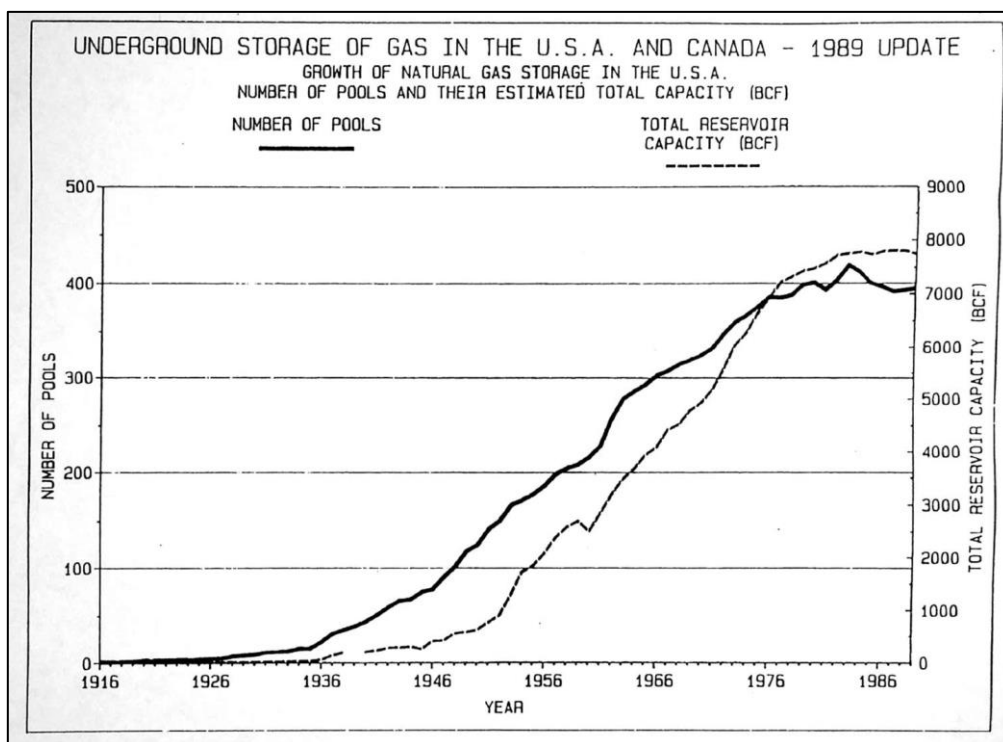
This information, when paired together with Walter Rzepczynski's sentence – that underground gas storage "should, if possible, be away from any populated area and not overlain by any coal mine, other strip mine or water body" – is a powerful and significant conclusion, the same corroborating conclusion published in the January 11, 1993 edition of the *Journal of Petroleum Science and Engineering*: "experience has shown that gas storage facilities can create a serious risk of explosion and fire and should not be placed under urban settings."⁷⁷²

The American Gas Association Paper

B.C. Gas Inc. sent the Anderson Commission a copy of the American Gas Association's May 1990, 29-page, *Engineering Technical Note document on Underground Storage of Gas in the U.S. and Canada – 1989 Data*. It was the Association's Underground Storage Committee's "39th Annual Report on storage statistics, prepared by the Task Group on Underground Gas Storage Statistics under the chairmanship of William C. Fay, Union Gas Limited." The succeeding 1989-1990 chairman of the Committee was Charles H. Becker. The data was "furnished by 80 companies in the United States and Canada." In this historical assessment document, by December 1989 Canada had 28 operating facilities with a "total capacity" of 0.504 Tcf of gas, and the United States with 395 operating facilities with a "total capacity" of 7.737 Tcf of gas!

The Anderson Commission discussed the May 1990 annual report at the Tuesday, September 4 technical hearing when Doug MacAdams examined witness Kentucky-based TXG Engineering president Howard Griffith.⁷⁷³ According to his resume, Griffith was an active member of the American Gas

Association and stated to the Commission that he had been "on the American Gas Storage Committee, and gas research."⁷⁷⁴ In Walter Rzepczynski's affidavit of October 8 for Commissioner Anderson's



⁷⁷² *Journal of Petroleum Science and Engineering*, 9 (1993), pages 223-238.

⁷⁷³ Pages 1158 following, *Proceedings*, Volume 6.

⁷⁷⁴ *Ibid.*, page 1246.

separate Allegations Inquiry, he states that he was also a “member of the American Gas Association and have served as [its] Chairman of the Underground Natural Gas Storage Committee.”

The 1989 annual report states that the first storage facility experiment began in 1915 in Welland County, Ontario. That experiment “prompted Iroquois Gas Company to apply the same principle in 1916 in the depleted Zoar Field south of Buffalo, New York.” In 1919, the Central Kentucky Natural Gas Company “repressured the depleted field Manifee Gas Field in Kentucky.” And the United Natural Gas Company started the Queen reservoir in Forest County, Pennsylvania in 1920. “By the end of 1930, there were a total of 9 pools in 6 states with a total capacity of 18 billion cubic feet.” And “during the war period, 24 new reservoirs were added for a total of 75 pools in 14 states, with a storage capacity of 416 billion cubic feet.”

Storage in combination oil and gas reservoirs was first developed by Hope Natural Gas Company in 1941 at its Fink Field in Lewis and Doddridge Counties, West Virginia. The first successful gas storage in an oil reservoir was accomplished in 1954 by Lone Star Gas Company in its New York City field in Clay County, Texas. Storage in salt caverns was first developed in 1961 in St. Clair County, Michigan; and in 1959, a coal mine near Denver, Colorado, was used for gas storage.

STORAGE FACILITY DATA - as of 12/31/89 (All volumes in MCF @ 14.73 psia - 60 F)												
STATE	NUMBER OF COMPANIES	NUMBER OF RESERVOIRS	NUMBER OF WELLS			NUMBER OF COMPRESSOR STATIONS					NEW CONSTRUCTION	
			INPUT AND/OR OUTPUT	PRESSURE CONTROL AND/OR OBSERVATION	TOTALS	INPUT ONLY	OUTPUT ONLY	INPUT AND OUTPUT	TOTALS	COMPRESSOR STATION HORSEPOWER	NO. OF RESERVOIRS	ESTIMATE ULTIMATE CAPACITY
Arkansas	1	4	11	0	11	3	0	0	3	2,500		0
California	2	9	330	88	418	10	0	0	10	118,580		0
Colorado	5	12	163	75	238	1	0	8	9	35,428		0
Illinois	8	34	1,110	585	1,695	13	3	11	27	199,570		0
Indiana	7	28	683	233	916	6	2	6	14	18,745		0
Iowa	2	8	314	121	435	0	0	4	4	14,000		0
Kansas	5	16	640	93	733	0	8	6	14	33,210		0
Kentucky	6	20	756	201	957	4	3	8	15	36,290		0
Louisiana	6	8	233	72	305	1	0	5	6	115,460		0
Maryland	1	1	75	7	82	0	0	1	1	11,000		0
Michigan	9	48	2,492	453	2,945	22	2	37	61	329,210	1	12,000,000
Minnesota	1	1	19	44	63	0	1	0	1	3,000		0
Mississippi	4	4	84	13	97	0	0	2	2	24,900		0
Missouri	1	1	50	32	82	0	0	1	1	8,850		0
Montana	2	5	217	23	240	0	1	10	11	24,225		0
Nebraska	1	2	30	39	69	0	2	11	13	10,690		0
New Mexico	3	3	35	8	43	4	0	1	5	13,180		0
New York	7	21	925	93	1,018	3	0	11	14	30,960		0
Ohio	3	22	2,984	258	3,242	2	2	14	18	107,490		0
Oklahoma	8	12	203	103	306	2	1	5	8	78,150		0
Oregon	1	2	9	9	18	0	0	1	1	3,600		0
Pennsylvania	9	63	1,606	468	2,074	2	0	18	20	56,823		0
Texas	7	22	282	49	331	15	2	8	25	109,257		0
Utah	1	2	10	9	19	2	0	0	2	1,350		0
Washington	1	2	31	46	77	0	0	1	1	12,500	1	25,000,000
West Virginia	5	37	1,216	360	1,576	0	0	16	16	53,320		0
Wyoming	3	8	24	12	36	1	0	9	10	10,683		0
TOTALS		395	14,532	3,494	18,026	91	27	194	312	1,462,971	2	37,000,000

In the document's "chronological list of each storage state with its first storage reservoir," it states that Illinois' first underground storage facility began in 1959, the "Waterloo" facility. Of the 27 American States on its list, California's first "Buena Vista" facility began in 1928, and the Oregon State Mist and the Washington State Jackson Prairie facilities were among the last. Shown in a graph, Table 1, from 1947 until 1980 there was a steep rise in the creation of underground gas storage facilities, with the addition of 300 facilities.

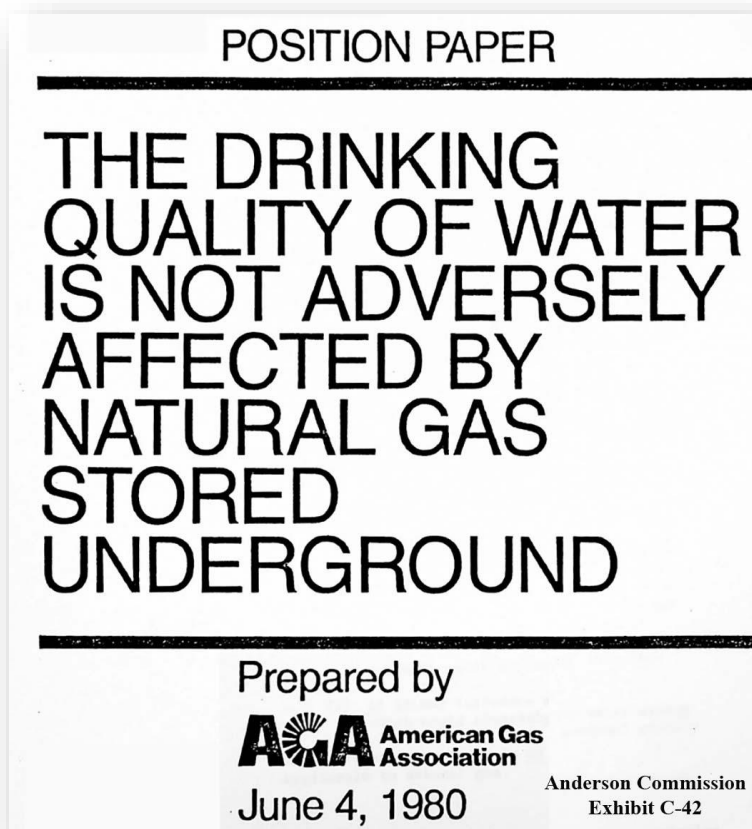
By 1989, a total of 85 companies were in control of 395 "pools" or storage facilities in the United States. For these 395 pools, there were a total of 18,026 wells, of which 14,532 were injection and withdrawal wells ("input and/or output"), and 3,494 of which were "pressure control and / or observation" wells. Of the 395 storage pools operating in 1989, with individual States with over 15 storage facilities: Pennsylvania had 63; Michigan, 48; West Virginia, 37; Illinois, 34; Indiana, 28; Ohio, 22; Texas, 22; New York, 21; and Kansas, 16. In these nine States, out of the total 27 States with underground facilities, were a grand total of 271 facilities. Of this higher category of State facilities, David Anderson would visit three: Michigan, Illinois and Indiana, the last of which he failed to reference in his final report.

One of the Anderson Commission's exhibits, C-42, was a copy of the American Gas Association's June 4, 1980, Position Paper, with the questionable title, *The Drinking Quality of Water is Not Adversely Affected by Natural Gas Stored Underground*. In a two-page statement by American Gas Association president George H. Lawrence, he states that the position paper was written in response to new regulations by the U.S. Environmental Protection Agency (EPA) enacted on May 19, 1980, "under the Safe Drinking Water Act which will drastically affect the natural gas industry:"

These regulations, which were published on May 19, 1980, were proposed to prevent underground injection of fluids that endanger drinking water.

But, in interpreting the statute, EPA's regulations swept in pipeline quality natural gas which is injected underground merely for storage.

Compliance with the regulations will be burdensome and costly. These unnecessary and unjustified costs, which will be paid by gas consumers, will not provide any additional protection for underground sources of drinking water. Underground storage of natural gas does not endanger drinking water.



STATEMENT OF THE AMERICAN GAS ASSOCIATION ON
PROPOSED REGULATIONS FOR STATE UNDERGROUND INJECTION CONTROL PROGRAMS

The American Gas Association (A.G.A.) represents some 300 natural gas distribution and transmission companies serving over 160 million consumers in all 50 states. These companies account for nearly 85 percent of the nation's natural gas utility sales. The Environmental Protection Agency has issued regulations under the Safe Drinking Water Act^{1/} which will drastically affect the natural gas industry. These regulations, which were published on May 19, 1980, were proposed to prevent underground injection of fluids that endanger drinking water.^{2/} But, in interpreting the statute, EPA's regulations swept in pipeline quality natural gas which is injected underground merely for storage.

Underground storage is a vital component of the natural gas industry. Association statistics indicate that the gas industry operates 399 storage fields containing 17,605 storage wells. Total storage capacity at the end of 1979 was 7.437 trillion cubic feet of natural gas.^{3/} During the 1978-79 winter heating season, the industry's underground storage capacity enabled it to meet a peak day demand of 39.7 Bcf smoothly and without disruption. The quantity of gas taken from storage on that day has the heating equivalent of 6.6 million barrels of oil.^{4/}

Compliance with the regulations will be burdensome and costly. These unnecessary and unjustified costs, which will be paid by gas consumers, will not provide any additional protection for underground sources of drinking water. Underground storage of natural gas does not endanger drinking water.

The Safe Drinking Water Act clearly says that underground injection endangers drinking water only:

- (1) if it may introduce a contaminant into a public water system which could cause that system to violate any national primary drinking water regulation; or
- (2) if it may introduce a contaminant into a public water system which could adversely affect human health.

In the first case, there is no national primary drinking water regulation applicable to natural gas.

Anderson Commission, Exhibit C-42

The Safe Drinking Water Act clearly says that underground injection endangers drinking water only: (1) if it may introduce a contaminant into a public water system which could cause that system to violate any national primary drinking water regulation; or (2) if it may introduce a contaminant into a public water system which could adversely affect human health.

In the first case, there is no national primary drinking water regulation applicable to natural gas.

A.G.A. also believes that natural gas in drinking water would not adversely affect health in any way. Natural gas exists naturally in some underground drinking water sources used as municipal,

household, and livestock water supplies without harmful effects. In fact, one state's Geological Survey classifies an underground water source in which natural gas is found as a most important aquifer.

In order to assure the public that natural gas does not endanger drinking water, A.G.A. commissioned Midwest Research Institute (MRI) to study independently the impacts of natural gas on drinking water. The study was published June 30, 1978. It found that methane or natural gas dissolved in drinking water does not endanger human health.

As an extra safety measure, A.G.A. later commissioned MRI to update its 1978 study. The results of this latter study were published on June 4, 1980. A copy of the MRI study is attached. After a thorough search and evaluation of all the available literature, the independent researchers concluded that natural gas does not react with any constituent of water in any way that endangers drinking water.

A.G.A. also believes that natural gas in drinking water would not adversely affect health in any way. Natural gas exists naturally in some underground drinking water sources used as municipal, household, and livestock water supplies without harmful effects. In fact, one state's Geological Survey classifies an underground water source in which natural gas is found as a most important aquifer.^{5/}

In order to assure the public that natural gas does not endanger drinking water, A.G.A. commissioned Midwest Research Institute (MRI) to study independently the impacts of natural gas on drinking water. The study was published June 30, 1978. It found that methane or natural gas dissolved in drinking water does not endanger human health.^{6/}

As an extra safety measure, A.G.A. later commissioned MRI to update its 1978 study. The results of this latter study were published on June 4, 1980. A copy of the MRI study is attached. After a thorough search and evaluation of all the available literature, the independent researchers concluded that natural gas does not react with any constituent of water in any way that endangers drinking water.

A.G.A. feels that these studies show conclusively that underground injection of natural gas for storage does not, and cannot, endanger drinking water. We feel that there is absolutely no reason to subject natural gas consumers to the costs of complying with the EPA's Safe Drinking Water Act regulations when drinking water will not be made one iota cleaner or safer.

Sincerely,



George H. Lawrence

FOOTNOTES

Anderson Commission, Exhibit C-42

^{1/} 42 U.S.C. §300h.

^{2/} 45 Fed. Reg. 33290 et seq. (May 19, 1980) Consolidated Permit Regulations.

^{3/} The Underground Storage of Gas in the United States and Canada, The Underground Storage Committee, A.G.A., XU0680 (December 31, 1979).

^{4/} 6.6 million represents an average of 6.9 million barrels of distillate and 6.4 million barrels of residual fuel oil.

^{5/} "Ground-water Resources of Adams and Bowman Counties, North Dakota," M. G. Croft, U.S. Geological Survey, Bulletin 65 - Part III, North Dakota Geological Survey, 1978, pp. 1 and 25.

^{6/} The extremely low solubility of natural gas limits the amount of methane that a person can conceivably ingest from drinking water. Some people actually produce methane in their bodies. Such a person can exhale over 5.5 times more methane than that person could ingest from drinking water, even assuming he/she drank 56 oz. of methane-saturated water daily.

A.G.A. feels that these studies show conclusively that underground injection of natural gas for storage does not, and cannot, endanger drinking water. We feel that there is absolutely no reason to subject natural gas consumers to the costs of complying with the EPA's Safe Drinking Water Act regulations when drinking water will not be made one iota cleaner or safer.

The correct title of the June 4, 1980, report, MRI Project No. 4953-G, for the American Gas Association was *The Effects of Natural Gas on Drinking Water Sources*, and not the misleading title of the Association's introductory page, *The Drinking Quality of Water is Not Adversely Affected by Natural Gas Stored Underground*. The report was signed by L.J. Shannon, executive director of Environmental and Material Sciences Division with the Midwest Research Institute, on May 28, 1980.

The Midwest Research Institute, headquartered in Kansas City, was eventually renamed as MRI Global, which presently conducts contracts on “applied scientific and engineering research.” According to Wikipedia, it “is an independent, not-for-profit, contract research organization,” and now has “regional offices in Virginia and Maryland” and “Palm Bay, Florida” and “operates research facilities for the Department of Energy and the Department of Defense.” Wiki also states that MRI was “founded in 1944” and set up shop in Kansas City by 1955, and that “in the 1970s, the organization began working for the U.S. Environmental Protection Agency developing tests to detect and measure pollutants.” For instance, a February 8, 1978, article in the St. Joseph News-Press from St. Joseph Missouri, *Water here to be tested for cancer-causing agents*, states that MRI had “sophisticated equipment” to accurately test for water contamination. In May 1979, MRI's board of trustees awarded it's 1979 Citation to CBS Evening News television anchor Walter Cronkite “for his devotion to the people's right to know,” as Cronkite “once sold newspapers on a Kansas City street corner.”⁷⁷⁵

The *Introduction and Background* section of the report states that:

The American Gas Association (A.G.A.) in 1977 requested Midwest Research Institute (MRI), a research consultant, to conduct a study addressing “Impacts of Natural Gas on Drinking Water Quality and Human Health” (A.G.A. Contract No. PR-138-99, June 1978). Conclusions regarding the human health effects of natural gas in drinking water sources as found in MRI's June 1978 report were:

1. The observed levels of methane in various waters under varying environmental conditions range from zero to several hundred parts per million. The solubility of methane in water at normal pressure and human temperature (37°C), however, is only about 16 ppm (w/w). At this concentration, a human would have to drink approximately 5.5 times the normal amount of water saturated with methane in order to consume an amount of methane equal to that normally exhaled in the breath of many humans.
2. Information in the literature indicates that methane or natural gas dissolved in drinking water poses no toxic hazard to the human population.

The A.G.A. in January 1980 requested MRI to update the initial human health effects study with regard to interactions of natural gas with constituents in water, and to determine whether these interactions might be construed to cause “endangerment” of drinking water sources. MRI and A.G.A. agree that it is not the purpose of this report to address the applicability of the Safe Drinking Water Act (Act) or Section 1421(d) of the Act to natural gas storage operations. The report limits its inquiry to the narrower factual question, does or could natural gas react with any constituent in underground sources of drinking water that could “... adversely affect the health of persons.”⁷⁷⁶

⁷⁷⁵ *Intelligencer Journal* (Lancaster, Pennsylvania), May 12, 1979, page 2.

⁷⁷⁶ Asterisks in the quote above referenced Section 1421(d), and (PL-93-523 [42 USC, 300 h (d), Supp 1979]), of the Safe Drinking Water Act.

The evaluation of the literature has led the MRI reviewers to the **general conclusion** [bold emphasis] that underground storage of natural gas will not adversely affect the health of persons.

The reviewers did find, however, two papers, the first by S. F. Gudkov, All-Union Scientific Research Institute of Gas, Ministry of the Gas Industry USSR (A-9) and the second by K. I. Lukashev and A. V. Kudelsky, Main Administration of the Gas Industry, Minsk, Byelorussian SSR (A-12), which suggest a potential problem might exist if the natural gas came in contact with sulfate containing waters. The papers are nearly identical in their statements. In this regard, Gudkov speculates that "... in areas of artificially created gas storages ... the relative shallowness ... and the high pressures inside them" that the sulfate can be microbially reduced to hydrogen sulfide rendering the water "... unsuitable for water supply." The authors present no documentation that such a reduction has actually been observed. Although the problem may exist in theory, the MRI reviewers believe that artificially created gas storage sites or other special conditions are essential to cause the sulfate to sulfide reduction to occur in natural storage reservoirs. These circumstances and conditions do not exist with respect to natural gas storage in the United States.

In the MRI eight-page report's conclusion: "After examining all available data, MRI concludes that natural gas will not react with any constituent in drinking water in a way that could adversely affect the health of persons."

Ten years before the B.C. government invoked the Anderson Commission on Fraser Valley Petroleum Exploration, the largest natural gas industry lobby group, the American Gas Association (and with its partner, the Canadian Gas Association ⁷⁷⁷) promoted that there were no dangers of underground storage areas to "drinking water." In fact, in the 1980 AGA position paper, there is almost no discussion of "gas migration." The only such references somehow pertain to "Russian authors," who "have postulated theories concerning the diffuse migration of natural gas stored in shallow, high-pressure, artificially created underground storage cavities." MRI researchers included no references to the plethora of American gas migration incidents over time, be they reported, verbally stated, or ignored. Perhaps there were instructions to MRI, either verbally or written, to ignore a thorough investigation of gas migration incidences in the recent operational history of American, Canadian and international underground gas storage facilities.

⁷⁷⁷ Patrick Lloyd, the senior vice president of B.C. Gas, an Anderson Commission technical witness on September 4, 1990, was a "director of the Canadian Gas Association, a member of the Legal Advisory Committee of the Pacific Coast Gas Association, and a member of the Law Society of British Columbia." (Source, Proceedings, Volume 6, page 1020.) For the Preparatory sessions, BC Gas included submission BCG-16, a December 1989 position paper and backgrounder by the Canadian Gas Association and the Ontario Gas Association, *Natural Gas and the Environment*.

*The Commission undertook an extensive seven-week investigation in both Canada and the United States to determine whether the allegations had any basis in fact. The investigation of these allegations took longer than expected or necessary by reason of The Friends of the Fraser Valley's refusal to co-operate with the Commission. The Commission found no reliable evidence that information of interest to it had been withheld, or that any civil servants who appeared at the technical hearings did not testify in a truthful and honest manner. The Commission concludes that the allegations of the Friends of the Fraser Valley are fabrications and without truth. No further action on these allegations is recommended.*⁷⁷⁸

*I should add however, that it has stopped this inquiry dead in its tracks. Nothing can be done by me in the way of preparing my report until this matter is cleared up one way or another.*⁷⁷⁹

*"What is important is that this is the level these people will stoop to get their own way."*⁷⁸⁰

October 19, 1990, Friday, the last working day of the week and three days before the *Witness Tampering* Hearing, David Anderson, who had a law degree, wrote a lengthy note to Commission counsel Douglas MacAdams with instructions and recommendations on how the October 22nd Hearing should proceed. The following are the contents of his entire "Note to Doug MacAdams:"

I have thought over the idea of introducing news clippings suggesting the Commission's reputation has suffered as a result of malicious misinformation, but I have concluded it may not be a good approach.

The basic objection is that it raises new issues to those we advertised would be considered at the hearing. This could lead to procedural objections, or to those who report the meeting stressing a concern over reputation rather than the more important issues of making false accusations, and of criminal activity by those who will be providing affidavits. Further, if there is any stress on an inquiry into attacks on the credibility of the Commission, the issue of who should look into that issue might arise. This again could lead to procedural objections. It is important for you to control the agenda, not those making procedural points.

I think instead we should try to limit the hearings as far as possible to the two advertised issues of potential witnesses being suborned (and we must add that potential witnesses of course includes those who might provide the FFV [Friends of the Fraser Valley] and thus ourselves with information relevant to the work of the Commission), and of the allegation that civil servants testified untruthfully.

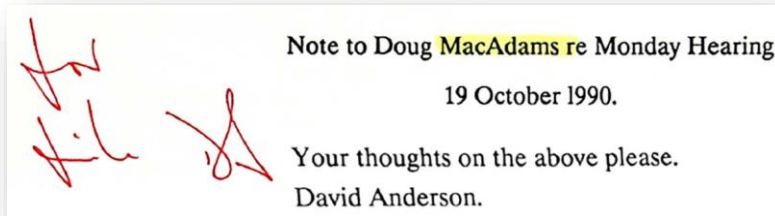
Both these issues are clearly within our competence, and even the most hostile of weekly newspaper editors should be able to understand that. First, there is no question of someone else carrying out such a hearing, because the two issues are directly pertinent to what I have been commissioned to look into. Further, as there has been no affidavit or testimony on oath taken which supports such

⁷⁷⁸ *Special Report on Allegations of Witness Tampering at the Commission Hearings*, November 1990, page 7.

⁷⁷⁹ Quote from David Anderson, from a letter of reply to Darrill Thompson's letter of September 25, 1990.

⁷⁸⁰ *Man told of gas danger won't talk at hearing*, Vancouver Sun, October 15, 1990, quote by Glen Breaks.

allegations, no judge would accept a request from the Commission to look into the issue; he or she would have nothing to go on. The Commission alone has the interest in this matter by virtue of the instructions given to me pursuant to the Inquiry Act.



Assuming there is a procedural challenge, you may not want to mention the second reason outlined above, as it may encourage someone to get up and state that they do have evidence. While we of

course would want such evidence if it exists (after all, that is the purpose of the hearing), someone getting up early on in the hearing with such a claim may throw out your timetable. On the other hand, if a person does get up but does not provide evidence, that person can be nailed. They have been warned to come and to be prepared to give testimony, and if they claim that they have left a document at home, or whatever, you can go after them. However it wastes time, it may result in you not controlling the proceedings, and I think it is best avoided.

In my view we must introduce some basic evidence fairly early. To the best of my knowledge we can accept Mrs. Breaks' 4 September statement as a matter of record - - David Fenn will check, but I believe it is on the transcript, and no material part of the transcript departs from the press release. Then you will have to introduce clippings, from the Chilliwack paper, where Al Vickers repeated the charges. Then there will be letters you have written to Mrs. Breaks and to Al Vickers. Perhaps you could read the one that you sent to Al into the record, and state that the others were to the same effect. Next would come the second FFV news release, which also requires a newspaper story indicating that it was genuine and from the Friends. Following that there should be the Glen Breaks letter of yesterday.

I then suggest you pause, and I will ask you how you intend to proceed. You could reply that you wish to deal with the matter on which we have the most information, which is the Rzepczynski affair. You could then read into the record the two U.S. affidavits, and any other pertinent information.

Next, having dealt with Glen Breaks, you return to the first press release. You might say that we have dealt with Mr. Breaks allegations, but note that he was careful in his letter of yesterday to distance himself from the accusations made by his wife. You then go through the other affidavits of B.C. Gas, Conoco, and Dynamic. Remember we want a witness on the stand from each company, and we want Bob to speak for the consortium as a whole as well. Each will be questioned separately about Wyoming, Michigan, and Washington, as well as Indiana, Kentucky and California (we want to indicate that our inquiries have been thorough). When questioning you will be referring back and reminding people of the language of the two press releases. When you are through, the Friends should realize the extent of their allegations.

Next, perhaps after coffee, we switch to the civil servants. This will be brief; just one civil servant presenting and reading the affidavits of the others.

Following that I suggest we go over the letters received that have indicated that no evidence has been found. Not all need to be read, and not all of each letter needs to be in the record, but there should be a thorough sampling.

I then ask for any other person with information on the two matters or any other matter of importance to the Commission to step forward and take the oath. If there are none, I turn to you.

Then I suggest you make a very quick summary, outlining the gravity of the allegations made. Make clear that criminal charges are not my responsibility, that we are only interested in the issue from the point of view of the Commission's mandate. Suggest that a report or definitive statement by me is required, particularly in the light of the constant irresponsible repetition by the press of allegations for which there is not the slightest evidence. Outline to me that slander and libel is not my concern either, but is the responsibility of the civil courts. However from the point of view of the Commission, a definitive statement is required on the matter, even though a civil action might go over the same ground.

I agree with you that this matter is extremely grave, and that it was therefore thoroughly looked into. I indicate that I am appalled by the irresponsible and malicious allegations, and wish to apologize on the part of the Commission and all fair minded and honest British Columbians for the quite outrageous allegations to people in other countries. I end by stating that I will consider your suggestions as to how to end this matter.

We then adjourn.

Two days later I send a two-page interim report to the Minister pointing out that while many FFV executive members are no doubt honest people with legitimate concerns, the FFV has issued irresponsible and malicious falsehoods, is clearly led by persons with no regard for the truth, people whom I can no longer deal with effectively by reason of their vicious campaign of personal vilification and mendaciousness. I add a philosophical note about the role of private interest groups in the decision-making process, and point out that if private interest groups cannot act responsibly, it will become impossible to effectively incorporate the concerns of the public into the government process. I make it clear this issue is more important than this individual commission.

Your thoughts on the above please.

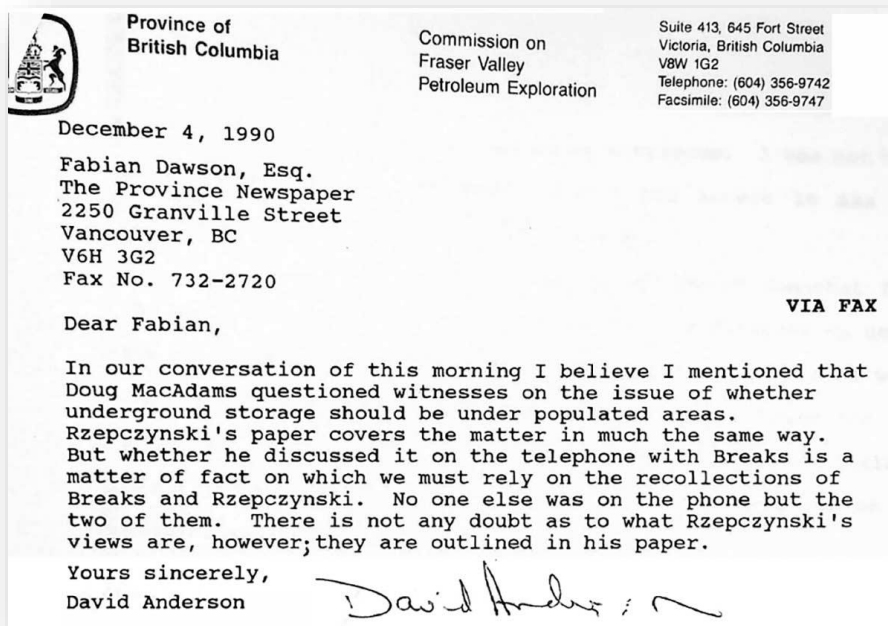
The inference to be made in his lengthy note to counsel MacAdams is that in Commissioner Anderson's mind – barring impromptu information popping up – the outcome of the upcoming October 22nd Hearing was already a foregone conclusion. Anderson required a satisfactory result in order to finish his final recommendation report to the government.

The case made by Glen Breaks, that his professional source had been compromised, was not the focus of the Hearing. The focus was on a witch hunt of multiple ghosts that had been 'leaned on' in B.C., Alberta, and in multiple American States. If the Commission had taken Breaks' and the Friends' statements seriously **that only one party was 'leaned on,'** it would have ordered Walter Rzepczynski and Howard Griffith to appear at the hearing for careful cross-examination. Instead, the Commission relied upon sworn affidavits couriered to the Commission by both of those parties, and upon Anderson's and MacAdam's private conversations with Rzepczynski during the Commission's special trip to Illinois (discussed in Section 5-22).

Some six weeks later, on December 4, 1990, after an interview with a Vancouver Province news reporter investigating the matter, Anderson admitted the following in a follow-up fax message to the same reporter:

In our conversation of this morning, I believe I mentioned that Doug MacAdams questioned witnesses on the issue of whether underground storage should be under populated areas. Rzepczynski's paper covers the matter in much the same way. But whether he discussed it on the telephone with Breaks is a matter of fact on which we must rely on the recollections of Breaks and Rzepczynski. No one else was on the phone but the two of them.⁷⁸¹

Anderson's admission stated in the faxed response letter calls into question the strong statements he wrote in pages 13 to 19 about Breaks and Rzepczynski in his *November 1990 Special Report on Allegations of Witness Tampering at the Commission Hearings*.



Leading up the October 22 Hearing were numerous newspaper stories featuring interviews with Glen Breaks and David Anderson. In the Monday, October 15, 1990, edition of the Vancouver Sun, *Man told of gas danger won't talk at hearing*, an interview with Breaks:

"In my opinion (the public hearing) is a charade. I have already given them the evidence I have and it's just a few people that know about this and that's me, B.C. Gas and a few key people." Besides, he says, "a guy who has been silenced is not going to come forward and say 'I've been silenced'."

Breaks said the Illinois-based gas company employee who provided him with considerable information about the hazards of natural gas aquifer storage stopped communicating with him after getting a call from a consultant with for B.C. Gas Inc. and a letter from a B.C. Gas lawyer. The employee subsequently wrote to the consultant, denying he ever discussed the dangers of aquifer storage with Breaks.

"What (the employee) said isn't that important anymore because others have substantiated it," Breaks said. "But what is important is that this is the level these people will stoop to get their own way."

⁷⁸¹ Fax letter from David Anderson to Fabian Dawson, esquire, The Province newspaper, December 4, 1990.

In the Wednesday October 17 edition of the Langley Advance, *Special hearing – Commission halted*:

Commissioner David Anderson said the Commission has spent “tens of thousands of dollars” on inquiries since the allegations were made by a pressure group, the Friends of the Fraser Valley ... Anderson insists he cannot review the information collected, knowing that some of it might be incorrect. “We just want to leave things wide open, bend over backwards, in case they [the allegations] are true,” said Anderson. “If the allegations are true, there are going to be some very serious consequences.” He said that if evidence can be found to support the Friends’ claims, criminal charges will be laid. Anderson said the Friends have made the Commission’s job more difficult by not providing evidence to support their charges.

In the Sunday October 21 edition of the Surrey Leader, *Natural gas inquiry resumes*:

“I don’t see why he [Anderson] now needs a sworn statement. I’ve stood up and told Anderson face to face about this (the tampering with potential witnesses),” Breaks said Thursday.

Breaks said a statement read on behalf of The Friends by his wife Gina, at the hearings September 4, citing reasons for their boycott of the commission, was not the first time the tampering charges were made. “This ... was brought to the attention of the commission on August 18, and then again on August 25.”

On those occasions, Breaks and other members of the Friends met with the commission’s legal counsel, to explain that an expert source Breaks had talked to had been contacted by the proponents, and pressured or embarrassed into withdrawing his support. The proponents, Fraser Valley Gas Project, have denied the allegations.

“I can’t really do anything more,” says Breaks, who claims the commission had the name of his source, and the particulars of the charge, yet refused to act until the allegations were made public. And he said back in August, the commission counsel told The Friends there was nothing the commission could do about the allegations, and that they should be careful about who they told their story to, or they would lose credibility.

Breaks said it is clear that Anderson had the information for some time, and that his letters seeking confirmation from The Friends are “not sincere.” Breaks said he will not appear before the commission because he has lost all faith in its impartiality, and he thinks “B.C. Gas is hoping to stick a knife in me.”

Following up on Glen Breaks’ October 18 letter to David Anderson (copies of which Breaks sent to newspapers) wherein Breaks states that his source “was pressured into withdrawing his support,” and that “this information was in front of you for sometime,” Anderson “instructed” Doug Macdams to send a formal letter, via process server – “hand delivery” – to the home of Glen Breaks on Saturday, October 20.⁷⁸²

We continue to await a simple direct response to our letter of September 26, 1990 in which we asked if Walter Rzepczynski was the gas company employee in Illinois referred to by you as having been silenced.

⁷⁸² Both letters were entered as Exhibit SP-8 and published in the *Appendixes to the Special Report on Allegations of Witness Tampering at the Commission Hearings*.

You are no doubt aware of the public hearings to be resumed in the evening of October 22. A copy of the newspaper notice for those hearings is enclosed. If you have anything to say regarding the two topics to be dealt with at those hearings, the appropriate way for you to communicate is by attending and by testifying on October 22.

The Morning Of

At 8:48 a.m. Monday morning, the day of the Allegations Hearing, Doug MacAdams faxed to David Anderson 17 pages of “script notes for cross-examination of witnesses at October 22, 1990 Commission hearings,” from material assigned to his law office from legal file 525-4. In the cover page MacAdams wrote:

Now sent for your review are my rough notes our reference 525-4/mmoo20a.doc of the evidence as I expect to call it from you this evening. I have master copies of the documents referred to save for the letters to be introduced towards the very end of your evidence. This afternoon at 2:30 pm. and thereafter we will discuss the evidence as a whole and the particulars of which letters should be dealt with at the end.

MacAdams’ 17 pages of written notes formed a draft rehearsal of assignments for Anderson, David Fenn and himself for the 7 p.m. Hearing scheduled at the Town & Country Inn in Delta, the same meeting hall the Commission met on August 27 for the first day of the Technical Hearing proceedings. For instance, on page 10 of his notes, MacAdams would recite the following:

Mr. Commissioner we will return to Mr. Breaks most recent letter later in our proceedings. It is sufficient for the moment to ask Mr. Fenn this: does Mr. Breaks letter of October 18, 1990 mention the name of Walter Rzepczynski or of any other person as having been pressured into withdrawing support?

Then, on page 12:

I will not read the [Walter Rzepczynski] letter of August 29, 1990. It is sufficient to say that in the letter Mr. Rzepczynski responds chapter and verse to the document of Glen Breaks which Mr. Griffiths sent to Mr. Rzepczynski. The burden of Mr. Rzepczynski’s letter is that Glen Breaks clearly did not understand Mr. Rzepczynski’s information.

And, on page 13:

Mr. Commissioner, I now turn to the Glen Breaks letter of October 18, 1990 addressed to you. In that letter Mr. Breaks writes: para 2 --- a source of information was pressured into withdrawing his support. I note from this letter that Mr. Breaks appears to be retreating from the position taken by the Friends of the Fraser Valley and indeed appears to be distancing himself from the position taken in the September 4, 1990 statement read by Mrs. Breaks that “persons in the industry in those area”, referring to four states, “have been contacted ...” But Mr. Breaks still does not come out in a simple way to give the name of person described in his October 18 letter as the “source of information (who) was pressured into withdrawing his support”.

MACADAMS LAW FIRM

DOUGLAS MACADAMS
BARRISTER AND SOLICITOR

OUR FILE #
YOUR FILE #

205 GLADWIN CENTRE II
2975 GLADWIN ROAD
ABBOTSFORD, B.C.
CANADA V2S 6W8

TELEPHONE: (604) 850-1675
TELECOPIER: (604) 850-1937

TELECOPIER TRANSIT FORM

AUTHOR: Douglas MacAdams

OPERATOR: dm

FILE NAME: Commission

FILE NO.: 525-4

DATE: October 22, 1990

TIME: 9:00 a.m.

TRANSMIT TO

NAME: David Fenn

FIRM: Commission

CITY: Victoria

TELECOPIER NUMBER: 356-9747

*Script for 22 October
hearing
for file
df*

Excerpts from Commission Counsel
MacAdams' 17-page facsimile to David Fenn

Notes for Cross-examination of
witnesses at October 22, 1990 Commission hearings
525-4/mmoo20a.doc

Mr. Commissioner, from the transcript Exhibit xx
at page 1143 I highlight these words:
"we were able----their support" {ADM to
emphasize the plurals}

And from page 1145 I emphasize these words:
"Although our industry contacts in the United
States have been silenced..."

And from page 1144 we read these words:
"One has only to look----party line"

Notes for Cross-examination of
witnesses at October 22, 1990 Commission hearings
525-4/mmoo20a.doc

I turn now to the statutory declaration of Walter
Rzepczynski:
read paras 1 to 30.
read paras 23 to 25 a second time.

I will not read the letter of August 29, 1990. It is
sufficient to say that in the letter
Mr. Rzepczynski responds chapter and verse to
the document of Glen Breaks which
Mr. Griffiths sent to Mr. Rzepczynski. The
burden of Mr. Rzepczynski's letter is that Glen
Breaks clearly did not understand
Mr. Rzepczynski's information.

The Letter

For the October 22 hearing, The Friends of the Fraser Valley delivered a four-page “Open Letter to David Anderson.” The letter was included as Appendix 8 in Commissioner David Anderson’s November 1990 *Special Report on Allegations of Witness Tampering at the Commission Hearings*. However, the letter was not mentioned or referred to in the Commission’s October 22, 1990, Proceedings. As David Anderson explained in his *Special Report*, the letter “addressed to me **was left on a chair immediately prior to the inquiry hearing** of 22 October [bold emphasis].”

If someone at the Town & Country Inn Hall found the letter and handed it to Anderson either before or during the proceedings, or if Anderson found it himself, he withheld it from the legal proceedings. If so, he would have been quietly fuming through the event after having consumed its contents. And if so, he nevertheless could have entered the letter as exhibit evidence after the coffee break, as alluded to in MacAdams’ notes to Anderson that morning: “After the coffee break we will hear from those who have indicated they have information and wish to testify.”⁷⁸³ Anderson could then have informed the participants that the letter was anonymously delivered and could have read its contents or summarized parts of it into the hearing microphone and should have made photocopies of it available for interested parties. But he chose not to because he wouldn’t have wanted to. And by withholding it counsel MacAdams would make no related comments or statements. Here is the letter:

The Friends of the Fraser Valley have already announced the total collapse of their confidence in you and your Commission. This is the result of the experience of numerous meetings between its members and yourself and your Counsel, on attendance at over twenty meetings of the Commission, and the bias and prejudicial statements made by you and your Counsel, some of which have been reported in the media, and all which remain undenied by you. As a result, we announced our decision to boycott your Commission, which still stands.

Since the inception of this Commission, you have been responsible for the following:

1. You deliberately misled us at the outset, by assuring us that our lack of funds and means to match the limitless resources of the Gas Consortium and its multi-billion dollar backers would not be allowed to weigh against us.
2. You denied us the right to Counsel.
3. You denied us the right to cross-examine witnesses on our own behalf.
4. You compelled our members to make full disclosure of such information as we were able to gather, to the evident advantage of the Gas Consortium, which lost no time in contacting our advisor to our prejudice. It also led to a series of full-page newspaper advertisements full of misleading propaganda from the Gas Consortium, and non-stop “public relations” nonsense from their high-priced hacks in an attempt to subvert our support.
5. You deliberately ignored some fifty-four problem areas raised in our written request of Aug. 8, 1990, for evidence to be heard on such vital considerations as insurance, real estate values and the

⁷⁸³ The coffee break information is referred to on pages 1620-1622 of the October 22 transcript proceedings.

effect on our lifestyle and the environment of the Consortium's plan. In fact, you did not have the simple good manners to acknowledge receipt of our letter.

6. You had to be shamed, by us, into visiting the major gas storage site on this Continent in Illinois, rather than wasting time and the public's money on trips by you and your staff to Paris, France; Milan, Italy; and England, as you have done. How was the view from the top of the Eiffel Tower? Could you see Langley from up there?

7. When you finally did get to Illinois, we are reliably informed that you demonstrated your boasted "impartiality" by indulging in derogatory personal remarks about one of our members. This alone raises the gravest doubts about your fitness for the position you now hold.

8. In addition, in an interview with you, the 'Delta Optimist' for September 5, 1990 published highly prejudicial statements which clearly demonstrate your bias and pre-judgement of the issues.

9. You have deliberately misled the public and the media in recent weeks by pretending you did not know the name of our principal technical advisor nor that, at the instigation of the Consortium's lawyers, he had been "contacted" by one Howard Griffith, an employee of Texas Gas and a "consultant" to the B.C. Gas Consortium. As a result, this man sent Griffith a letter denying, in abject terms, what he had told us in a series of long-distance phone calls (totalling over two hours in length over a period of days). You have had these names and copies of the correspondence for many weeks but have had the unmitigated gall to pretend otherwise and attempt to make what you, but not we, called 'tampering with witnesses' and used this as an excuse, for the further waste (according to you) of "tens of thousands or dollars" or the taxpayer's money to "investigate" a phoney 'issue' created by you, and you alone.

10. You have pretended that we attacked the credibility of Government officials from Alberta, British Columbia, etc, when our sole complaint in this regard was directed to the lack of effective cross-examination by your Counsel of the panel of employees of the B.C. Department of the Ministry of Energy, Mines & Petroleum Resources on their admitted ignorance of underground gas storage at the time the drilling rights were sold to the Gas Consortium, and the possibility of complicity between the Ministry and the Consortium in a deliberate attempt to deceive the public and, in particular, the residents of the Fraser Valley, by concealing the true nature of the Consortium's plans.

11. You have harassed a member of the Press who wrote an article raising questions as to the appropriateness of the storage scheme and demanded the names of his sources and copies of any documents in his possession, which is a clear violation of the Canadian Charter of Rights.

12. You then went further and personally harassed that source, thus following the dubious example of the Gas Consortium itself.

As a Commissioner you, we suppose, are some sort of Judge. We have never heard of a Judge indulging in Open-Line Radio interviews or handing out Press Releases or bombarding the citizenry at large with interminable and tendentious correspondence, never mind in expressing personal views and comments on the parties and issues before him.

Your conduct has become so outrageous that we are driven to the conclusion that this Commission was set up with the sole purpose of diffusing the issue and “keeping the peasants quiet” until after the expected Provincial Election this Fall, ‘lest’ it become an issue in the election itself.

Since it is now apparent that there can be no election until next Spring, we believe that these very proceedings here tonight have been devised to justify a further delay, to that end.

Mr. Anderson, we have come to the sad conclusion (particularly sad in view of the trust and faith we put in you and your promises at the outset) that you and your Commission are nothing more than tools in the hands of certain unscrupulous politicians and the vested interests who are determined to force this deplorable and unnecessary scheme on us, our homes and our families, for their own greedy ends.

We will not stand for this. We will not be intimidated by you or anyone else.

We will fight you, and the Gas Consortium and the Ministry of Mines and, if necessary, the Provincial Government itself, every inch of the way. We demand and will insist on an investigation by the Ombudsman into the activities of you and your Commission, and into the many denials of the principles of Natural Justice to which we have been subjected at your hands.

The Witnesses

At the October 22 Hearing the Commission called the following witnesses: David Fenn (Anderson’s assistant); Paul Gronert (the Manager of Petroleum Engineering with the B.C. Utilities Commission); Emil Morin (member of Alberta’s Energy Resources Conservation Board); John Nichol (Alberta Energy Resources Conservation Board’s manager of Drilling and Production Department); Bob Spring (Fraser Valley Gas Project consortium’s manager, for Conoco Canada Ltd.); Wayne Babcock (President of Dynamic Oil Ltd.); Patrick Lloyd (B.C. Gas Inc.’ Senior Vice President of Gas Supply and Services); and John Thrasher (B.C. Gas Inc.’ Manager of Gas Supply Planning).

For the Hearing, counsel Doug MacAdams amassed a total of 18 affidavits, four of which belonged to Commission witnesses Babcock, Thrasher, Lloyd and Spring.

- Alongside the two B.C. Gas Inc. witnesses, were four more B.C. Gas Inc. affidavits, making a total of six out of the eighteen: Carman Avery (Corporate Communications Director); Janis Wattis (Corporate Solicitor); Robert Stepan (Gas Supply Planning engineer); and Edward Schellenberg (Manger of External Relations). Perhaps Howard Griffith, president of Kentucky-based TXG Engineering Inc.’s lengthy affidavit could be considered in the grouping of B.C. Gas Inc.’s affidavits, as Griffith was its hired consultant.
- Including Bob Spring’s affidavit, Conoco Canada Ltd. had a total of four affidavits, the other three being Robert Pelzer (Vice President and General Counsel), Ed Norquist (Drilling Superintendent), and David Holowachuck (Coodinator of Safety, Regulatory, and Environmental Affairs). Alongside Babcock, Dynamic Oil had a total of three affidavits, the others belonging to Donald Umbach (Vice President) and Michael Bardell (Controller and Corporate Secretary).
- The Fraser Valley Gas Project consortium had two affidavits: consultant Karla Mebs and lawyer Cal (C.B.) Johnson.

- The only affidavits not affiliated with the Fraser Valley petroleum and utility companies were from Walter Rzepczynski (Senior Reservoir Analyst with the Natural Gas Pipeline Company of America) and Graham McCredie (the Safety/ Loss Control Specialist with United Resource Safety Ltd.).

October 30, 1990

Mr. Carman F. Avery
Director of Corporate Communications
BC Gas
1066 West Hastings Street
Vancouver, BC
V6E 3G3

Dear Mr. Avery:

Thank you for your statutory declaration concerning the allegations by the group "Friends of the Fraser Valley" that potential witnesses with information of interest to this Commission were pressured into silence by the Fraser Valley Gas Project consortium. Statements such as yours were very important to the Commission in determining that the accusations had no basis in fact.

I will be presenting a report on this matter to the Minister of Energy, Mines, and Petroleum Resources shortly. Thereafter, I will prepare a final report on the risks and benefits of natural gas drilling and underground natural gas storage in the Fraser Valley. I expect to present that report to the Minister at the end of the year.

Thank you again for your participation in the proceedings.

Yours sincerely, David Anderson
Commissioner

Commission Correspondence Files

This contingent of affidavits all agreed there had been no 'hanky panky.'

The structure of the hearing was roughly laid out as follows:

- 'evidence' gathered from three of The Friends' statements and written materials, Gina Breaks, Glen Breaks, and Al Vickers, point to allegations of multiple parties being 'tampered with;'
- lengthy quotes from Howard Griffith and Walter Rzepczynski affidavits being read out by Commission counsel Doug MacAdams (pages 1554 to 1575) denying and refuting what Glen Breaks said what he said;
- select witnesses stating they were unaware of any tampering or that any information was leaked.

Before Anderson's final summation, two witnesses from Alberta's Energy Resources Conservation Board (ERCB) were questioned about allegations of "bias" they brought to the Commission's technical hearings, with MacAdams reading out part of Gina Breaks September 4 statement to the Commission:

One has only to look at the schedule for the technical hearings to see a large contingent of industry experts, and an equally large number of government bureaucrats that will, between them, bring a bias to the hearing. No government employee would risk his future by suggesting that any course of action other than that ordained by the party line be followed.

Emil Morin replied: "I am here tonight to emphatically deny that we were at any time restricted in providing an honest opinion to the Commission on the matters on which we gave evidence on the 31st of August."

Mr. MacAdams: And did you give your honest opinions on August 31?

Mr. Morin: Yes we did. Yes, I did.

After MacAdams introduced statements of denial from the Fraser Valley Gas Project consortium's representatives, he read out at length lawyer C.B. Johnson's affidavit, reasoning and pointing out "this statutory declaration is in a form different from the others." Johnson had been called in as a legal fixer by the consortium brass in early August 1990 to deal with Glen Breaks' early revelation interviews with Walter Rzepczynski through B.C. Gas Inc.'s consultant Howard Griffith about underground gas storage proximity to population centres.

Right: Paul Gronert, before his appointment to the B.C.U.C.

October 30, 1990

Mr. Paul H. Gronert
Manager, Petroleum Engineering
BC Utilities Commission
P.O. Box 250
Sixth Floor, 900 Howe Street
Vancouver, BC
V8Z 2N3

Dear Mr. Gronert:

Thank you for your appearance at the special Commission hearing of October 22 on the allegations of witness tampering made by Mr. and Mrs. Breaks and Al Vickers of the Friends of the Fraser Valley. Your testimony was important in demonstrating the lack of any factual basis for these serious accusations.

Yours sincerely,

David Anderson
Commissioner



Nanaimo engineer Gordon Bell, left, discusses the pipeline with Paul Gronert of the utilities committee and Westcoast Energy's Jack Kavanagh.

Nanaimo Daily News - February 17, 1989

Twin lines to carry gas

By NEIL MACMILLAN Staff Writer

Twin underwater pipelines will carry natural gas to Vancouver Island, spectators at a Nanaimo public hearing were told Thursday.

The line will be twinned in the underwater segments with only one of the lines used at a time.

In the event of failures "on the rare occasions we get them," repairs should take 10-12 hours or less, said Jack Kavanagh, vice-president of engineering and construction for Westcoast Energy, one of the principals in the pipeline project.

He added large industrial users with access to alternative fuel sources will have an interruption in the event of line failure, while residential customers will be served from the "line-pack" for the duration of the repair.

Line pack refers to gas already in the line before the repair.

Submissions were generally supportive as two days of public hearings opened on the proposed Vancouver Island natural gas pipeline.

Hearing the submissions is a three-member panel of the B.C. Utilities Commission. John McIntyre is panel chairman and chief executive officer of the B.C. Utilities Commission. The other two panel members are Norris Martin and Frank Leighton.

"This is a quasi-judicial procedure and the general rules of evidence apply, but there's a less formal environment than in a normal court," Mr. McIntyre said.

Several citizens and the Nanaimo Natural Gas Pipeline Committee were among those appearing

Thursday. The hearings continued today at the Tally-Ho Island Inn.

Also attending are commission staff and representatives of Pacific Coast Energy Corp. and Westcoast Energy.

Pacific Coast Energy, the pipeline sponsor, is owned 50-50 by Westcoast Energy Inc. of Vancouver and Chieftain Development Company of Edmonton.

Westcoast is an experienced pipeline construction company while Chieftain is a major gas supplier.

Mr. McIntyre said the function of the commission is to review the pipeline application and make representations to the provincial environment and energy ministries.

Lawyer Chris Sanderson, representing Pacific Coast Energy, said he was generally pleased with the submissions made.

Westcoast representatives assured Ted Barsby, Nanaimo Fish and Game Club member, river crossings of the pipeline won't harm fish. An overhead crossing will be used at the Nanaimo River.

Westcoast Energy will be retained by Pacific Coast Energy for construction of the pipeline, which will be owned by Pacific Coast.

Geoff Matthews, Nanaimo gas pipeline committee chairman, told the panel he hopes natural gas will finally come to the island after decades of debate.

"Hopefully, seeing you here today will see the end of this saga after 30 years," said Mr. Matthews.

"There is definite political will in Victoria, with Premier (Bill) Vander Zalm and his government."

Committee member Deane Finlayson called for the distribution system to remain Canadian-controlled.

Commission Correspondence Files

Judgement

After the “coffee break,” MacAdams presented his ‘closing argument.’ The nature of what MacAdams was about to perform and state was remarkably different from that of his former role and utterings in the technical hearings from August 27 to September 6. He was now the condemning prosecutor – making a mountain out of a mole hill in the absence of independent cross examination of affidavit evidence and witnesses – and Anderson the judge and jury.

MACADAMS: On September 4th, 1990, in the name of a large and vigorous resident’s group, allegations were made before you [the Commissioner] in a gathering of several hundred people, with the television cameras running. Those allegations had several aspects, including a criminal law aspect, a civil law aspect, and an aspect of the greatest importance to you and to all other commissioners now appointed and who might in the future be appointed under the Inquiry Act.

The allegations to which I refer are of course, firstly, that persons, in the plural, within the natural gas industry with useful information to the Commission were contacted by the proponents, plural, and were pressured and embarrassed into withdrawing support. And secondly, that public servants under oath, in giving evidence before you, failed to give their honest opinions on matters of public importance. Now, these allegations are serious indeed. These were not the rantings of a marginal group in our society. These allegations were the public statements made in a public forum by a group which you, in my view, properly ought to have understood and accepted to be one made up, for the most part, of ordinary law-abiding people with legitimate concerns.

Now, these serious statements made on behalf of a serious group have, as I say, implications in criminal law. ... The allegation that persons were silenced, that witnesses were tampered with is, in effect, an allegation of a crime under section 139 of the Criminal Code. The allegation that public servants were less than honest when under oath implies a crime, the crime of perjury. Now, I’m not saying that those events would necessarily give rise to charges or if charges were laid, would give rise to convictions, but nevertheless, there is that criminal law aspect to the charges, the allegations made on September 4th and repeated thereafter.

These serious statements made on behalf of the Friends of the Fraser Valley, or perhaps more accurately in the name of the Friends of the Fraser Valley, have implications in civil law as well, for if these statements are untrue, the reputations of petroleum company personnel and of government servants have been besmirched with the possibility of lawsuits in defamation.

But in my submission to you, these criminal law aspects and these civil law aspects are not within your purview. Your commission is to inquire into matters relating to petroleum exploration and gas storage. Your job is to leave criminal and civil law questions to others, but nevertheless, within the compass of your responsibilities, the statements made have very serious implications for you, for your Commission and indeed for all commissions.

I turn now in a direct way to the evidence which is before you. On the question of the silencing of witnesses or of sources of information, you have evidence of the following. You have evidence that the statements were made, that is to say, the allegations of silencing of witnesses or sources of information. You have evidence that insofar as silencing of witnesses is concerned, Friends of the Fraser Valley as an organization and Mrs. Gina Breaks and Messrs. Glen Breaks and Al Vickers were asked to provide particulars, but have failed to do so. The particulars being what are the

names? Was Walter Rzepczynski a person supposedly silenced? And the only silence we had was the silence of the Friends of the Fraser Valley.

You have evidence that such information as is available points to only one transaction; the Griffith / Rzepczynski transaction. You have no evidence of any silencing of witnesses or of sources of information in Washington, in Wyoming, in Michigan, or of any silencing of witnesses or stilling of information in Illinois, other than the possibility of the one transaction, the Griffith / Rzepczynski transaction.

And so, you face this question: what is to be believed? The sworn statement of Walter Rzepczynski, or the unsworn hints of Glen Breaks? The unsworn hints of Friends of the Fraser Valley in the person of Gina Breaks? The unsworn hints of Al Vickers? Of the unanswered letters? The answer is clear. What are you to accept? In my submission, you are to accept the sworn evidence of Walter Rzepczynski, buttressed and supported and corroborated by the sworn evidence of Mr. Griffith and of the others whose viva voce evidence and whose statutory declarations you have before you now.

What steps should you now take? In my submission, you should issue an interim report to deal with the two questions which have so vexed and agitated and distracted public attention.

The Allegations Report

Commissioner David Anderson released his *Special Report on Allegations of Witness Tampering* five weeks later on Tuesday, November 27, 1990. Alongside it, came a two-page media release:

The 12-page report contains twenty individual conclusions, finding that there is no evidence that potential witnesses from Wyoming, Illinois, Washington, or Michigan had been pressured into remaining silent by companies wanting to drill in the Fraser Valley or that technical witnesses had not given their honest opinions to the Inquiry. A 60-page volume of evidence was also published.

784

In the report, Anderson states he has no reason to think that the vast majority of the membership of the Friends of the Fraser Valley had any part in the untruthful statements and regrettable behavior of the group's spokespersons, who should have known that their allegations were baseless.

"I have never linked the major public concerns - - over groundwater, environmental impacts, possible loss of Valley lifestyle - - to any particular organization, but have recognized them all as being legitimate public concerns, to which I must bring the best technical evidence and judgment I can," said Anderson. "I will now get on with preparing my final report."

In his *Special Report*, Anderson "concluded" the following:

- That there is no evidence whatsoever for a reasonable person to believe that Mr. Walter Rzepczynski was pressured into silence on matters of interest to this Commission.
- That there is no evidence whatsoever for a reasonable person to believe that Mr. Howard Griffith exerted any pressure with a view to silencing any person on matters of interest to this Commission.

⁷⁸⁴ *Commission on Fraser Valley Petroleum Exploration Technical Hearings*, October 22, 1990, *Proceedings*.

- That the views on exploratory drilling and underground natural gas storage attributed to Mr. Rzepczynski in Mr. Break's "technical paper" are fabrications.
- That Mr. Rzepczynski's views on exploratory drilling and natural gas storage are as set out in his sworn statutory declaration of 8 October 1990.
- That the spokespersons, officers, and directors of the Friends of the Fraser Valley knew or should have known that the allegations made in the name of their organization regarding Mr. Griffith and Mr. Rzepczynski were without any truth whatsoever.
- That the spokespersons, officers, and directors of the Friends of the Fraser Valley knew or should have known that the allegations made in the name of their organization regarding witnesses being silenced by the proponents in the state of Washington, Illinois, Wyoming and Michigan were without any truth whatsoever.
- That the spokespersons, officers, and directors of the Friends of the Fraser Valley knew or should have known that the allegations made in the name of their organization regarding untruthful testimony given by public officials were without any truth whatsoever.

COMMISSION OF INQUIRY INTO FRASER VALLEY PETROLEUM EXPLORATION

Special Report on Allegations of Witness Tampering at the Commission Hearings

DAVID ANDERSON
Commissioner

NOVEMBER 1990

VICTORIA
BRITISH COLUMBIA

BC
281990P7
D:864
1990
v.1
c.5

THE APPENDICES TO THIS REPORT ARE PROVIDED IN A SEPARATE DOCUMENT ENTITLED "APPENDICES TO THE SPECIAL REPORT ON ALLEGATIONS OF WITNESS TAMPERING AT THE COMMISSION HEARINGS".

LEGISLATIVE LIBRARY
VICTORIA, B.C.

Declared before me in the)

State of Illinois this)

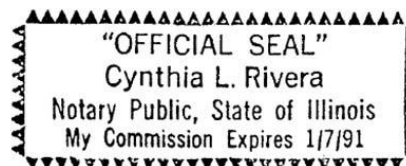
8th day of October, 1990)

Walter Rzepczynski

GIVEN UNDER MY HAND AND SEAL OF OFFICE,
this 8th day of October, 1990.

Cynthia L. Rivera
Notary Public in and for Illinois
County, DuPage

My commission expires 1/7/91



Anderson concluded that Glen Breaks' interviews with Walter Rzepczynski concerning his comments about the dangers of underground gas storage near urban settings were "fabrications." Therefore, Glen Breaks' statements that Rzepczynski had a 'change of heart' were "without any truth," and causally unrelated to someone 'getting to' Rzepczynski, because "no reasonable" person could draw such a conclusion.

Let's examine what Walter Rzepczynski stated in his research paper, *Aquifer Storage Development*, the basis of Breaks' telephone conversations with Rzepczynski which Breaks then transmitted to the attention of the Anderson Commission and to the B.C. Utilities Commission in July 1990, which ultimately reached the top brass at B.C. Gas Inc.

In the first sentence of page one of the research paper, which was included in Rzepczynski's October 8 affidavit, it begins by discussing "the development of aquifers suitable for underground gas storage." By page two, under the heading *Finding a Suitable [underground storage] Structure*, he states: "It should, if possible, be away from any populated area and not overlain by any coal mine, other strip mine or water body." Rzepczynski ends his affidavit by stating that "My views of storage of natural gas are accurately reflected in my draft paper 'Aquifer Storage Development'".

That simple and straightforward statement, to "be away from any populated area," conforms to what Glen Breaks wrote and said repeatedly to the public about what Rzepczynski related to him in at least one or more instance of his five June to July 1990 telephone conversations.⁷⁸⁵

On page 5 of his paper, Rzepczynski summarized, under the heading *Assurance of Adequate Caprock*, the associated dangers of gas migration:

It is quite obvious the most important requisite of an aquifer storage reservoir is an adequate caprock overlying the intended gas bubble to assure containment of the gas with no vertical migration to overlying beds. ... It should be mentioned that sometimes shales have imperfections and could have some inherent fractures not readily noticed but reflect themselves once gas is injected under an existing pressure. ... Remember, the observation well above the primary caprock is only good in its response if it also has an adequate caprock above it.

Rzepczynski's simple statement about the danger of storage facilities to population proximity got muddled up in his affidavit, lost in the "Mr. Breaks has misrepresented and misconstrued what I have said and written," the "Mr. Breaks had misunderstood or had chosen to mischaracterize what I had told him," "nor could I understand how he could write such words based on my paper," sort of thing. Some of the truth peeks out from the fog in one of his statements under heading "11:"

I gave Mr. Breaks my frank assessment of natural gas storage from my 35 years experience in the field. In our conversation, reference was made to problems that have arisen in underground storage of natural gas, but I told Mr. Breaks of the advances that have been made in the technology since I first worked in the field, and I told Mr. Breaks that if underground storage of natural gas is carried out to present day standards, underground storage of natural gas is a safe and beneficial way to supply gas to consumers.

⁷⁸⁵ Rzepczynski states in his affidavit: "I recall having had perhaps as many as five relatively short telephone conversations with Mr. Breaks, who said he was interested in natural gas storage."

The Langley Times published an article by reporter Al Irwin on November 3, 1990, with the title, *Gas expert's letter is not consistent with own paper*, and the Surrey Leader's identical article on November 14 with a slightly more provocative title, *Gas expert contradicts own study*. The articles were questioning, calling out the Anderson Commission allegation's controversy between Rzepczynski and Glen Breaks. Irwin cited the sentence from Rzepczynski's report sent to Breaks, "... it should if possible, be away from any populated area ...", and then, for comparison purposes, Irwin quotes from Rzepczynski's August 29 letter to Howard Griffith: "I have never recommended or indicated to Mr. Breaks that aquifer storage or any other type of storage facility should be away from any population."

Irwin then points out that Rzepczynski stated in his October 8, 1990, affidavit that he sent to Breaks his "paper on gas storage for information purposes only. ... I did not give Mr. Breaks permission to use this paper in any public manner." Irwin wrote the following after interviewing Breaks:

Breaks, on the other hand, told the Times he did not ask for the paper, but had it sent to him, with no stipulations. He said he turned over the information he gathered, because he had been instructed by the gas commission to do so.

"That was all I had, and they accused me of taking his words out of context. How could I take it out of context when I presented them (the Commission) with the entire paper?" Breaks asked. And Breaks asked why Rzepczynski would send the paper, if he did not stand behind it.

In a November 27 Vancouver Sun article, *Fraser Valley drilling hearings to resume*, it reported that "after seven weeks of silence, Friends of the Fraser Valley spokesman Glen Breaks said he is a little cynical about the commission's forthrightness:"

"I used to trust the members of the commission. But after what I've gone through, and the things that happened, I don't trust them anymore."

5 – 24. The November 27 Langley High School Meeting

*So, I'm saying that maybe they should insist on a one hundred million dollar [\$100,000,000] limit of liability, or don't let the guys in, that's all. It's as simple as that. ... The downside of all this of course is that you as individuals have to pay for the lawsuit yourself. As I said earlier, there is no insurance available to you. So, you would have to take them to court and go through that type of process unless they are prepared to, if a lawsuit occurred, prepared to come out and pay immediately, which is unusual.*⁷⁸⁶

The November 21, 1990, edition of the Abbotsford Times printed a short article by Ian Robbins, *Gas opponents will rally again*, stating that The Friends “are holding a public meeting Tuesday, Nov. 27 ... at Langley Senior Secondary which will feature Lodene Clark, of Illinois, among other speakers.” The article included an update on Glen Breaks who “was recently castigated by gas commission lawyer Douglas MacAdams for – in MacAdams’ view – perjuring himself and making statements “giving rise to questions of defamation”.”

“They were fairly nasty toward me,” Breaks said later. “I feel quite put out by it because I’ve just told the truth about it.”

Breaks said he wants to “set the record straight” and is intending to ask the Ministry of Attorney General to administer a polygraph, or lie-detector, test to him on the condition that the expert he referred to, Walter Rzepczynski, and the man who contacted Rzepczynski, Walter Griffiths, also take polygraph tests.

Because of newspaper advertisements of the upcoming Friends meeting on the evening of November 27, it is noteworthy that the David Anderson Commission chose to release the *Special Report on Allegations* that very morning! The timing of the Commission’s media release was no doubt meant to complicate and imbalance the public meeting. Anderson’s report release timing legitimately infuriated The Friends. At the rousing public meeting, The Friends criticized the petroleum industry and government and attacked the Anderson Commission.

Some of the meeting details were narrated in a long, fiery letter sent to Premier Bill Vander Zalm the following day on November 28 by Friends member and lawyer Charles Maclean, a copy of which he sent to David Anderson. He stated that the meeting, held “on a frosty November night to spend two hours listening to speeches,” “was attended by 692 residents of the Fraser Valley,” who “raised some \$5,000 in donations to our fighting fund.” “Contingents came from all over the Valley, including a group from Yarrow - Cultus Lake, who chartered their own bus to get there – there was even representation from our neighbours “over-the-Line” in Lynden, Washington.” The following is the bulk of MacLean’s personal letter to the Premier:

I regret the necessity of approaching you personally on this matter, which I have, so far, avoided, but the references in Anderson’s “Special Report” to my wife Margaret Ormston and myself, and our respective professions, leave me no alternative.

⁷⁸⁶ Quote from Jack Hamilton, Insurance broker with the Insurance Brokers Association of BC, November 27, 1990.

Putting to one side the wisdom of the storage of natural gas beneath a populated area such as the Fraser valley, I can assure you that Anderson's performance as sole commissioner has brought the whole Public Inquiry process into disrepute.

When I read out Anderson's references to Mr. and Mrs. Glen Breaks (and, by direct reference, to my wife and myself and the other Directors of our Society) and appealed to the audience for support, there was a prolonged standing ovation of the whole assembly.

During the recent Municipal Elections all the Aldermanic candidates in the affected areas, without exception, publicly declared their opposition to the Gas Consortium's proposals. Many of those Aldermen were present at the meeting last night.

Bill, I have to tell you, with regret, that much of the resentment and suspicion of the residents of the Valley against the oil and Gas Companies has now been transferred to Anderson himself and, by extension, to you and the Government you lead.



In his "Special Report" Anderson has had the insolence to drag in the professional standing of my wife as a Doctor and myself as a member of the Bar, coupled with an oblique attack on our credibility as Directors of the Society. Our participation in the affairs of the Society is purely as residents of the Fraser Valley. I am not legal counsel to the Society any more than my wife is its advisor on medical matters. Even if Anderson had allowed us legal representation before his commission, which he did not, I would not have acted for the Society because of my personal interest and strong feelings on the issues. Anderson's reference to "Mr. Charles Maclean, Q.C." (an interesting example of his professional illiteracy) as "available legal advisor to the Friends of the Fraser Valley" is quite gratuitous and unfounded.

I have known Anderson since we were classmates at U.B.C. Law School 31 years ago. Because of this personal connection I felt it was improper for me to take an active part

before him as sole Commissioner. In consequence, I did not do so. For the same reason I even avoided being present at the meeting in my own home, which was held at his request. My thanks for this concern for propriety, and for our hospitality, is to have my name, and that of my wife, and our respective professional characters, vilified by Anderson in a public document.

I will not bore you with a detailed rebuttal of Anderson's "Special Report". The Society already has this project in hand. Suffice it to say that, in my opinion, and that of the entire membership of the

**Excerpts from Charles Maclean's seven-page
letter to Premier Bill Vander Zalm**

COPY
The Hon. William Van der Zalm
Room 156 West Annex
Parliament Buildings
Victoria, B.C.
V8V 1X1

November 28, 1990

rec'd 12/31/90

Dear Bill:

Re: David Anderson and the Fraser Valley Commission's
"Special Report" of November 1990

I regret the necessity of approaching you personally on this matter, which I have, so far, avoided, but the references in Anderson's "Special Report" to my wife Margaret Ormston and myself, and our respective professions, leave me no alternative.

Putting to one side the wisdom of the storage of natural gas beneath a populated area such as the Fraser Valley, I can assure you that Anderson's performance as sole Commissioner has brought the whole Public Inquiry process into disrepute.

Bill, I have to tell you, with regret, that much of the resentment and suspicion of the residents of the Valley against the Oil and Gas Companies has now been transferred to Anderson himself and, by extension, to you and the Government you lead.

In his "Special Report" Anderson has had the insolence to drag in the professional standing of my wife as a Doctor, and myself as a member of the Bar, coupled with an oblique attack on our credibility as Directors of the Society. Our participation in the affairs of the Society is purely as residents of the Fraser Valley. I am not legal counsel to the Society any more than my wife is its advisor on medical matters. Even if Anderson had allowed us legal representation before his Commission, which he did not, I would not have acted for the Society because of my personal interest and strong feelings on the issues. Anderson's reference to "Mr. Charles Maclean, Q.C." (an interesting example of his professional illiteracy) as "available legal advisor to the Friends of the Fraser Valley" is quite gratuitous and unfounded.

I have known Anderson since we were class mates at U.B.C. Law School 31 years ago. Because of this personal connection I felt it was improper for me to take an active part before him as sole Commissioner. In consequence, I did not do so. For the same reason I even avoided being present at the meeting in my own home, which was held at his request. My thanks for this concern for propriety, and for our hospitality, is to have my name, and that of my wife, and our respective professional characters, vilified by Anderson in a public document.

My wife and I had to learn of Anderson's attack on us by reading his published "Special Report". Unlike Anderson, I am not a back stabber, and I am therefore taking the liberty of sending a copy of this letter directly to him for his information.

Society, the exercise “reflected in Anderson’s “Special Report” is nothing more than an attempt by Anderson to restore his reputation and that of his commission which had been so publicly and fatally damaged when, after several months experience of him, (including attendance at twenty formal hearings), the Friends of the Fraser Valley declared their total loss of confidence in Anderson and, as a matter of principle, refused to have anything more to do with him or his commission.

Anderson (wasting vast sums of the public’s money in the process) has used the Commission to attack the characters of such fine citizens as Mrs. Gina Breaks, who spoke out against Anderson, in public, to his face, and her husband Glen Breaks, who are both members of a large family extended throughout the Fraser Valley, some of whom are known to you personally, and all of whom are outraged by this defamation of Gina and Glen, cloaked in the guise of a solemn inquiry. Anderson even had the temerity to extend his vendetta to a person such as Ray Addington, an internationally known business and community leader who has been chairman of all our meetings and to the Directors of the Society, who include persons well known in our community for their integrity and public spiritedness.

You certainly know Ray Addington, Brian Calder and myself. You know our respective personal and professional reputations. You have met Mr. and Mrs. Jack Breaks and their son Glen and his wife Gina. You have also met many more of our members who have been active supporters of yours over the years. Do you really accept that we are irresponsible liars, as Anderson would have you, the Government and the public believe?

Finally, I should tell you that, in all my years as a practising lawyer (which includes relevant experience such as Counsel for the B.C. Firefighters before the Royal Commission on Workmans’ Compensation and as Counsel to your distinguished predecessor W.A.C. Bennett on his submission to the Royal Commission on the B.C. Railway), I have never witnessed a greater travesty of the purposes of the Public Inquiry process than the Anderson Commission. The responsibility for this lies directly on Anderson and, to a lesser extent, on his Counsel, Douglas McAdams. So far from reassuring the public and allaying its fears he has, through his own arrogance and folly, exacerbated the legitimate concerns of decent citizens by insulting their intelligence and mounting personal attacks on their leaders by means of a blatant abuse of the Public Inquiry process. He has created a mounting wave of public resentment which is growing every day, and is now focusing on the Government itself.

The Friends of the Fraser Valley is a non-political body but most of its members are long, true and active supporters of the Government, as you well know. We have watched with dismay as you have constantly been held accountable for the appalling conduct of persons whom you trusted, and from whom you had every right to expect honourable, intelligent and responsible behaviour.

You (and, if I may say so, Lillian too) have also experienced the agony of unfounded public vilification of the sort which Anderson has, without any justification, inflicted on Margaret and myself, and those of our friends and neighbours. I hope you will therefore understand the depth of our feelings.

I would be very sorry indeed if Anderson’s antics were to add to your present political problems but I regret to say, this is a very real possibility.

My wife and I had to learn of Anderson's attack on us by reading his published "Special Report". Unlike Anderson, I am not a back stabber, and I am therefore taking the liberty of sending a copy of this letter directly to him for his information.

With warmest personal regards and best wishes for the battle ahead.

Al Vickers

Charles Maclean was the final speaker of six participating panel members at the November 27 evening rally meeting at the Langley High School. The five others, in order of their presentations: Al Vickers, Margaret Ormston, Lodene Clark (resident from Illinois), Brian Calder (past president of the Real Estate Council), and Jack Hamilton (Insurance broker with the Insurance Brokers Association of B.C.). Ray Addington was the panel meeting

moderator. The event was videotaped by Rogers Community Four cablevision Langley staff and was later aired on Community television. Here is the transcript of the evening's videotape:



Ray Addington: This meeting is called by the Society of The Friends of the Fraser Valley, which is a completely non-political, and simply a collection of over a thousand neighbors, all residents of the area who are very concerned and dedicated to see that the provincial government does not allow our families and our properties to be exposed to risks through this totally unnecessary scheme. And I can advise the meeting that at the recent municipal elections all the candidates, whether they be elected or unelected, declared themselves completely opposed to gas and gas storage in the Valley. [Applause]

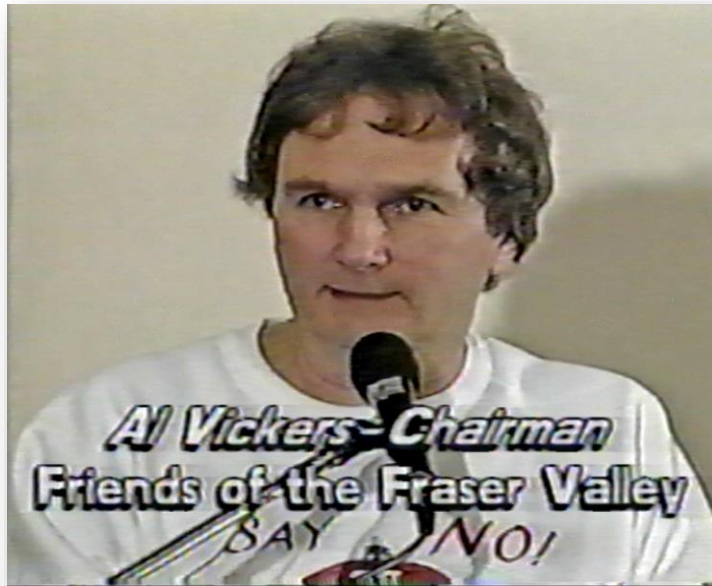
I must also tell you that we invited the honourable Jack Davis, the honourable Carol Gran, and MLA Dan Peterson to this meeting tonight. Now, Dan Peterson and Jack Davis told us they will not be attending. But Carol Gran has indicated that she will attempt to get here.

Our first speaker will be Al Vickers of 256th Street, Aldergrove, who is chairman of the Friends of the Fraser Valley's Society. Now, he's a schoolteacher by profession. I can tell you he's got the heart of a lion and the energy of a beaver. And he'll explain briefly the background of the issue.

Al Vickers: Thank you Ray. And I would like to welcome everyone a second time. Please don't be afraid to hold up those signs and let the rest of the province and Canada know exactly where you're from and why you're here tonight. Very important.

Well, I have the ominous job of giving the background to you. There are many people here tonight who have never really heard of this gas project really until the last few days. So, it is incumbent upon me to try and give you notice as to what has been going on. So, it's going to be a tough job, and I'll go fast, and I hope you understand of what I have to say.

It all started back on October 25th for us, anyway, of last year. It is slightly more than a year ago, when, without notice, the provincial government, through Jack Davis' Ministry of Energy, Mines and Petroleum Resources, sold the sub-surface mineral rights to in excess of 188,000 acres of land



in the Fraser Valley. They sold without notice to you and to me, the people who would indeed be placing their safety at risk and their property at risk. It is interesting to see, and perhaps later on in the evening when you have time, you can go to the back [of the meeting hall] and take a look at what is known as the consultation schedule. It would appear that Jack Davis and the Cabinet felt it was important enough to inform local MLAs and local governments because there is this consultation schedule for those people as early as April 8th of 1988.⁷⁸⁷ But they took no action, none at all, to warn you and me.

On February the 19th we were told, I was told, by means of a telephone call from someone in the community that there were two companies in the area, Conoco Canada and Dynamic Oil. Just two. And they were here solely to explore for gas and oil. We soon found out when we started to investigate things that that just wasn't the case. In fact, that was the first con [confidence] job. The first con job, however, the very first, was the fact that they did not tell people like you and me that they were coming into our community. We formed on February the 25th, exactly nine months ago, The Friends of the Fraser Valley. We went around to public information meetings like this, and we informed many of you who are here tonight. Our public presentations raised the heat!

There were three consequences of our public meetings. One: con job number two came forward. There weren't two companies involved, there were three: B.C. Gas came out of the woodwork. So, there is B.C. Gas, Conoco Canada, and Dynamic Oil. Con job number three was the fact that they weren't here to find gas and oil, they were here to store gas.

Another consequence was the Anderson Commission. You know, there are really two proponents to this whole scheme. There is the industry itself, and of course there is Jack Davis, the Minister. It is awfully suspicious to me that the Minister took it upon himself to form his own Commission. Sometime in March of this year he formed his own Commission and elected David Anderson to be the Commissioner.

Now, the question is, why do these companies feel, and does Mr. Davis feel, there should be storage in the Fraser Valley? Well, we asked that question too. The companies told us that the reason why storage should be here was because there was this shortage of natural gas to the Lower Mainland. One of the presidents of the companies stated quite clearly in the local paper that Langley Memorial hospital had run short two years ago. Not so. Another con job. While he was saying that we've

⁷⁸⁷ Refer to the section above, *Provincial Government's 'Consultation' with Third-Order Governments*, for the details. Vickers reference date of April 1988 appears to be in error and should read 1989.

BIG STINK OVER GAS STORAGE

Copyright 1990 Los Angeles Times. Reprinted by permission.
By Jeffrey L. Rabin, Times Staff Writer

When natural gas was first injected underground, the only neighbors were birds. Now residents complain of leaks and odors.

Since World War II, vast quantities of natural gas have been stored in the sandstone pores of an old oil field more than a mile beneath Playa del Rey, the Ballona Wetlands and parts of Marina del Rey and Venice.

At the Southern California Gas Co.'s processing plant high atop the Playa del Rey bluffs, natural gas piped from Texas and California producers is compressed, cooled and injected deep into the Del Rey field. The gas remains there until it is needed to meet customer demand.

For most of its history, the plant's only neighbors were the hawks and migratory birds that frequent the sandy bluffs and the wetlands below.

But now the facility and many of the wells where gas is injected and withdrawn are surrounded by urban development.

Instead of wildlife, the gas company operates side-by-side with residents of multimillion-dollar, bluff-top homes with spectacular views of Santa Monica Bay and the entire Westside from Malibu to downtown Los Angeles.

With the residents have come complaints about odors, leaks and the venting of gas from wells that in some cases are just a few feet away from expensive homes. Like many other areas of Los Angeles, the situation in Playa del Rey has the potential to become a classic land-use conflict between industry that was there first and the residents who came later.

Pat Boster, a leader of the Playa del Rey Bluffs Assn., a homeowners group, said her neighborhood smells like gas at least once a week. "You'd think somebody had turned on the gas in your house, when they are really venting," she said. "When our house is full of it, the whole neighborhood is full of it."

Joe Berberich, a neighbor, agreed. "Periodically the place just gets inundated with natural gas smells... it's certainly a source of concern. No one wants to be breathing gas."

Berberich said he and other neighborhood residents have called the gas company numerous times to complain about the telltale gas smell, which is actually a scent added to the usually odorless gas. "I don't know if they have wells that are leaking or if it's part of their venting," he said. "Nobody really knows that."

In response to persistent questioning from neighbors, gas company officials acknowledged recently that small amounts of gas are vented into the air up to 50 times a month.

Jim Tierney, general superintendent of the gas company's South Basin Division, disclosed in a letter to Boster last spring that about 300,000 cubic feet of natural gas is vented into the air each month from normal operations at Playa del Rey. The amount vented is enough gas to supply 57 residential customers for a month.

Tierney said the vented gas is "a relatively tiny fraction of the billions of cubic feet of gas stored in our underground facilities." And he pledged that efforts would be made to reduce the venting by two-thirds before the end of this year.

Dave Zuniga, station superintendent, said the venting varies from 10 to 15 times a month to as much as 50 times a month depending on maintenance of compressors, wells, pipelines and other equipment.

Concerned about possible health effects, the Playa del Rey Bluffs Assn. has enlisted the help of a public health professor and a law professor at UCLA to understand the implications of the gas company's operations.

Boster said more than 100 neighborhood residents attending a community meeting with gas company representatives last November were shocked to learn that the storage field underlies about 460 acres — an area running from Manchester Avenue on the south across Playa del Rey, the Ballona Wetlands and part of Marina

del Rey to Venice.

"They never gave us any clue," she said. "We had no idea we were living over such an extensive field." Nor did the residents know the extent of the venting. "We had no idea they would vent that stuff on us," Boster said.

UCLA law professor Henry McGee, who has been retained as a consultant by the homeowners, describes the gas company facility as an improper land use in what is now a residential neighborhood. "It's obviously incompatible. Whether it's safe is not known," he said.

The tension could rise if ambitious plans for a vast new community called Playa Vista between Playa del Rey and Marina del Rey become reality.

Developer Nelson Rising said he believes the gas company's operations are compatible with plans for construction of the massive residential, office, retail, marina and hotel complex. "We're quite confident that there's no problem," Rising said.

Gas company officials say the Playa del Rey gas storage field, one of six such fields operated by the company, has operated safely for nearly half a century and they promise to take steps to reduce any impact on the neighbors.

Tierney said the facility is vital to serving gas customers.

"We could not duplicate this facility. It is a naturally occurring facility, so it's not something you can pick up and move to some remote location," he said. "That can be done with most things in the industrial world, but not with this kind of facility. It's just here. God put it here and that's it. So we've got to live with the neighbors."

Tierney readily admits that circumstances have changed since the Del Rey oil field was discovered in 1929. The first oil well in the area was dubbed Rod and Gun Club 1, a testament to the lonely nature of the landscape in those days.

As the oil was extracted, room was created in the underground rock formations that was ideal for gas storage.

During World War II, the field was operated by the U.S. War Department to ensure an adequate supply of natural gas to defense plants in the area. After the war, the field was acquired by the gas company, which has operated it ever since.

A total of 72 wells operate today throughout the field. Thirty of them, near the center of the field in Playa del Rey, are used for injection and withdrawal of gas. The remainder, scattered at the periphery of the field, are used for withdrawal only.

Altogether, 2.6 billion cubic feet of gas can be stored in the field. The gas is withdrawn as needed on cool winter days and when smog conditions require electric generating plants in the South Bay to use clean-burning gas rather than more polluting fuels.

Despite complaints from some residents, officials at the South Coast Air Quality Management District said they have never been able to prove that the gas company facility is the source of odors in the area and no violation notices have been issued.

In May, AQMD inspectors determined that the likely source of odors reported near the bluffs was the city of Los Angeles' sewer line that carries waste water to the Hyperion treatment plant. The line runs under Cabora Drive, a paved path midway up the bluff face. Manhole covers were sealed to control the smell.

But neighbors are not satisfied. "It's not the sewer line," Berberich said. "It's definitely a natural gas smell."

Air samples taken last August in the vicinity of the Treasure 8 well on Delgany Avenue showed trace amounts of cancer-causing chemicals benzene and toluene in the air. "The minute quantities observed make

it nearly impossible to ascertain whether venting or leaks from Treasure 8 were the source," inspectors wrote.

Samples taken in January and February in other parts of Playa del Rey showed benzene levels at 5 parts per billion, double the 2.4 parts per billion that is the average concentration in the basin's air.

The gas company has acknowledged in notices sent to customers that natural gas can contain small amounts of benzene. Elliott H. Harris, an environmental engineer for the gas company, said benzene levels range from 0 to 50 parts per million in natural gas depending on the source of supply.

Toluene levels in the recent air samples were 15 parts per billion or 1.5 times the average concentration.

AQMD spokesman Bill Kelly said the readings were "not really that much out of sync" with the levels recorded in coastal areas of Los Angeles.

And air quality officials were not concerned about the venting of natural gas, which is primarily methane. "In general, we do not regulate that kind of activity," said AQMD's senior engineering manager, Dave Schwien.

When released at ground level, methane rises and disperses quickly, and does not react with other gases to form smog. "In our judgment," Schwien said, "methane is not an air contaminant."

After looking at the test results, Schwien added: "We just don't see this as a problem."

Nevertheless, the gas company is planning to install a flare stack next year that will burn off much of the gas that is now vented into the air.

Tierney said the flare stack, already used at gas storage fields in Whittier and Montebello, should eliminate odors. He said plans to install the equipment were prompted by the fact that "neighbors are moving in downwind" from the plant. The flare stack was not required by any government agency.

The gas company has also posted signs on some wells warning that hydrogen sulfide, a flammable poisonous gas, may be present. Electronic monitors have been placed at the wells to alert plant operators to the presence of hydrogen sulfide.

Jeevan P. Anand, division superintendent for the gas company, said the monitoring equipment was installed because "we're being surrounded by people... If our operations are in any way causing any problems, rather than react to it, we need to be prepared ahead of time," he said.

In response to new AQMD regulations, the gas company will fully enclose its facilities at the base of the bluffs where water pumped out of the wells is treated before being discharged to the county sewer system.

The gas company's actions, while welcome, have not deterred activists such as Boster. She is still pressing county health officials to probe the causes of cancer deaths in the neighborhood.

Philip Jacobs, an epidemiology analyst for the Los Angeles County Health Department, said a review of cancer statistics from 1972 to 1980 failed to find anything unusual in Playa del Rey.

"The cancer rate in their area was not statistically different from all of Los Angeles County. I did not find anything that stood out," he said.

Boster, who has had cancer surgery three times since moving to the area in 1968, is not satisfied. She called on the county to conduct a full-fledged study of cancer in the neighborhood.

"To avoid using the current data when many of these houses did not exist in 1980 seems incredible to me," she said. "They should be ashamed not to look at those statistics."

As an addendum to this article, according to an official of the Southern California Gas Company, when it came time for them to expand their operations in the 1970's, after many years of experience at operating in a populated area, they did not repeat their previous error. This time around the entire surface area of their new facilities at Aliso Canyon and Honor Rancho was purchased as well as a buffer zone around the perimeter of each site. No one resides on either of these facilities.

If this can be accomplished in a state which has a population greater than all of Canada, then it can be accomplished here, if it is proven that underground storage is indeed needed.

PAID FOR BY
Friends of the Fraser Valley



discovered that we have a twenty-five-year supply of natural gas at the present rate of consumption to the Lower Mainland. And not only did we find out that, but they had just discovered in excess of seven trillion cubic feet of natural gas that would have saved, or rather, would have projected us into the next few hundred years. If you have been paying attention to the newspapers within the last two weeks, the Minister of Energy, Mines and Petroleum Resources, Mr. Jack Davis, has stated publicly that there is now in excess of eighteen, 18 trillion cubic feet of natural gas in the northeast sector, and

approximately another 20 trillion cubic feet that is suspected to be there. And they've just scratched the surface. So, it is quite obvious that even if there was natural gas here in the Fraser Valley there is not the slightest reason, not the slightest reason to engage in gas exploration in the populated Fraser Valley. We have it coming out of our ears.



Well, the consortium of companies decided that we had them on that one too. That was another con job we caught them at. So, then they said, yes Al, we do have all that gas up there but we really can't bring it all down here to the Coast. The pipeline capacity is not adequate.

Well, ladies and gentlemen, we did our homework on that one as well, and we found this. That Westcoast Energy

Corporation, the carrier for natural gas to the Fraser Valley, has a capacity for 1.5 billion cubic feet per day to deliver to people like you and me. Now, that doesn't mean anything until you know how much we use. On an average winter's day – not Spring, not Fall, and certainly not Summer – on an average winter's day we use only thirty percent of that supply. Only thirty percent. Another con job. There was plenty of gas coming down to us. Not only that, they didn't even announce, but we had to discover on our own, that they were in the process of completing a looping system, which would bring down another twelve to fifteen percent extra as well. And Westcoast Energy is more than pleased, by the way, as a result of the Commission's finding, to even double the pipeline capacity. Another con job.

Well, recently they have been telling us that the reason why they have to have natural gas here it is for security of supply. You know, many times I have gone before the public and said what the companies have had to say is interesting, but it is what they have not said that is absolutely vital. And that is exactly what they have done here. Sure, it is security of supply: **it is security of export supply!** And for those people from B.C. Gas here tonight I would suggest you use the word export in your vocabulary. Another con job. [Applause]



Now, I'd like to point out because there seems to be some people even in the David Anderson Commission that don't understand where we are coming from. So, those of you from the Anderson Commission here tonight, take notes. The Friends of the Fraser Valley have the following position: we endorse the use of natural gas in homes, in automobiles, and in factories. We have no problems with storage. We have no problems with export. Mr. Anderson, wherever you are, this is the problem. Mr. Davis as well,

who is not here. We do not want, nor do we need, storage in the populated Fraser Valley. Thank you very much. [Applause]

Let it be known that we pay a big price to live in municipalities. Municipalities are not the place for primary resource development. We have adequate supplies, we have adequate delivery arrangements, there is no need to place the residents or their properties at risk. You can be expected to live under a disaster evacuation plan 24 hours a day, every day, every year, as long as you are here! They also suspect



there could be a problem with your well water, because they are going to test your water before, during and after the drilling phase. And think about that, what that means. All that means is one day they may come to you and say we've tested your water, I'm sorry Henry, it's wrecked! You have no comeback on that. There are no laws provincially, federally or municipality-wise that can protect you. And the companies have no legal obligation. You have to take those people to court. [Vickers raised his arm in the direction of the consortium representatives in the meeting hall.]

Now, do they leak? Indeed, they do. Tonight, Lodene Clark from Ancona-Garfield Illinois will tell you about those kinds of leaks. But I can assure that once they leak, and once the gas migrates, the gas is free to wander and cannot be controlled. And don't take my word for it. Listen to Lodene and listen to Dr. [Donald] Katz. Dr. Katz is one of the leading authorities in the United States and has written a textbook that was just published this year 1990. It is called *Natural Gas Engineering, Production and Storage*. Here are quotes:

- "A concern is that this gas eventually might reach water supplies and appear in the local user's water. Gas might even permeate the soil at the surface and enter homes or buildings to provide explosive mixtures."
- "It is foolhardy to say that such leakage will not occur in a reservoir being developed with a projected 30-to-50-year lifetime."
- "It would be preferable to have the homes on concrete pads without basements, and this type of new construction might be well advised in gas storage areas. Monitors in basements that would detect low concentrations of natural gas could possibly be installed to provide adequate warning before the gas reached the explosive limit, should gas ever enter a basement."

Any one of these reasons or recommendations that they have given to us tonight, and they recommend strongly that they don't go anywhere near populated areas. Any one of those recommendations or reasons is sufficient cause is to bring this project to an immediate halt tonight! Not tomorrow, tonight! [Applause]



Now, I would like to add to your possible shock that that book [lifts a page from Dr. Donald Katz's book in the air with his left arm] was not in the Ministry of Energy and Mines' files in their library in Victoria this Spring. And Mr. [Jack] Davis has failed to come out tonight to hear it still. I don't know if that became testimony in the Anderson Commission. I don't recall having seen it.⁷⁸⁸ I'm glad they are here to hear it.

I would like you to know this. That your Premier Mr. Bill Vander Zalm was told all of that information and more on July the 30th of this year, four months ago, and I have yet not received a reply from that man.

⁷⁸⁸ No references to the title of Dr. Donald Katz's book were found in the Commission's transcripts, and his book was not entered as a Commission exhibit. References to the name "Katz" are in Proceedings transcript volumes, 6, 8 and 9.

In good faith we cooperated, assisted and supported the Anderson Commission by supplying information and guidance. But we soon realized that because of its conduct the Commission's purpose was not to look into our concerns but to convince the government and the residents that the proposals that the government had embarrassed themselves with should now be allowed to proceed. Now, I'm going to predict something for the future. We are getting close to the new year. And I'm going to suggest this. You can anticipate these findings from the Anderson Commission report when it comes forward in the new year. Expect the report to say that the residents are ignorant, fear-mongers and users of rhetoric. And they are going to bully certain people like Mr. Glen Breaks and certainly yours truly, Al Vickers. They are going to say that The Friends of the Fraser Valley, and that's all of you I presume, and many more of us, that they are simply people who don't know what they are talking about, and people who should welcome the dangers and the abuse of their lives and their properties by these companies. Because there is no evidence, none, at all, anywhere, that there



is anything wrong with it. Ask counsel for Commission. He's here tonight. He told us that [on August 25] two days before they started. That the preponderance of evidence would suggest that the project could go ahead safely. Expect this from Mr. Anderson and his Commission.

In conclusion, I would like to say this. That if you care for your

family and property as we do, and I know you do because you wouldn't be here tonight, you will know what to do. You will demand that the provincial government cancel this whole thing, once and for all. Let them know in no uncertain terms that you will not put up with this unnecessary and dangerous scheme where the residents are the only people who put up all the risks and take all the chances. Now, we can help you achieve some of that, and Mr. Addington will tell you later about how to go about doing that. Let me conclude by saying that this insane project must be stopped. Believe me, if they are allowed to develop the first reservoir, as they propose to do, the gas and oil industry will have the entire Fraser Valley developed into an enormous time bomb of potential trouble. And they know it too! [Applause] Now, there's only one outfit that can do anything about it, and that's the government. And that's you. Because you are the government. You do the telling. Thank you very much.

Margaret Ormston

Ray Addington: Now, Margaret Ormston, based on her own experiences, will give you an idea of what little regard the oil and gas industry has for property owners like you and me once they have the enormous authority to do what the hell they like from Mr. Vander Zalm to drill.

Margaret Ormston: Good evening. I think that most of you have been at many previous meetings, and I have told you about a very beautiful and attractive piece of property that I owned in Ft. St. John and was totally wrecked for me by a combination of the oil companies and the Ministry of Mines and Petroleum. Any stated regulations that they set up can be altered at the drop of a hat. If a large number of oil companies combine, for instance, they can drill an oil well every ten or twenty acres. It doesn't really matter as long as they can get a large enough so-called 'unit.' So, my piece of property was cursed with five oil wells and a compressor station and a scrubbing plant for oil.

Now, I have talked about this piece of property, and the Ministry of Mines and Petroleum were very aware of my anger of what was done to it. And indeed, earlier this summer they did a cosmetic job



on this poor, benighted place, and tidied it all up and made the oil lease sites very attractive. But, despite knowing that people were watching, they did manage to have a very large fire on one of the oil wells. Now, the oil company couldn't deal with it. The local fire people couldn't deal with it. And they had to call out the fire fighters and their special equipment from the Ft. St. John airport to put out this fire. Now this piece of property had me, one house, one resident, on it, and it was 300 acres.

Now, I would like you to compare that to the number, for instance, that live in Murrayville. Friends of the Fraser Valley surveyed Murrayville earlier this summer, and I may point out that the Anderson Commission did not a single, local survey. They didn't go around and collate people, talk to them, see how many animals they had, how many people were in their house, what age. Friends of the Fraser Valley did. And we found that there are 411 people living within one kilometre of the proposed drilling site in Murrayville. The Fraser Highway also runs through that area. And can you imagine a major fire in an area like that that requires very large equipment coming out from airports or heaven knows where? I don't know if Langley even has that kind of equipment to deal with a great big fire in the middle of Murrayville. The industry expects us to believe their assurances that they can evacuate us. Four hundred-odd people, four hundred domestic farm animals within the area, as well as deal with all the traffic. And I think many people have involved in evacuations recently in Langley where there have been relatively minor gas leaks, and they do create a lot of problems.

I would like to say again that I feel very strongly that we don't need the kind of threat that the petroleum imposes on a community in Langley. And I ask everybody to do whatever they can, on

whatever kind of level, of municipal action, provincial, or even federal, to show the oil companies the door and suggest very strongly that they move elsewhere. Thank you.

Province of British Columbia
Commission on Fraser Valley Petroleum Exploration
No. 105, 20611 Fraser Highway
Langley, British Columbia
V6A 4G4

Attention David Anderson
Commissioner



Conoco Canada Limited
3900, Bow Valley Square 2
205 - 5th Avenue S.W.
Calgary, Alberta T2P 2V7
(403) 260-2400

Dear Sir:

October 12, 1990

Re: Report on Methane Dispersion in the Atmosphere

Conoco Canada Limited, on behalf of the Fraser Valley Gas Project, submits the attached report entitled "Estimated Ground Level Methane Concentrations Resulting from a Natural Gas Well Blowout in the Fraser River Valley".

The report has been prepared by Dr. D.M. Leahey of Western Research. He has had extensive experience modelling atmospheric dispersion of gases as evidenced by his attached experience record.

If it is deemed necessary, Dr. Leahey is available to answer any questions the Commission may have regarding the report contents. Please contact Mr. R.M. Spring at (604) 856-8031 if additional information is required.

Thank you for your consideration of this report.

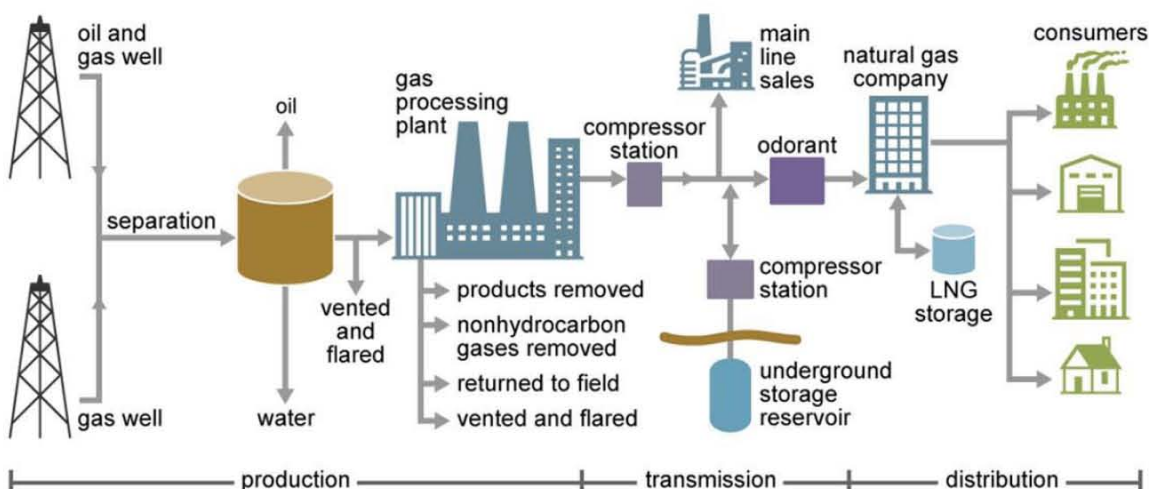
Yours truly

CONOCO CANADA LIMITED

ROBERT E. PELZER
Vice President &
General Counsel

c.c. W.E. Westall - Conoco Canada
T.N. Tipton - Conoco Canada
R.M. Spring - Fraser Valley Gas Project

Natural gas production and delivery



Source: U.S. Energy Information Administration

Lodene Clark

That evening, the audience heard from special guest Lodene Clarke from Long Point, Illinois. She had been invited and sponsored by the Friends for a one-week visit. She stayed at the home of Glen Breaks' parents, and in their company and during her many visits that week, she would tell the attentive, eager ears of those listening the many sordid tales of her experiences with underground gas storage, what Charles Maclean stated in his letter to Premier Vander Zalm, "the misery she and her family have endured."

Ray Addington: Mrs. Lodene Clark, as I told you before, has come all the way from Illinois. And, in addition to that, she is appearing for the first time in her life in public, and she will tell you what it is like to live above a gas reservoir.

Lodene Clark: I'm not a public speaker, and I'm scared to death to be here, but I have a story to tell. It's too late for me, it's too late for my farm. And I'm here to tell you what happened to me in an effort to say – save yourselves.

We were approached in our area in 1961. And we live in a sparsely populated area. It's rural



Illinois, flatter than a pancake. No hills, no mountains. You name your mountains, and we name our plots of farmland. Now, I'm going to talk about a Fordice farm which consists of 80 acres. And then a fourth of a mile down the road there's another 80 acres that I'm going to talk about as the Clark farm. So, we have a Fordice-80 and a Clark-80. And I happen to at the present time own them both because they were inherited through a family chain.

The Norther Illinois Gas is our company. And when they approached these people to put the underground storage down, the people were elderly. My mother-in-law was widowed. May Fordice was in her seventies, and Harry Fordice, her husband, was about the same age. So, these were not young people. They were shown a contract, took the contract to their attorney who had been a friend for years. He said at that time, if they [Northern Illinois Gas] want it, they're going to have it. They are going to get it by eminent domain.⁷⁸⁹ There will be ways for these big companies to get this land.

⁷⁸⁹ The subject of "eminent domain" was discussed at the Commission's technical hearings on three occasions, September 4, 5 and 6, 1990, during witness examination of American storage consultants. "**Counsel MacAdams:** Eminent domain is an American legal technique to enable storage companies, amongst others, to take over privately held land rights in order to



Left: Lodene Clark's home. 1990.

You're just as well sign the contract and be done with it. So, there was no active fight put up here. Okay. The neighbors that were surrounding here also signed. There was compensation. They paid \$1,000 an acre, but they didn't buy the acre! The only took the easement, and that has been a big problem. Because, now what has happened there is a series of gas roads to go back and service all these wells. There

are a series of wells, and you can't grow any crop on those wells or on those roadways, so consequently you pay taxes on land that is non-productive. In essence, I am subsidizing this huge company. So, kind of money out of the pocket there.

Anyways, when the contract was signed by my particular branch of the family in December 1981 [error, 1961], drilling started soon after. Drilling to go down, as deep as they go down in our particular area was 2,500 feet. It does not take just a little rig. There were huge drilling rigs that came in. They crossed the farmland. We have land being so flat that we have to have tiling under it in order to carry the drainage away. These huge, huge pieces of machinery. But the very weight of them broke up many of our tile that had never been adequately repaired. Consequently, they have generally reduced my income because the land cannot drain and not as adequately able to grow crops as it did.

When these big, big rigs came in, they were set up, there were generators next to them, highly lit, worked 24 hours a day, seven days a week, had a big tank / some kind of affairs next to them, required a great deal of water because they use water down around this drill bit somehow. So, you had a truck running down to a creek, and they had to have gas pumped down there to pump the water out of the creek, put it into this tank or take it back to their drilling rig. Then, in order to have a place to put what came up from the drilling as the water went down it brought up, I suppose, ground up rock, they dug huge, huge pits and drained this water that contained rock, into these pits. And that rock set up just like concrete. So, after those pits were filled up after the drilling was done, now you have a pit with a nice concrete bottom just like a swimming pool. So again, they damaged the productivity of the land. These rigs were highly lit up at night. There was a lot of noise. It's a sparsely populated area. Didn't bother us that much other than you knew they were out there, you

facilitate the operation of the facility, correct?" (Source, *Proceedings*, Volume 6, September 4, page 1200.) **Expert witness, consultant Douglas Ball:** "Another story that I keep up with because the company retains our company to keep watch on the reservoir, served Saint Louis. ... the storage underlies a bedroom community called Florissant. ... At the time the company was filing with the, I think it's called the Missouri, or I guess it's the Missouri Public Service Commission for the right to use eminent domain or to have the company's right of eminent domain broadened so that it included underground gas storage, there was quite a fight over that. The landowners, some of them hired expensive attorneys, and did lots of fighting on the condemnation court. And I represented, I didn't represent, but I was a witness for the company to try and let everybody understand just what the storage was like and what it was going to do, and things of this sort. And I do remember that the fight was bad. And those people now, they claim that their storage -- that their property rights would be severely devalued, and it would be worthless." (Source, *Proceedings*, Volume 8, September 6, pages 1483-1484.)

could hear the clanking of the pipes, you could hear these trucks going back and forth, you could hear this generator running on a diesel or something and all that made noise.



A few video interviews were made of Lodene Clark and her tribulations with the gas company's leaking underground storage facility.

In this interview, Lodene is pointing out and describing two water wells affected by leaking methane.

One of the wells, capped (indicated by red circle), to the right, was tainted.



Here, to the left, Lodene lifts a square hollow box which is positioned on top of a small piece of plywood. Under the plywood is a "dug water well." "A couple of times it got hit by lightning, and this board blew off," she explains.

Looking into the water well. "You'll see the gas bubbling on the sides of it as it comes up. Now, this isn't as riled as it's going to be as they put more and more gas in here [in the storage facility] as the winter sets, in about September, October. This will boil just like a tea kettle. It's really going full tilt."



Eventually the gas injection withdrawal wells did go down. On an 80-acre plot, which would be a fourth of a mile wide, a half a mile long, I believe we had seven wells on the Clark and a comparable number on the Fordice. It's been an ongoing battle with this company for a lot of years. This drilling and the placement of these wells went on from about 1962, 1963 up to about 1964, 1965. It was a matter of not just a brief period, but a matter of several years before all this drilling and digging and pile and pipeline.

The Fordices, Mr. and Mrs. Fordice, my aunt Mary and uncle Harry, lived on the Fordice 80 and they had a home that was built in 1888. Always kept in good condition. They had a dug well. And, if you know what a dug well is in this area, that is what it is. The well had always had good quality water in it. Somewhere in around 1966 the quality of the water became very, very poor. It was discolored, it was agitated, it was churning a little bit. They didn't know what to do about it. They had a little small drilled well put down in close proximity to this dug well. They got no better water from that. Somewhere in about 1969 we checked into the well, and low and behold the dug well is boiling like a tea kettle would boil, very rapidly, churning very rapidly. We reported it repeatedly to the local gas company people and they always said, you have a problem with native gas. That's not our gas. That's native gas, native to this area. [The audience stirs, starts laughing.]



Across the street "from our farm home," Lodene examines a protruding pipe in a corn field. "This is one of the holes that they drill every fall, in order to release some of this pressure from under the ground. This one, when I raised a fuss, when they sealed them all. And you can see how this water bubbles up around [outside of the steel pipe] here. Sealing all the holes is really not that effective."

In another section of a nearby cornfield: "These are probably holes that were drilled this year, even though they are not allowed to do that. Maybe if we hold the camera down far enough, we'll be able to hear that it is actually bubbling. (The sound of wild bubbling is clearly heard in the audio.) If you look down in that it is a gently boiling kettle."



So, the complaining went on for a number of years. We wrote a letter that fortunately I did keep, stayed in the file, because we wrote more than one, dated 1970. We complained to the higher echelon of the company that this well was boiling. And, in fact we did not know if it was native gas or pipeline gas, but we would pursue it a little bit more. Well, the boys from the gas company local, local station, would come out and from time to time to check this [water] well. They took a sample every year and they always reported that this water was acceptable. Although, it stained white

clothing, it stained your porcelain. It was not good quality water, and water was nearly always purchased to drink.



Then in about 1971 or 1972 we noticed that the gas company would come out, go back on their own pads, they would put gravel around these injection / withdrawal wells, and they would drill a hole down. And they did this on almost all of their sites.

“My son’s first concern was to try get potable water, and we’ll walk over and see the well that he put down that is now bringing up Louisiana pipeline gas. And we refer to the water as ‘chocolate water,’ and it is totally unusable.” Seen to the left, “this is the well that Tom put down when he was intending to build a house out here. I think it is down probably about 70 feet. And when the driller put it down, he had a young man with him who took it upon himself to light it. And it shot a sustained flame four foot in the air. And it was a constant thing. ... I’m not going to take the top off, but listen, and you’ll hear it bubbling. The men from the Department of Mines and Minerals, as well as from the University of Illinois came out about a year ago in October (1989), and as soon as they saw this well, they got quite concerned. Then they went over to the gas company station, which is located there, like close to here, and that’s when we began to see some action, not that anything concrete has been done.”

“This particular strip of roadway has had this multitude of holes drilled. And, when the fellow from the Division of Mines and Minerals came out, he threw a match down in one of them, and it singed his eyebrows, and blew his cap off. It didn’t give him any serious burns.”



Now, in 1989, they were really aggressive. This entire area, the roadside ditches had innumerable holes. And what I had noticed in the past is that you could light these holes. My son used to jog. He lives in the farmhouse now. He had a dog that gained a little too much weight and he thought it was good for the dog to get some exercise. So, he would jog. And as he would pass these holes, he would flip a match. And, when he came back, he had his way lighted. [Laughter] Okay. Wasn’t that nice.

So then, as the year went on, in the fall, fine, the pressure of the gas was coming up. But, come around January, February you’ve got all of this roadside oil, salt, drainage, snow, whatever, the

water would all run down these holes. And I use to think, damn, they are really knocking the devil out of this water supply now.



STATE OF ILLINOIS

DEPARTMENT OF REGISTRATION AND EDUCATION

ISOTOPIC IDENTIFICATION OF LEAKAGE GAS FROM UNDERGROUND STORAGE RESERVOIRS— A PROGRESS REPORT

Besides drift gas and petrogenic gas of local origin, natural gas is piped into the state and is stored in underground reservoirs. This gas is generally of petrogenic origin. Sometimes gas that is stored underground leaks through the caprock of the storage reservoir into the overlying rocks or even all the way to the surface (Buschbach and Bond, 1974). The ability to identify such leakage gas and to distinguish between it and local naturally occurring gas is of both economic and environmental significance. This paper presents some of the preliminary results obtained in the attempt to use isotopic analysis of methane to identify leakage gas.

Dennis D. Coleman

Wayne F. Meents

Chao-Li Liu

Robert A. Keogh

ILLINOIS PETROLEUM 111

ILLINOIS STATE GEOLOGICAL SURVEY

1977

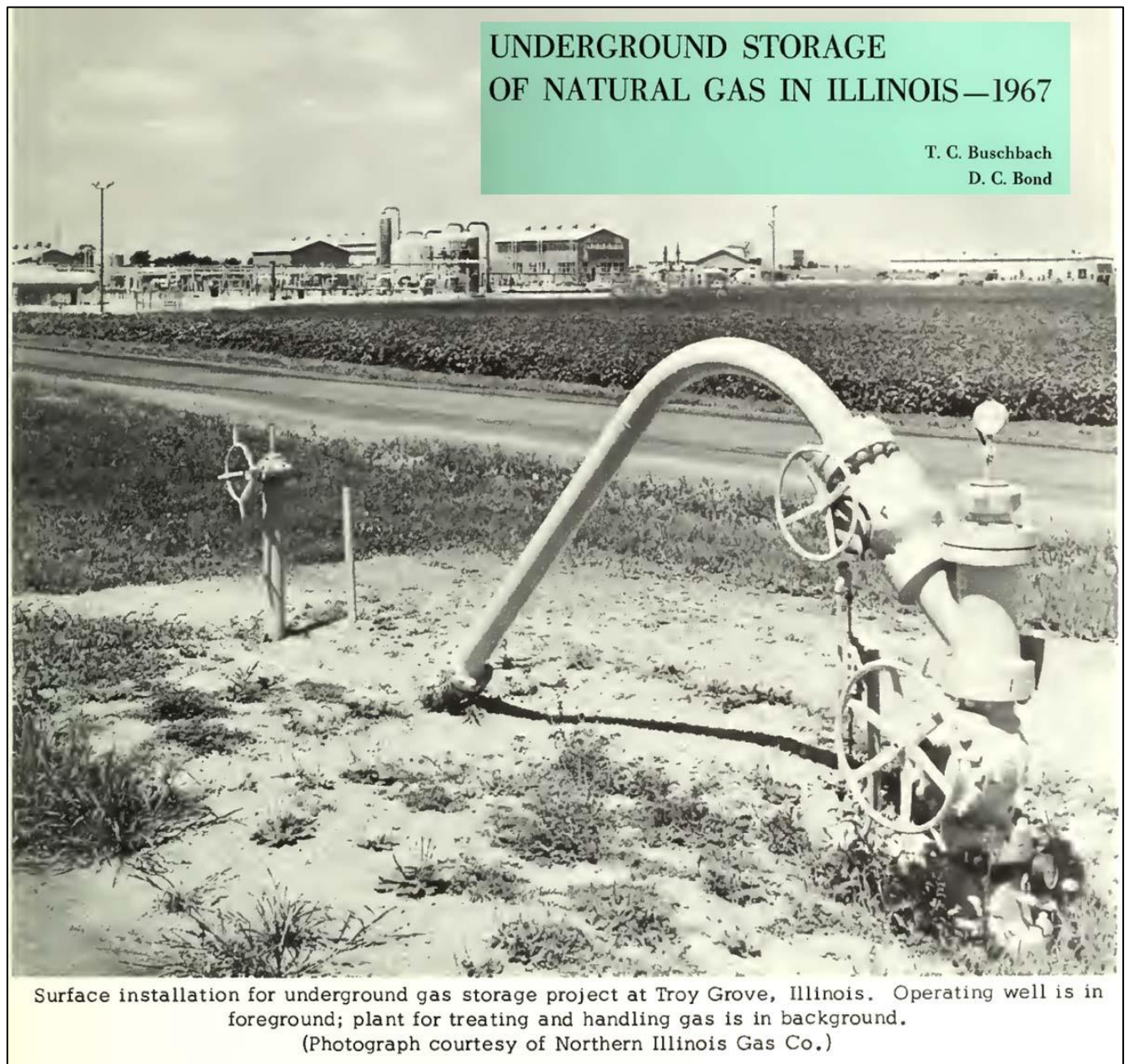
URBANA, IL 61801

Finally, someone said call the Department of Mines and Minerals. I did call down there. I did get a gentleman who said, we have a field man out in that area, and I will have him meet with you, and he can determine if there is a problem. So, the field man met with me, he looked at these holes, he realized the scope of the problem immediately. They took samples of the gas that was coming up out of these two wells, and out of these roadside holes, the holes that were drilled in the roadside ditches. And it is Coastal State's pipeline gas. So, I've got Louisiana gas coming up out of my Illinois well. That's quite a feat. [Laughter, and applause.] One of the fellows that was along with these boys, walked down along the ditch and decided he was going to drop a match down one of these holes that was drilled in the roadside ditch. And, instead of flipping a match at it, as my son did, he stood over it and dropped the match, and it took his hat off, it took his hat right off, but it didn't burn him. It was a big explosion. It went off like a shotgun. So, we've had that.

If they are going to tell you they are going to contain their gas 500 feet under the ground, they could not on my particular spot. Now, they tell me that I'm over a fault. And I had a big meeting with

these fellows. And the one fellow told me that it wasn't Northern Illinois Gas' fault that my land was over this fault, that God had put the fault there, not Northern Illinois Gas! [Laughter] And I said, wasn't that clever of God not to put Louisiana pipeline gas under it then! This company that I dealt with for many, many years, with lots and lots of frustrations, seemed to have an answer to everything.

Now, I want to say again that we are in a very sparsely populated area. We're lucky if we have two residents in a square mile. So, even though some of these things are occurring, it is not happening to a great many people. I think if you had a densely populated area then indeed you would have a lot of other problems.



Some of the other problems with this field is close by. They have what they call a dehydration plant. And as this gas is brought back up from the deep storage it brings a certain amount of water with it. These wells themselves bring up and shoot out onto the farmland an actual brine. This brine is supposed to be injected from the level that it came from. In other words, if it was in the Trenton layer, gas was removed from the Trenton layer, they are obligated to put the water back down in the Trenton layer. And, I suppose, they do most of it. But there is a certain amount of brine that shoots out of these wells. But this gas has been carried as far as I know to the dehydration station. The dehydration station has three burning pipe smokestacks. And it has a pond of some kind. I don't know the reason for the pond. Maybe somebody here could tell me that. But the one thing that the dehydration station does have, is when it's working, and all three of these burning areas, these smokestack things are going up. And then you have a muggy day you have a smell of heavy exhaust. I can only say it would be like standing in the middle of a freeway and nobody has emission controls. That's the kind of smell you have. It's not a problem out our way because the dehydration station sits probably a half mile away from any homes. But again, in a densely populated area this could be, could be a real problem.

B4

The Vancouver Sun, Wednesday, November 28, 1990 *****

BRITISH COLUMBIA

Gas-storage foes to target premier

By HAROLD MUNRO
Sun Regional Affairs Reporter

Fraser Valley residents plan to barrage Premier Bill Vander Zalm with letters opposing any proposal to store natural gas underground in their communities, organizers of an anti-gas rally said Tuesday night.

"Now we really start to fight and we go after Vander Zalm and the provincial government," said lawyer Charles McLean of Langley, whose fiery speech drew a standing ovation from the overflow crowd of about 600 at Langley secondary school.

The rally was organized by McLean and others from the Friends of the Fraser Valley, a citizens' group formed nine months ago to oppose natural-gas drilling and storage as proposed by a consortium of three gas companies. The citizens' group, started by about 20 people, now has a membership of more than 1,000.

On Tuesday, Friends supporters were offering for donations: sweat-shirts (\$20), T-shirts (\$10), bumper stickers (\$1) and lawn signs (\$6) stamped with "No Gas" slogans.

Most people at the two-hour meeting signed form letters opposing gas

Fraser Valley group opposes plan

drilling and aquifer storage. The letters will be sent to the premier's office in Victoria.

Social Credit MLAs for Langley Carol Gran and Dan Peterson and provincial Energy Minister Jack Davis were invited to the meeting, but did not attend.

Gas-company representatives were not invited. Nor was David Anderson, the commissioner appointed by the provincial government to make recommendations on the drilling application and offer suggestions on natural-gas storage.

The commissioner reopened his study Monday after a seven-week investigation of charges by the Friends that gas-company officials tampered with commission witnesses. Anderson ruled Monday the charges were unfounded, but the Friends continue to boycott the commission.

No further public hearings are planned, but Anderson said Monday he will begin the process of reviewing the accumulated data and making a final report.

The Langley crowd heard Tuesday from eight panelists opposed to the gas companies' plan for the valley.

Illinois farmer Lodene Clark, whose trip to B.C. was paid for by the Friends, said in September that natural gas is bubbling to the surface of her 80-hectare Illinois farm.

She related the story Tuesday, voicing concerns about groundwater contamination and the ever-present danger of a gas explosion.

Clark concluded: "I don't know how all this is going to turn out for me, but I expect I will have to sell ... my farm."

Another panelist was Insurance Corporation of B.C. chairman Ray Addington, who said: "With one stroke of the pen, Vander Zalm can stop all of this nonsense."

Addington, an Aldergrove resident, said he tried to insure his property against the risk of groundwater contamination in the event the gas project goes ahead, but was told that


type of insurance is not available. Frank Hamilton, general manager of the Insurance Brokers Association of B.C., confirmed there is no insurance available to property owners.

Hamilton noted the gas companies can buy "control-of-well" insurance, which he described as a liability policy that covers them in the event of damage caused by seepage or pollution.

"It is up to the municipalities to insist that the companies carry the coverage in sufficient quantity to cover all the residents," Hamilton said. \$100 million worth of coverage would be a good start.

Panelist Brian Calder, past president of the Real Estate Board of Greater Vancouver, urged the Anderson commission to study the impact gas storage would have on property values.

"Everywhere I've been we've asked about property values," Anderson said Tuesday. "There is evidence elsewhere in North America and in Europe that property values decline temporarily, but it has never happened on a long-term basis."

SAY NO! 
**TO GAS DRILLING
&
STORAGE HERE** ↓



KEN OAKES

LODENE CLARK: claims gas bubbling in her Illinois field

If you would think of this field as a factory that is spread out into a big area, all of these wells require servicing. So, in the summer they come, and they lift these little cabin things off, and there's concrete pad under there, and there's gauges and pipes that come up and down. And they clean these things out. When the field first went in, they would pay us for what they referred to as 'acid damage,' and they would tell us not to be around these things because they would put something into it and blow it out and just called it an acid. What kind it was I don't know. They do do a certain amount of cleaning out. Then in the wintertime, each one of these valves must have to be warmed because they have – it is not a true fuel oil or kerosene, it is a little more high-alcohol. They pay one person in our town to run a truck out and they all have storage tanks, and they have to keep these valves warm, these gauges warm, something has to keep warm. So, the gas truck runs up and down these roads in the winter. In the summer you have the cleanout people running up and down these roads that are the easement on the land.

These wells also require a great deal of checking. And you have a lot of traffic from the company itself as the men go out and check gauges and do whatever thing they have to do. Now, on our land we farm with big machinery. We have lots of valves. We have lots of above ground pieces – I don't know what to else to call them – that you have to farm around. It's a little inconvenient, not deadly so, but it is still an inconvenience that we wouldn't have had if we didn't have this underground storage area.

I don't know how all this is going to turn out, but I think I am probably going to have to end up selling this one 80-acre to this one company. It can never be returned to the condition that it was before they took possession of it. And the day that if that happens and I sign the sale I won't go by the cemetery because all the ancestors are going to be gone like that.

Brian Calder

Ray Addington: The aquifer type of storage, that system of storing natural gas underground, is exactly the type of storage which is being proposed by the gas consortium here. Exactly the same sort of thing. Now, your home and your real estate is, generally speaking, your largest asset. And you have a duty to yourself and your families to protect it in every possible way. Brian Calder will now tell you what is in prospect for your real estate value and its marketability if this drilling and storage scheme is allowed to proceed.

Brian Calder: The provincial government is considering a proposal to store natural gas beneath the agricultural and residential land in the Fraser Valley. As I understand the idea, it is to pump natural



gas into the sandstone where it is to be trapped and held by the water aquifers which run under the Fraser Valley from the Mount Baker glacier. I should point out that I do not consider myself to be, nor do I hold myself out to be tonight, knowledgeable on the functioning of storing natural gas. Further, I do not consider myself to be anti-development, anti-progress, or anti-growth. But by the same token, I am not blindly pro-growth at the expense of the community, the neighborhood, lifestyles, or the safety. I feel as a real estate agent, as I mentioned earlier, a responsibility to the public when it

comes to any proposed change in land use which may significantly affect you, the public. Realtors should study the issue and report on the merits or otherwise of such a plan. The proposal could significantly affect the public we serve.

Leaving to one side the question of the appropriateness of storing 25 billion cubic feet of natural gas beneath this area, which is undergoing very rapid urbanization, and presently has a population of some 500,000 people, I feel that as a real estate agent we must give urgent consideration to the following matters which could affect sales and selling procedures if this gas storage is to proceed. I am concerned that the following issues would immediately arise if the provincial government gives such approval. Would we be able to ensure against the hazards arising from the underground storage of natural gas under a populated area? Would this affect land or house prices in an area that had an underground storage facility as compared to areas that did not have underground storage facilities? Is there a psychological factor alone, never mind the danger that might be inherent in storage of natural gas, where someone looks at Langley, or Surrey, or Sumas, and the alternate housing accommodations in Mission, or Coquitlam, or Port Moody that does not have the underground storage of natural gas? It is my information that the Fraser Valley east of the Surrey border is dependent on groundwater, drawn from municipal and private wells, is there a possibility of contamination to the groundwater by leaking gas?

I'm given to understand that this leakage problem has been experienced in already existing underground storage facilities in North America. This has to be given serious consideration since, in the present state of the law, as I understand it, any homeowner or landlord would be without any recourse against the oil and gas industry, or the provincial government, in the event that the water supply was contaminated by the leakage of gas to the surface subsoil. Under the provisions of the Petroleum Natural Gas Act owners of the surface land are compelled to provide access to gas companies for the construction of surface facilities, the drilling of wells, and the provision of land for access roads and pipelines and construction. The only restriction is that the surface equipment, such as drill rigs, must be located at a minimum of 80 metres from a residence. Will this have an effect on land values?

The storage of natural gas underground calls for an emergency evacuation plan for people, but not livestock, within one kilometre of an installation in the event of a gas well blowout or a similar catastrophe. This plan is filed with the provincial government and is available for you to go through, I guess the Premier's office, would be the most direct route.

If the provincial government approves this proposal for underground gas storage in the Fraser Valley, my preliminary legal opinion, or advice, is to the effect that all of the foregoing are matters which could materially affect any contract for sale or purchase of real estate in the Fraser Valley. Agents and salespersons may be under a legal obligation to advise all prospective purchasers of the foregoing matters in order to protect themselves from any actions for damages or rescission of contract and sale and purchase should the information have otherwise been withheld. Would this type of disclosure negatively impact on a purchaser if they were told that there was the underground of natural gas, which in preliminary legal opinion, my lawyer tells me, that we would have to protect ourselves, advise the public when they were purchasing property that there was on the sales and purchase contract, that there was underground storage of gas beneath the area? Now, if the option is that there are homes available in a surrounding area it is just as commutable for the person, and is desirable, it would seem to me that it might have a negative impact on that purchaser that might cause them to be alarmed. If the provincial government approves the proposal, real estate agents may well be advised to also obtain a waiver of liability covering these matters from all

prospective purchasers of the property as well. Real estate sales have been strong in the Fraser Valley, and this is expected to continue for the next twenty years and beyond.

I am not here tonight to tell anyone that I have all the answers, because I certainly have not. And I wrote that column⁷⁹⁰ posturing positions taking legal counsel if this went ahead, what might happen. And a rhetoric from a representative from the gas companies to me was a non-answer.⁷⁹¹ And, it is precisely my point, is that I don't have the answers. I strongly suggest that the potential consequences of this proposed underground gas storage facility to all present and future owners of property in the Fraser Valley must be discussed freely, openly in a public forum in as many hearings as it takes so that all questions [applause] that must be asked, deserve to be answered, and everyone deserves to be heard. The provincial government's Anderson Commission presently investigating the issues must take as much time as is necessary so that all may be heard. We must be apprised of all of the potential negative, as well as positive, factors which may affect the people in the Fraser Valley, their homes, their farms, their business, their lifestyle, by the proposed introduction of such an underground gas storage facility. We all need, and we benefit from, our oil and gas industry in British Columbia. I'm not suggesting for a moment that we don't. This, however, does not mean that anyone is entitled to override any of the rights of the hundreds of thousands of property owners in the Fraser Valley. [Applause] If it is demonstrated, beyond doubt, after thorough public discussion and debate, that an underground storage facility is really necessary then surely some more appropriate site can be found in this enormously land-rich province of ours. Surely we must be able to find a site that has absolute minimal impact on our population, rather than allowing an oil and gas storage facility to locate under land designated to become the major population centre for this whole province. It is interesting to reflect on some of our history at this time. The oil and gas industry's last attempt at this, to my knowledge, was in 1977. The then mayor described this proposal "as another of these kooky schemes which people try and force on the Fraser Valley."⁷⁹² The mayor's name, Bill Vander Zalm. 1977, the scheme was stopped dead in its tracks by the provincial government of the day. Prior to any approval of any plans to store natural gas underground in the Fraser Valley I would think it incumbent on the Premier of this province – also named Bill Vander Zalm by some such strange coincidence – to explain what changed from his 1977 opinion of the concept when mayor of Surrey. If his reasons for opposing the imposition of this gas and storage facility into the Fraser Valley were valid then, one could only presume they were even more compelling to oppose it now. And from what I am hearing from this crowd, someone will surely be asking him. Thank you very much.

⁷⁹⁰ Brian Calder wrote an opinion column in the Vancouver Sun weekly Business section, *Gas storage under the Fraser Valley could create a nightmare*, September 25, 1990. Calder's article and subsequent articles referencing it received widespread attention in the Lower Mainland and Fraser Valley.

⁷⁹¹ Bob Spring, manager of the Fraser Valley Gas Project consortium, sent a five-page letter response to Brian Calder on September 27, 1990. His letter of response was printed in the October 16-22 edition of the Vancouver Sun Business weekly.

⁷⁹² Refer to *The Third Wave* chapter for the narrative and quote from Bill Vander Zalm. The quote is from a June 4, 1975, Vancouver Sun article, *Storage area sought for natural gas*.

Jack Hamilton

Ray Addington: Well, Brian really hit the nail on the head there. And particularly for reminding everybody that the duty of the real estate industry is to care for the interests of the property owners, and not the government.

Now, Jack Hamilton will relate to you the problems of getting the insurance industry to cover against risk to your property in the event that this scheme gets Vander Zalm's go-ahead.

Jack Hamilton: I was just asked to come and find out and report on the facts about insurance. So, obviously I don't have a speech. However, if you would like to hear a couple of hours of the history of insurance, and Lloyds of London, and things like that. No, I didn't think so.

I'm an insurance broker and represent the insurance brokers. And I have been an insurance broker for many years, as Mr. Addington said. And I'm not here as an insurance company representative



because they have got to look after themselves. I've been asked to speak on the insurance side of your problem. Let me say at the outset, no insurance is available for individual homeowners for pollution of wells, which is the major concern you have. It is not available. Some of you, and I see some of your communities mentioned here, obviously have found out that insurance don't provide flood insurance either. There are some coverages that are just not available. You are not covered now in your existing insurance policies, and you can't buy it. It's one of those things,

unlimited risk, only those affected would purchase it and it's the old story about insurance that the premiums of the many pay for the claims of the few. And, if there's only a few buying, then those are the ones that are going to be claiming, while obviously it is difficult for insurance companies.

All homeowners, though, need some type of recourse against whomever is responsible if their wells are polluted as you heard earlier this evening from one of the other speakers. Either obviously the municipality in the area you live who allow this drilling, or this type of activity to take place, or against the company responsible for that pollution. And seeing the size of this crowd and hearing your issues, I'm assuming that this project won't go ahead. [Applause] However, you have to do your homework, you have to be prepared in case something does happen. And I'm able to say to you that drilling companies are able to buy 'control of well' insurance it's called. Those companies can buy that coverage, so obviously it's not a hardship for them as to anything that happens the insurance company has to pay for it. But if this program goes ahead it is up to your municipality to insist that all companies operating in the area must carry 'control of well' insurance. There should be adequate protection for all homeowners, and obviously all of you aren't here, but this is an

unbelievable number. There are a lot of you interested out there. So, your municipality has to be responsible in each of your areas for insisting that this coverage be carried, and enough to cover you all. So, I'm saying that maybe they should insist on a one hundred million dollar [\$100,000,000] limits of liability, or don't let the guys in, that's all. It's as simple as that. [Applause] This coverage is available; those kinds of limits are available. It would be a requirement to before they start drilling that they would have to lodge policies of that type with the municipality. If the company is able to pay it, they didn't buy that kind of coverage, the municipality could probably be sued. So, obviously if the municipality wants to avoid having those kinds of suits, make sure the company is adequately covered or they don't start drilling.

The downside of all this of course is that you as individuals have to pay for the lawsuit yourself. As I said earlier, there is no insurance available to you. So, you would have to take them to court and go through that type of process unless they are prepared to, if a lawsuit occurred, prepared to come out and pay immediately, which is unusual. So, once again, there is no coverage available for you. There is coverage available for the drilling companies. And that's the basic fact of the insurance side of this issue.

THE CORPORATION
OF THE TOWNSHIP
OF LANGLEY

rec
12/31/90

4914 - 221st Street, Langley
British Columbia V3A 3Z8
Telephone (604) 534-3211
Telefax (604) 533-6098

December 19, 1990

File No. 3600-D01

The Honourable Jack Davis
Minister of Energy, Mines & Petroleum Resources
Parliament Buildings
Victoria, B.C.
V8V 1X4

Dear Honourable Jack Davis: **Liability Insurance for Gas Storage Companies**

Township Council, on December 10th, again reviewed the impact and potential liability that the storage of gas in the Fraser Valley may have on our properties.

At the meeting, Council directed that staff look into the requirement for liability insurance of \$1 billion for gas storage companies if underground gas storage is permitted.

It would be appreciated if you could advise us on the requirement for liability insurance and the powers that the Township may have if gas storage is permitted to require insurance coverage.

Yours truly, Rod Edwards
Municipal Clerk



✓ cc: Commission on Fraser Valley Petroleum Exploration
Suite 413, 645 Fort Street, Victoria, B.C. V8W 1G2

Commission Correspondence Files

Charles MacLean

Lawyer Charles MacLean ended the evening public assembly in a passionate, rousing Winston Churchill “we’ll fight them on the beaches” style speech:

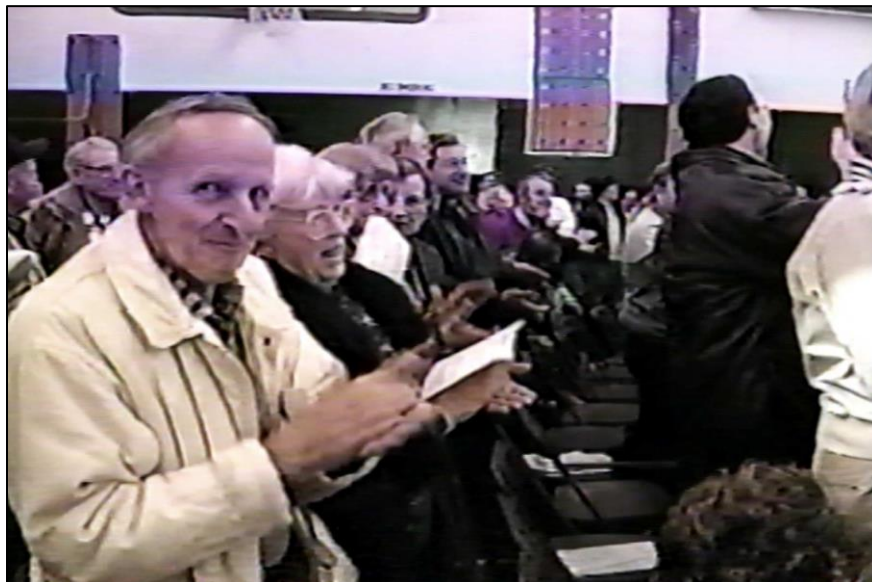
Now, I have to urge you. The Anderson Commission is behind this. It’s decisions and recommendations are a foregone conclusion. They are our enemies. They have joined our enemies.

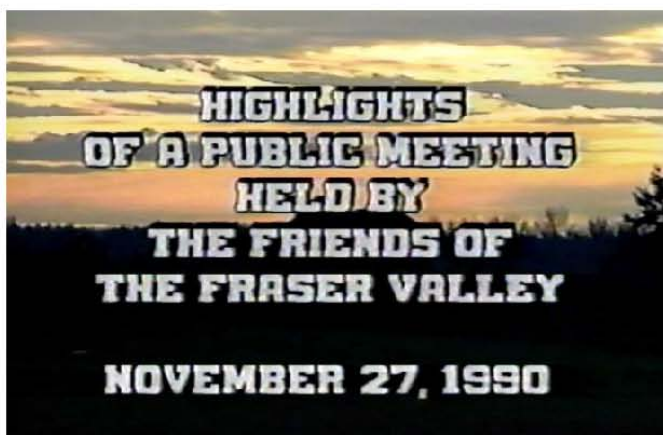


And we now have to concentrate on the future. What do we do now? Well, what we do is that now we really start to fight. And we go after Vander Zalm and the provincial government! [Cheering and applause.]

And we tell them by every means at our disposal, that if they dare to allow this nonsense to proceed in the Fraser Valley, they will answer to us. At the polls. They will answer to us in every way that we can find. Because we will not quit! [Continuous applause.]

Now, Ray [Addington, moderator for the evening] will have a list of things you can all help us to do. We have 500 rented chairs in this hall tonight. They are all full, with a notable exception of that public benefactor [Energy Minister] Mr. Jack Davis, [Langley MLA] Ms. Carol Gran and [Langley MLA] Mr. Peterson. The chairs are still empty. But all of you – we have 500 chairs full and possibly at least another 100 people standing. All of us must now get on the backs of these people. You must write. You must telephone. You must support all the activities that your Society of the Friends of the Fraser Valley are advocating, and let’s go after them now! And let’s keep after them! On and on and on, until they finally stop it! [Standing ovation and applause.]





THE CHILLIWACK PROGRESS

LETTERS

December 24, 1990

Valley is for everyone

Editor, *The Progress*:

I would like to thank the 650-plus concerned Fraser Valley residents who attended the Friends of the Fraser Valley *All Star Show* on November 27, 1990 and who contributed to our cause so generously. Considering there was no prior paid advertising announcing the event, the response was, to say the least, overwhelming. Five hundred of you handed in signed letters expressing your opposition to the provincial government's Fraser Valley gas drilling and underground gas storage project. These letters have been passed along to Premier Vander Zalm and members of cabinet.

More than 1,000 letters were collected and mailed over the past few months and I know a great many

others expressing opposition to drilling and storage have been mailed directly to the premier who must, by now, be knee-deep in paper!

Our provincial government authored this devastating situation we all find ourselves in and they are the only ones who can put an end to it. So keep up the pressure, let the premier and MLAs know, daily if possible, that enough is enough and you are not going to take it anymore. Municipalities are for people and not for primary resource development!

Al Vickers, Chairman,
Friends of the Fraser Valley,
Aldergrove

Are we sheep?

Editor, *The Progress*:

Regarding gas drilling, and storage in the Fraser Valley.

It is hard to believe our mineral rights to our property were sold in 1989 (in Fort St. John of all places) without our knowledge or consent. We are now at the mercy of three gas companies. What is the real issue here? Gas storage for export

or the rights of property owners in this province?

How can anyone in their right mind believe there is absolutely no danger to people living on top of gas storage? Have we really become such sheep that we believe this big business propaganda? I urge your newspaper and anyone that reads this letter to please keep this issue before the public, to write Vander Zalm and tell him in no uncertain terms to stop this ridiculous plan before it's too late. Elections are nearing, government is supposed to be the people who support it. Make sure you're not supporting anyone who is putting your home and family in danger.

Don't think this issue affects "some other area". The Fraser Valley includes Delta, White Rock, Langley, Aldergrove, Cloverdale, Yarrow, Murrayville, Surrey, etc. This will affect you!

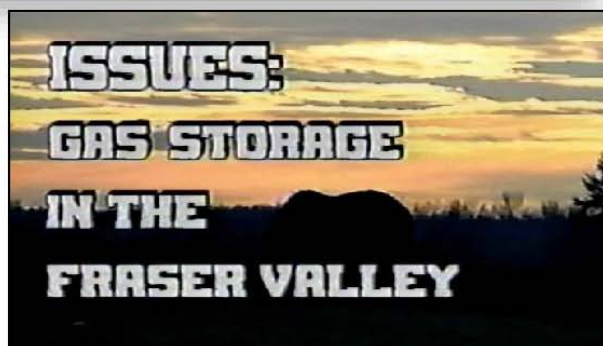
It's pathetic of gas companies to imply that real estate values won't be negatively affected. I hardly think that sitting on, near, or around gas storage is a positive selling feature. I can honestly say if I had known that we had been "sold down the river in 1989" I would not

have chosen to build my home in the Fraser Valley.

We must rally together and fight this issue, put up a sign, write letters, phone politicians. Do something!

I do not want my home and neighborhood put in jeopardy for local use gas storage or for export to the U.S.A.

Julia Baneroft,
Langley



5 – 25. ‘Time will Tell ...’ Illinois: Forty Years After the AGA Position Paper

*“Nobody wants to take on the gas storage companies.”*⁷⁹³

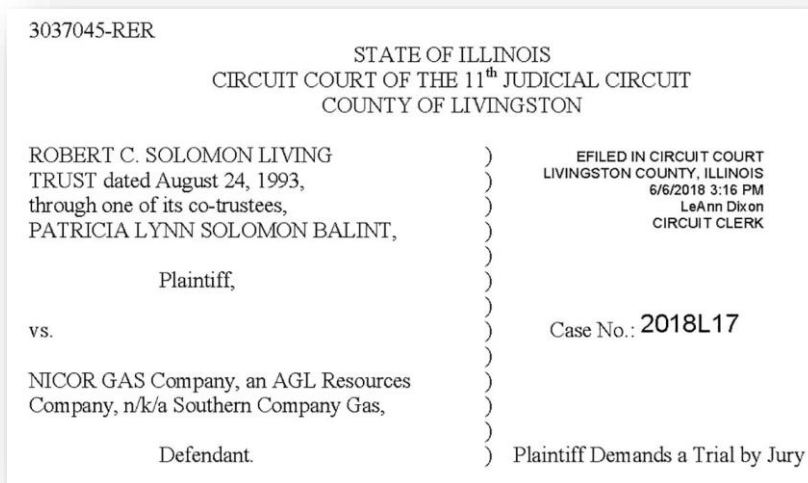
*“They will not release those records. If they did that then they would be admitting that they’ve got a problem.”*⁷⁹⁴

On October 15, 2020, forty years after the American Gas Association’s tainted position paper on federal drinking water legislation was published,⁷⁹⁵ the Rockford, Illinois television station, WCIA 03, posted an article, *Clear and Present Danger: The Advocate*. It was the first written segment of many segments and short feature television format investigative documentaries to follow concerning gas migration leaking to the surface from the NICOR Gas Company’s enormous Ancona / Garfield underground gas storage facility. Commissioner David Anderson and Commission counsel Doug MacAdams met with NICOR executives thirty years previous, in October 1990.

WCIA’s first segment featured the experiences of the Solomon family who “brought this list of grievances – crop damage, bubbling water in ditch banks, contaminated water sources, diminished property value – to Ruth Robinson, a Rockford-based agricultural attorney in 2015, and enlisted her help in a fight to try to shut down the massive underground natural gas storage facility that lies

beneath their centennial farm.” It was essentially the same story, the same experiences stated by Lodene Clark to the British Columbia public from September 1990 to February 1991 after Friends member Glen Breaks tracked her down. Five years after the Solomon lawsuit was filed, the subject peeked the interests of WCIA staff because of an Illinois State whistleblower.

Revealed in WCIA’s website articles and broadcast news segments from October 2020 to January 2022, it had taken decades before the matter became a major public issue for the State of Illinois. And for the keen interest taken by the WCIA news management and its investigative team for their expose of the issue, reporters Mark Maxwell and Lyndsay Jones received a Mid-America Emmy Award in October 2021 for the opening episode, *Clear and Present Danger: The Leak*.



⁷⁹³ Jim Stephens, former Illinois State well inspector for the Department of Natural Resources, January 30, 2022.

⁷⁹⁴ Ibid.

⁷⁹⁵ Refer to Section 22, *Anderson’s and MacAdams’ Special Trip to Illinois*, for the narrative on the American Gas Association position paper.

NEWS

PODCAST: Behind the Emmy-winning story 'Clear & Present Danger: The Leak'



| Posted: Oct 25, 2021 / 05:12 PM CDT / Updated: Oct 25, 2021 / 07:13 PM CDT

CENTRAL ILLINOIS (WCIA) — WCIA is celebrating an Emmy Award for one of our investigative pieces. The investigation revealed a methane leak in Livingston and LaSalle counties that endangered people and damaged the environment.

The reporter who broke the story was WCIA 3's Mark Maxwell. In this podcast, Mark talks with WCIA's Jessica Kunz about some of the behind the scenes investigation that led to this story being turned.

| [Clear and Present Danger: The Leak](#) →

A Target 3 investigation uncovered a troubling methane leak at a Nicor Gas facility in rural Ancona, Illinois. Jim Stephens, a whistleblower at the Illinois Department of Natural Resources, led us to a centennial farm family that had sued the gas company for damages after the leaking gas bubbled up in streams, skies, and soil on their farm land.

| [Clear and Present Danger: The Advocate](#) →

Our first follow up story profiled attorney Ruth Robinson who had tangled with Nicor Gas in court proceedings for years, and whose research led us to the potential origin of the leak.

| [Clear and Present Danger: The Remedy](#) →

Our investigation caught the attention of state lawmakers, who filed bills seeking to regulate Nicor and prevent or detect gas leaks before they endanger people or the environment. The General Assembly is still considering new regulations on the gas industry in the wake of our reporting.

| [Attorney General's office confirms Nicor Gas under investigation](#) →

We obtained documents that revealed the state recommended the Attorney General take "enforcement action" against Nicor for the ongoing methane leak, and that the AG's office opened an investigation into Nicor after our report.

| [Clear and Present Danger: The Impact](#) →

Atmospheric scientist Don Wuebbles, a globally recognized climate science expert who advised the Obama White House on greenhouse gas emissions, analyzed our reporting, and compared the size of the leak at the Nicor Gas site to the equivalent of pollution that could come from 100,000 cars on the road over the course of an entire year. Over the course of several years, the leak could add up to the amount of methane that spilled from the Aliso Canyon disaster site in California.

Copyright 2022 Nexstar Media Inc. All rights reserved. This material may not be published, broadcast, rewritten, or redistributed.

SHARE THIS STORY ▶



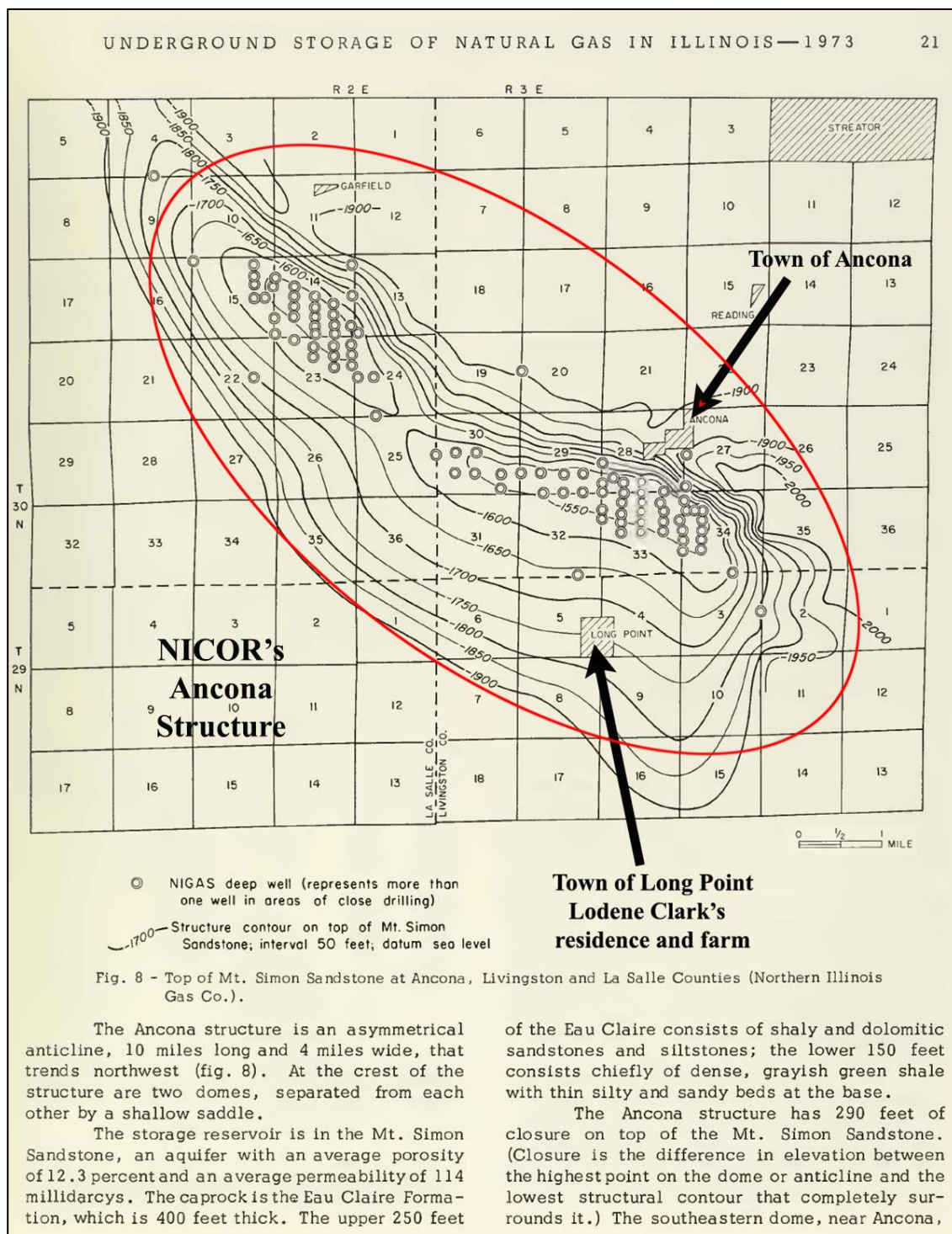


Lyndsay
Jones

Mark
Maxwell



According to the “Complaint at Law,” or statement of claim, filed by the Solomon’s lawyer in the Livingston County Circuit Court in Illinois on June 6, 2018, the statements reveal a replica of Lodene Clark’s accounts of when problems began in the early 1960s, only this storage facility, operated by the same company, was located near the unincorporated town of Ancona, north of Lodene’s hometown of Long Point. According to the writ, “NICOR Gas Company, and AGL Resources Company (formerly known as Northern Illinois Gas Company) and wholly owned by Southern Company Gas is a company authorized to do business in the State of Illinois.”



Ancona (formerly Ancona-Garfield) Project

Operator: Northern Illinois Gas Company

Location: Near Ancona, 7 miles southwest of Streator, T. 29 and 30 N., R. 2 and 3 E., Livingston and La Salle Counties

Gas for the Ancona project is purchased from Natural Gas Pipeline Company of America. A 24-inch pipeline connects the project to the Natural Gas Pipeline Company of America trunkline at Mazon, Illinois. The gas is consumed in the suburban Chicago area.

Structure drilling in the area began in 1958, and 123 structure tests have been drilled to the Galena Dolomite Group or deeper. A gravity survey was run to help delineate the structure. Gas was first injected in 1963 and the project became operational in 1965 (table 4).

TABLE 4 — INJECTION AND WITHDRAWAL HISTORY OF ANCONA PROJECT (MMcf)

Year	Injection	Withdrawal	Inventory (end of year)	Peak daily withdrawal
1963	105	0	105	0
1964	1,976	0	2,080	0
1965	4,857	39	6,899	22
1966	9,237	360	14,431	77
1967	8,300	4,100	20,500	105
1968	17,514	4,911	32,961	105
1969	26,549	10,258	51,113	153
1970	21,220	9,644	75,310	315
1971	38,900	27,000	103,700	450
1972	38,929	41,007	101,564	471

Illinois now has a greater reservoir capacity for underground gas storage than any other state (Vary et al., 1973). Within a few years it could have a larger volume of gas actually in storage than any other state. Underground storage of gas will continue to be a growing and important segment of the Illinois economy for many years.

UNDERGROUND STORAGE OF NATURAL GAS IN ILLINOIS—1973

SUMMARY OF ACTIVE GAS STORAGE PROJECTS IN ILLINOIS

At the end of 1972, 30 underground gas storage projects were operating in Illinois. These projects, plus seven others that are in various stages of testing and development, are discussed here. A summary of pertinent data is presented in table 1. At several of these projects, reservoirs other than those currently used for storage have been tested but are currently inactive or abandoned. These inactive or abandoned reservoirs are discussed in the descriptions of each project, and the information is summarized in table 2. Two projects have been tested and abandoned. They are discussed in the next section of this report, and data from them are summarized in table 3.

Information about each project was obtained from current statistics and structure maps that were furnished by the operating companies. Also freely used in the preparation of this report was testimony presented to the Illinois Commerce Commission during hearings on petitions for certification to store gas at each project. The testimony contains much valuable information that is available to the public from the files of the Illinois Commerce Commission at Springfield, Illinois.

Most storage projects in Illinois are located near the major centers of population, such as Chicago and St. Louis, or are relatively near the main pipeline systems (fig. 5).

TABLE 31 — INJECTION AND WITHDRAWAL HISTORY OF TROY GROVE PROJECT (MMcf)

Year	Injection	Withdrawal	Inventory (end of year)	Peak daily withdrawal
1958	707	0	707	0
1959	4,138	65	4,780	20
1960	6,930	528	11,182	50
1961	9,649	1,081	19,751	100
1962	12,670	3,042	29,408	250
1963	20,749	12,940	37,218	400
1964	16,070	8,372	44,916	500
1965	28,069	24,342	48,643	580
1966	26,700	22,762	46,447	650
1967	25,200	25,800	48,300	590
1968	28,766	24,736	53,170	706
1969	24,794	35,223	47,973	647
1970	30,300	27,295	54,077	887
1971	28,400	26,400	57,900	870
1972	36,777	32,109	62,515	792

WCIA television produced a series of three opening broadcast segments, *Clear & Present Danger*, on the methane leakage from NICOR's underground facility in Livingston County, Illinois. Two of the three segments featured an interview with Jim Stephens, a former Illinois State well inspector for

ILLINOIS STATE GEOLOGICAL SURVEY						
TABLE 1 - UNDERGROUND NATURAL GAS						
Project	Company	County Township Range	Operational dates (initial)			
			Devel- opment	Stor- age	With- drawal	
Ancona- Garfield	Northern Illinois Gas Co.	LaSalle & Liv- ingston 29, 30N 2, 3E	1961	1963	1965	
Number of wells			Geologic data			
Oper- ating	Obser- vation	Other	Stratigraphic unit	Lithol- ogy	Trap	Native fluid
36	14		Mt. Simon	sand	dome	water

the Department of Natural Resources, the whistleblower who provided the news station with six years of video footage clips (2015-2020) showing NICOR's gas bubbling up into small pools of water in ditches near corn fields. "Stephens told us a crack in that capstone contributes to a massive and ongoing leak:"

Stephens: "By their own admission, they don't know how much they are actually losing. They are capturing 500 million cubic feet. They are not capturing everything, or it wouldn't be bubbling up in water wells, or it wouldn't be bubbling up in creeks, it wouldn't be bubbling up in road ditches. That's the problem. You wouldn't have the crop circles out there."



WCIA Target 3 news reporter Mark Maxwell stated: "We've spoken to some agricultural experts, and they explain just how methane can kill the crop at its roots, because it's in the soil there."

In another main feature segment is the following transcript (made by this report's author) from WCIA news:

Maxwell: Despite geological studies warning a fissure in the capstone could case a leak, NICOR still merged those two fields [the Ancona and Garfield storage fields] into one massive storage facility.

Attorney Ruth Robinson represents the Solomon family farm that sits on top of the gas field.

Robinson: "The gas seemed to be migrating out of the underground storage where it was supposed to stay."

Jim Stephens inspected wells on gas storage fields for the Illinois Department of Natural Resources for decades. **Stephens:** “You cannot know with a one hundred percent certainty what is 3,000 feet below the ground.”

Maxwell: “Right. How do you inspect that?”

Stephens: “You don’t. You don’t.” He visited the Ancona / Garfield site several times and raised concerns.

Maxwell: “What are we looking at here?”

Stephens: “That’s a hand dug water well on property that is now owned by NICOR, that is sitting there bubbling because of the natural gas inside the water vein. This well is 35 foot deep. They are supposed to be storing at 2,500, 2,800 feet. So, it is actually leaving the storage formation through fractures and migrating up through the surface.”



Maxwell: That’s the very reason why the Solomon family filed a lawsuit against NICOR in 2015 to try and shut the storage facility down.

Ruth Robinson: “They don’t want this gas bubbling up onto their property.”



Maxwell: That lawsuit failed. NICOR appealed. The Court kicked the case down to the Illinois Commerce Commission where it languished, and the Solomon family started running low on money.

Jim Stephens: “Methane gas is not hazardous to your health other than an explosive hazard or as an inhalation hazard. There were houses in Kansas blowing up because of natural gas leaking into houses.”

Maxwell: NICOR’s website has instructions for how to spot a gas leak. One, look for discolored vegetation, blowing dirt, or continued bubbling water, listen for a hissing sound, and smell for the distinctive rotten egg odor⁷⁹⁶ of natural gas. When we went to the Solomon family farm to investigate it didn’t take long to find all three. [Maxwell:] “Watch what happens when we put this

⁷⁹⁶ Methane in its raw form is an odorless gas substance. Before ‘natural gas’ is exported from the refinery for use, the petroleum industry is mandated to add a chemical to the gas to give it a traceable odor, the ‘rotten egg’ smell, in order to make the deadly and explosive gas detectable to human and creature scent functions.

gas detector near this hole. There is no doubt in my mind there is something coming from this hole right now, something cool, something that smells terrible, and something that sets this gas detector off.”

HOW TO SPOT A GAS LEAK

SOURCE: NICORGAS.COM

- LOOK FOR DISCOLORED VEGETATION, BLOWING DIRT OR CONTINUED BUBBLING WATER
- LISTEN FOR A HISSING SOUND
- SMELL FOR THE DISTINCTIVE “ROTTEN EGG” ODOR OF NATURAL GAS



Maxwell (at another site on the farm): “We are going to see if we can detect any leaking gas coming from the bottom of this pipe. That is a positive test for leaking gas. Now, listen carefully to see if you can hear the bubbling beneath.”

Jim Stephens: “It shouldn’t even be there.”

Maxwell: “The methane?”

Stephens: “Yeah. There shouldn’t be gas coming to surface like that.”

Maxwell: “NICOR’s massive underground natural gas storage facility is supposed to house the gas hundreds of feet below the surface here, but somehow, evident by this crop death, enough of it is reaching the surface to kill the crops here and scar the cornfields for miles around.” (Drone camera footage shows the corn fields with scarred dead circles.)



Ruth Robinson: “There’s one conclusion: the caprock, the lid, is not working. And, but then nobody does anything about it. Year after year it’s getting worse. There is more and more crop damage. Decades of gas just going up into the atmosphere, and there is nothing being done about that.”

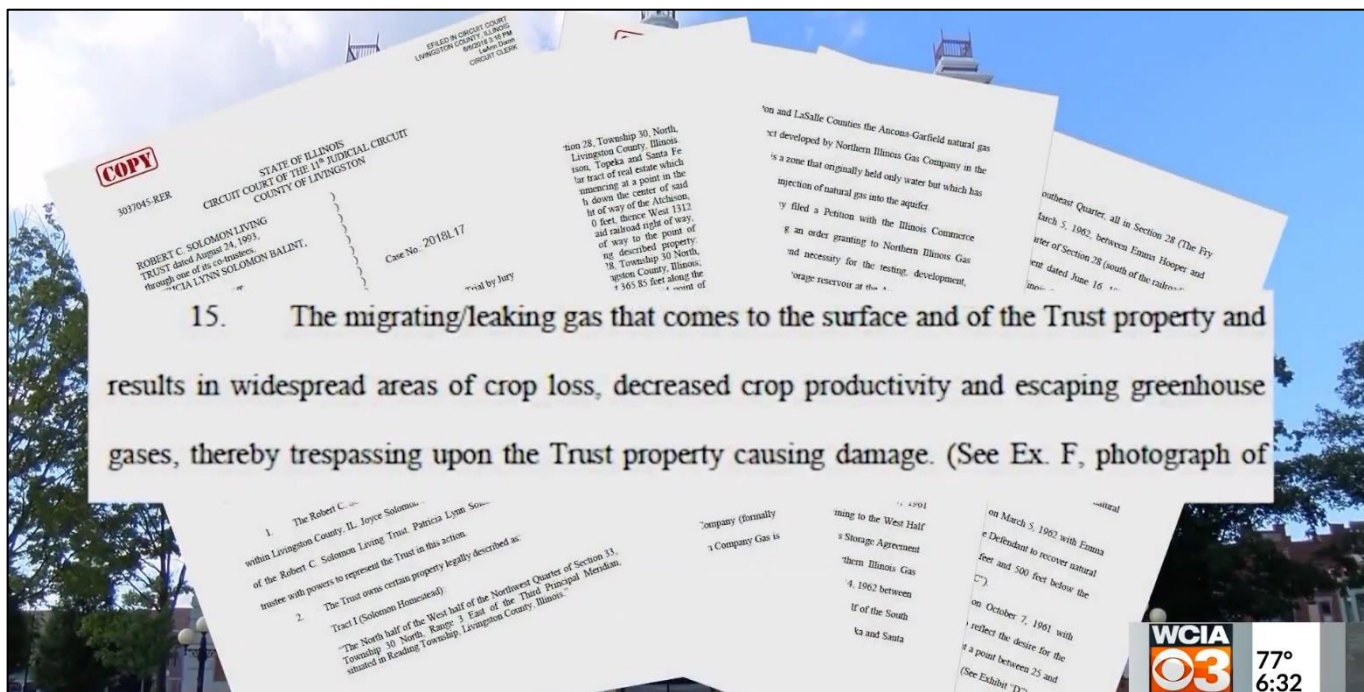
Maxwell: NICOR tells us [WCIA] in a statement, quote, “A small amount of gas migrates from the storage zone to a shallower zone through geological features or conditions that existed prior to the construction of our storage facility in the 1960s.” It says it has “systems in place to safely prevent natural gas from getting into the atmosphere.” Quote: “We have installed secondary collection wells that capture the gas in the shallower formations, recompress it and inject it back into our transmission system.”

Leaf River Project

Operator: Northern Illinois Gas Company
Location: T. 25 N., R. 9 and 10 E., Ogle County

In 1968 and 1969 the Leaf River reservoir was tested by the injection of 348 million cubic feet of inert gas. Subsequent rises in the water levels in observation wells completed in porous zones above the Eau Claire caprock indicated that the caprock was leaking. Therefore, the project was abandoned (table 3).

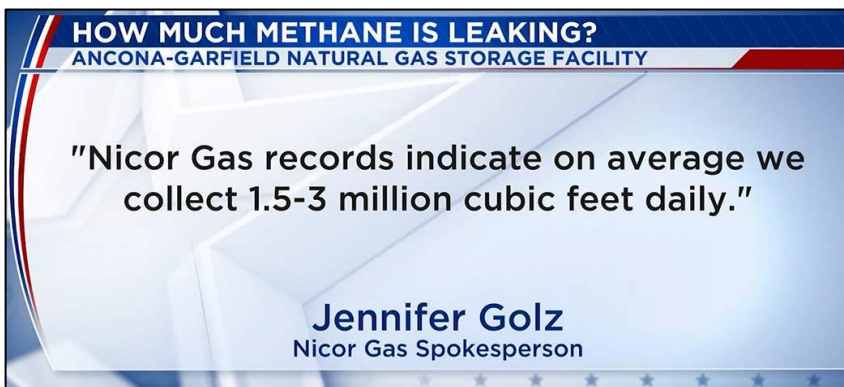
Storage had been proposed in a faulted anticline trending west-northwest and having about 80 feet of closure. At the location of the proposed storage project, the upper part of the Eau Claire Formation consists of about 20 feet of shale underlain by 55 feet of shaly siltstone. The siltstone grades downward into about 70 feet of fine-grained, water-saturated sandstone (called the "Lightsville" by Northern Illinois Gas Company), which was to have been



Target 3 reporter Lyndsay Jones joins me now. She has poured through thousands of documents that date back decades. Lyndsay, Court documents show that at times NICOR has pointed to the existence of biogenic gas, or natural gas, that maybe to suggest that perhaps some of this gas isn't all theirs.



Lyndsay Jones: “Yah. NICOR in fact included that note in their response to us. But expert analysts have sampled and tested this gas numerous times over the years and they found a chemical fingerprint that confirms that in fact it is NICOR’s gas and not naturally occurring drift gas.”



Maxwell: And the company says that amount of gas is “small,” those are their words. But we still don’t exactly know what the volume is, how much might be escaping into the atmosphere.

Lyndsay Jones: “That’s still the biggest mystery here. NICOR knew that a geological crack or split

existed in the early 1960s. They still store the gas there and expanded the storage field while downplaying the risk of a leak. Initially, State law requires for them to report any gas leaking immediately, but **the Illinois Commerce Commission dropped that requirement in the 1980s.**”

Maxwell: So, we zeroed in on the source of the leak and how much is leaking. NICOR still claims it reports that data back to the State. But several months into this investigation several public request records went in, and we still have not found any State documents yet that would tell us exactly how much methane is escaping that field. Jennifer.



Jennifer, WCIA news anchor: “Thank you. Now, there is much more of this story on WCIA.com, much more to come. A whistleblower sounded an alarm about high levels of a cancer-causing chemical at NICOR’s oldest gas storage facility. He no longer has his job. But our Target 3 team followed up and investigated what’s in the water in our second story in the series.”



In a January 4, 2021, telephone conversation by the author of this report with Illinois Attorney Ruth Robinson, who had researched Lodene Clark’s tribulations with the same company, she said:

The methane has continued to leak for decades. [In] Lodene’s battle with the ICC (Illinois Commerce Commission), she tried to get them to revoke the authorization of the ‘order of necessity’ that NICOR received to operate this underground storage facility. In the 1960s, the ICC determined that NICOR’s geologists proved their case (that there was a secure caprock) and gave them their ‘order of necessity,’ and so they got ‘eminent domain authority’ too. So, if landowners didn’t give them easements, they had the ability to file for eminent domain, saying they had the necessary documentation.

Lodene is the one to get [‘who got’] the Illinois Department of Natural Resources involved. She tried to get the Illinois Environmental Protection Agency involved. Everybody pretty much said they didn’t have jurisdiction, if you will. She battled it and battled it in the 1990s and never got anywhere other than NICOR had to pay crop damage. Basically, by that they were recognizing then that their methane, that they were storing, is damaging crops. So, they paid



landowners in that area for crop damage since the 1990s. The courts have said that this is an ICC issue, that if you have a beef, it is with the ICC, because the ICC determined it was a necessity, that the populace of Illinois required this underground storage of natural gas. Everyone is just willing to pass the buck, and eventually it is going to be a situation like we had in California where there was an explosion and a large fire from a methane leak.

They do have problems. And then you've got this one here, the Ancona / Garfield facility that has problems and nobody has done anything about it for four decades. We've never been able to get NICOR to identify how much of the gas is lost, and probably not enough that it affects their pocketbook, if you will. They are not going to fix it because it is still profitable. If you look at Google Earth you can see these circles of dead crops, and it is getting bigger and bigger as the years go by.

WCIA television station's second phase segment, which aired on October 28, 2020, featured NICOR's dumping of benzene contaminated wastewater "in a small town in LaSalle County in northern Illinois," "directly above a drinking water aquifer."

Mark Maxwell: The records we obtained show NICOR dumped nearly 75,000 gallons of wastewater with high levels of benzene into soil right above an aquifer recharge zone, right near Spring Creek, a small tributary of the Illinois River.

Narrator: ... these alarming test results from February of 2019 caught the attention of Jim Stephens, a former inspector and field manager with the Illinois Department of Natural Resources.

Stephens: "All the test results from Troy Grove [facility field] that show the benzene in the water were studied at EPA. EPA had those test results. They had them, December, January and February."

Maxwell: NICOR brings gas in pipelines before they store it deep underground, thousands of feet below the earth's surface here. When they draw that gas back up, they have to separate the wastewater before they sell it to their customers. This permit application to the State shows the Company's plan to take that wastewater and spread it out across farm fields surrounding this storage site.

Stephens: "What NICOR decided to do was, and we don't even know how deep it was, were assuming ten or twelve feet, they went out and dug trenches, laid perforated tile out through these farmers' fields, and basically was just dumping the water into these perforated tiles letting it saturate out into the ground. So now, any chemicals or



anything that is in this water that is coming out of this formation is basically leaching out into these fields.”

Maxwell: Federal regulations say that any more than 5 parts of Benzene per billion is too high, dangerous and unsafe. And yet these test results that we obtained show that water from eight wells on this [Troy Grove] facility NICOR maintains registered hundreds of parts of Benzene per billion, far too unsafe. This well [which Maxwell approaches] was the worst, well 28, registering at 26,000 parts of Benzene per billion. That’s an astounding 5,200 times too high.

Stephens: “There was no containment. And when this came to my attention at Troy Grove, when I contacted IEPA [Illinois Environmental Protection Agency] I contacted my counterpart the day after I found out about all of this and had the test results, his comment was “Oh Crap! That is an aquifer recharge zone.” Basically, anything that gets on the surface or subsurface goes straight down into the drinking aquifers in that area.”

Maxwell: That was back in March of 2019. Shortly after those alarming test results the [LaSalle] County public Health Department started fielding unusual phone calls.

Health Department staff member: “We had just received a call about some activity at the location with multiple trucks hauling potentially water off site.”

Maxwell: 18 months later, the amount of Benzene left in the soil remains a mystery. And if it did make its way into drinking water ...

Health Department staff member: “That would give us a great deal of concern and we would be working with the Illinois Department of Health and probably the EPA to try and determine geographically if this water had spread, you know, off property or to other water wells.”

Maxwell: Now, lawmakers are starting to take notice.

The introduction of Benzene into the export pipeline to NICOR’s filtering facility is no doubt linked to the petroleum product’s sources via the recent and controversial advent of hydraulic fracturing, or fracking, in North America. Other contaminant concerns from fracking have been raised, or kept secret, on the linked transport of radioactive materials in the pipeline systems.

WCIA 03 News stayed on the beat. Five months later, on March 8, 2021, came the following broadcast:

News anchor: We showed you video evidence last Fall of methane leaking from an underground storage field in LaSalle County. Our bureau chief Mark Maxwell is live in Springfield [Illinois]. So, Mark, State lawmakers overwhelmingly approved measures to crack down on these leaking gas fields.

Maxwell: Paul. It was overwhelming support. It was clearly unanimous. Democrats and Republicans agreeing to approve a Bill in the House Energy and Environment Committee just this afternoon. It happened on Zoom. But this plan effectively increases and strengthen the oversight and enforcement of leaking gas fields in the State. Now, before it goes to the House, and maybe the Senate floor, there still could be some changes. But this plan would essentially require the State to verify the source of that leaking gas. If they can test the gas and trace it back to the storage field, the

company would have to pay to install gas detectors, devices to separate gas from water. Lodging accommodations for any affected homeowner if the gas were to reach near explosive levels. And a comprehensive inspection of the wells that drill down thousands of feet below ground to draw that gas up out of the storage formation.

House democrat Bob Morgan says our [WCIA News] reporting exposed not only leaking gas fields but cracks in the regulatory system that allowed this to go unnoticed for so long.



Highwood Democrat Representative, Bob Morgan: “And there’s clearly a number of cracks in the system, where the people are falling through the cracks in the system. These big, these multinational multi-billion-dollar companies are polluting the area, whether it’s the air, the water. We need to make sure that people are safe, and we are holding them accountable that this kind of pollution stops.”

THE REGULATORS

"WE HAVE NOT RECEIVED INFORMATION TO SUPPORT ALLEGATIONS OF ONGOING VIOLATIONS..."

ANNIE THOMPSON
SPOKESWOMAN FOR ILLINOIS
ATTORNEY GENERAL



Maxwell: The head of government relations for NICOR testified in that committee today. She’s a former House Democrat now on contract with a big gas company. She said NICOR stepped up and did as it should have. [Bold emphasis] At last report NICOR told us that one and half to three million cubic feet of gas, every day, escapes that underground

gas storage facility in the Ancona / Garfield, and that's just the amount they are able to capture, collect and pressurize and pump back down into that gas storage formation that we know is already leaking. That number does not account for any excess gas that we see bubbling up in creek beds, in streams, and in cornfields. Reporting in Springfield. Mark Maxwell. WCIA, your local news leader.

A week later, March 16, came another update. Mark Maxwell was chasing or investigating the amount of gas escaping from NICOR's Ancona / Garfield field, one of many fields the company owns in Illinois.

Maxwell: Ruth Robinson is the lawyer representing this family farm.

Attorney Ruth Robinson: "When I went to law school, I did study environmental law."

Maxwell: And Jim Stephens is the former inspector who examined their property.



Stephens: "I'm not an environmental activist. I'm an active environmentalist. And there's a big difference."

Maxwell: Both were alarmed at how much gas was leaking under NICOR's underground storage facility every day. NICOR told us [WCIA] their storage formation, 2,000 feet underground, loses up to three million cubic feet of methane each day. But that's just how much they collect and pump back down into the same leaking storage field. Former Illinois Department of Natural Resources field inspector Jim

Stephens said evidence at the surface suggests even more is seeping out.

Stephens: "So, it's in excess of that [the 3 million cubic feet]. Because they are not capturing everything, you know, or it wouldn't be bubbling up in water wells, it wouldn't be bubbling up in creeks, it wouldn't be bubbling up in road ditches."

Ruth Robinson: "This is just one situation. How many of these are out there? How many of these types of situations are out there where gas is just, unabated, coming out the ground you know, for thirty, forty years." [And more, according to Lodene Clark.]

Don Wuebbles, atmospheric science professor, University of Illinois: "Methane is escaping all over the world from underground reservoirs that we didn't think would escape from. And we see methane bubbling up from the oceans, we've seen methane bubbling up in other parts of the world. We are causing it. We need to take some responsibility here."

Maxwell, standing outside of the Illinois Commerce Commission building: We still wanted to know how much methane is escaping into the atmosphere. We invited NICOR for an interview. They declined. In an email, they told us they report that data on the leaking data to the Illinois Commerce Commission. The ICC told us: "those records," quote, "don't account for any gas that escapes into the atmosphere." NICOR says the amount of leaking methane they capture is less than

one percent of the total gas they pump down into that leaking reservoir. And despite the videos we've showed you [the public], the spokesperson from NICOR still insists, quote, "the shallow gas collection system ensures the gas does not reach the atmosphere." Reporting in Springfield, Mark Maxwell.

In an October 25, 2021, televised podcast WCIA 03 News celebrated Mark Maxwell's and Lyndsay Jones' recent Emmy award by reviewing the news station's coverage of NICOR's methane leakage. Maxwell stated that where he was stationed at the WCIA news building in Springfield, the capital of Illinois, it was a two-hour drive to NICOR's gas storage facility.

"We had a former State investigator from the Department of Natural Resources who became what amounted as a whistleblower. He had raised issues inside the State at IDNR several times about what was this persisting problem of an underground natural gas storage field, and all of the different issues it had generated for the farm families that lived around there. He brought this to our attention and said, 'you know guys, this is a big deal, I really wish somebody would look at it.' In fact, he was hoping, maybe like 60 Minutes, or some other big national outlet, would take a look at it. That's how important it was to him. And he really felt this story had gone decades without being noticed."

"So, we went out there. We looked at it. We encountered a family who had owned property there for over one hundred and fifty plus years. Before Abraham Lincoln was president, they were farming that very land. And, then in the late 1950s, early 1960s, this big gas company came to town, and they started buying up parcels of land. Their whole idea was to bury this natural gas not in an aluminum canister, like many people might imagine, or in some contained place, but actually just using the earth's geological structure under this big capstone. It's a little nerdy, but it was quite fascinating to learn this is how they bury natural gas, and just find this big pocket deep underground and they just pressurize this natural gas to bury it there. And they hope that the rock, the impermeable caprock that they call it, which serves as this lid to keep it all down there. And they use these wells. They are kind of like straws that withdraw the gas out and use it to power your home, to turn your stove on, or they pressurize more gas and keep it down there. Well, what happened was in the late 1960s, NICOR, which is now the Southern Gas Company, decided we want to take these two big bubbles [fields] of gas about 1,500 to 2,000 feet underground and join them together. Well, we back into these State records from the 1960s and found that the State actually cautioned them [NICOR] against that at the start, because they found a geological fissure, or a crack, in the lid that might allow some of this gas to start sneaking and bubbling its way up to the surface. And the company told the State at the time, in essence, 'don't worry, we don't think that is going to happen, and if it ever does, we will let you, the State, know and we'll take care of it.' Well, it was not until the 1970s, just a few years later when all of sudden farm families started noticing crops dying. And we found records of these complaints that have largely been ignored for decades, and so the problems seem to persist and get bigger."

"Even still, a year after breaking this story, the latest gas loss report that NICOR has given to the State was heavily redacted. There is still an ongoing fight about how to get exactly to the bottom of exactly how much methane, which is a greenhouse gas that traps heat and warms the planet at a rapid rate, we don't exactly know how much of that was escaping the original bubble down below

the earth. They are trying to capture it at this secondary level before it actually gets to the surface. Even that is not working, because enough of the gas is reaching the soil and the sky and the streams. As I'm sure you can tell just describing all of this, we knew we kind of had to wrap our hands around this in a way that we could tell it visually for television. I wasn't exactly a made-for-TV-story when all these documents started coming in to our in-box."

Host: So Mark, after people watched that story ... did anything surprise you as you were investigating, as you went out to that farm [the Solomon farm].

Maxwell: "Yeah. Maybe the biggest surprise are the things that actually couldn't make it into the story. The smell of the rotten eggs oozing out the ground, and the temperature of that pressurized cool air. I mean, imagine putting your hand down this strange looking hole in the ground and



feeling what is a fairly high pressurized cool breeze, almost like someone turned a fan on the AC in your house, is coming out of the ground. I've never seen anything like that before in my life. And then, when I went on NICOR's website, and it said 'if you smell or see something like this, back away, don't turn your car on, don't light up a cigarette, don't turn on a lighter, don't turn on your phone, don't turn on your car,

Mark Maxwell: "Watch what happens when we put this gas detector near this hole. There is something coming out of this ground right now. Something cool, something that smells terrible, and something that sets this gas detector off."

because any of these things that might spark something could ignite' what they believed is methane. If this were to snake up under someone's crawl space or basement somewhere. We've seen news reports in other States in years past where a gas leak can lead to detonating an entire home."



We've been tangling with the Department of Natural Resources to get some more information just recently. We don't want to speculate, but within a few minutes of this story airing, I believe it was a

Wednesday night about a year ago in October, within a few minutes the Director of the Department of Natural Resources emails the [State of Illinois] Attorney General's Office, which is the State's lawyer, and there is a link that is totally redacted: it says, "call me." The very next morning after they have this exchange, the Department of the entire State agency he reaches out to guess who? The field inspector who monitors this exact field and they have this ongoing discussion and in that same email thread you see conversations about this very story that we broke. So, we know they are



Mark Maxwell: "We are going to see if we can detect any leaking gas coming from the bottom of his pipe." (Sound of bubbling water, and sound of gas detector beeping.) "That's a positive test for leaking gas. Now listen carefully to see if you can hear the bubbling beneath."

watching this closely. We are still trying to get the State to tell us, heh, how much gas is

leaking?

I'll give you a little teaser. NICOR submits these documents to the State. They say every quarter, every three months, this is how much gas is leaking. When they did that, they apologized. They said, heh, we are going to start submitting these reports in a more-timely manner. We had stopped, kind of, giving this information as quickly as we were supposed to. Sorry. Whoops. Here is the new information. **They also sent along this disclaimer, and they said, heh, we advise you, the State of Illinois, to redact this info from the public if anybody comes looking for it.** [Bold emphasis] Think about that. Here's public information, information that should be in the public interest at the very least, and a private for-profit company is telling the State we recommend you keep this secret. Don't tell the public about how much we are polluting here. And so far, the State has taken their recommendation and they haven't actually given it to us. We're fighting them on that, and we hope to get that information for the public to look at.

In yet another continuing episode, WCIA 03 television ran two segments on January 30, 2022, with a tantalizing teaser about NICOR and the State regulator to be revealed on the station's main feature later that evening at 10 p.m.:

Mark Maxwell: "We'll have a closer look at another State regulator that allowed the company to relax its reporting requirements. Jennifer, you might have heard that hit movie, Don't Look Up. If this story had an alternate title, it might be, Don't Look Down!"

The 10 p.m. feature had two components: the Illinois Commerce Commission's approval of three recent natural gas rate hikes by NICOR, and information on the amount of gas leaking from NICOR's underground facilities.

Maxwell: Another former State regulator said more people in power should take action to stop it.

John Albers, former Illinois Commerce Commission administrative law judge: "I'm very glad to see your reporting of it, because I am very frustrated and offended that no one in authority seems to care about this issue."

Kwame Raoul, Illinois Attorney General: "We have been on it."

Maxwell: Attorney General Kwame Raoul's Office enforces laws to protect consumers and the environment but says, quote, "We have not received information to support allegations of ongoing violations from the Department of Natural Resources or the Illinois EPA." [Statement by Annie Thompson, spokeswoman for Illinois Attorney General.]

Kwame Raoul: "We've looked into it. I don't like to go too deep into ongoing investigations."

Maxwell: But there is another powerful State regulator, the Illinois Commerce Commission.

John Albers: "The ICC could step in tomorrow, today, and investigate this."

Maxwell: The ICC has power to set utility rates for consumers and gave NICOR the green light to bury that gas in the first place.

John Albers: "I spent nearly 18 years as an administrative law judge at the Illinois Commerce Commission, so I'm aware of their authority."

Maxwell: John Albers says regulators aren't using all the tools at their disposal.

John Albers: "The ICC can order it to shut down."

Maxwell: NICOR says without the storage field, quote, "More than 700,000 Illinois customers would be without the energy they expect and rely on during extreme weather events ..." [Quote from Jennifer Golz, NICOR spokeswoman.] In other words ...

John Albers: "Their field is simply too big to close."

Maxwell, standing next to a small white building: One year after our investigation NICOR installed this shallow gas collection well. Essentially, it sweeps up and collects a lot of the leaking gas underground, pressurizes it, and pumps it right back into the same leaking storage formation where it came from.

John Albers: "All that escaping gas has to be replaced. Customers are paying for that."

Maxwell: In November [2021] the Illinois Commerce Commission a record rate hike allowing NICOR to charge its customers higher rates.

John Albers: "Commissioners don't usually say no to rate hikes."

David Kolata, Citizens Utility Board: "Yeah. NICOR Gas has won three rate hikes over the last four years."

Maxwell: David Kolata with the Citizens Utility Board opposed the rate hike. He says NICOR raised its rates 77 percent over the last five years. They use part of the money to pay for infrastructure to deliver that gas to your home.

David Kolata: “The leaks affect consumers. Essentially you have less gas. So, it raises prices, and we are paying for these storage fields in our rates.”

During the July 11, 1990, public hearing in Aldergrove, Friends of the Fraser Valley researcher Glen Breaks had drawn attention to this same nagging issue of future rate increases by B.C. Gas Inc. Breaks stated that in his meeting with Paul Gronert with the B.C. Utilities Commission on July 10, he asked Gronert about B.C. Gas later passing on added costs to consumers related to the corporation’s proposed underground storage facility.

Breaks: And when I asked if there would be any costs related to an environmental mishap those costs would be deemed operating costs. He at first said no. I then pointed out that the environmental problem might be through no fault of B.C. Gas, but just a part of the risks of the operation and may require equipment. ... Well, he said, the public or gas consumers would indeed pay, and the company would make their standard profit margin on that environmental problem. So, you can see that there is absolutely no risk on their part, neither financial, health or environmental. He did tell me though the rate increases would be kept small and spread over several years.

Al Vickers: I would also like to allude to what Mr. Glen Breaks has just said, in terms of the pricing. It would appear to me from what Mr. Breaks has said that the more these people spend the more money they make. And the money they spend is my money, because the rates will go up. And indeed, the rates will not go down, they will go up, not down. They have been caught clearly tonight with their fingers in the cookie jar. And its my cookie jar and I want the Premier to know that we don’t want that to happen.

On the second theme of the evening’s television special feature, Mark Maxwell investigated the State’s responses on information about the amount of gas escaping from NICOR’s facility, revealing troubling news indeed.

Maxwell: At first, the Department of Natural Resources sent us documents redacted at NICOR’s request. We challenged the redaction and won. [WCIA shows a segment of a NICOR letter to the Department, some of which is blacked-out, the top of which reads: “Nicor Gas hereby submits its first, second and third quarter reports for 2020 of the loss estimate of gas migrating from a storage formation for its underground natural gas storage facilities pursuant to Illinois DRN rules at 62 Ill. Admin. Code Section 240.1853(c)(4).” The next sentence is highlighted in yellow: “We also designate this data as confidential as allowed by 62 Ill. Admin. Code Section 240.1853(d).”] Those unredacted documents showed NICOR had reported 675 million cubic feet of natural gas had escaped its original underground storage field in Ancona in 2020. And, in the span of four months, 3.7 billion cubic feet escaped the storage formation at Troy Grove. NICOR claims that is just the amount of gas that they collect before it reaches the surface. It says that volume is “not truly lost gas.”

Jim Stephens: “The question was then asked how much are you then losing? And they could not tell us.”

Maxwell: NICOR’s spokeswoman Jennifer Golds says: “To suggest that significant amounts of gas are escaping through to the surface is false.”

Jim Stephens: “I personally have seen gas bubbling up in a road ditch. I’ve heard it in their vent pipes. I’ve seen it in the water wells. You know, that to me is not a miniscule amount.”

Maxwell: According to this letter [a letter dated October 20, 2021, is shown addressed to the Illinois Department of Natural Resources, Re: Third Quarter 2021 Report of the Loss Estimate of Gas Migrating from a Storage Formation for Underground Natural Gas Storage Facilities] from NICOR to IDNR last October, **a State regulator relaxed the reporting requirement and told the Company to no longer report how much leaking gas it collected underground. Instead, just report how much leaking gas it could find after the methane entered the atmosphere.** [Bold emphasis] NICOR’s letter doesn’t include a specific scientific measurement but describes the volume as negligible. [The quote from the page reads, “the volume of gas that reaches the surface at Ancona is negligible.”]

Jim Stephens: “They will not release those records. If they did that then they would be admitting that they’ve got a problem.”

Maxwell: NICOR says it uses state of the art sensitive leak detection equipment.

Jim Stephens: “They flew over with a flare camera and took images of the farms.”

Maxwell: In June, photos taken at the storage fields show a helicopter flying low overhead taking thermal images of the surface. We asked Stephens, what would they show?

Jim Stephens: “They would see a lot of hot spots. A lot of hot spots.”



Maxwell, walking across an abandoned, gravel covered property: This empty gravel lot used to hold a key clue, a pressure gauge would indicate just how much gas had escaped that initial storage formation and was coming up closer to the surface here. But last year NICOR got rid of that pressure gauge and plugged and abandoned the observation well that used to be right here.

John Albers: “I would like to see those numbers.”

Maxwell, standing in the cold outside the Illinois Commerce Commission: And we asked Jim Stephens why would regulators tell NICOR they no longer had to report those gas loss reports. He told us, quote: **“There is no reason to do that unless you are just covering it up.”** So, we asked IDNR in Governor Pritzger’s Office to explain. Tonight, the Pritzger Administration pushing back hard claiming NICOR, quote, “misunderstood and mischaracterized the regulators.” A Pritzger spokeswoman said NICOR should report both the leaking gas and the leaking gas they capture to, quote, “show their math and prove how much gas might still be out there,” floating underground, migrating to the surface, or polluting the air. Reporting in Springfield. Mark Maxwell, WCIA 03, your local news leader.

The information recently revealed south of the Canadian border, extending from the time of the 2015 Solomon family lawsuit with NICOR, to the October 2020 to January 2022 ongoing news reporting on NICOR and the State of Illinois gas migration coverups, and stemming from not just NICOR’s Ancona / Garfield facility, but also its Troy Grove field facility, stands as a vindication of The Friends of the Fraser Valley’s February 1990 to December 1990 concerns, and an indictment of the provincial Anderson Commission and its final January 1991 report.

The serious gas migration issues ongoing since the 1960s in parts of Illinois, which had been ongoing during the Anderson Commission, and which Lodene Clark spoke of at length, were covered up, and expert gas storage witnesses, some of which were on the American Gas Association’s special committee, claimed these facilities as safe, and supported Commissioner Anderson’s and counsel Douglas MacAdam’s claims that Glen Breaks had fabricated information stated by one of those members.

The disturbing news coverage in Illinois validates the legal and regulatory obstacles and difficulties that Fraser Valley residents would have encountered with B.C. Gas Inc. (and its successors) and the B.C. government should gas migration have occurred, polluting their groundwater, inflicting explosive dangers and adding to the plight of human-induced warming of the third planet from the sun. Of course, those legal and regulatory obstacles that have allowed the contaminations of groundwater, lands and air have been ongoing in the petroleum States of America and the petroleum provinces of Canada, ruled over the courts through secret agreements and control of government regulators.

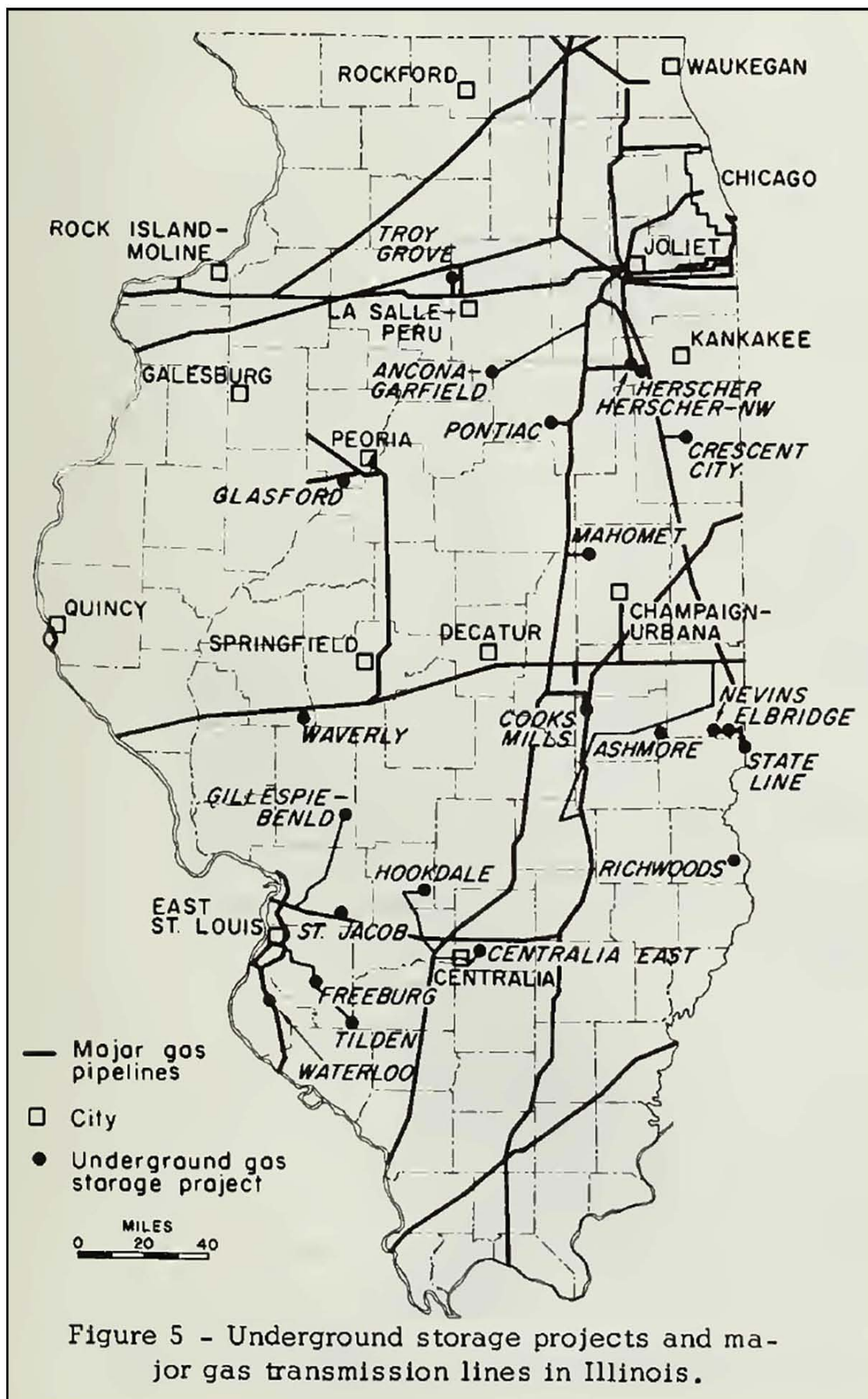


Figure 5 - Underground storage projects and major gas transmission lines in Illinois.

5 – 26. The Complaints to The Law Society of B.C.

*A complaint against a Clearbrook lawyer is being investigated by The Law Society of B.C. ... Glen Breaks, an Aldergrove carpenter and outspoken opponent of the commission wrote a letter to the society after comments made by MacAdams at a special [October 22, 1990] hearing called to investigate allegations of witness tampering. Breaks stated in a letter to the law society that “Mr. MacAdams has attacked my character and reputation in public before the final hearing of the Anderson Commission.” He also alleges that MacAdams publicly “made me out to be a liar and unworthy of belief.” B.C. Society of Law Bryan Ralph said that a decision on the matter would be rendered before the end of December.*⁷⁹⁷

*My final report to the Lieutenant Governor in Council had to await the results of the Law Society’s inquiry, which, as fully expected, showed that there was nothing to support the allegations made. The press continues to quote the statements of the Friends of the Fraser Valley on the exploratory drilling program as though they are factual and does not bother either to check them with more knowledgeable people, or to point out the group’s track record of dishonesty.*⁷⁹⁸

About a week after the Anderson Commission’s special Allegations hearing, a resident of East Vancouver, Douglas Peterson, sent Premier Bill Vander Zalm a letter, dated October 28, 1990. The one-page letter, one among hundreds sent to government either for or against Fraser Valley exploration, complained about The Friends of the Fraser Valley, blaming the group on causing the waste of taxpayer’s money for the special September – October 1990 Allegations process, and that the group was unable to “defend their allegations” which Peterson stated were “unsubstantiated.” The Friends, he wrote, failed to defend their “charges of witness tampering,” thereby losing out on building “credibility,” and “the best they could come up with was to boycott the whole thing.” On January 10, 1991, some ten weeks later, Premier Vander Zalm forwarded Peterson’s October 28 letter to David Anderson who was readying his final report for the Premier’s Cabinet.

Some 23 years prior in June 1968, Bill Vander Zalm, then Surrey City alderman, was in the federal election race in the Surrey riding as a candidate for Prime Minister Pierre Trudeau’s Liberal Party, the same party that David Anderson ran for in the Esquimalt-Saanich riding of southern Vancouver Island. Anderson was elected, but Vander Zalm lost to NDP candidate Barry Mather. Some nineteen years prior in May 1972 when Bill Vander Zalm sat as mayor of Surrey, he was in the same race with 34-year-old David Anderson for nomination as provincial Liberal party leader. Vander Zalm, with early aspirations to become B.C.’s premier, stated that “Anderson was “a little further left” on the political spectrum.”⁷⁹⁹ “Professionally-printed Vander Zalm placards festooned the interior of Penticton’s Peach Bowl Centre. The Vander Zalm supporters distributed Vander Zalm “newspapers,” Vander Zalm buttons and gallons of free coffee in styrofoam cups labelled Vander Zalm.”⁸⁰⁰ Vander Zalm, who lost out at the May 19 – 21,

⁷⁹⁷ *Lawyer focus of complaint*, December 22, 1990, article, News Record Weekend Edition, found in the Commission records newspaper clippings, binder 4.

⁷⁹⁸ Letter from Commission David Anderson to Douglas Peterson, Vancouver resident, January 17, 1991.

⁷⁹⁹ *McGeer quits post – Picks Anderson as successor*, Vancouver Sun, May 3, 1972.

⁸⁰⁰ *Vander Zalm enlivens convention*, Vancouver Sun, May 23, 1972.

1972 party convention in Penticton City by a margin of 388 to 171, would later be heralded Premier under a right-wing party that Anderson severely criticized during his 1972-1975 stint as Liberal leader.

On January 17, 1991, Anderson wrote to Mr. Peterson, responding to his comments of October 28 to the Premier. In that letter Anderson was frank about his thoughts concerning The Friends, thoughts that, as a standing Commissioner, he should never have written down on paper. He stated that, in the context of causing "an expensive investigation," with "allegations to be complete fabrications," The Friends had a **"track record of dishonesty."**

Moreover, Anderson wrote in his letter that The Friends:

... continued with their program of false allegations, this time lodging a complaint with the Law Society of British Columbia against the lawyer for the Commission who assisted in the investigation. The Law Society investigation took six weeks, during which time they continued to repeat the totally unsubstantiated charges, which of course are extremely damaging to the reputation of the person concerned. My final report to the Lieutenant Governor in Council had to await the results of the Law Society's inquiry, which, as fully expected, showed that there was nothing to support the allegations made.

This is apparently the only accounting found in the Commission records revealing that the complaint launched by Glen Breaks with the Law Society of B.C. was responsible for holding up Anderson's final report.

January 17, 1991

Mr. Douglas Peterson
22nd Avenue East
Vancouver, BC
V8T 1H8

Dear Mr. Peterson:



Province of
British Columbia

Commission on
Fraser Valley
Petroleum Exploration

Suite 413, 645 Fort Street
Victoria, British Columbia
V8W 1G2
Telephone: (604) 356-9742
Facsimile: (604) 356-9747

The Premier's correspondence secretary sent me a copy of your letter to him of 28 October 1990, but unfortunately not until this week.

You may not be aware that after the Special Report which I issued on the matter in November, they continued with their program of false allegations, this time lodging a complaint with the Law Society of British Columbia against the lawyer for the Commission who assisted in the investigation. The Law Society investigation took six weeks, during which time they continued to repeat the totally unsubstantiated charges, which of course are extremely damaging to the reputation of the person concerned. My final report to the Lieutenant Governor in Council had to await the results of the Law Society's inquiry, which, as fully expected, showed that there was nothing to support the allegations made.

The press continues to quote the statements of the Friends of the Fraser Valley on the exploratory drilling program as though they are factual, and does not bother either to check them with more knowledgeable people, or to point out the group's track record of dishonesty. I confess I do not understand why.

Yours sincerely,
David Anderson
Commissioner

A handwritten signature in cursive script that reads "David Anderson".

Commission Correspondence Files

Anderson's statements in his letter to citizen Peterson are almost verbatim the narrative he wrote in the Summary section of his final February 1, 1991, Commission report, words no doubt he had recently drafted, or perhaps, may in part have been inspired by Peterson's letter.

As outlined in the commission's Special Report of November 1990, there has been vigorous and organized opposition to the proposals of the consortium. ... as detailed in the Special Report, some opponents have resorted to spreading untruthful allegations of improper and illegal behavior by civil servants and by proponents of drilling. In November, subsequent to the Special Report,⁸⁰¹ they resorted to further allegations of misconduct, against the staff of the commission. This has resulted in yet another investigation, this time by the Law Society of British Columbia. In a decision on 7 January 1991, the Law Society concluded that there was no evidence to support these allegations.

Unfortunately, these two separate investigations of these allegations have delayed this report, from October of 1990 to January of 1991. The commission regrets these delays but regards them as an unfortunate price of the open and public process. Sadly, but perhaps inevitably in such processes, some will succeed in abusing the opportunities for constructive participation that are provided to them.

Commissioner David Anderson was most likely the object or outcome of his own predicament, the agent of his own scorn. The consideration was entertained in Section 21 of Chapter 5, *The Rzepczynski (Population Proximity) Affair*, that both David Anderson and counsel Douglas MacAdams failed to restrain themselves from conducting a witness tampering Allegations Inquiry and officiating a quasi-legal hearing. Contrary to what MacAdams stated on October 22, "In my submission, Mr. Commissioner, for the purposes of other commissions, present and future, you had no choice but to deal seriously with these serious allegations,"⁸⁰² **MacAdams and Anderson did have another "choice."** Both, after all, chose to conduct what amounted to be a witch hunt on 'multiple' parties that they wrongfully alleged The Friends said were silenced, when in fact the two Commission principals had multiple contrary letters and statements from The Friends stating the opposite, that there was only 'one party,' namely Glen Breaks' professional contact, Walter Rzepczynski, who The Friends believed to have been gotten to or silenced. Had the Commission wisely not pursued the Allegations Inquiry, Breaks would not have filed complaints with The Law Society, and Anderson would have been able to finish his report for government on time. In hindsight, there is also the possibility that had such been the case of a no Allegations Inquiry, the government may not have chosen to reject underground storage as it did on February 1, 1991, a direct consequence of the demonstrative public outrage resulting from the Allegations Inquiry, compounding and escalating an altogether angry public since February 1990.

Anderson's Allegations Inquiry evolved into a vendetta against The Friends, as summarized by Friends member Charles MacLean in his November 28, 1990, lengthy letter to Premier Vander Zalm (see Section 24, *The November 27, Langley High School Meeting*, for its contents), leading MacLean to state at the November 27 public meeting that "they," namely the Commission, "are our enemies, they have joined our enemies."⁸⁰³

⁸⁰¹ Break's complaint was filed 'prior to' the Special Report.

⁸⁰² *Proceedings*, Volume 9, Commission on Fraser Valley Petroleum Exploration Technical Hearings, Town & Country Inn, October 22, 1990, page 1624.

⁸⁰³ *Gas opponents determined to battle on*, Abbotsford Times, December 5, 1990.

On November 16, eleven days before Commissioner David Anderson's Allegations Inquiry report was released, Glen Breaks filed a complaint to The Law Society of B.C. about Commission Counsel Douglas MacAdams' conduct. Breaks sent copies of his November 16, 1990, complaint to "the Vancouver Sun, to the Abbotsford Clearbrook Times and to The Province" newspapers, granting media privilege to sensitive information.⁸⁰⁴

Breaks wrote in his complaint:

I am told that I cannot sue Mr. MacAdams for libel due to the fact that he was acting as a lawyer before the commission, and this gives him immunity in this regard. I am therefore appealing to the law society for protection against him by means of laying this complaint for his professional misconduct by suppressing evidence which should have been brought out by him at this meeting.⁸⁰⁵



The Law Society sent MacAdams a copy of Break's complaint on November 26, 1990, which MacAdams received on November 29. MacAdams immediately contacted Commission secretary Sheryl MacDonald instructing her to forward to the Law Society: a copy of Anderson's Special Report of Witness Tampering; a copy of the volume of Appendices to the Special Report; and a copy of the transcript of the Allegations Inquiry's proceedings for October 22. MacAdams stated to the Law Society that in the interim he was "preparing a full response."

In MacAdams' eight-page formal letter of response to the Law Society, dated December 4, 1990, he states, mimicking somewhat Breaks' distribution of his November 16 written complaint to outside sources, "I do not require that this response be kept

Chilliwack Progress - December 5, 1990

Complaint of misconduct filed

Glen Breaks, a member of the Friends of the Fraser Valley, has filed a complaint of professional misconduct against lawyer Douglas MacAdams, counsel to a commission on Fraser Valley natural gas exploration.

In a letter to the society, Breaks said MacAdams has "attacked my character and reputation in public" by "deliberately suppressing evidence known to him."

Commissioner David Anderson concluded there is no support for allegations of witness tampering in the hearings.

Sworn testimony by U.S. gas engineer Walter Rzepczynski deny-

ing he was pressured to change his views was accepted over unsworn allegations by Friends members, Anderson said.

Rzepczynski also denies recommending to Breaks that natural gas storage facilities should be located away from populated areas.

Breaks claims a published article by Rzepczynski contradicts that claim, and that lawyer MacAdams had a copy of the article when he read aloud Rzepczynski's affidavit at the hearings.

"It seems to me that (MacAdams) has a clear duty to present all the evidence in his possession . . . rather than to choose some evidence and suppress others."

⁸⁰⁴ Douglas MacAdams letter to The Law Society of B.C., December 4, 1990.

⁸⁰⁵ *Gas opponent claims evidence suppressed*, Abbotsford Times, December 5, 1990.

confidential.” MacAdams begins by laying out his “understanding of the complaint:”

My understanding of Mr. Breaks’ complaint is drawn from the second paragraph of his letter dated November 16 and is that I made submissions: “ ... without putting all of the relevant facts known to him before the Commission, and used these omissions in order to attack me, by deliberately suppressing evidence known to him.”

I understand Mr. Breaks says that the relevant facts known to me which he says I failed to put before the Commission and the evidence Mr. Breaks says I deliberately suppressed were the following words referring to underground storage of natural gas which words were included in the draft paper by Walter Rzepczynski titled *Aquifer Storage Development*: “It should, if possible, be away from any populated area.”

I understand Mr. Breaks’ complaint in his letter of November 16, 1990 to be that I used the omission of the words: “It should, if possible, be away from any populated area,” as a basis for that submission.⁸⁰⁶

We read as well in Mr. Breaks letter of November 16, 1990 these words on page 3, in the third paragraph: “... it is his own witness, Mr. Rzepczynski, whose truthfulness should have been brought into question ...”

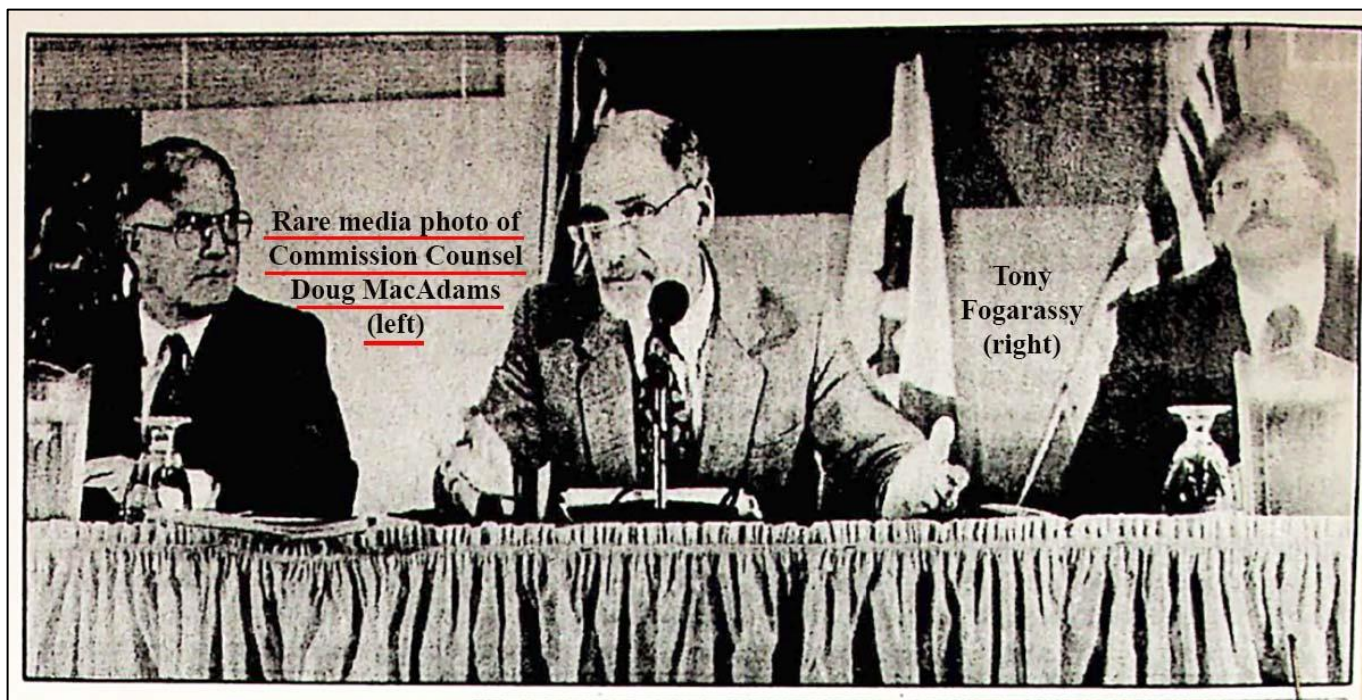
I understand the thrust of Mr. Breaks’ letter to be that there is a contradiction between (i) what Mr. Rzepczynski wrote in 1988 when he revised *Aquifer Storage Development*, and (ii) what he stated on August 29, 1990 when he wrote his letter to Mr. Griffith referred to by Mr. Breaks in his letter of November 16, 1990 and what he stated on October 8, 1990 when he [Rzepczynski] swore his statutory declaration.

The transcript of the Commission hearing of October 22, 1990 will show that in my submissions I did not refer to the words on which Mr. Breaks has focussed. Nor did I suggest that there was any contradiction in what Mr. Rzepczynski had written or said on various occasions. Nor did I attack Mr. Rzepczynski’s credibility. The reasons for my not doing so are that in my view: (i) when the statements are properly understood, there is no contradiction, and (ii) in my view Mr. Rzepczynski’s credibility is beyond reproach.

When presenting the evidence to the Commission on October 22, 1990 I had had the benefit of telephone interviews with Walter Rzepczynski, and had met with him for most of the day on October 8, 1990 at his company’s offices in Lombard, Illinois. From my discussions with him, I understood from him that his views were those which were included in paragraph 30 of his statutory declaration, namely: “If geological conditions are favorable, if proper testing and evaluation is carried out, and if the techniques which have been developed over the past 35 years are properly and carefully applied, aquifer storage of natural gas can provide a safe and beneficial means of supplying gas to consumers.”

I also understood from Mr. Rzepczynski that in the United States, the land tenure system required operators of storage facilities to purchase underground rights from surface holders, or in the case purchase could not be negotiated, to use administrative procedures to acquire those rights by compulsory means, and to deal with surface rights holders on an ongoing basis. This understanding

⁸⁰⁶ Pages 1-2.



Rare media photo of
Commission Counsel
Doug MacAdams
(left)

Tony
Fogarassy
(right)

was consistent with what other expert witnesses to the Commission had said in preparation for hearings of the Commission in August and in September. I understood from Mr. Rzepczynski that for these financial, legal and administrative reasons peculiar to the United States, from the operators' point of view it was preferable to develop underground storage of natural gas in places away from population.

Lawyer focus of complaint

A complaint against a Clearbrook lawyer is being investigated by The Law Society of B.C.

Douglas MacAdams served as legal counsel for the Commission on Fraser Valley Petroleum Exploration and his conduct during the final hearing has been questioned by a member of the residential group Friends of the Fraser Valley.

Glen Breaks, an Aldergrove carpenter and outspoken opponent of the commission wrote a letter to the society after comments made by MacAdams at a special hearing called to investigate allegations of witness tampering.

Breaks stated in a letter to the law society that "Mr. MacAdams has attacked my character and reputation in public before the final hearing of

the Anderson Commission."

He also alleges that MacAdams publicly "made me out to be a liar and unworthy of belief."

B.C. Society of Law secretary Bryan Ralph said that a decision on the matter would be rendered before the end of December.

Abbotsford News
December 22, 1990

When presenting evidence to the Commission on October 22, 1990 I made no suggestion that there was any contradiction in what Mr. Rzepczynski had written in Aquifer Storage Development and in what he had written and said on other occasions because I believed that Mr. Rzepczynski believed and that he had at all times believed natural gas could in appropriate circumstances, safely be stored underground in populated areas. When presenting evidence on October 22, 1990 I believed that properly understood, no statement of Walter Rzepczynski known to me was inconsistent with the

BRYAN F. RALPH, SECRETARY
ROSS TWEEDALE, DEPUTY SECRETARY

THE LAW SOCIETY OF BRITISH COLUMBIA
300 - 1148 HORNBY STREET
VANCOUVER, B.C.
V6Z 2C4

Jeffrey G. Hoskins

CONFIDENTIAL

Mr. Glen R. Breaks

Aldergrove, B.C.
VOX 1A



TELEPHONE: 689-2888
FAX: 689-6232

Dear Mr. Breaks: December 20, 1990

Re: Douglas P. MacAdams

Enclosed is a copy of a letter we received from Mr. MacAdams in response to your complaint.

We have now had the opportunity to review the materials on our file concerning your complaint and are in a position to make a final assessment of the matter.

It appears that your complaints are as follows:

1. That Mr. MacAdams suppressed evidence known to him at a hearing of the Commission of Inquiry into Fraser Valley Petroleum Exploration. Specifically, you refer to a statement in an unpublished paper entitled "Aquifer Storage Development" by Walter Rzepczynski;
2. That Mr. MacAdams attacked your character by making submissions to the Commission at a hearing on October 22, 1990 regarding your credibility.

It is apparent from the documents on our file that the unpublished paper in question was placed before the Commission as an exhibit to the Statutory Declaration of Walter Rzepczynski which was considered by the Commissioner and referred to in his report published in November 1990. Mr. MacAdams did not place emphasis on this document and the statement in it which you have quoted because he gave it an interpretation different from your own, based in part on his discussions with Mr. Rzepczynski, and found it, therefore, of less significance. I see no evidence that Mr. MacAdams reached this conclusion in bad faith or that the evidence in question was in any way suppressed by anyone.

With respect to the alleged attack on your character, I have read a transcript of Mr. MacAdams' submissions to the Commission at the October 22, 1990 hearing in its entirety. In my view, in the circumstances, where sworn evidence was offered both orally before the Commission and in the form of Statutory Declarations contradicting unsubstantiated allegations made by individuals who apparently refuse to give sworn evidence, counsel had a duty to advise the Commission as to the weight and credibility that should be given to the contradictory positions placed before it. In my view, Mr. MacAdams' submissions were appropriately restrained and supported by the evidence before the Commission.

Because of the seriousness of the complaints you have made, I think it is appropriate to refer the matter to the Standing Discipline Committee for its review and a final decision. It follows from the foregoing that my recommendation to the Committee will be that no further action be taken.

A review by the Committee does not constitute a Hearing. The Committee meets monthly to review a number of complaints to determine what further action, if any, should be taken. The Committee itself does not take the action, but merely determines whether a complaint should go forward to a more serious level or be resolved by the Committee without further action.

I expect you will be advised of the outcome of the Committee's deliberations in due course.

Yours very truly,

Jeffrey G. Hoskins
Staff Lawyer - Complaints

Enclosure
~~Mr. Douglas P. MacAdams~~

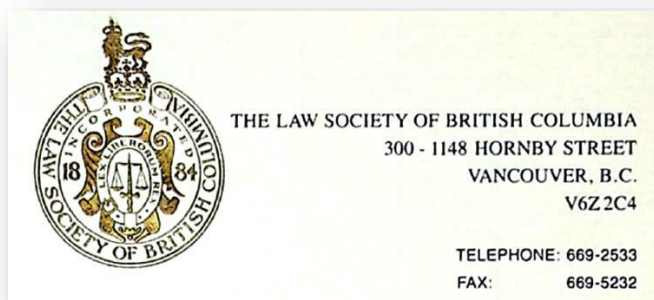
belief that natural gas could in appropriate circumstances safely be stored underground in populated areas.⁸⁰⁷

After meeting with Mr. Rzepczynski on October 8, 1990 I formed the opinion that any trier of fact would conclude that he was a truthful and credible witness.⁸⁰⁸

MacAdams' words, "I formed the opinion," is substantiated, in part, on a convenient lack of documentation. The Anderson Commission records contain no files or notes with information on Anderson's and MacAdams' special taxpayer-ed visitation to Illinois and Kentucky where they met with Walter Rzepczynski, with Howard Griffith – the B.C. Gas company hired consultant – and with other parties.⁸⁰⁹ There were no audio tape recordings or transcripts found in the Commission records of what was said at those special visitation meetings as officers of government on a legal Commission business trip. There was no reference found of an independent accompanying witness present to hear, see and document the two Commission representatives. What questions did MacAdams ask of Rzepczynski on October 8? How thorough were his questions? This hole of information is one of the main problems of Anderson's Allegations Inquiry: lack of evidence of what the two Commission members stated and discussed with the two parties, Rzepczynski and Griffith, in the early October 1990 special trip, the two parties who were key absent, affidavit witnesses for the October 22 Allegations hearing.

It was on that visitation to the northeast U.S. that the two Commission officials journeyed to and met with Long Point, Illinois resident Lodene Clark. Her lands, water well and property structures were affected and contaminated by migrating gas from underground storage. Lodene later recounted to a Fraser Valley newspaper reporter that Anderson snubbed her.⁸¹⁰ Was Clark's stirring account an indication of a Commissioner and his Counsel favoring underground gas storage and perhaps siding with industry's point of view?

In his December 20, 1990, letter to Douglas MacAdams, Law Society of B.C. staff lawyer Jeffrey G. Hoskins wrote:



Enclosed for your information is a copy of my letter of today's date to Mr. Breaks indicating that, because of the seriousness of his complaints, I have referred this matter to the Standing Discipline Committee for its review and a final decision. As I have indicated to Mr. Breaks, my view is that his complaints are without foundation, and I will recommend to the Committee that no further action be taken.

⁸⁰⁷ Pages 4-5.

⁸⁰⁸ Page 6.

⁸⁰⁹ Refer to Section 22 of this chapter, *Anderson's and MacAdam's Special Trip to Illinois*.

⁸¹⁰ Stated in the originating article in the Chilliwack Progress, *the air explodes around her home*, February 6, 1991, and in the copied article, *Illinois grandmother shares her story*, in the Abbotsford News, February 9, 1991. "Commissioner David Anderson visited [Lodene] Clark in her home recently as part of his commission of inquiry into gas exploration and storage in the Fraser Valley. But the meeting didn't go well. "I felt I was able to tell him some of the things that have happened to me. He didn't call me a liar but almost." "

In Hoskins letter of the same date to Glen Breaks, he wrote:

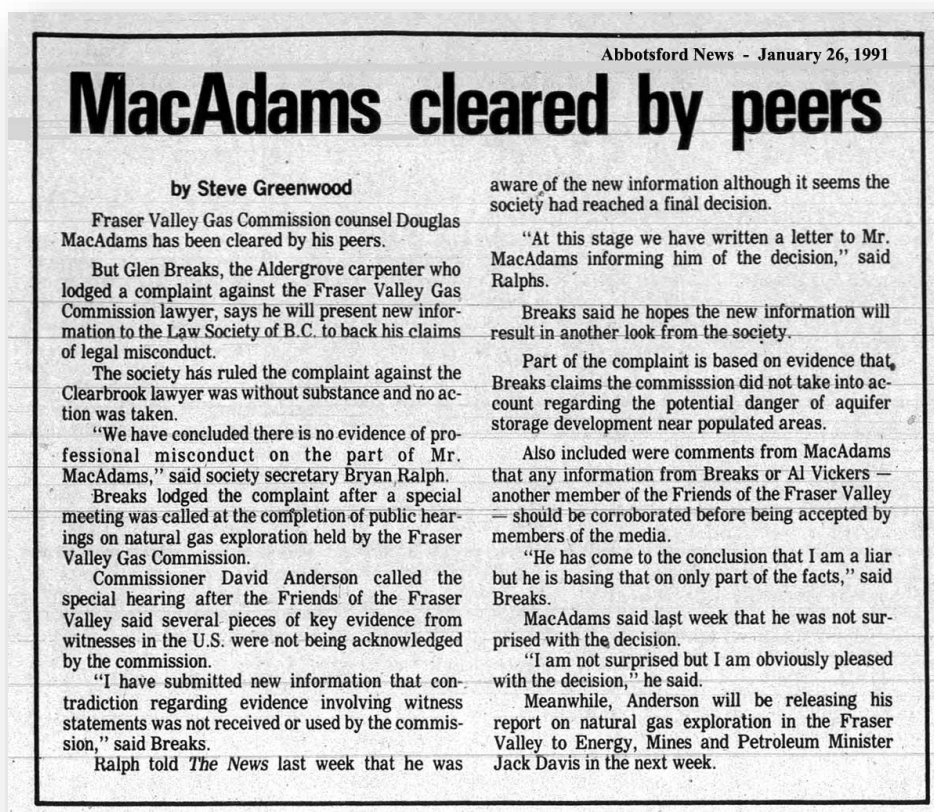
It appears your complaints are as follows:

1. That Mr. MacAdams suppressed evidence known to him at a hearing of the Commission of Inquiry into Fraser Valley Petroleum Exploration. Specifically, you refer to a statement in an unpublished paper entitled "Aquifer Storage Development" by Walter Rzepczynski;
2. That Mr. MacAdams attacked your character by making submissions to the Commission at a hearing on October 22, 1990 regarding your credibility.

It is apparent from the documents on our file that the unpublished paper in question was placed before the Commission as an exhibit to the Statutory Declaration of Walter Rzepczynski which was considered by the Commissioner and referred to in his report published in November 1990. Mr. MacAdams did not place emphasis on this document and the statement in it which you have quoted because he gave it an interpretation different from your own, based in part on his discussions with Mr. Rzepczynski, and found it, therefore, of less significance. I see no evidence that Mr. MacAdams reached this conclusion in bad faith or that the evidence in question was in any way suppressed by anyone.

With respect to the alleged attack on your character, I have read a transcript of Mr. MacAdams' submissions to the Commission at the October 22, 1990 hearing in its entirety. In my view, in the circumstances, where sworn evidence was offered both orally before the Commission and in the form of Statutory Declarations contradicting unsubstantiated allegations made by individuals who

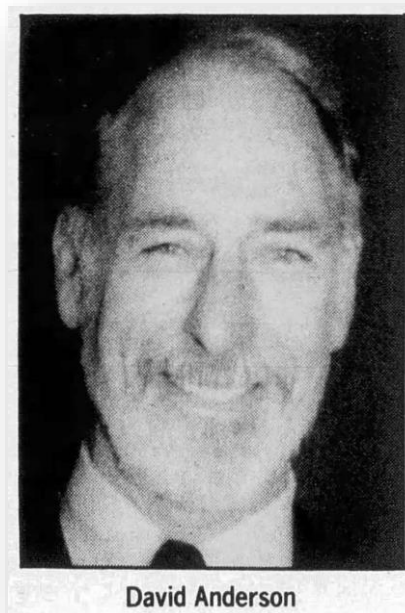
apparently refuse to give sworn evidence, counsel had a duty to advise the Commission as to the weight and credibility that should be given to the contradictory positions placed before it. In my view, Mr. MacAdams' submissions were appropriately restrained and supported by the evidence before the Commission.



On February 1, 1991, the day that government released Commissioner Anderson's final *Report of the Commission of Inquiry into Fraser Valley Petroleum Exploration*, David Anderson wrote to Jeffrey Hoskins of The Law Society, forwarding him a copy of his report in defence of Commission counsel MacAdams.

I understand that despite the decision of the discipline committee on 7 January 1991, Mr. Glen Breaks has renewed his complaints regarding the work of the counsel to this commission, Mr. Douglas MacAdams.

To complete your file, I am enclosing a copy of my report to the provincial cabinet on matters relating to petroleum exploration in the Fraser Valley. May I draw your attention to the acknowledgements (page v), to the introduction (page xiii), to "Public Participation" in the summary section on pages 11 and 12, to the "Public Participation" chapter from pages 145 to 156.



The name of Mr. MacAdams occurs elsewhere in the document. A full appreciation of his effective work on behalf of the Commission requires a full reading of the report, but the pages mentioned will outline for you the lengths to which the Commission and Mr. MacAdams went to in an effort to have the highest possible level of public participation.

I am sure it is rare for a counsel in such a process to ask members of a private interest group for the names of those whom they wish to have called as witnesses and to call all of those witnesses, to ask them what lines of questioning they wish pursued (for all witnesses, not just the ones they requested), to have them fully involved in the prehearing conferences with the witnesses, to have them permitted to sit at his elbow when carrying out the questioning of witnesses, to have them permitted to suggest individual questions during the questioning, and finally to have them able to request adjournments during questioning to discuss what information he should be seeking. I confess that I sometimes thought I had asked too much of Commission Counsel. However Mr. MacAdams not only put up with this unusual process, but did so in a most cooperative, cheerful and friendly manner.

If the Law Society has a committee that considers praise rather than complaints, I would be grateful if you would bring the above facts to the members' attention. A certificate of commendation for Mr. MacAdams' patience and good work is in order.

The last correspondence by David Anderson about The Law Society complaint was found in his February 8, 1991, letter to Paul Williamson, Counsel for the government's Royal Commission on Health Care and Costs, on the final day of Anderson's formal role as Commissioner.

I believe I sent you a copy of the special report that gave my conclusions; if I didn't the results were that the allegations were deliberate fabrications without any evidence to support them.

Subsequent to that report a director of the Friends of the Fraser Valley accused Doug MacAdams of unprofessional conduct, an allegation that went to the Discipline Committee of the Law Society. On 7 January the Committee quite rightly concluded there was no evidence to support the complaint. Since then, the Friends have provided “new evidence” and have renewed their allegations. The Discipline Committee will be looking into this in due course, perhaps in March. The new evidence is as ill founded as everything else they have done; however, it is tough on Doug to suffer through such actions. There appears to be no mechanism for the Law Society to declare that these complaints are a misuse of process, and to reprimand those who bring them forward.

On April 9, 1991, B.C. Law Society staff lawyer David Newell forwarded Glen Breaks the Society’s final ruling.

Enclosed is a copy of a letter we received from Mr. MacAdams in response to your letter of January 22, 1991. We have reviewed the additional material enclosed with your letter and are now able to make a final assessment of your complaint.

We confirm that the nature of your complaints has not changed since your original letter of November 16, 1990. It does not appear that the basis for your complaints has altered either. The additional documents you supplied does not perforce lead to the conclusion that Mr. MacAdams placed an untenable interpretation on the statement made by Mr. Rzepczynski, nor, indeed, does the material suggest that he acted in bad faith in making his interpretation.

In view of our conclusion that there is no further evidence substantiating your allegation that Mr. MacAdams knowingly suppressed evidence at the Special Hearing, our original assessment that Mr. MacAdams’ submissions to the Commission were appropriate in the circumstances must stand. We therefore do not intend to place this matter before the Standing Discipline Committee again and we intend to close our file.

5 – 27. Anderson's Final Report and Government's Decision to Quash Underground Storage

*The information and concerns brought forward by residents will have to be addressed before underground storage could even be considered in populated areas of our province and, in particular, the proposal for the Fraser Valley. As you are aware, Dr. David Anderson is presently conducting an inquiry into this matter. Before any government could possibly even consider allowing storage of gas in such a populated area, all answers would have to be available and acceptable to the community. David Anderson's inquiry is critically important. As much time and as much discussion as is needed must and will be allowed. The security and peace of mind of our community comes first and foremost. You have not only my word, but my firm promise to support your cause, which I believe to be the safety of our citizens.*⁸¹¹

More than 1,000 letters were collected and mailed over the past few months, and I know a great many others expressing opposition to drilling and storage have been mailed directly to the Premier

*who must, by now, be knee deep in paper! Our provincial government authored this devastating situation we all find ourselves in and they are the only ones who can put an end to it. So keep up the pressure, let the Premier and MLAs know, daily if possible, that enough is enough and residents are not going to take it anymore. ... Remember – every resident is a friend of the Fraser Valley.*⁸¹²

*The Friends of the Fraser Valley had developed a new strategy in their fight against natural gas drilling and underground storage proposals. In an attempt to attract more support for their organization, the Friends have instituted a hotline which can be accessed 12 hours a day. Calls will be forwarded to 14 available members, from 9 a.m. to 9 p.m., seven days a week. The group is holding a fund-raising dance on February 1st at the Kinsmen Community Centre in Aldergrove.*⁸¹³

*We must all continue to make our voices heard and, in the words of the Raging Residents Choir [at the Friends of the Fraser Valley fund-raising Dinner-Dance], "Shout loud and clear: no, you can't drill here." Remember, every resident is a friend of the Fraser Valley.*⁸¹⁴

BE INFORMED!

PROTECT YOUR HOME.

Gas drilling and artificial gas storage in the Fraser Valley threatens your:

- SAFETY
- WATER SUPPLY
- REAL ESTATE
- AIR QUALITY

and can lead to **compulsory occupation of your private property.**

You have neighbours working to stop this lunacy.
Bumper stickers and property signs are available.
A community fund-raising dance is planned for Friday, Feb. 1, 1991.

To learn how you can support us, call

Friends of the Fraser Valley
856-0829
9 a.m. to 9 p.m.

or write
260-256th Street, Aldergrove, B.C. VOX 1A0
CALL TODAY!

127b-1 (28-1)

⁸¹¹ Letter to Ms. Pat Lawrence, Aldergrove, October 23, 1990, from Carol Gran, Langley M.L.A., Minister of Government Management Services and Minister Responsible for Women's Programs.

⁸¹² Letter to the editor, Abbotsford Times, December 19, 1990, by Al Vickers, Chairman, Friends of the Fraser Valley.

⁸¹³ *Friends fight gas with 12-hour hotline*, The Langley Advance, January 23, 1991.

⁸¹⁴ *Friends' fundraiser big success*, letter to the Langley Advance, by Pat Lawrence.

The drilling and storage protest group, The Friends of the Fraser Valley, has expressed delight at news that storage will not be allowed. The Friends staged a protest outside the Fraser Valley Gas Project office in Aldergrove on Monday [February 4], however, making it clear that they will not rest until the exploratory drilling proposal is also rejected.⁸¹⁵

A4

THE LEADER, SURREY, B.C. — SUNDAY, JANUARY 27, 1991

Gas company waits for decision on drilling

B.C. Gas is anxiously awaiting the commissioner's report on plans for natural gas storage and drilling in the Fraser Valley.

B.C. Gas president Bob Kadlec, who spoke to Surrey Chamber of Commerce on Wednesday, said he expects the report from commissioner David Anderson to be released very soon. Anderson was appointed to look into drilling plans for the Fraser Valley, which have caused consternation among many residents of rural areas, particularly in Langley, where the Friends of the Fraser Valley organization has led the fight against the drilling plans.

B.C. Gas is interested in storing

natural gas in an underground cavern in the valley. Kadlec said the utility could save up to \$14 million a year by storing gas closer to its major market.

In addition, a consortium of Conoco and Dynamic Oil is interested in drilling for oil or natural gas in the valley. The firms have purchased mineral rights to property in Delta, Surrey, Langley and Matsqui.

Kadlec said he is distressed by the emotional tone the debate over the drilling has taken. He said the primary opposition has been due to concerns about wells, but his company wouldn't want to store gas at

any level close to the water table.

"We're talking about going down more than a mile," he said.

Water wells are rarely deeper than a couple of hundred feet, and usually tap into an aquifer at that level.

He said a much-publicized case of gas seeping into a water well in Illinois took place over 20 years ago, and was the result of using a technology that was outdated at that time.

Nevertheless, Kadlec said B.C. Gas will accept whatever decision Anderson hands down.

"We're prepared to walk away from it if we have to," he said.

On February 1, 1991, the B.C. government issued two opposing news releases on the same controversial subject. The first out the door was the official publication release by the Queen's Printer of Commissioner David Anderson's final 211-page report, *Report of the Commission of Inquiry into Fraser Valley Petroleum Exploration*.

Anderson concludes that the risks of exploratory drilling are slight and the gains may be great. Regarding under ground storage, he states that more geological information on the Fraser Valley is necessary before an evaluation can be made.

Energy Minister Jack Davis said, "This report gives the most up-to-date picture of the impacts and risks associated with exploration, drilling, and potential development. We are grateful to David Anderson for his work."

⁸¹⁵ Cabinet confuses Friends, Langley Advance, February 6, 1991.

Anderson's conclusions and 59 detailed recommendations are based on the concerns of area residents, evidence from technical experts, and visits to drilling sites and storage facilities in Ontario, Washington state, California, Michigan, Illinois, Missouri, Italy, France and England.

Three companies, B.C. Gas, Conoco, and Dynamic Oil, have proposed a three-well exploratory drilling program. "No applications for drilling, facilities or storage have been received and no permits have been issued," said Davis.

CALGARY HERALD

Sat., February 2, 1991 F21

Drilling risks slight

VICTORIA (CP) — Exploring for oil and natural gas in the Fraser Valley promises large gains with little to lose, a provincially appointed commissioner has concluded.

But commissioner David Anderson said a proposal to store natural gas underground needs more study.

"The conclusions that emerge from the investigation are that the risks of exploratory drilling are slight and the benefits from the energy security, economic and environmental points of view may be considerable," Anderson said in the report released Friday.

Anderson said drilling would encourage the use of natural

gas in the Vancouver area, offering the best hope for reducing air pollution as well as contributing to a global reduction in greenhouse gases.

The 211-page report contained 59 recommendations. It followed eight months of hearings and research by Anderson amid accusations by opponents that the process was slanted in favor of industry.

Anderson, a former leader of the B.C. Liberal party and author of a report on oil-tanker traffic in B.C. waters, found the risk of drilling to groundwater or the chances of a well blowout are minimal.

"The chances of well blowout is very slight — perhaps one in

15,000 per well, based on more than 200,000 wells drilled in Alberta," the report said.

Energy Minister Jack Davis said his staff will study the recommendations before making any decisions on a drilling program by three companies.

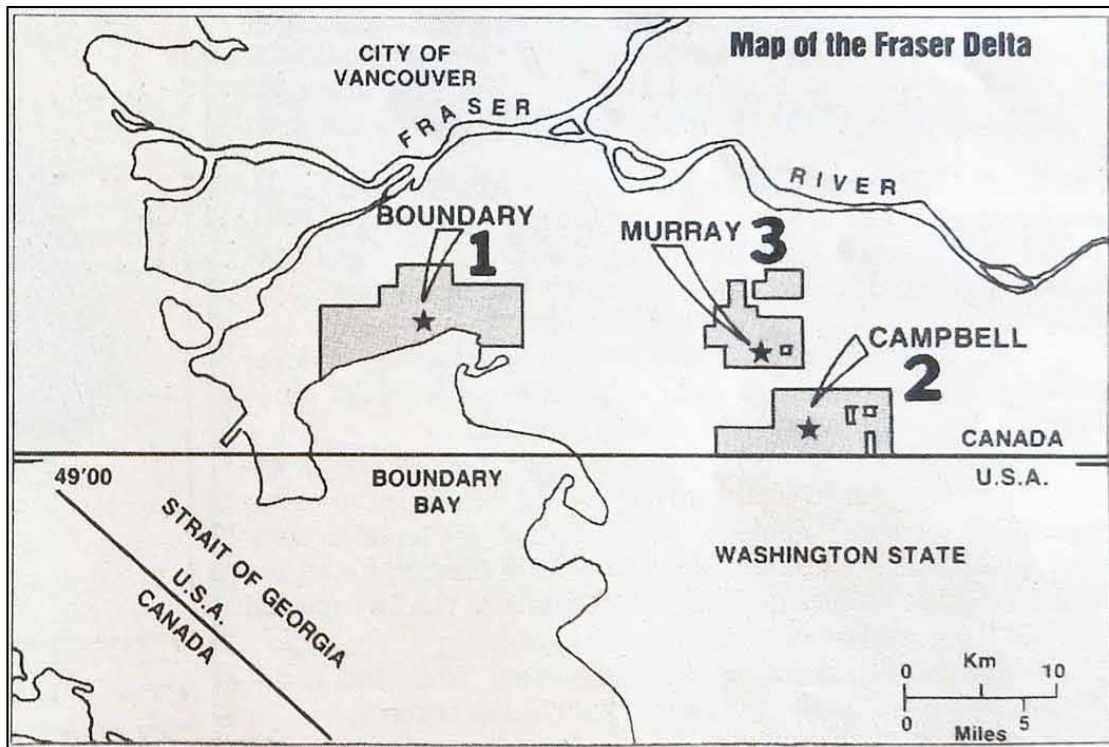
The Fraser Valley Gas Project consortium — which includes B.C. Gas, Conoco and Dynamic Oil — want to drill three exploratory wells, two in Langley and one near Boundary Bay in Delta.

The provincial government auctioned off the mineral rights for 7,265 hectares from Delta to Abbotsford to Dynamic and Conoco for \$5.6 million in October 1989.

Anderson's report contains 16 chapters, 13 appendices and 59 recommendations. The report's main conclusions are:

- the risks of exploratory drilling are slight;
- energy security, economic and environmental benefits may be considerable;
- the chance of groundwater damage is remote in the extreme. Drilling is the least by far of threats to groundwater when compared to pesticides, herbicides, fertilizers and other contaminants. New legislation and a vigorous program of cleaning up existing problems and pollution sources is recommended to protect Fraser Valley groundwater and soil;
- petroleum industry developments in the Fraser Valley can be expected to have a mildly positive effect on farmland preservation and on fish and wildlife habitat protection;
- the chance of a well blowout is very slight -- perhaps one in 15,000 per well, based on more than 200,000 wells drilled in Alberta;

- the environmental effects of drilling can be expected to be strongly positive, as expanded use of natural gas in the Lower Mainland offers the best hope of improving the current air quality problems, and contributes to national and international objectives of reducing greenhouse gas emissions.



Make anti-gas fight political

The Editor,
Langley Adviance,

January 30, 1991

Dear Sir,

I, like many other people who live in Langley where they want to drill for or store natural gas, say no to this. I believe this could bring great harm to our underground water supplies and the safety of the community if there was a gas leak.

I think the people of Langley should go to or write their MLAs and tell them that you do not want this here and for them to speak out in public against drilling and or storage of natural gas here in Langley. If they won't do this, you could remind them that there is a election coming and this could mean you will not be voting for

them.

If you are a member of a political party you could mail or leave your membership card at their constituency office and tell them you will pick your membership card up when they have spoken in public against the drilling of and storage of natural gas here in Langley. With a election coming probably this spring, maybe this could be made into a election issue with all the political parties.

If a decision has to be made on this gas drilling and storage it should be done by the people of Langley in a referendum vote, but not by this government or the gas companies.

D. Sanderson

REPORT OF THE COMMISSION OF INQUIRY INTO FRASER VALLEY PETROLEUM EXPLORATION

Commissioner: David Anderson.
ISBN 0-7726-1256-0

1. Petroleum — British Columbia — Fraser River
Valley — Prospecting. 2. Gas, Natural — Underground
storage — British Columbia — Fraser River Valley.
3. Petroleum industry and trade — British Columbia —
Fraser River Valley. I. Anderson, David, 1937-
II. Title.

HD9574.C33B742 1991

333.823

C91-092056-7

David Anderson
Commissioner
JANUARY 1991



DOC
BC
ZR1990F7
B
1991
c.10

© Advanced Satellite Productions Inc.

Satellite Image of the Fraser Valley is reproduced with
the permission of Advanced Satellite Productions Inc.,
Richmond, B.C., Canada.

Province of
British Columbia





Province of
British Columbia

NEWS RELEASE

MINISTRY OF ENERGY, MINES
AND PETROLEUM RESOURCES

FOR IMMEDIATE RELEASE

1991:09

February 1, 1991

DAVIS SAYS 'NO' TO VALLEY GAS STORAGE

Victoria, B.C. - Energy Minister Jack Davis, commenting on the Anderson Inquiry report, said today that there would be NO DRILLING FOR UNDERGROUND GAS STORAGE in the Fraser Valley.

-30-

For further information contact:

Irwin Henderson, Director of Communications
and Public Affairs
(604) 387-5178

The second item out the door was Energy Minister Jack Davis' stunning, but brief, one-sentence-long announcement:

DAVIS SAYS 'NO' TO VALLEY GAS STORAGE

Victoria B.C. - Energy Minister Jack Davis, commenting on the Anderson Inquiry report, said today that there would be NO DRILLING FOR UNDERGROUND STORAGE in the Fraser Valley.

The Langley Advance

LANGLEY OWNED, MANAGED AND STAFFED!

Authorized as Second Class Mail by the Post Office Department, Ottawa
under Registration No. 0548, and for payment of postage by cash

50¢ per copy.

VOL. 60, NO. 29.
WEDNESDAY, FEBRUARY 6, 1991.

WEDNESDAY EDITION

P. O. BOX 3310, Langley, B.C.
Phone 534-8641.

Gas storage plans quashed

by Bruce Cox

Natural Gas will not be stored underneath the Fraser Valley, provincial cabinet has decided.

But David Anderson, Commissioner of the Inquiry into Fraser Valley Petroleum Exploration, warns that the government could have to pay more than \$200 million in compensation to owners of subsurface mineral rights if cabinet

also nixes plans for exploratory drilling.

Anderson's report, released Friday, says confiscation of 240,000 people's rights would be necessary. He describes it as "a process that may take from one to two hundred million dollars, perhaps a great deal more."

Langley MLA and cabinet minister Carol Gran said a decision to ap-

prove test drilling wells — two in Langley and one in Delta — has been put on hold, pending further study by the Ministry of Energy, Mines, and Petroleum Resources.

Gran said she could not say when cabinet would decide on the exploration issue because "there is a lot of data to go through." She said cabinet chose to ban storage mainly because of opposi-

tion voiced by local residents.

"I think it's very important for government to listen to how people feel and I think the people in the Fraser Valley spoke very loudly and very clearly," said Gran.

"But it was also based on the fact that there was no real critical need for gas storage," she added.

(Continued on 2a)

Provincial Cabinet, the Executive Council, had undoubtedly weighed the matter for the entire month of January 1991 as David Anderson and his editorial accomplice / team were finishing and fine-tuning the report. The decision, which would fundamentally disappoint industry, was political.

With a provincial election looming, the Social Credit Party administration, in office for 15 consecutive years, was in deep trouble on multiple provincial resource management fronts. As much as Langley MLA Carol Gran, the Minister of Government Management Services and Minister Responsible for Women's Programs, extended herself to console her Langley constituents and plead with her Cabinet colleagues for restraint, she and her Fort Langley/Aldergrove riding colleague Dan Peterson would be rebuked and lose their riding seats in the October 1991 provincial election.

Derrill Thompson, the New Democratic candidate for Langley, said in a press release Monday the government's ban on gas storage was a "last-ditch political ploy to fend off certain defeat in the next election."

Thompson said it is clear to him that Carol Gran and Dan Peterson convinced cabinet they would be defeated if gas storage went ahead. Nevertheless, Thompson said he is pleased, "that, for whatever motives, the government has halted this dangerous plan." He warns however that the Friends of the Fraser Valley must "remain diligent in ensuring that this cabinet order does not get overturned."⁸¹⁶

Gran defends cabinet ruling against natural gas storage

Vancouver Sun - February 4, 1991

By LINDSAY KINES

The B.C. government has delivered a confusing message by refusing to permit underground storage of natural gas in the Fraser Valley, says a spokesman for the Fraser Valley Gas Project.

Wayne Babcock, president of Dynamic Oil, said cabinet's decision appears to contradict comments made by Premier Bill Vander Zalm in his televised address last week.

"I watched the premier's message and he certainly talked about the Vancouver Island pipeline and reducing dependence on imported oil, and increasing the use of natural gas," said Babcock. "All of these depend on us having a secure supply of natural gas, particularly here in the Lower Mainland, where most of the gas is used. That is something that B.C. Gas was working towards with this gas storage plan. So it's a confusing message."

Langley MLA Carol Gran confirmed Sunday that cabinet made the decision last Wednesday after receiving a comprehensive report by David Anderson on natural-gas drilling and storage in the valley.

"We also have received over the last many months . . . thousands of letters from residents of the Fraser Valley," said Gran. "The report indicated . . . gas storage is a fair way off in the future, so cabinet decided that there would be no gas storage."

Gran said the second question, whether to permit exploratory drilling for natural gas, has been sent back to the ministry of energy, mines and petroleum resources for further study.

The Anderson report, which was released to the media Friday, concluded the risk is minimal and the potential benefits substantial if the provincial government permits exploratory drilling.

The Fraser Valley Gas Project, a consortium consisting of B.C. Gas, Conoco and Dynamic Oil, has applied to do exploratory drilling at two sites in Langley and one in Boundary Bay.

"We're very hopeful the government will adopt the findings of the report and allow exploration drilling to continue," said Babcock.

Meanwhile, Al Vickers, chairman of the anti-drilling citizens' group Friends of the Fraser Valley, welcomed the cabinet decision to prohibit storage, but said it's too early to celebrate.

"I really think it's important for the people of the Fraser Valley — all of them — to realize that this battle has not been resolved. And it would be extremely premature to believe it is."

"We have to wait and see what this cabinet and government will say — not only on the issue of storage — but on the issue of exploration."

Cabinet rejects gas storage

The Province Sunday, February 3, 1991

By Fabian Dawson
Staff Reporter

A Sacred government won't allow underground storage of natural gas in the Fraser Valley, says Langley MLA Carol Gran.

But a commission of inquiry says a similar ban on gas exploration could cost B.C. hundreds of millions of dollars in compensation.

Gran said yesterday storage is banned "as long as there is Sacred government," calling cabinet's move a political decision based on residents' fears.

The decision "did not make much sense," said BC Gas spokesman Ted Schellenberg.

BC Gas got the green light in August 1989 to spend \$18 million to look for natural gas and possible underground storage sites in the Fraser Valley.

In his report, commissioner David Anderson said 240,000 valley property owners — most of whom can trace family ownership to the 19th century — own mineral rights and could demand compensation if drilling is banned.

A decision not to allow exploratory drilling would be regarded by owners of sub-surface mineral rights as a confiscation of their rights, he said, and they would "react vehemently."

Compensation could cost "one to two hundred million dollars,

perhaps a great deal more."

"From the views expressed at the commission's public meetings, these people can be expected to be very upset," Anderson said in his 211-page report released Friday.

Al Vickers, chairman of the Friends of the Fraser Valley, formed to fight exploration, said exploration opponents will make the Sacred pay at the ballot box if the hunt goes ahead.

Energy Minister Jack Davis said Anderson's report will be studied before a decision is made.

Victoria auctioned off sub-sur-

face mineral rights on 7,285 hectares (18,000 acres) in the Fraser Valley for \$5.6 million in October 1989 to Dynamic Oil Ltd. and Conoco Canada.

Drilling on three sites was to begin last year but an outcry led by the Friends of the Fraser Valley prompted Anderson's inquiry.

Anderson concluded the risks associated with exploratory drilling "are very slight but the gains may be great." He said underground storage of gas — if commercial quantities were not found — required further study.

⁸¹⁶ Friends optimism 'cautious,' Langley Times, February 6, 1991.

NDP questions government sincerity

LANGLEY - The Socred government's announcement banning gas storage in the Fraser Valley appears to be a last-ditch political ploy to fend off certain defeat in the next election, New Democrat candidate Derrill Thompson said, Feb. 2.

"It is very clear to me, and I'm sure the residents of Langley, that Carol Gran and Dan Peterson convinced cabinet that they would be defeated if the gas storage project were to go ahead," Thompson said.

"David Anderson's report came out, as expected, in

favor of drilling. If this government was not going to heed the report's recommendations, then why did they put the residents of the valley through this turmoil?"

"I am pleased that, for whatever motives, the government has halted this dangerous plan. Last year I made it very clear that I believed the Anderson Commission of Inquiry was flawed, and that is an opinion I still hold," said Thompson.

A New Democrat government would introduce intervenor funding to the commission process. This would help to

put the residents on an equal footing with the industry that was pushing for this proposal.

"It is terrible that so many residents have had to spend so much time and money trying to defend their way of life. I hope that the Socreds are sincere in their rejection of gas storage."

"I believe that the Friends of the Fraser Valley must remain diligent in ensuring that this cabinet order does not get overturned. We have all seen how it only takes a phone call from industry to change the premier's mind," concluded Thompson.

Aldergrove Star - February 7, 1991

Langley residents should rest assured that it is doubtful that Langley MLA and multiple portfolio cabinet minister Carol Gran could have misread her cabinet colleagues' intentions so grossly. If she has, it is certain that she has put her political life on the line. It is most likely that she is correct about the mood of cabinet, that gas storage will not be allowed. It is equally likely that Mr. Davis, an outspoken proponent of gas and oil interests, has purposely, through his ambiguous message to the press, left the door open for a change of heart that he whole-heartedly hopes will come about, whether or not his dreams are nestled in reality.⁸¹⁷

[Wayne] Babcock, [Bob] Spring and Cam Avery, director of communications with B.C. Gas, refused to criticize the cabinet decision [at a press conference on the gas consortium's project office in Aldergrove Centre mall on February 4], instead focusing on the positive aspects of Anderson's report. Avery said the need for storage exists now and is being met by storing gas underground in Washington State's Jackson Prairie facility.⁸¹⁸

The Vancouver Sun reported on Jack Davis' "confusing message," a direct quote from Dynamic Oil's president Wayne Babcock, a Fraser Valley Gas Project consortium member. In the same article:

Meanwhile, Al Vickers, chairman of the anti-drilling citizen's group Friends of the Fraser Valley, welcomed the cabinet decision to prohibit storage, but said it's too early to celebrate. "I think it is really important for the people of the Fraser Valley - all of them - to realize that this battle has not been resolved. And it would be extremely premature to believe it is. We have to wait and see what this cabinet and government will say - not only on the issue of storage - but on the issue of exploration."⁸¹⁹

⁸¹⁷ In Our Opinion: *Storage History*, The Langley Advance, February 6, 1991.

⁸¹⁸ *Cabinet rejects gas storage bid*, Surrey Leader, February 6, 1991. Refer also to section 19 of this chapter, *The Big Lie about Storage at Jackson Prairie*, concerning Avery's and the consortium's myth-making about Jackson Prairie.

⁸¹⁹ *Gran defends cabinet ruling against natural gas storage*, The Vancouver Sun, February 4, 1991.

A different kind of GAS WAR

by Paul Bucci

The war of words in the Fraser Valley Gas Project is heating up in the wake of a recently released report from a commission of inquiry into natural-gas drilling and storage.

Opponents of natural gas development in the Fraser Valley say the provincial government is giving off conflicting signals.

Langley M.L.A. Carol Gran says gas storage in the Fraser Valley will not be considered as long as there is a Social Credit government in B.C. But Energy Minister Jack Davis says his staff will study the report's recommendations before making any decisions on a drilling program.

Al Vickers, chairman of the anti-gas lobby Friends of the Fraser Valley, says the government has to clarify its position.

"Drilling program for what? Exploring for oil? Gas? I don't know what Davis means. He has to be challenged on that," Vickers says.

In his 211-page report, commissioner David Anderson says the risks of exploratory drilling are slight and benefits would be considerable from a energy security, economic and environmental point of view.

Anderson also recommends that additional studies should be undertaken before any proposal to store natural gas underground in the Fraser Valley is considered.

Yarrow resident Bruce Standeven, a longtime anti-gas activist, says the government is wrong if it thinks opposition to the project will fade because of the report's recommendations about underground storage.

"It's getting to the point now where a lot of the stuff the government is saying can be taken both ways. But one thing I do know — this thing is far from over."

Standeven says it's too early to tell if Gran is speaking on behalf of the government, or merely trying to appease her constituents. If the province does put the brakes on gas storage and exploration, Standeven says that represents quite a turnaround.

"I think because there is so much opposition to the project, the Secords might be changing their position to regain some of the ground they've lost politically."

In his report, Anderson says 240,000 property owners in the Valley have mineral rights and could demand compensation if drilling is banned.

Oil company representatives say that compensation could cost the government millions of dollars.

Vickers says the oil companies are grasping at straws.

"Wayne Babcock of Dynamic Oil claims there are 240,000 people that are going to lose out on their mineral rights. I challenge him to name 50," Vickers says.

"All the mineral rights for underground gas storage have already been expropriated," Vickers says.

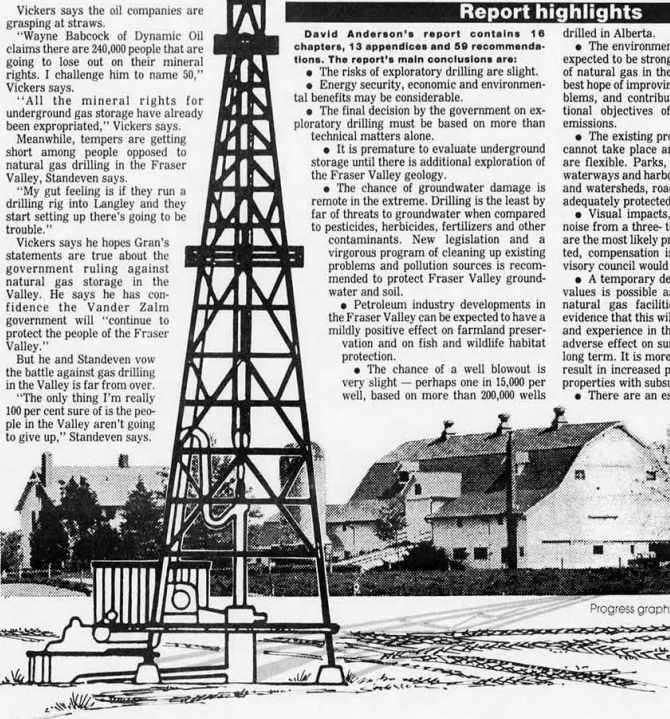
Meanwhile, tempers are getting short among people opposed to natural gas drilling in the Fraser Valley, Standeven says.

"My gut feeling is if they run a drilling rig into Langley and they start setting up there's going to be trouble."

Vickers says he hopes Gran's statements are true about the government ruling against natural gas storage in the Valley. He says he has confidence the Vander Zalm government will "continue to protect the people of the Fraser Valley."

But he and Standeven vow the battle against gas drilling in the Valley is far from over.

"The only thing I'm really 100 per cent sure of is the people in the Valley aren't going to give up," Standeven says.



Report highlights

David Anderson's report contains 16 chapters, 13 appendices and 50 recommendations. The report's main conclusions are:

- The risks of exploratory drilling are slight.
- Energy security, economic and environmental benefits may be considerable.
- The final decision by the government on exploratory drilling must be based on more than technical matters alone.

- It is premature to evaluate underground storage until there is additional exploration of the Fraser Valley geology.
- The chance of groundwater damage is remote in the extreme. Drilling is the least by far of threats to groundwater when compared to pesticides, herbicides, fertilizers and other contaminants. New legislation and a vigorous program of cleaning up existing problems and pollution sources is recommended to protect Fraser Valley groundwater and soil.

- Petroleum industry developments in the Fraser Valley can be expected to have a mildly positive effect on farmland preservation and on fish and wildlife habitat protection.
- The chance of a well blowout is very slight — perhaps one in 15,000 per well, based on more than 200,000 wells drilled in Alberta.

- The environmental effects of drilling can be expected to be strongly positive, as expanded use of natural gas in the Lower Mainland offers the best hope of improving the current air quality problems, and contributes to national and international objectives of reducing greenhouse gas emissions.
- The existing protection zones where drilling cannot take place are large and the regulations are flexible. Parks, schools, hospitals, airports, waterways and harbours, GVRD water reservoirs and watersheds, roads and residential areas are adequately protected by the present system.

- Visual impacts, traffic, lights at night and noise from a three- to six-week drilling operation are the most likely problems. If drilling is permitted, compensation is possible and a public advisory council would be useful.
- A temporary decline in residential property values is possible as a result of publicity over natural gas facilities, but there is no clear evidence that this will occur. Two Alberta studies and experience in the U.S. and Europe show no adverse effect on surface property values in the long term. It is more likely that the industry will result in increased property values, particularly properties with subsurface rights.

- There are an estimated 240,000 residents of the Fraser Valley who own the rights to oil, gas and other subsurface rights under their properties. Many of these people are likely unaware of this.
- There should be tougher fines and penalties for companies and their officers that do not obey the regulations and special insurance provisions for petroleum activity.
- Increased public participation and consultation during proposal evaluation is recommended through public hearings, public advisory councils and "citizen conference" negotiations.

drilled in Alberta.

• The environmental effects of drilling can be expected to be strongly positive, as expanded use of natural gas in the Lower Mainland offers the best hope of improving the current air quality problems, and contributes to national and international objectives of reducing greenhouse gas emissions.

• The existing protection zones where drilling cannot take place are large and the regulations are flexible. Parks, schools, hospitals, airports, waterways and harbours, GVRD water reservoirs and watersheds, roads and residential areas are adequately protected by the present system.

• Visual impacts, traffic, lights at night and noise from a three- to six-week drilling operation are the most likely problems. If drilling is permitted, compensation is possible and a public advisory council would be useful.

• A temporary decline in residential property values is possible as a result of publicity over natural gas facilities, but there is no clear evidence that this will occur. Two Alberta studies and experience in the U.S. and Europe show no adverse effect on surface property values in the long term. It is more likely that the industry will result in increased property values, particularly properties with subsurface rights.

• There are an estimated 240,000 residents of the Fraser Valley who own the rights to oil, gas and other subsurface rights under their properties. Many of these people are likely unaware of this.

• There should be tougher fines and penalties for companies and their officers that do not obey the regulations and special insurance provisions for petroleum activity.

• Increased public participation and consultation during proposal evaluation is recommended through public hearings, public advisory councils and "citizen conference" negotiations.

• Increased public participation and consultation during proposal evaluation is recommended through public hearings, public advisory councils and "citizen conference" negotiations.

• Increased public participation and consultation during proposal evaluation is recommended through public hearings, public advisory councils and "citizen conference" negotiations.

• Increased public participation and consultation during proposal evaluation is recommended through public hearings, public advisory councils and "citizen conference" negotiations.

The air explodes around her home

The air is known to explode on occasion around Lodene Clark's property in Livingston County, Illinois.

Safety hazards, bad water and other concerns prompted the 62-year-old grandmother to fly out to the Fraser Valley late last year to tell residents about her problems with natural gas.

"I'm not an activist. I'm an old farm wife with two years of college... I'm willing to tell my story because I know what these gas companies are saying. I know there's another side of the story."

Clark owns a house on top of one of North America's largest underground gas storage areas. The problem is that the gas reservoir leaks.

Clark first noticed the situation soon after storage began more than 20 years ago.

"In 1968, when this field was first going into operation, the well boiled. You could see the water boiling down there like a tea kettle would boil," Clark said in a

telephone interview.

"The well got to be very bad quality water — almost undrinkable. It became so vile you couldn't even wash clothes in it."

Gas began seeping through the ground and conditions got so bad that Clark began battling with the Northern Illinois Gas company. She got little satisfaction.

"They told me it was native gas (coming out of the well) and none of their concern."

"We used to put a vented pipe on it and actually burn it to embarrass the gas company."

But the gas company was difficult to spur into action. Company officials would sympathize with Clark, but always insisted it was gas native to the area that was seeping out, not gas they were storing, Clark says.

Company officials began digging shallow holes around her property in the 1970s.

By this time gas was leaking so badly that her son

would flip a match in each hole as he went out for his evening jog. He could navigate his way back to the house by the burning holes.

It was proven in 1980 that it was definitely stored gas leaking, but the troubles didn't end there.

"They plugged the holes. Then fissures in the land opened up. The fissures would boil," she says.

Unfortunately for Clark, one of those fissures is under the house where her son now lives.

"Gas coming up and releasing into the surface is not ideal but it's not overly harmful."

But if it collected in a basement it would explode. If you dropped a match down the concrete well it would explode and blow the concrete cap off," Clark says.

That very thing did happen to one of her neighbors, she says.

His pump house got covered with a heavy wet snow one time when he was on vacation. The snow sealed seeping

gas in the building. When he got back from vacation he turned on the taps, which caused the pump to kick in.

The resulting explosion blew the boards off the building and through the windshield of his car, Clark says.

Commissioner David Anderson visited Clark in her home recently as part of his commission of inquiry into gas exploration and storage in the Fraser Valley. But the meeting didn't go well.

"I felt I was able to tell him some of the things that have happened to me. He didn't call me a liar but almost."

Clark wants to settle with the gas company. Among other things, she wants a new farm to replace her 80-acre operation.

"Until she gets what she wants, she says the battle will continue."

"The potential for someone being killed is very high," she says.

At least one mayor favors gas industry

One man's curse is another man's blessing — especially when it comes to natural gas.

While many residents are opposed to natural gas exploration and storage in the Fraser Valley, the same can't be said of other places in British Columbia.

Fort St. John Mayor Steve Thorlakson has the distinction of living near the largest natural gas reserves in the free world.

North Eastern British Columbia provides most, if not all, of the province's natural gas needs, Thorlakson says. And living near all that explosive force doesn't worry him in the least.

He says Canada's natural gas industry has a safety record second to none.

There's never been a "disaster" in the Fort St. John area because of natural gas, Thorlakson says. However, there have been some minor accidents.

"There is an occasional leak. It does happen. The

occasional pipe breaks and valves let go. It's treated immediately. It's not that big a deal."

He says the company's response time is excellent. And in any event, leaking gas isn't that big of a safety hazard because it dissipates quickly.

"Any valve can let go or a joint can let go. These things do happen..."

The population of Fort St. John is about 14,000 — far less than the Fraser Valley. But Thorlakson thinks the added population shouldn't be a big concern.

"I don't know of an industry that operates with the level of safety control that the gas industry does."

Thorlakson says he can understand why people might be afraid of natural gas development in the Fraser Valley, but added he thinks the fears are unfounded.

Apart from the occasional sulphur smell — far less strong than the odors around Port Moody — Thorlakson says there's no worry.

Arrangements were made before public told — Vickers

The provincial government had its eye on establishing a gas exploration and storage industry in the Fraser Valley years before the public was made aware,

charge members of the Friends of the Fraser Valley.

Friends of the Fraser Valley chairman Al Vickers says the government and the gas industry had put considerable time and resources into planning for underground gas storage in the Fraser Valley well before making their intentions public.

Furthermore, Yarrow resident Bruce Standeven charges the Anderson Commission was only established after members of the anti-gas lobby Friends of the

Fraser Valley Gas Project started asking questions after stumbling across gas industry workers in their neighborhoods.

According to documents assembled by the Friends of the Fraser Valley, the government began embarking on a gas development strategy in June 1986, when amendments to the Petroleum and Natural Gas Act removed expropriated owners mineral rights for underground storage.

In August, 1988, the Ministry of Energy Mines and Petroleum Resources started an extensive consultation program to inform local MLAs and municipal governments affected by gas exploration and storage about the

Fraser Valley Gas Project without informing local residents.

"Apparently the gas proposal was important enough for ministry officials to meet and discuss details of the plan with local MLAs, local municipal governments and senior municipal staff, but took no action to inform local residents apart from an oblique advertisement in local newspapers," Vickers says.

The government then moved to further amend the Petroleum and Natural Gas Act to remove the right of public intervention.

— See Protest A8 —

On February 6, the Chilliwack Progress newspaper ran several articles about Anderson's report and included comments from Al Vickers and local Friends of the Fraser Valley spokesperson Bruce Standeven:

Al Vickers, chairman of the anti-gas lobby Friends of the Fraser Valley, says the government has to clarify its position. "Drilling program for what? Exploring for oil? Gas? I don't know what Davis means. He has to be challenged on that," Vickers said.

Yarrow resident Bruce Standeven, a long-time anti-gas activist, says the government is wrong if it thinks opposition to the project will fade because of the report's recommendations about underground storage. "It's getting to the point now where a lot of the stuff government is saying can be taken both ways. But one thing I do know — this thing is far from over."

Standeven says it's too early to tell if Gran is speaking on behalf of the government, or merely trying to appease her constituents. If the province does put the brakes on gas storage and exploration, Standeven says that represents quite a turnaround. "I think that because there is so much opposition to the project, the Socreds might be changing their position to regain some of the ground they lost politically. ... The only thing I'm really 100 per cent sure of is the people in the Valley aren't going to give up."⁸²⁰

A4 Wednesday, February 6, 1991

The Chilliwack Progress

It still stinks

Underground natural gas storage will not happen in the Fraser Valley while there is a Socred government in British Columbia. So goes the promise, hastily made after the David Anderson commission of inquiry report was released last week.

This announcement has an odor about it far worse than leaking gas.

Consider the following: The natural gas exploration issue was officially broached by several oil companies in June, 1988. Without prominent public announcements or requests for input, the provincial government encouraged the oil industry to expend about \$10 million on research and studies, and sub-surface mineral rights were acquired or expropriated for thousands of hectares of Valley property.

In August, 1988, the Ministry of Energy Mines and Petroleum Resources says it informed local MLAs and municipal governments affected by gas exploration and storage about the Fraser Valley Gas Project.

Yet, according to district officials, Chilliwack was apparently not made privy to those announcements.

In July, 1989, B.C. Gas Inc. submitted an application for underground gas storage in the Fraser Valley. The next month, Energy Minister Jack Davis approved the request.

In October of the same year, the ministry auctions sub-surface mineral rights to nearly 30,000 acres in the Fraser Valley. Conoco Canada and Dynamic Oil Ltd. paid the province \$5.6 million for rights to 18,000 of those acres.

After seeing seismic trucks in their neighborhoods, people begin to get suspicious. Public hell breaks loose when it becomes apparent as to the scope of the Fraser Valley Gas Project.

Lo and behold, a commission of inquiry is struck, with a mandate of investigating natural gas exploration and storage in the Fraser Valley. And not surprisingly, the final report recommends gas exploration in the Valley, but more study for underground storage.

Only days later, the hottest potato — underground gas storage — is dropped by the Socreds. Assurances are given that it won't happen here, as long as we reject this government.

It's a move which casts disrepute and deep suspicion upon the entire process, and on the sincerity of this government's sudden concern.

This process has been a sham.

Regardless of professed economic benefits, the public must continue to oppose any and all natural gas exploration, storage or drilling in the Fraser Valley — at least until some semblance of believability begins to emerge.

At present, that is virtually non-existent.

Township Briefs

Langley Advance
January 23, 1991



Al Vickers

Friends of the Fraser Valley will step up their opposition to natural gas storage, if the recently completed report by Petroleum Exploration Commission David Anderson's is not to their liking. Friends chairman Al Vickers told Township Council on Monday, "If Mr. Anderson does not come out with a favorable report for every person in this community, we are really going to put up a battle."

⁸²⁰ A different kind of gas war, Chilliwack Progress, February 6, 1991.

The Chilliwack Progress newspaper also included a summary of a “poll, conducted by Vancouver-based Marcon Research Services Inc. ... on two separate occasions in January,” a poll commissioned by The Friends of the Fraser Valley.

91 per cent of those surveyed were very concerned about the potential hazards and impacts of exploratory drilling and gas storage once they were explained.

79 per cent thought underground storage of natural gas would have a negative impact on local real estate values.

Level of concern about the issue was fairly similar across all age groups surveyed, although concern rose slightly as age of the respondents increased.⁸²¹

Friends’ spokesman Charles MacLean said the survey results “totally support the provincial government decision not to allow underground storage of natural gas under the Fraser Valley and confirms the belief that the vast majority of the residents oppose the plan to turn the Fraser Valley into a massive oil and gas field.”⁸²²

Wrapping up with last minute correspondence duties, on February 8, 1991, Commissioner David Anderson sent out a number of letters to various parties notifying and sending each a copy of his final report, with the following opening paragraph attached in each: “Last Friday the provincial cabinet released my report on Exploratory drilling for Gas in the Fraser Valley. A copy is enclosed. According to press reports, a decision by the cabinet on whether to permit drilling will take place in from 60 to 90 days:”

To: Ken Carlson and Ed Sainantiago, Enhanced Recovery Engineering Section, Division of Oil and Gas, Department of Conservation, State of California. We really appreciated the opportunity of viewing the California facilities, and getting your views on earthquake and other risks. The amount of petroleum industry activity in the Long Beach/Los Angeles area adjacent to residential or commercial properties was a real eye opener for me. What is being planned here is very modest in comparison. However, it is not yet certain that it will go ahead, as a decision in favour of drilling has not been made.

To: Paul King, Office of the Agent General in the United Kingdom, British Columbia House, 1 Regent Street, London, England. You will note that I have written enthusiastically about the Wytch Farm visit. It was certainly one of the most impressive of the visits to petroleum facilities that I made. I might add that my description has had absolutely no effect on the attitudes of the opponents of drilling, but I hope that those who are keeping an open mind may find it of interest. May I thank you for all your help in arranging the Poole trip.

To: Ed Smith, B.C. Petroleum Mediation and Arbitration Board, Ft. St. John, 100142-101st Avenue. If you read the report you will find that here and there I have mentioned the name of the Board, generally with a view to giving you gentlemen more work. You can take this two ways - - first as an unwelcome increase in the workload, or second, as a tribute to the impressive job you

⁸²¹ *Opposed to drilling*, Chilliwack Progress, February 6, 1991.

⁸²² *Survey shows drilling opposed*, Langley Times, February 9, 1991.

Imperial Oil Limited



111 St. Clair Avenue West
Toronto, Ontario
Canada M5W 1K3

James D. McFarland
Vice President

Environment Department
416 968 5204

Mr. David Anderson
3195 Exeter
Victoria, B.C.
V8R 6H7

December 20, 1990

Dear David:

Just a short note to say how much I enjoyed the observations you shared with us in Victoria over dinner on December 11 concerning exploratory drilling and underground gas storage in the Fraser Valley.

I must say that your rather pessimistic view of the inability of some key stakeholders to see eye-to-eye where tough environmental and safety issues are at stake, troubles me. Yet I recognize this reality. Your thoughts have challenged me to give this facet of the environmental challenge additional focus in the environmental strategic framework we are developing for Imperial Oil.

What gives me some cause for hope is my own personal experience with major energy developments in the North and Western Canada. As a company, we were successful in achieving "public consent" for relatively significant and intrusive projects at Norman Wells and Cold Lake in the period of the mid to late 1980's when environmental awareness was on the increase. This consent was achieved through hard work with the communities involved. Similar lessons have been successfully applied at Caroline by Shell and are an important element of the effort to progress the potential OSLO project, which we lead. If you think you could benefit from some dialogue with us on the lessons learned from these experiences, don't hesitate to call.

You might also be interested to know that a senior manager from Esso Resources in Calgary recently moved to Bordeaux to become the Production Manager of Exxon's affiliate in France, Esso Rep. As you know, this company is a major oil explorer and producer in the Paris Basin just outside Paris (Chaunoy Field). In your visit to France this summer I'm not sure whether you were able to ascertain the perspective of industry in terms of the lessons learned from this fairly recent development (mid 1980's) in an intensively farmed area. If you would like to explore this further, I can arrange this for you as well.

I have also attached a recent article titled "Hazard versus outrage: Responding to Public Concern about Environmental Risk" which I have found particularly thoughtful. I think you will see some similarity with your message. This article and your remarks in Victoria have both helped me to better understand the challenge we face.

I will be watching for a "breakthrough" in your work in the Fraser Valley!

Yours very truly,

/ec

Attach.

cc: D. Coghill


J.D. McFarland

Imperial Oil

Commission Correspondence Files

have done in your efforts to date. In fact, you can take it both ways. I fail to see that major changes are needed to deal with public concerns in the Fraser Valley. With a little help on the difficult cases from your Board, the parties concerned are best left to negotiating between themselves. I would be interested in your views on what I have written on minimum distances and on fairness issues. For the life of me I cannot understand how opponents of drilling in the Fraser Valley are able to argue with a straight face that their concerns and lifestyles are more important than those of the residents of the Peace River area. There is a clear and unattractive double standard at work here. I trust that Margaret Ormston and Charles MacLean do not persuade the provincial government to adopt their approach in this regard.

To: Michael Weston, Manager, Field Operations, ANR Storage Company, Kalkaska, Michigan. May I thank you for your help during the summer in arranging such an informative trip to your facilities. Space did not permit a lengthy discussion of all that I saw, but it was very important to me in getting a handle on the true nature of the risks of underground natural gas storage.

To: Jim Reid, Area Supervisor, Drayton Valley Area Office, 2nd Floor, Provincial Building, Drayton Valley, Alberta. Our visit to Drayton Valley [Alberta] was among the first of our trips, and was a real eye opener for me. The way the industry was integrated into the community was very impressive. It was a standard against which I could measure the other trips made and other facilities visited. I want to thank you most sincerely for the time you took to show us around, and for the excellent overview that you gave of the situation. The provincial cabinet has said that it will consider the report for sixty to ninety days before making a decision. The opposition to any development is as strident as ever, so it is really anyone's guess as to what government will do.

David Anderson also wrote a final letter on February 8 to Energy Minister Jack Davis, who was in the hospital battling advanced stage of cancer and would soon die in his sleep at home on March 27, 1991. Anderson wrote that his Commission contract "was an interesting study" which he "enjoyed doing", wherein he was surprised to discover how "the petroleum industry had been so successfully integrated into urban and semi-urban settings:"

I was very sorry to learn that you have been in hospital over the last few days. Irwin Henderson has told me that you are using the telephone and keeping up with things through visits from John Allen and others. I trust that you will be up and about before too long. I regret that your illness prevented me from delivering a copy of my report to you in person: No doubt you are by now well aware of its contents and implications. It was an interesting study, which I enjoyed doing. Previous to looking into the matter I had no idea that the petroleum industry had been so successfully integrated into urban and semi urban settings. I look forward to seeing you soon and discussing it with you further.

Davis, an MP under Prime Minister Pierre Trudeau's federal Liberal Party, appointed as Minister of Fisheries (July 1968 – March 1969), Minister of Fisheries and Forestry (April 1969 – June 1971), and Canada's first Environment Minister (June 1971 – August 1974), had been Anderson's political party colleague from 1968 to 1972. Davis, after his losing his federal Coast-Capilano riding seat in 1974, jumped ship from the Liberals and joined the Social Credit party, winning the North Vancouver / Seymour riding seat in the December 1975 provincial election. Davis was the later prime mover, the Minister responsible for invoking the controversy favoring petroleum exploration and underground gas storage in the Fraser Valley. Had he lived through to the end of the year, Davis might have lost his North

Vancouver/Seymour riding, in a provincial election that the New Democratic Party would steal from the Socreds. Liberal party candidate, Dan Jarvis, a real-estate agent, won Davis' old riding.



Province of
British Columbia

Ministry of
Provincial Secretary

B.C. Archives and
Records Service
865 Yates Street
Victoria
British Columbia
V8V 1X4
General Office: (604) 387-1321/387-5885

*Rec'd Aug 13
- Lij*

1990 August 8

12780-20/

OUR FILE

YOUR FILE

Mr. Robert Tweedie
Commission Secretary
Royal Commission on Petroleum
Exploration
#105 - 20611 Fraser Highway
Langley, B.C.
V3A 4G4

Dear Mr. Tweedie:

RE: ARCHIVES AND RECORDS SERVICES

As the repository for records and papers of Royal Commissions and Commissions of Inquiry in British Columbia, the Archives and Records Service provides to an agency, covered by the Document Disposal Act, the following services:

Records Advisory - general records management advisory in the areas of strategic planning, operational planning, and records systems implementation and development, forms management, office automation, automated records systems, records equipment, file supplies, and records training, etc.;

Records Centre Services - the provision of secure, economical and efficient off-site storage for records including retrieval services;

Archives - with the completion of the Commission's work, the records and papers will be transferred to the archives for public research use. By mutual agreement, access to the material may be restricted for a clearly defined period of time.

The records of the commission will have considerable evidentiary, legal, and research value for future historians and researchers. I look forward to working with your staff on their information management needs. If you have any questions relating to the provision of services, please feel free to contact me at 387-4128.

Yours truly,

GAM

Gary A. Mitchell
Manager
Advisory and Training

GAM:am

With the Commission's tasks completed, Commission secretary Sheryl MacDonald "sent 13 boxes, including 3 pieces which are not really boxes, but have been named so for the purpose of uniformity," to the Ministry of Energy, Mines and Petroleum Resources' librarian, Sharon Ferris.

Enclosed is a complete inventory of the boxes being sent to you this afternoon. I have also enclosed an updated copy of the Commission Library Listing, that shows show which material has been duplicated. The boxes that I have sent to you are not sequentially numbered due to re-inventory and repacking, so don't worry if you seem to be missing a box ... it probably wasn't meant to go to you anyway. If you have any questions, worries, or out and out panics, please do not hesitate to contact me at either the above number or at my home number if your panic doesn't set in until after the 15th of February. I will have a complete inventory list on hand there for just such an emergency.⁸²³

The Ministry of Energy withheld the Commission records for three years, until, reportedly, "eleven" boxes were sent to the Provincial Archives in 1994. From 1994 until mid-2021, the Commission records remained in an 'uncatalogued' state, meaning that the records were never processed for public scrutiny and consumption and left to collect dust in storage, that is until the author of this report began inquiries about their location in early 2021, and were then retrieved.



According to Commission correspondence of August 17, 1990, sent to Gary Mitchell of the Provincial Archives from Commission Secretary Robert J. Tweedie, the Commission records were to be promptly transferred to the B.C. Archives and Records Service "once Mr. Anderson has completed his report." Mr. Tweedie's letter and permission was issued in response to Mitchell's August 8, 1990, letter of request for the records. Mitchell wrote:

The records of the commission will have considerable evidentiary, legal, and research value for future historians and researchers. I look forward to working with your staff on their information management needs. If you have any questions relating to the provision of services, please feel free to contact me at 387-4128.

A likely reason as to the curious three-year delay in the Ministry of Energy's transfer of the Anderson Commission records to the provincial Archives was due to the Fraser Valley Gas Project consortium's exploratory drilling operations in the Fraser Valley that ended in late 1993, a timeline narrated in the final section of this report. Cognisant and leery of The Friends of the Fraser Valley, or other interested parties, in examining the Commission's records, and perhaps finding and exposing more controversy while those exploratory operations were proceeding, the Energy Ministry kept any of those possible added conflicts quietly and safely under wraps.

⁸²³ Correspondence, February 8, 1991.

5 – 28. Provocateurs: The Ferndale Jump-Start Consortium

There are no commercial oil or gas wells in Washington. More than 100 attempts have failed to find commercial amounts of gas in Whatcom County, but Canadian Hunter is using more sophisticated data than previous attempts. ⁸²⁴

Two months after the release of Commissioner David Anderson's final report on petroleum exploration in the Fraser Valley, something peculiar was reported in the Bellingham Herald newspaper edition of April 14, 1991.

Canadian Hunter Exploration Ltd. and partners are seeking a state permit to bore 6,000 feet down on the Tom Altona farm, 5964 Elder Road, west of Ferndale" [in Washington State]. Through U.S. subsidiary American Hunter Exploration Ltd., the company based in Calgary, Alberta, is requesting a permit from the state Department of Natural Resources." ⁸²⁵

Firm would keep drilling for gas

The Bellingham Herald

Permit requested for 6,000-foot well

By LEO MULLEN
of the Herald staff April 14, 1991

A Canadian company is preparing to drill a second wildcat exploration well searching for natural gas in Whatcom County.

Canadian Hunter Exploration Ltd. and partners are seeking a state permit to bore 6,000 feet down on the Tom Altona farm, 5964 Elder Road, west of Ferndale.

Through U.S. subsidiary American Hunter Exploration Ltd., the company based in Calgary, Alberta, is requesting a permit from the state Department of Natural Resources.

The company expects to know the fate of its application within 30 days, said Project Coordinator Tim Cummings.

The American Hunter well would be the only active one in the state, said Ellis VonHeeder, a geologist with the natural resources department.

Drilling on American Hunter Terrell Well No. 1 would begin sometime early summer and last about three months, Cumming said.

Speculators have drilled about 100 wells in Whatcom County. None has struck commercial amounts of natural gas, said C. John Newhouse, publisher of Northwest Oil Report trade newsletter from Portland, Ore.

"The whole area has been covered with fairly shallow wells," he said. Only six have gone deeper than 5,000 feet.

American Hunter is the most recent and most scientific speculator. The company

drilled a dry hole in early 1988 that cost \$1.3 million and was bored to a depth of 9,125 feet, the county's deepest well.

That well, American Hunter Birch Bay Well No. 1, is in the 7500 block of Blaine Road, about four miles north of the new site. American Hunter plugged the well last summer.

During the mid- and late-1980s, American Hunter acquired long-term leases on oil and gas rights for more than 35,000 private and public acres in central and north Whatcom County.

The company contracted for extensive geo-seismic studies that sent hi-tech trucks crawling across roads in much of the same region, mapping underground rock formations.

The company also took elaborate tests of the depths while drilling Birch Bay Well No. 1. The well found mostly water, but also trace amounts of natural gas.

The company plans to return with a new partner that Cumming would not name and the previous partners: Inland Natural Gas of Vancouver, B.C.; Transmountain Pipeline Co. of Vancouver, B.C.; Epic Resources Ltd. of Vancouver, B.C.; and Optima Energy Corp. of Calgary.

The exploration is unrelated to a partnership that has plans to drill three exploratory gas wells in the Fraser Valley of British Columbia this summer, including one about 900 yards north of the border and two miles west of Guide Meridian, Cumming said.

"The two are totally independent," he said. "We're not involved with them and they're not involved with us. They are two independent exploration efforts in the same basin."

The American Hunter partnership plans to spend \$600,000 on the well and again de-

(See GAS, Page B6, Col. 1)

The Bellingham Herald Gas April 14, 1991

(Continued from Page B1)

vote much of the cost to collecting research data, said Cumming.

"We'll be seeking to get the same amount of information but at a substantially reduced cost," he said. "This area is very poorly drilled and so we learn more with each well that we drill."

Cumming placed odds on finding gas at about 20 to 1 — a long shot, but common in the wildcat industry. As a practice, American Hunter tries to discover gas, then sell its holdings to companies that work gas fields.

The partnership wants to drill again in the county because its research shows promise despite its

costly and unsuccessful first venture, Cumming said.

It takes several wells to fully test a potential gas field because a well can miss a reservoir only a few miles away, Cumming said. So even a second dry hole will not necessarily bring exploration here to an end, he said.

The new well will probe a new reservoir that may contain gas or water, Cumming said.

"We think there's a separation between this (geologic) structure and the Birch Bay structure, and every time there's a separation there can be separate fluids," he said. "The target we're looking for is a gas-filled sandstone that would have been deformed into a dome-type structure."

The company wants to discover gas, but could consider gas storage

if no payload is found. The Fraser Valley partnership said it would consider storage if it does not strike gas.

In storage, gas is injected into empty geologic reservoirs during low-use periods to be used during peak times at nearby markets, such as Vancouver.

"It's a possibility," Cumming said. "With storage you have to do an enormous amount more of work to satisfy yourself that you have a valid candidate. You don't do that with one well."

"The major emphasis here is definitely on gas exploration."

Newhouse, however, isn't so certain.

"Storage might just be what they are after," he said. "We kind of felt that way about the other well too. Birch Bay well."

⁸²⁴ Gas well drilling set to start, Bellingham Herald, October 16, 1991.

⁸²⁵ Firm would keep drilling for gas, Bellingham Herald, April 14, 1991.

The newspaper named Hunter's partners: B.C. Gas Inc., Transmountain Pipeline Co. (a B.C. Gas Inc. subsidiary), Epic Resources and Optima Energy. However, American Hunter's project coordinator Tim Cummings "would not name" a new partner. The new partner would be identified by the Bellingham Herald in November 1991 as CGC Energy Inc., a subsidiary of Cascade Natural Gas Corp. which was based in Seattle City.⁸²⁶ The Herald also reported three other companies in the same consortium not identified earlier, all based in Vancouver, B.C.: Delta Energy Inc. Rival Resources Inc., and Inland Gas and Oil Ltd.

The April 1991 named partners, under the same American Hunter leadership, had drilled the Birch Bay No. 1 well in the late 1980s (explained in Section 2 of this chapter, *Enter the Big Players*). Restricted from drilling at that time in the Fraser Valley, the newly assembled consortium found favour in Washington State under a more conducive regulatory regime and set up the Birch Bay drilling partly, or mainly, as an exercise in public relations to help promote petroleum exploration across the American border in the Fraser Valley. The Birch Bay well, "in the 7500 block of Blaine Road," which came up dry, was on the southern fringes of the same geologic Fraser Valley sedimentary formation or 'play.' The new proposed well, American Hunter Terrell Well No. 1, was about four miles south of Birch Bay No. 1, part of "American Hunter's acquired long-term leases on oil and gas rights for more than 35,000 private and public acres in central and north Whatcom County." The rationale for the proposed site was speculated to be in a separate but contiguous southern geologic structure.

The same April 1991 Ferndale partners constituted a second Fraser Valley gas consortium, tethered together on a petroleum bid granted by the B.C. Ministry of Energy on October 25, 1989. B.C. Gas Inc., which was only interested locating underground gas storage, had claims in both Fraser Valley petroleum consortiums, with the other consortium consisting of B.C. Gas Inc., Conoco Canada, and Dynamic Oil.

Why would the American Hunter Washington State consortium gamble its investments on another dry well, one might ask, after about 100 wells were drilled unsuccessfully over the decades in Whatcom County?⁸²⁷ The Bellingham Herald said:

The company wants to discover gas but could consider gas storage if no payload is found. The Fraser Valley partnership said it would consider storage if it does not strike gas. ... "It's a possibility," Cumming said. "With storage you have to do an enormous amount more work to satisfy yourself that you have a valid candidate. You won't do that with one well. The major emphasis here is definitely on gas exploration."

[C. John] Newhouse [publisher of Northwest Oil Report Trade newsletter from Portland, Oregon] however, isn't so certain. "Storage might just be what they are after," he said. "We kind of feel that way about the other well too. Birch Bay well."

A motive behind the Ferndale April 1991 drilling permit application and drilling, which began on October 20, 1991, and in which B.C. Gas Inc. was a partner, was in helping to promote the other consortium, Dynamic Oil, Conoco, and B.C. Gas Inc. to be granted a drilling permit in the Fraser Valley, helping to demonstrate to the B.C. government that the American State government next door had given the green light. After all, almost two years had passed since the B.C. Ministry of Energy granted the petroleum

⁸²⁶ Gas well dry; firm will try 2nd Ferndale site, Bellingham Herald, November 13, 1991.

⁸²⁷ Narrated in Chapter 2, *The Second Wave*, B.C. Electric's subsidiary attempted drilling in the 1950s and walked away disappointed.

tenures in the Fraser Valley, and the companies were itching to bring out their big boys toys. Three months later in July 1991, B.C. Energy Minister Jack Weisgerber, who cited the Anderson Commission report as a validation, did just that: he granted the other petroleum consortium the permit go-ahead for a demonstration gas well in Delta.

32 November 4, 1991

INVESTMENT

THE FINANCIAL POST

Renewed hunt starts for Fraser River delta gas

FERNDALE, WASH. — In the middle of a cornfield here, a few miles south of the Canada-U.S. border, Epic Resources (B.C.) Ltd. is drilling again in a renewed effort to find natural gas under the Fraser River delta.

This is only the third well to be drilled in an exploration play being watched closely by everyone from Howe Street investors to utilities in Seattle and British Columbia.

The two juniors most closely identified with the play are Epic and Dynamic Oil Ltd. Recently, Stateside Energy Corp. of Calgary and British-based Hardy Oil & Gas Canada Ltd. entered the play by acquiring the mineral rights for 6,000 acres in Delta, south of Vancouver.

Stateside, which has not traded above \$1 since 1985, has recently been around 35¢.

Dynamic, listed on the Vancouver Stock Exchange since 1982, has ranged between \$1.03 and \$4.65 in the past 52 weeks and currently is at about \$2. This company's first well in Delta came in dry in September.

Epic, on the VSE since 1985, has been as high

WESTERN MARKETS

By John Schreiner



as \$5.88. That was in 1988, when one of its partners, Canadian Hunter Exploration Ltd., drilled a 9,200-foot exploratory well at Birch Bay in Washington state. So far, that well has yielded only information to improve the understanding of the Epic group's seismic data.

Epic's high-low in the past year has been \$2.35-\$1.10, and it traded recently at about \$1.75.

Epic's partners in the Ferndale drilling project include Optima Energy Corp. with 10.5%, B.C. Gas Inc. with 27% and Cascade Natural Gas Corp. of Seattle with 25%. Canadian Hunter's U.S. arm, which is operating the drilling program, chose to farm out its interest. That raised Epic's share in the partnership

from 7.5% to 37.5%.

Optima, listed on Vancouver since 1984, has had a range this year of \$3.60-\$2, and currently is about \$2.50. Optima also has several aggressive offshore drilling ventures.

The well being drilled at Ferndale for US\$650,000 is one of at least two that will be drilled this fall to test what Epic hopes is a gas-bearing structure about 6,000 feet below surface.

Epic president Frank Donis is not discouraged by the dry hole that Dynamic and partner Conoco Canada drilled. His group did not even bid on the leases Dynamic holds.

"We saw nothing that would have interested us in drilling in that area," Donis says.

However, the Epic group does own mineral rights on the U.S. side of the border adjacent to an area in the eastern Fraser Valley in Canada for which the Conoco group paid \$3 million. Donis insists there are more drill targets south of the border and less political hassle in getting at them.

The B.C. government so far has not permitted

drilling in the eastern end of the valley, chiefly because the residents have fought against drilling. These residents do not own the mineral rights — the Crown does — so there is no incentive for them to co-operate with drilling rigs.

In the U.S., by contrast, residents generally own mineral rights and are interested in having a shot at royalties from whatever may be found.

Naturally, the partners would like to find natural gas. The two utilities also would be happy if the drill rigs located structures suitable for underground storage. B.C. Gas is desperate to find the capacity to meet increasingly higher winter gas demands in the Vancouver area — demands that exceed current pipeline and storage capacity.

Donis would settle for coal gas (methane). The well logs at Ferndale provide evidence of coal seams underground.

"Methane is salable, too," Donis notes. Besides, the U.S. government's tax credits to encourage exploration for coal gas have been extended to the end of next year.

Undoubtedly, the new B.C. government also will watch the Epic drilling results. Should either of the wells hit gas, there will be renewed pressure on government to allow exploration on the Canadian side.

It is unclear whether Mike Harcourt, who becomes premier on Nov. 5, will want to court trouble with the Fraser Valley drilling opponents. They contributed to the defeat of several high-profile Social Credit cabinet ministers in the Oct. 17 election.

VSE's delinquents

IF THE VSE's index is not enough evidence that business is bad on the exchange, take a look at the latest list of public companies in default of their filing requirements.

The B.C. Securities Commission has published a list of 314 delinquent companies — that is, companies that have not filed current financial statements. Most are juniors languishing into inactivity and in imminent danger of delisting.

That's close to 15% of the VSE's listings.

National Post writer John Schreiner, in his 'Western Markets' column, stated that the Ferndale well, which "Epic Resources (B.C.) Ltd. is drilling again in a renewed effort to find natural gas under the Fraser delta," located "in the middle of a cornfield," is "only the third well to be drilled in an exploration play being watched closely by everyone from Howe Street investors to utilities in Seattle and British Columbia." A bit of an exaggeration.

Epic, [a junior] on the Vancouver Stock Exchange since 1985, has been as high as \$5.88. That was in 1988, when one of its partners, Canadian Hunter Exploration Ltd., drilled a 9,200-foot exploratory well at Birch Bay in Washington state. So far, that well has yielded only information to improve the understanding of Epic group's seismic data. Epic's low-high in the past year has been \$2.35 - \$1.10, and it traded recently at about \$1.75.

Epic's partners in the Ferndale drilling project include Optima Energy Corp. with 10.5%, B.C. Gas Inc. with 27% and Cascade Natural Gas Corp. of Seattle with 25%. Canadian Hunter's U.S. arm, which is operating the drilling program, chose to farm out its interest. That raised Epic's share in the partnership from 7.5% to 37.5%. The well being drilled at Ferndale for US \$650,000 is one of at least two that will be drilled this fall to test what Epic hopes is a gas bearing structure about 6,000 feet below the surface.

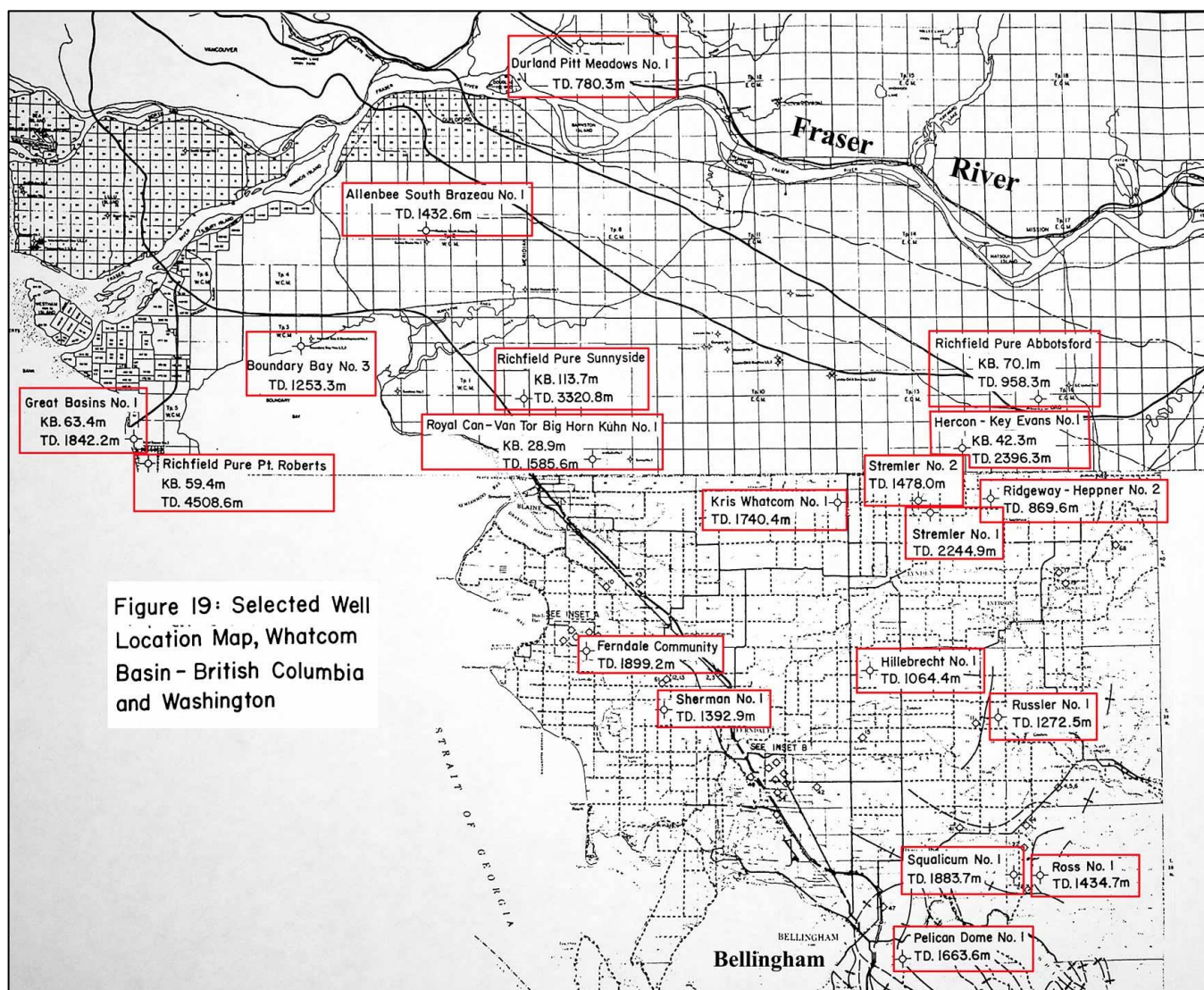
Epic president Frank Donis is not discouraged by the dry hole that Dynamic and partner Conoco drilled [in Delta, B.C.]. "We saw nothing that would have interested us in drilling in that area," Donis says. However, the Epic group does own mineral rights on the U.S. side of the border adjacent to an area in the eastern Fraser Valley in Canada for which the Conoco group paid \$3 million. Donis insists there are more drill targets south of the border and less political hassle in getting at them.

The B.C. government so far has not permitted drilling in the eastern end of the valley, chiefly because the residents have fought against drilling. These residents do not own the mineral rights — the Crown does — so there is no incentive for them to co-operate with drilling rigs. In the U.S., by

contrast, residents generally own mineral rights and are interested in having a shot at royalties from whatever may be found.

Donis would settle for coal gas (methane). The well logs at Ferndale provide evidence of coal seams underground. "Methane is saleable, too," Donis notes. Besides, the U.S. government's tax credits to encourage exploration for coal gas have been extended to the end of next year.

Undoubtedly, the new B.C. government also will watch the Epic drilling results. Should either of the wells hit gas, there will be renewed pressure on government to allow exploration on the Canadian side. [Bold emphasis] It is unclear whether Mike Harcourt, who becomes premier on Nov. 5, will want to court trouble with the Fraser Valley drilling opponents. They contributed to the defeat of several high-profile Social Credit cabinet ministers in the Oct. 17 election.⁸²⁸



⁸²⁸ *Renewed hunt starts for Fraser River delta gas*, The Financial Post, November 3, 1991.

Having known or predicted the outcome in advance, the American Hunter consortium's "6,010-foot-deep test well" in Ferndale came out dry.

Workers for Taylor Drilling Co. of Chehalis on Saturday sealed the well at 5964 Elder Road after about three weeks of drilling, Tim Cumming said. "We didn't see any reason for encouragement," Cumming said.

The consortium on Thursday [November 14, 1991] will start drilling a test well at the northeast corner of the intersection of Smith and Aldrich roads, also near Ferndale, Cumming said. That project will take another three weeks. The companies lack permits to drill any other sites in the county, Cumming said. Aside from American Hunter, the consortium is made up of CGC Energy Inc., a subsidiary of Cascade Natural Gas Corp. of Seattle, and Delta Energy Inc., Rival Resources Inc. and Inland Gas and Oil Ltd., all of Vancouver.⁸²⁹

Gas well dry; firm will try 2nd Ferndale site

FERNDALE — A consortium drilling for natural gas near here sunk a 6,010-foot-deep test well, but found no gas, the project's manager said.

Workers for Taylor Drilling Co. of Chehalis on Saturday sealed the well at 5964 Elder Road after about three weeks of drilling, Tim Cumming said.

Cumming works for Canadian Hunter Exploration Ltd., owner of American Hunter Exploration Ltd., a member of a consortium of companies backing the drilling.

"We didn't see any reason for encouragement," Cumming said.

The consortium on Thursday will start drilling a test well at the northeast corner of the intersection of Smith and Aldrich roads, also near Ferndale, Cumming said. That project will take another three weeks.

The companies lack permits to drill any other sites in the county, Cumming said.

Aside from American Hunter, the consortium is made up of CGC Energy Inc., a subsidiary of Cascade Natural Gas Corp. of Seattle, and Delta Energy Inc., Rival Resources Inc. and Inland Gas and Oil Ltd., all of Vancouver, B.C.

Washington has no commercial oil or gas wells. More than 200 test wells in Whatcom County have failed to yield any commercial amounts of gas.

Bellingham Herald - November 13, 1991

⁸²⁹ Gas well dry; firm will try 2nd Ferndale site, Bellingham Herald, November 13, 1991.

5 – 29. The Battle Continues and Finally Ends: 1991 – 1994

*Several years after it was announced, an exploratory natural gas well will be drilled in the Fraser Valley – the first since 1963. Conoco Canada Ltd. and Dynamic Oil Ltd. will start drilling the contentious well in mid-September. Dynamic Oil president Wayne Babcock said the \$1.1 million well will be the first of a three-well exploration program in the Fraser Valley. The 14-storey high drilling rig will be erected on a harvested corn field on leased property near Mud Bay. ... “It’s a very exciting moment for all of us and for British Columbia,” said Babcock.*⁸³⁰

*As for environmental concerns, [Delta municipality alderman Bob] Mountford says the municipality has been assured by the experts the project will have no effect on the surrounding Boundary Bay area or the farmland and that’s good enough for him. “At some point we have to take someone’s word for it.”*⁸³¹

*He [Brian Innes, a senior land advisor for Conoco Canada] said he doesn’t blame residents for being concerned about the drilling but said they “started to realize it’s not a dangerous thing,” once their questions had been answered.*⁸³²

*The latest battle against gas storage in the Fraser Valley may have been won, but the war is far from over, vows an anti-gas lobby. The Friends of the Fraser Valley is claiming a partial victory following a government announcement restating the province’s position against gas storage drilling in the Fraser Valley. ... Vickers said the gas companies will do their utmost to make sure the Delta drilling site is above reproach, so they can achieve their real goal of gas storage in other parts of the Valley. “You can rest assured they will be putting on their best public relations in the history of the industry,” Vickers said. “I bet they will be bringing busloads of children and senior citizens to come out and see how ‘safe’ it all will be.”*⁸³³

*Dynamic vice president of lands Don Umbach said the companies “will sit tight until after the election,” before applying for further drilling permits in Langley.*⁸³⁴

*Local liberal victories symbolize a “resounding defeat of the oil and gas plans,” says Friends of the Fraser Valley chairman Al Vickers. “The victory reflects the overwhelming disapproval of the past government’s method of conducting business in the Fraser Valley,” he said. Vickers said the Social Credit’s Ministry of Energy was guilty of conducting business in private and attempting to keep Fraser Valley residents in the dark about plans for petroleum exploration. ... “It’s over when it’s over,” said Vickers. “The Friends of the Fraser Valley are on standby. We’re certainly prepared to listen to what Mr. Harcourt [the new Premier] and the New Democrats will have to say. The ball is in their court.” Prior to being elected premier, Mike Harcourt said the NDP would impose a moratorium on gas and oil exploration and consult further with Valley residents.*⁸³⁵

⁸³⁰ *Gas exploration begins with well in the Fraser Valley*, Vancouver Sun, August 31, 1991.

⁸³¹ *It’s good news*, Surrey Leader, July 7, 1991.

⁸³² *Murray Creek: Second drill site given approval*, Langley Advance, July 30, 1993.

⁸³³ *Stay vigilant say anti-gas lobbyists*, Chilliwack Progress, July 10, 1991.

⁸³⁴ *Gas drilling in Delta wraps up*, Surrey Leader, October 9, 1991.

⁸³⁵ *Anti-gas Friends keep eyes open*, Langley Advance, October 23, 1991.

WARNING

TO ALL FRASER VALLEY RESIDENTS

1. The Gas Consortium - B.C. GAS CORP., DUPONT-CONOCO DYNAMIC OIL has started an expensive campaign *to reverse the Government's decision to ban underground gas storage in the Fraser Valley.*

It is out to *defy* the wishes of the residents and the Government in full page advertisements and mailouts which promote underground storage.

2. They are embarking on a *door to door sales pitch* to get you to *sign a form letter* in support of drilling and storage.
**WE CALL ON EVERYONE WHO CARES ABOUT OUR VALLEY,
OUR COMMUNITY, HOMES AND LIFESTYLE
TO HELP FIGHT OFF**

THIS

**POWERFUL AND GREEDY INDUSTRY
WHO WANTS TO FORCE ITSELF INTO OUR COMMUNITY.**

DON'T SIGN THE LETTER!

3. **COMMUNITIES ARE FOR PEOPLE**

NOT the exploratory petroleum industry!

WE, THE RESIDENTS, HOLD THE POWER!

**TOGETHER, WE CAN PREVENT THE OIL AND GAS INDUSTRY
FROM TAKING OVER THE FRASER VALLEY!**

CAROL GRAN has publicly committed herself to fight to
keep the oil and gas industry out.

We thank her for this concern for her constituents and neighbours.

4. DAN PETERSON, (a long time employee of the energy industry) *has failed to inform his constituents* of the major petroleum industry plans that will change the life and style of Langley and Aldergrove irrevocably.

He has *failed to attend any of his constituent's public meetings* to discuss our objections to turning the Fraser Valley over to the oil and gas industry.

**THIS IS NOT THE CALIBRE OF PROVINCIAL REPRESENTATION
WE, THE PEOPLE OF THIS MUNICIPALITY WANT OR NEED**

VOTE PETERSON OUT!

**WATCH THIS NEWSPAPER FOR FURTHER ADVICE
ON HOW TO PROTECT YOUR INTEREST**

Donations to help pay for this advertisement greatly appreciated - we have spirit and principle - but we need financial support. Please send donations to: Friends of Fraser Valley, 324 - 256th Street, Aldergrove, V0X 1A0.

*It is unclear whether Mike Harcourt, who becomes Premier on Nov. 5, will want to court trouble with the Fraser Valley drilling opponents. They contributed to the defeat of several high-profile Social Credit cabinet ministers in the Oct. 17 election.*⁸³⁶

*For many folks in Langley the sound of natural gas drilling rigs at work is the sound of NDP betrayal. ... Back in July 1991, the Friends of the Fraser Valley thought they had an ally in then-opposition leader Harcourt. He promised a moratorium on drilling and storage and he promised that key land-use decisions in the Fraser Valley would come only after “the full participation of those who must live with the results.” By July 1992, the Friends of the Fraser Valley were starting to wonder if Harcourt had really meant what he said.*⁸³⁷

5 – 29 – 1. 1991: The Final Year of the Socreds

Ever wary of the interlocking intentions of both the private petroleum sector and government, Friends of the Fraser Valley member Glen Breaks revealed more of his research to the media in a letter to the editor of the Langley Advance newspaper. The Friends’ active intuition and public statements were that although government had declared an end to underground gas storage, it could be re-initiated at a drop of a hat. In other words, the government’s nod to permit methane gas exploratory drilling in the Fraser Valley was merely a pretext for future storage, despite assurances otherwise. Backing up this concern, Breaks recited blatant information he discovered from “the American Gas Association’s Transmission Conference Proceedings.” Here is his quote from those Proceedings:

Use of and oil and gas lease with provisions for converting to storage can be an effective means of acquiring storage rights in an area where the land and mineral owners may not be familiar with underground storage reservoirs. The language of the oil and gas lease and its implied obligation to explore for and develop production may tend to camouflage some of the disagreeable aspects that are part of the development of an underground storage reservoir. This can be an advantage to the landman acquiring storage rights during the acquisition stage of the project. However, when the problems with disgruntled landowners who did not understand what they were getting into eventually arise, they must be dealt with in a satisfactory manner.⁸³⁸

A year later Friends member Ray Addington used the same quotation in an April 29, 1992, letter to the editor of the Langley Advance by identifying that the American Gas Association’s Proceedings had taken place in Arlington, Virginia. Contrary to repeated comments by industry suggesting that it had no further interests in pursuing underground storage, Addington wrote that “the chairman and president” of B.C. Gas Inc. nevertheless stated in his 1991 annual report, “dated March 11th, 1992:”

B.C. Gas is responding by developing an integrated resource plan that explores options such as the potential for gas supplies or storage facilities in the Fraser Valley. ... This runs contrary to the impression created by Dynamic’s letter [of April 17th] that no gas storage is planned for the Fraser Valley. Mr. Babcock is technically correct in stating, “there is no proposal of which I am aware to

⁸³⁶ *Renewed hunt starts for Fraser River delta gas*, The Financial Post, November 4, 1991.

⁸³⁷ *Harcourt, Edwards maintain charade*, by Brien Kieran, The Province, August 17, 1993.

⁸³⁸ *Gas storage still real issue*, Langley Advance, March 6, 1991.

store natural gas in the Fraser Valley,” because no official proposal has been lodged with the authorities.

About five months after the Social Credit administration mothballed the special July 1989 Order-in-Council approval granted to B.C. Gas Inc. for undertaking a location, or locations, for underground gas storage in the Fraser Valley,⁸³⁹ new Energy Minister Jack Weisgerber announced on July 4, 1991, at “a meeting with MLAs and resident groups at the Delta River Inn,”⁸⁴⁰ that “government will allow the drilling of a [single] “demonstration” natural gas well in east Delta.”

The well site in Delta will disturb 1.5 hectares for the three-to-four-week period in which exploration drilling will take place. Drilling of the 1,700-meter-deep well is expected to begin some time in the fall.⁸⁴¹

When Joni Whitwell looks out from the porch of the farmhouse at 4160 - 104th St. in Delta that she rents with her husband Tom, she sees the drill site across the fence. She’s worried because the drilling is “literally in my back yard,” in the field where her children, aged one to 12, often play. “I’m concerned it may cause health or environmental hazards,” Whitwell said. “What about gas leaks, what about the air, what about water?” She said her greatest fear is for the safety of her children.

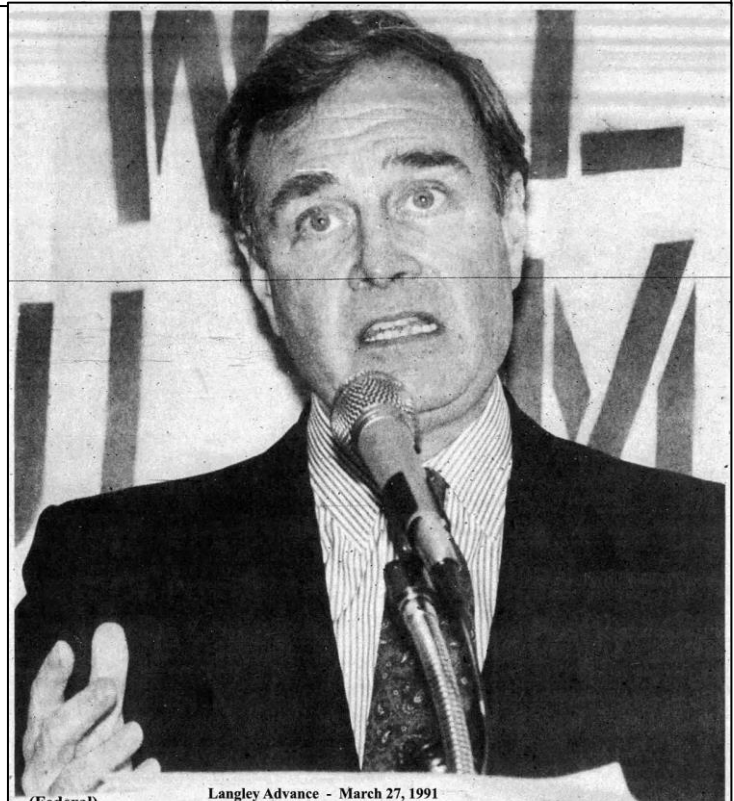
THE LANGLEY ADVANCE
Wed., March 27, 1991.

Steve Ferguson, alderman for the Township of Langley, told the gathering that Council had recently passed a motion asking the Union of British-Columbian Municipalities to lobby the provincial government to give municipal governments some jurisdiction over sub-surface mineral rights.

Ferguson said the motion asks that the Province amend the Municipal Act so that it supercedes any other provincial legislation and gives local government the right to enact by-laws to control and limit sub-surface mining, petroleum exploration and production, natural gas exploration, or natural gas production and storage.



Steve Ferguson



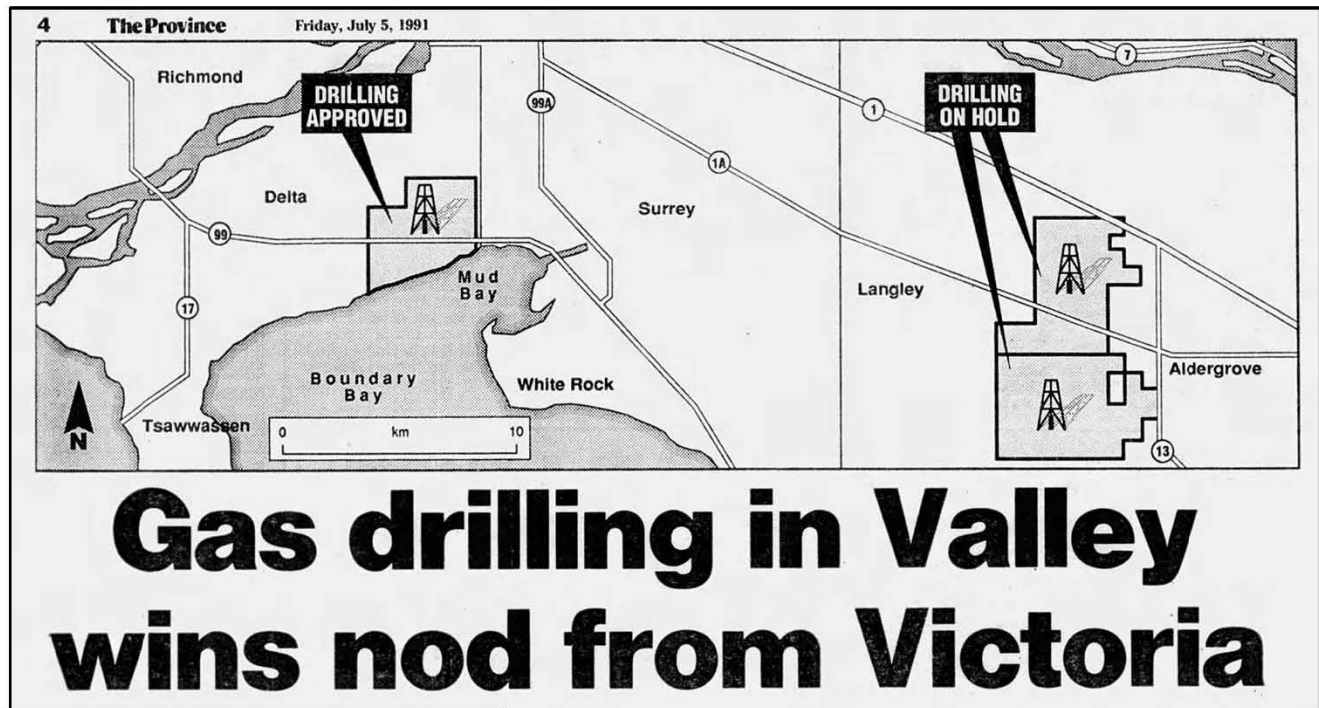
Langley Advance - March 27, 1991
(Federal) LIBERAL ENVIRONMENT CRITIC Paul Martin staged by provincial Liberal candidate Gary Farrell-Collins at Newlands Golf and Racquet Club Saturday afternoon. — Dean Broughton photo

⁸³⁹ Stated in Section 5 of this chapter, *The October 26, 1989, Bidding Process Results*.

⁸⁴⁰ *Gas drilling approved in Delta*, Surrey Leader, July 7, 1991.

⁸⁴¹ *Gas test limited to one well*, Langley Advance, July 10, 1991.

A few houses from the Whitwell's, Gabrielle Liverant said she is furious about the drilling. "It's not safe where people have livestock," she fumed. "It doesn't belong in agricultural land."⁸⁴²



Gas drilling in Valley wins nod from Victoria

Group maps fight over gas drilling Decision by Victoria anticipated

By HAROLD MUNRO
and KATHERINE MONK

A Langley group will go to war against their local Social Credit MLA if the provincial government permits natural gas drilling in their municipality.

"We'll have to fight our own government," said Glen Breaks, a founding member of Friends of the Fraser Valley. "The same government that most of us out here helped to elect (in 1986)."

B.C. Energy Minister Jack Weisgerber was to announce today in Vancouver whether gas drilling will be permitted at two Langley sites or a third site in Delta.

Should the minister permit drilling, Breaks warned: "We will go to war with Dan Peterson."

Langley MLA Dan Peterson is the subject of the Friends' wrath for refusing to oppose drilling as proposed by the gas company consortium of B.C. Gas, Conoco and Dynamic Oil. The protesters fear drilling will lead to a proposal for underground gas storage.

Peterson said in an interview he is not afraid of the Friends of the Fraser Valley, and would not oppose gas drilling in his riding.

"We're talking about drilling — not storage. The storage issue isn't even on the table anymore. The (Friends) keep getting it confused," Peterson said.

Peterson said while some people do not want drilling of any kind,

there are some who do. "If it's on someone's private land, and they want it, then I'm not going to stand in the way."

While Peterson has given the green light to gas drilling, Carol Gran, the other Social Credit MLA for Langley, is on record as opposing it.

The controversy surrounding the drilling applications led to a report to the government earlier this year by David Anderson. It recommended drilling be approved.

Weisgerber declined Wednesday to release the contents of his announcement before today, saying that it could have an impact on stock market values.

"Our decision is a result of careful consideration of the Anderson report and discussions with the various interest groups in the valley," Weisgerber said.

"I hope that the decision is something that everyone can live with. I don't think that our decision is going to upset the public."

Breaks, who has been fighting the drill applications for 18 months, said: "I have a feeling that it is going to go ahead in Delta and I don't know how we can prevent that. The (drilling) site is far away from populated areas and I think the vast majority of people in Delta are unaware of it."

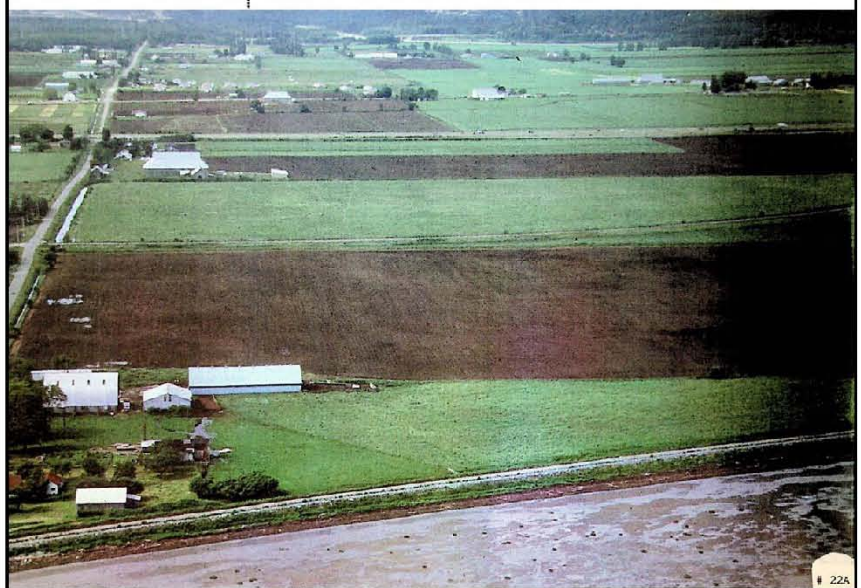
Slide # 21
DRILLING AND RECLAMATION
COMPLETED IN 3 - 6 WEEKS

Slide # 22
East Delta site (ground)

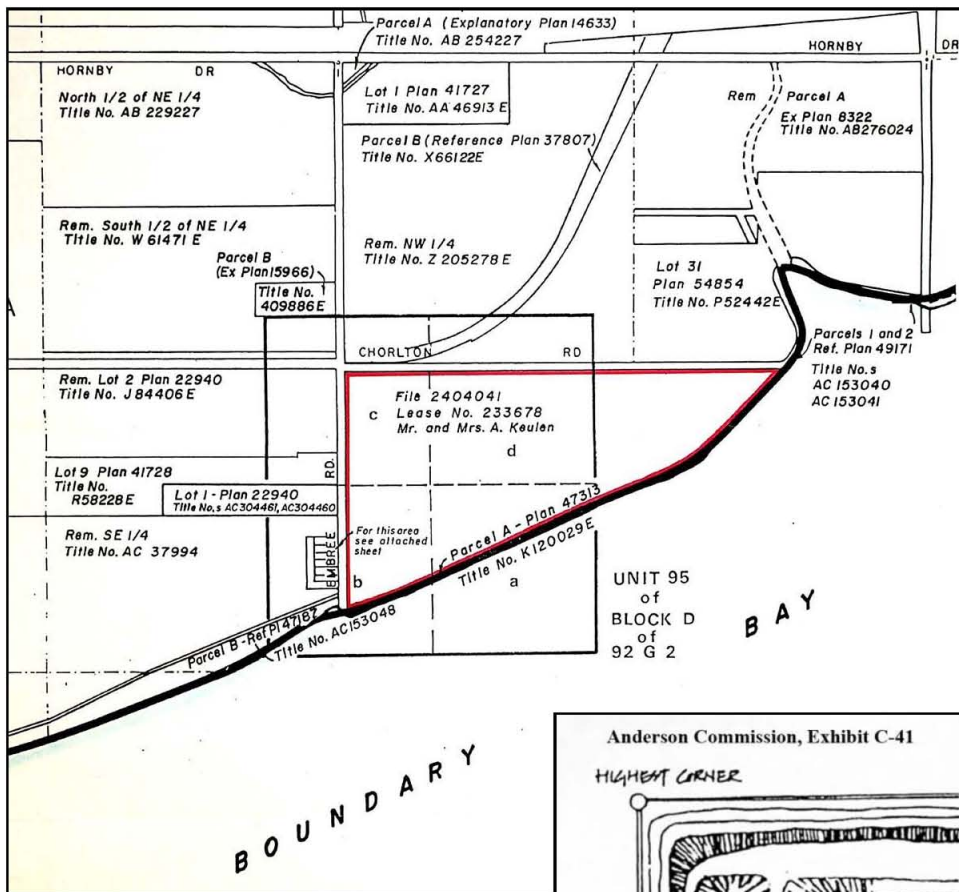
Slide # 22A
East Delta site (air)

THE PROPOSED DRILLING LOCATIONS ARE AT EAST DELTA, CAMPBELL RIVER AND MURRAY CREEK . . . AND I'LL BRIEFLY DESCRIBE EACH SITE.

THE FIRST IS AT THE SOUTH END OF 104TH STREET IN EAST DELTA, NEAR THE EDGE OF CORN FIELDS. THIS WELL WOULD BE DRILLED IN THREE TO FOUR WEEKS . . . AND WOULD REACH A DEPTH OF APPROXIMATELY 1,600 METRES (5,200 FEET).



⁸⁴² Mixed feelings surround natural gas well in Delta, Vancouver Sun, July 6, 1991.

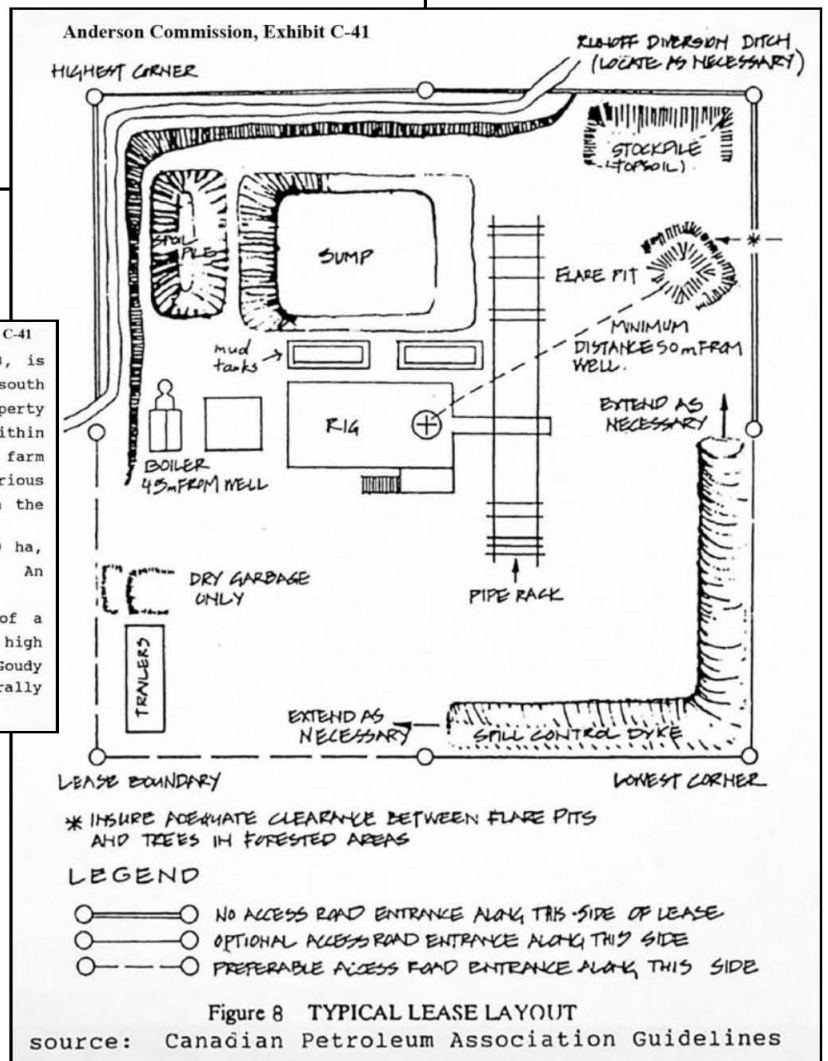


2.1 Boundary Bay Site Anderson Commission, Exhibit C-41

The Boundary Bay site, shown on Figures 2 and 3, is situated immediately east of a small airfield in south Delta, 150 m inside of the Boundary Bay dyke. The property is presently leased to a dairy farmer, and is located within the Agricultural Land Reserve. A barn and other farm buildings are located 165 m from the well site and various aircraft servicing businesses are located 300 m from the well site. Other farms are located along 104th Street.

The area required for exploration involves 1.59 ha, including well site, work space and access road. An operating natural gas well would require about 0.4 ha.

The proposed drill site occurs in the middle of a pasture behind the farm. Soils are characterized by high water tables and saline subsoils of the Embree and Goudy soil groups.¹ Poor drainage and strong salinity generally limit agriculture to forage and pasture use.



Protesters step on gas

Province

Thursday, June 13, 1991

By Don Hauka
and Keith Fraser
Staff Reporters

Foes of natural-gas drilling in the Fraser Valley are turning the heat up on Premier Rita Johnston.

The Friends of the Fraser Valley gave Johnston and other Socred leadership hopefuls a hot time at an all-candidates forum last night.

A crowd of about 300 people — mainly pro-Johnston, but including about 100 protesters — showed up at Aldergrove community centre to hear three Social Credit leadership candidates last night.

Premier feels heat over drilling

Protesters and the party faithful waged a quiet, polite war, with Socreds waving placards and protesters waving plastic bags with "no drilling" logos on their hands.

All three leadership hopefuls got a rough ride from the protesters, who want a ban on exploration and underground storage of gas in the valley.

And Johnston drew cries of dismay when instead of promising such a ban, she merely promised a decision by her cabinet "shortly."

"But how do you feel about it?" shouted one member of the audience.

Friends spokesman Charles McLean said he had expected about 200 protesters.

Before the meeting, he wondered whether the Socreds would let them in.

"Because if they don't let them in, there'll be a hell of a demonstration outside."

But Fort Langley-Aldergrove riding association president Ralph Snell said the protesters were welcome as long as they behaved themselves.

"As long as they don't unduly interrupt things and act responsibly, that's fine," Snell said before the meeting.

The Friends are upset over gas exploration in the Fraser Valley.

The provincial government has announced it will ban drilling for natural-gas storage, but has not prohibited exploratory drilling.

Valley residents, including McLean, fear the work is potentially dangerous and have been fighting drilling proposals from B.C. Gas and Calgary-based Conoco.

Also at the meeting were leadership candidates Mel Couvelier and Duane Crandall.

After Energy Minister Jack Davis' passing in late March 1991, Cabinet appointed South Peace District MLA Jack Weisgerber as his temporary successor, in who's riding in northeast British Columbia the petroleum industry had, and still has, an overly dominating political influence.

Richard Neufeld, who won the adjacent Peace River North electoral riding in the October 1991 provincial election, would later state in the B.C. Legislature that he was "a proponent for drilling in the Fraser Valley," and likened the "people in the Fraser Valley and the lower mainland" opposed to petroleum exploration as "environmental terrorists." Neufeld, an unwavering, almost perfect political petroleum industry puppet, blamed the government itself for the public opposition in southwest B.C. because it failed "for not educating the people about the benefits of natural gas," as all of the environmental impacts from petroleum exploration are of little relevance as it primarily "means money to Peace River North, and it's just a matter of education."⁸⁴³ After running under the B.C. Liberal Party ticket in the May 2001 provincial election, Premier Gordon Campbell appointed Richard Neufeld as Minister of Energy and Mines, who later served in 2008 following as a federal Senator, rewarded under appointment by Conservative

A16

The Vancouver Sun, Thursday, June 13, 1991

★★★★

Gas-drilling foes beard Socred leadership hopefuls

Fraser Valley meeting attracts 100 angry protesters

By HAROLD MUNRO
and Sun Victoria Bureau

THE FIRST EVENT to attract all three declared Social Credit leadership candidates also drew about 100 angry protesters Wednesday night.

Members of the Friends of the Fraser Valley, a group opposed to natural gas drilling in the valley, upstaged the leadership hopefuls at an all-candidates meeting in Aldergrove attended by about 300 people.

The protesters, led by Friends organizer Al Vickers of Aldergrove, wore plastic bags with anti-drilling logos on both hands and waved repeatedly at candidates Premier Rita Johnston, Mel Couvelier and Duane Crandall during the meeting.

All three leadership challengers spoke about gas drilling in Langley and Delta as proposed by a consortium of three gas companies but didn't reveal whether they support the proposal.

Johnston said cabinet will vote on the issue in the next two weeks.

Couvelier said he doesn't "have any trouble waiting for the (cabinet) process to unfold. In my view, the issue is of such importance in this area, there has to be more comfort

provided to the citizens by way of appropriate consultation."

"When you say we are dodging the question, I guess you are right," Couvelier told reporters. "But so far we don't have a question to deal with. It's still before cabinet."

Both Couvelier and Crandall said they are not completely familiar with the issue.

Johnston said she doesn't "think it's appropriate for a premier to go out to a meeting... and start making government policy on the platform."

In a reference she later confirmed was to the leadership style of former premier Bill Vander Zalm, she told the crowd: "Any leadership candidate who suggests they will preempt that (cabinet) process and make the decision on their own is one who, I suggest, would get us back on the same track that has caused so much dissension within the Social Credit family for the past several months."

⁸⁴³ Hansard, Wednesday, June 23, 1993, Afternoon Sitting, Volume 11, Number 13, 2nd Session, 35th Parliament.

Party Prime Minister Stephen Harper. After Premier Bill Vander Zalm resigned in March 1991, he was replaced by Surrey MLA Rita Johnstone, who media later photographed donning a pink hardhat at disaster and construction sites.

SAY NO



TO DRILLING

WARNING
TO ALL FRASER VALLEY RESIDENTS


- The Fraser Valley Gas Project has NOT been cancelled.
- If this proposal is not stopped, our lifestyles will be degraded, our homes devalued.
- Who will the B.C. Government support? The electorate or the wealthy petroleum industry?

SHOW YOUR CONCERN. CONTACT LOCAL MLA'S WITHOUT DELAY. GET INVOLVED IN UP-COMING POLITICAL ACTIVITIES.

For further information call **856-0829**

FRIENDS OF THE FRASER VALLEY

Langley Advance June 12, 1991 (46.4)



A MESSAGE TO ALL RESIDENTS FROM 'FRIENDS OF THE FRASER VALLEY'

The very strong stand taken by residents in opposition to drilling and underground gas storage in Langley/Aldergrove has been significantly successful. The Provincial Government has placed the project "on hold" and rescinded the Order-in-Council authorizing underground gas storage in this area.

We believe, however, that if MLA Dan Peterson had properly represented the wishes of his constituents the project would have been cancelled entirely.

The "FRIENDS OF THE FRASER VALLEY" would like to thank every resident for their support, and we will continue to keep you informed.

Langley Advance - July 17, 1991 (52.1)

NATURAL GAS

Exploratory drilling resumes in valley

Vancouver Sun
Sept. 24, 1991

HAROLD MUNRO
Sun Regional Affairs Reporter

Wayne Babcock's field of dreams is a small patch of leased property in a South Delta cornfield.

But the Vancouver oil company executive isn't trying to resurrect dead baseball players — he's after natural gas.

Natural gas drilling resumed in the Lower Fraser Valley Sept. 14 after a 25-year absence.

Babcock, a geophysicist and president of Dynamic Oil Ltd., said the idea to drill in the Fraser Valley came eight years ago when he saw a photograph of a 1904 drilling machine at work in the Delta area.

"Back then people were looking for oil, but they kept finding unwanted natural gas," Babcock said. "I saw the valley as having great potential."

He quietly went about acquiring subsurface mineral rights and conducting private geological surveys.

Then a very public fight erupted. For two years, drilling opponents have kept Dynamic Oil and Conoco Canada Ltd. of Calgary away from prime drill sites in Langley, saying that exploratory drilling was unsafe.

After lengthy debate and a costly provincial review, the Social Credit cabinet rejected drilling at the two Langley sites, but approved it at Mud Bay, where residents have not resisted exploration.

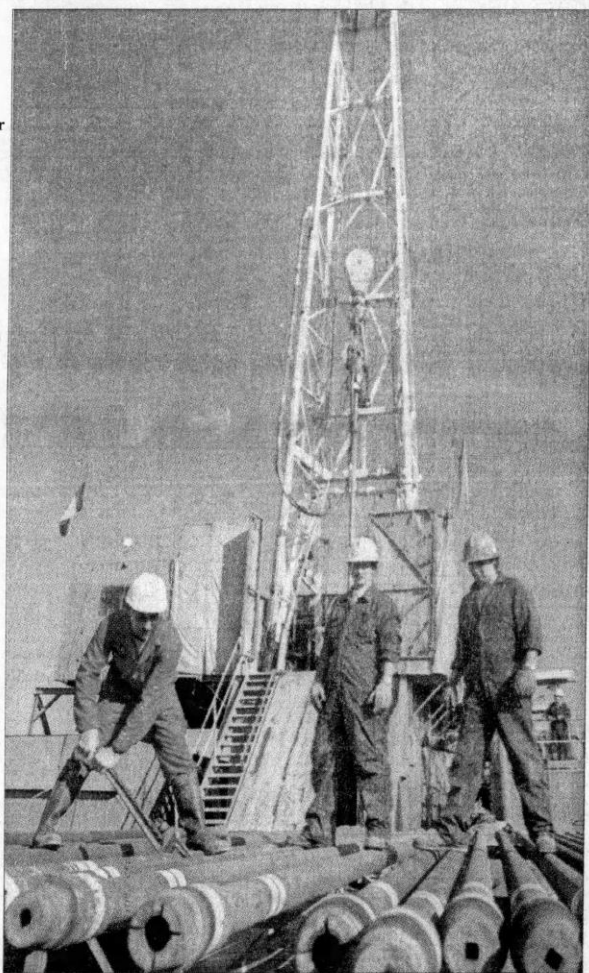
Unlike Langley, most Ladner residents own their sub-surface mineral rights, which could pay handsome returns in the event of a natural gas discovery.

So here, in the middle of Art and Wilma Keulen's cornfield, sits a 14-storey drilling rig, plunging its carbide-toothed bit 1,900 metres into the earth at the rate of four metres an hour.

The activity has not produced a single public complaint, says Bob Spring, vice-president of exploration for Conoco.

The federal department of

Please see GAS, A16



DIGGING DEEP: Drill crew drives hole 1,900 metres beneath Delta cornfield

RALPH BOWER

By early October 1991, Dynamic Oil and Conoco Canada completed their exploratory demonstration well in northeast Delta which, at 1,701-metres deep, failed to produce a payload. The failed results were almost consistent with all 'five wave' drilling explorations in the Fraser Valley since about 1914. In total, "Dynamic and Conoco have spent about \$8 million on land acquisition, seismic testing, and community consultation."⁸⁴⁴

Delta drilling fails to find gas

Vancouver Sun - October 1, 1991

HAROLD MUNRO
Sun Regional Affairs Reporter

Despite the failure of an attempt to find natural gas in South Delta, officials of the company that launched the search said Monday their drilling results indicate there are large volumes of natural gas in the area.

But a residents' group opposed to gas exploration anywhere in the Fraser Valley warned the consortium not to expand its search to Langley and said they will spend the rest of the provincial election campaign working to defeat a Langley Socred who supports drilling.

"We're all fired up again. We had a meeting (Sunday) night and we're going to give it all we've got the next couple of weeks," Langley resident Glen Breaks, one of about 1,500 members of the anti-drilling group Friends of the Fraser Valley, said Monday.

The group will target Langley Social Credit MLA Dan Peterson, who supports the application to drill in Langley. Socred Carol Gran, the other MLA for Langley, is opposed to drilling in the municipality, as are the NDP and Liberal candidates in Langley.

"We'll be doing everything we can to unseat him," Breaks said. "The

stance we're taking is, anybody but Peterson."

Dynamic Oil Ltd. and Conoco Canada Ltd. came up empty Monday after spending \$1.1 million and two weeks drilling 1,701 metres for gas in a Mud Bay corn field. It was the first attempt at exploratory drilling in the Lower Mainland in 30 years.

But Wayne Babcock, president of Dynamic Oil, said the two companies plan to push ahead with an application to drill in Langley because the Delta exploration reveals hydrocarbons are being created deep underground in formations of sand and shale capable of producing natural gas fields.

Breaks said he is concerned drilling will lead to underground gas storage that many Langley residents say should not be done in heavily populated areas because of the potential for gas leaks.

Babcock said drilling will not necessarily result in storage, but added underground gas storage is carried out safely in several places around the world, including Washington State.

He said another application to drill in Langley will be made in late December or early January after an analysis of data collected by charting formations in the Delta well.

The partnership's initial applica-

tion to drill in Langley was rejected by the provincial government earlier this year because of an outcry by area residents.

After eight years of research in the valley, Babcock said he is optimistic there is a major gas field — or fields — somewhere under the Fraser River delta.

The delta spreads 110 km up the Fraser Valley, spilling into Washington State, from the mouth of the Fraser River, and boasts a high-sediment basin similar to the Sacramento Basin in central California, which contains more than 12 trillion cubic feet of gas scattered over 76 different fields.

⁸⁴⁴ Gas Co. eyes turn to Langley, Langley Advance October 2, 1991.

The timing of the end of the petroleum consortium's demonstration drilling in Delta came within two weeks of the provincial election, when Fraser Valley political candidates were, thanks to The Friends of the Fraser Valley, earnestly debating the merits of petroleum exploration. Gambling on gaining political points, on October 2 Dynamic Oil's vice president Don Umbach stated that his consortium would "be applying for permission in November or December and hope to begin drilling sometime in the spring at the sites in Murrayville and South Aldergrove."⁸⁴⁵

8a
THE LANGLEY ADVANCE, Wed., October 9, 1991.

Issue: Development of possible existing natural gas under Langley



FORT LANGLEY/ALDERGROVE

ELECTION '91

Candidates

On The Issues

William R. White

Western Canada Concept

My opinion of the possibility of gas drilling in the Fraser Valley is not important. Referendum to the residents of the valley.

Lila Stanford

Independent

Government which is closest to the people is best able to govern responsibly. Therefore I would address a local issue from the view of local people. Government has a guardianship role in drilling permission. Because drilling in a closely populated area has an impact and possible adverse effect upon many people of the community, it seems right to let both sides present their concerns publicly. Referendum, informed decisions, would guide the citizens.

Charles Bradford

New Democrat

New Democrats have heard concerns of citizens of who believe the drilling program has more to do with finding storage sites than natural gas. Social Credit has ignored Fraser Valley concerns from the beginning. The Socreds sold the drilling rights before consulting local residents. Then they gave the public a bogus hearing. Proper public hearings give community interest official intervenor status, allow parties to challenge each other's evidence, and allow intervenors to present a thoroughly researched case.

Gary Farrell-Collins

Liberal

The exploration for natural gas under the homes, farms, and businesses in the Fraser Valley is a risk to the whole area. Dan Peterson tells us that if one landowner wants a gas well on his property but the neighbour next door does not, then the well should be drilled. However, you do not have to be a genius to understand that you cannot isolate the effects of an explosion to property lines (160 blowouts per year). This project makes no sense whatsoever and must be stopped once and for all.

Dan Peterson

Social Credit

Evidence in the Anderson report and preliminary data resulting from the drilling site in Delta indicate the risks of exploratory drilling are slight. If natural gas is discovered, energy security and economic and environmental benefits may be considerable. Accordingly, property owners should have the right to decide whether drilling may or may not take place on property they own. Most importantly, is the fundamental principle of private property ownership, which holds that a citizen controls what happens on his/her own land so long as it does not adversely affect the common good.

William R. White

Western Canada Concept

Rather than sell to the U.S.A., we should supply ourselves first. If more needed for winter we should enlarge pipeline or twin them. Again, the will of the people should be reflected in referendum.

Lila Stanford

Independent

We all appreciate having natural gas for numerous purposes. It makes our lives easier. However, the thought of it being stored underground in a populated area doesn't add to anyone's peace of mind. The meeting which was sponsored by Friends of the Fraser Valley was an enlightening two hours for me. I feel that a comparative chart and a referendum vote is the way to address this situation also.

Charles Bradford

New Democrat

New Democrats do not believe there are sufficient economic, social, and environmental merits to underground gas storage in the Fraser Valley. It has been almost painful to watch opportunistic members of the Socred Cabinet and Caucus "flip flop" on this issue. The position was wrong from the beginning. Achieving a balance between development, the environment, and community interests means hearing the people first — before making decisions.

Gary Farrell-Collins

Liberal

The past Social Credit government, after well over a year of public pressure, finally stated that it is opposed to gas storage at the present time because not enough information exists on the geological make-up of the Fraser delta. The two test wells that are proposed for Langley, and one that has been completed in Delta, will add to that information. Will the Social Credit then go ahead with storage? No one can ever tell if a storage facility will leak until they bring it up to full capacity, and then it is too late. We have the proven, safe alternative of gas pipelines.

Dan Peterson

Social Credit

Natural gas storage is simply not an option for the Fraser Valley, not now and not in the future. Your Social Credit government stated clearly on Feb. 1st, July 4th, and again on Oct. 1st, 1991, that there will be no drilling for storage. In addition, on Oct. 1st, the Honourable Jack Weisgerber, Minister of Energy, Mines and Petroleum Resources, said, "There are no applications from companies and none will be accepted. B.C. Gas spending authorization to explore for storage was revoked last July." I am fully supportive of this position and will continue to be in the future.



White



Stanford



Bradford



Farrell-Collins



Peterson

⁸⁴⁵ Ibid.

In the same publication of the Langley Advance newspaper was an engaging letter to the editor from fiery Friends' member Margaret Ormston:

As a long-time, former employee of the energy industry and chairman of the Socred's Standing Committee on Energy, Mines and Petroleum Resources and, therefore, knowing full-well that mineral exploration in B.C. still overrides all other property rights, [Langley MLA] Dan Peterson continues to deceive residents by

suggesting they have the right to decide whether or not they want drilling on their properties.

This Socred Government sold the property beneath us, without our knowledge or consent, subjecting us to the draconian, all-powerful legislation contained within the archaic Petroleum and Natural Gas Act, which allows the industry to erect drilling rigs within 80 metres of our homes, forcing large areas and hundreds of residents of this Municipality to live under Mandatory Major

6a
THE LANGLEY ADVANCE, Wed., October 16, 1991.

Letters to the Editor

Let's get it even straighter

The Editor,
Langley Advance,

Dear Sir,

I write in response to Dan Peterson's latest campaign publicity, entitled, "Let's Get It Straight." Mr. Peterson just does not understand; we don't want [underground natural gas] storage, nor do we want exploratory drilling [for natural gas].

We particularly don't want exploratory drilling by itself for two reasons.

Exploratory drilling is, without question, dangerous. The findings of a hundred commissions will not, and cannot, make it safe. All the advertising that money can buy will also not make it safe. For example, four people were killed on a modern technology drilling rig in Ohio last week. The deaths were caused by a blowout. According to information released by the drilling industry, there were over 150 gas well blowouts in the world last year. It is not a question of whether there will be an accident in the Fraser Valley; it is a question of when.

We have seen very little in the way of honesty and integrity demonstrated by the Social

Credit government in the past term. B.C. Gas and the drilling companies continue to state that they want gas storage. We must assume that, if they find what they consider to be a suitable gas storage site, they will get permission to proceed. The Social Credit government will again disregard the concerns, safety, and rights of citizens in favour of big business, and we will have underground gas storage. To be blunt, I do not trust the Social Credit government.

Aldergrove/Fort Langley is a highly populated residential and agricultural community. Petrochemical exploration in such an area is foolish beyond the comprehension of any reasonable person. Proponents of the scheme are obviously not thinking of the future, and do not have a concern for the environment.

A poll commissioned by the Friends of the Fraser Valley really says it all: Over 75% of the voters in the Langley area do not want either exploratory drilling or gas storage. The people polled were all residents of Langley, the people supposedly represented by Mr. Peterson.

Jack Breaks

RESULTS BY ELECTORAL DISTRICT — 35 TH GENERAL ELECTION 1991				
Electoral District	Name	Party	Total Valid Votes	% of Popular Vote
Langley Tot. 18,354 Rej. 354	Galenzoski, Nora E.	IND	62	0.34
	Gran, Carol M.	SC	5,201	28.34
	Norman, Barrie O.	FCP	180	0.98
	STEPHENS, Lynn	LIB	7,149	38.95
	Thompson, Derrill	NDP	5,762	31.39
Fort Langley-Aldergrove Tot. 19,844 Rej. 243	Bradford, Charles	NDP	6,027	30.31
	FARRELL-COLLINS, Gary	LIB	8,663	43.57
	Peterson, Dan	SC	4,880	24.54
	Stanford, Lila	IND	227	1.14
	White, William	WCC	87	0.44

Both Gran and Peterson lost their two Langley riding seats in the October 1991 provincial election. They lost their seats to members of the newly formed Liberal Party, the party later hijacked by the 'downtown' Social Credit party elites.

Emergency Evacuation Plans, and leaving us with the possible options of either abandoning or selling our homes at a fraction of their worth.


There is one right, however, still left to us – one which every resident of the Aldergrove-Fort Langley riding should make sure they exercise on October 17th: the right to boot Dan Peterson and his Fraser Valley Gas Project out of our Municipality.

The double-seated Langley constituency ridings in rural Fraser Valley were conservative leaning. As a condemnation of the petroleum initiative, both electoral riding voters therefore rejected the Social Credit incumbents, decided against the New Democratic Party candidates, and opted for two Liberal Party candidates in the provincial election. Understanding this opportunity, Liberal Party candidate Gary Farrell-Collins for the Fort Langley / Aldergrove riding stated before the election, “If they try to go ahead with these wells in Langley, they’re (the oil companies) going to have a fight on their hands that they’ve never imagined.”⁸⁴⁶

The corporate wing of the Social Credit Party under the captainship of former Vancouver City Mayor Gordon Campbell was astutely nicknamed by some in those days as the ‘Downtown Socreds.’ That wing would soon hijack and redirect Gordon Wilson’s rejuvenated Liberal Party, bringing back the Socred Party empire under a new banner as the NDP’s formal opposition throughout the 1990s.

Brenham Texas, April 7, 1992.

It used to look like Langley ... until a pipeline leading to an underground gas storage site EXPLODED.



NO-ONE expected this liquified petroleum gas pipeline to BLOW UP.

“The blast’s fiery force threw cars from nearby roads, killed livestock ... flattened mobile homes and rattled homes and buildings more than 90 miles away.”
— USA Today, April 8, 1992

“Trees were ripped apart and dead livestock could be seen lying in the scorched fields ... 10 homes were completely destroyed.”
“The shockwave was so powerful it registered a 4 on the Richter scale.”
— Seattle Post-Intelligencer, April 8, 1992

To Date: 2 dead, 20 injured

If this is what happened in the SPARSELY-POPULATED Brenham area, IMAGINE THE CONSEQUENCES IF SUCH A DISASTER OCCURRED IN POPULATED LANGLEY!

We’re sorry to report
B.C. Gas and the NDP Government are planning gas production and underground storage sites in Langley!

This ad is sponsored by
FRIENDS OF THE FRASER VALLEY
260 - 258th Street, Aldergrove, B.C. V0X 1A0

Langley Advance
April 22, 1992

Articles of clothing and household items hang from trees as authorities search through the wreckage of a mobile home that was destroyed by a gas line explosion. A 6-year-old boy inside the home was killed.

Reuter photo by Arthur Hahn

(40-1)

⁸⁴⁶ Ibid.

Now beginning its third year of opposition, and with 1,500 members strong, and soon to be 2,000, The Friends re-engaged in their battle after NDP Energy Minister Anne Edwards announced on June 19, 1992, her permission for the Dynamic Oil and Conoco consortium to submit applications to her Ministry for drilling the two proposed well sites in the Langley and Aldergrove municipalities. After 13 agencies reviewed the applications, Edwards announced her approval for the two exploratory wells on August 4, 1992.

On July 5, 1991, prior to the October 1991 election, MLA Mike Harcourt sent a letter addressed to The Friends of the Fraser Valley wherein he stated, "I want a moratorium on natural gas exploration and storage in the Fraser Valley."⁸⁴⁷ The August 4 approvals went against Premier Mike Harcourt's pre-election promises to the locals for a petroleum moratorium, a broken promise which Liberal MLA Gary Farrell-Collins raised in the Legislature on July 22, 1992:

Farrell-Collins quoted from a letter from the Premier which asked for a moratorium on natural gas exploration in the Fraser Valley. The letter, said Farrell-Collins, called "for a full public consultation so all questions can be answered about the environmental and economic impact." Farrell-Collins questioned why the Premier did not carry through with his plans. "Why did the Premier lie to the people of the Fraser Valley?" he asked and was then required to withdraw the comment. Farrell-Collins said that two surveys have shown 80 per cent of Langley residents are opposed to gas drilling, and asked if "it's fair for the Premier to ram this project down the council of Langley?"⁸⁴⁸

The public sentiments about the government's decision were voiced in public letters in the newspapers:

An open letter to: Mike Harcourt. Dear Sir. You have no defense against what you have done regarding gas drilling and storage in the Fraser Valley. You have gone back on your election promise. The people of this province will not tolerate this kind of behaviour. ... You obviously have no regard

Friends fight natural gas drilling

Langley Advance - July 3, 1992 **page 7**

INSIDE	
Tea marks thirtieth year	page 5
Trail system infringes	page 3
Grant boosts park	page 5
Friends fight natural gas drilling	page 7
Unlicensed garage closed	page 9
Douglas grads	page 24
Common Ground	8
Dog Tales	13
Entertainment	14
Gardening	10
Letters	4
Travel	11
SPORTS	12
CLASSIFIEDS	15
LOTTERY WINNERS	14
Langley Advance, July 3, 1992	



ANNE EDWARDS
drilling goes ahead

Gas-drill approval irks valley residents

Vancouver Province - August 5, 1992

By Paul Chapman
Staff Reporter

Final approval has been given to natural-gas drilling in the Fraser Valley despite a 2½-year battle by residents to stop it.

Friends of the Fraser Valley, the group formed to fight plans for exploratory wells, said drilling will inevitably lead to underground storage of natural gas.

"We're very disappointed and angry," group spokeswoman Margaret Ormston said last night.

"Our main objection is to the further development and storage of natural gas on the site. There's no way we can stop that now."

⁸⁴⁷ *Premier accused of gas drill deception*, Langley Advance, July 16, 1993.

⁸⁴⁸ *Gas well issue explodes again*, Langley Advance, June 24, 1992.

for your constituents. It is ludicrous to subject the unwilling constituents of this populous valley to the dangers of drilling and storage of gas, and you know it. How soon you have succumbed to the almighty dollar, eh Mike, and fell in with the money grubbers!⁸⁴⁹


There is a likelihood that a portion of NDP Cabinet's decision approval for exploratory drilling was based on political revenge for its recent candidates' losses in the conservative strongholds of the Fraser Valley. As Liberal Langley MLA Lynn Stephens would later state, "gas drilling was a major election issue in Langley and the position of the local NDP candidates had been made very clear" – "They campaigned with Mike Harcourt on that issue and now we see that their word was not worth the official letterhead it was written on when he was in opposition."⁸⁵⁰

As a concession, Edwards' Ministry of Energy held an open house for the Langley residents on Monday, June 29, 1992, at the Langley conference centre where over 400 people showed up.

An open house held by the Ministry of Energy, Mines and Petroleum Resources has shown that people do not want gas drilling and storage in Langley, said Friends of the Fraser Valley spokesman Al Vickers. ... According to Vickers, 400 to 450 people attended, including B.C.'s official opposition leader Gordon Wilson, Langley MLA Lynn Stephens, and members of [Langley] Township Council. The meeting, said Vickers, was held by the ministry "to say they're going ahead with the drilling." ... As for what happens next, Vickers said, "It's my understanding that [the provincial] cabinet will make the ultimate decision. I'm hoping it will make the only reasonable decision," he said, "to listen to the hundreds of thousands of residents in the Fraser Valley and to put a total and irrevocable ban on drilling for gas and gas storage."⁸⁵¹

Immediately after the public meeting, B.C. Gas Inc., Conoco Canada and Dynamic Oil formed the Community Advisory Committee, a title that would quickly be renamed, Citizen's Advisory Council. Reporter Erin McKay with the Langley Advance newspaper investigated this new creature in his July 15, 1992, article, *Secret group to decide on gas drilling*. B.C. Gas Inc.'s manager of external relations, Ted Schellenberg, stated that "the Committee was formed to deal with the "nitty, gritty job of how to proceed with natural gas drilling," and that "members" of this new Committee "want to remain anonymous, as they are afraid of being "harassed", and that "Langley may never even learn all of the names of the Committee's members."

Ironically, the 'Community' Advisory Committee was originally an in-house membership, with private industry and Ministry of Energy representatives. In the Ministry of Energy, Mines and Petroleum Resources' subsequent letter of invitation to Langley Township, Assistant Deputy Minister Peter



**Ministry of Energy, Mines
and Petroleum Resources**
Hon. Anne Edwards, Minister

**PUBLIC OPEN HOUSE
REGULATION OF FRASER
VALLEY
NATURAL GAS
EXPLORATION**

A Public Open House has been scheduled:

Monday, June 29, 1992
10:00 a.m. to 10:00 p.m.
Langley Conference Centre
20381 - 66 Avenue, Langley

Staff from the Ministry of Energy, Mines and Petroleum Resources will be available to provide information on the regulatory process and answer questions. Included will be:

1. Full details of government regulations;
2. Groundwater protection and noise levels; and
3. Results of Delta well-drilling monitoring program.

Input is invited from interested parties and members of the public.

Those wishing further information should call Bruce Hanwell in Victoria at 387-5993 (collect).

Langley Advance - June 26, 1992

(49w-1)

⁸⁴⁹ *Harcourt led voters astray*, Langley Advance, July 3, 1992.

⁸⁵⁰ *Premier accused of gas drill deception*, Langley Advance, July 16, 1993.

⁸⁵¹ *Friends fight natural gas drilling proposal*, Langley Advance, July 3, 1992.

Ostergaard stated: "the Community Advisory Committee was formed to "ensure good communication between the ministry, the operator, and the community"." Langley Township Alderman Trudi Campen, who "accepted membership on the Committee," being "the only publicly acknowledged member of the Committee," had "missed the Committee's first meeting on Thursday, July 9th." The Langley Advance reporter stated that "even Campen is having trouble getting answers about the Committee's goings-on," contradicting Ted Schellenberg's quote that "Campen was on the Committee to represent the public's concerns." ⁸⁵²

THE LANGLEY ADVANCE, Wed., July 29, 1992.

3a

Citizens seek natural gas answers

by Erin McKay

About 40 citizens concerned about natural gas drilling in Langley sought answers to their questions at the second meeting of the Citizen's Advisory Council.

The meeting was held on Thursday, July 23rd at the Langley Conference Centre. The minutes of the meeting were recorded by Lynne Ewing, senior policy advisor of the Energy, Mines and Petroleum Resources' Oil and Gas Policy Branch.

The meeting was conducted by Dr. Robert Durie. Ewing, who made an introduction at the beginning of the meeting, said Durie is a retired petroleum engineer who worked for Environment Canada for seven years. He was also assistant deputy minister for the Ministry of Energy, Mines and Petroleum Resources for seven years.

Durie was hired by the Ministry "as a neutral facilitator," said Ewing.

The meeting, along with one scheduled for Thursday, July 30th, was meant to deal with "the conditions to be placed on the wells, should they be approved," said Ewing.

Ken Jones, MLA for Surrey-Cloverdale, expressed concern that he had not been informed of the meeting, and had found out about it at the last minute.

One of the Ministry staff told Jones he had been "overlooked."

Details of the meeting were published in the Wednesday, July 22nd, edition of *The Langley Advance*.



COMPLAINTS about secrecy were levelled at a public meeting of the Citizen's Advisory Council on natural gas drilling in Langley by Surrey MLA Ken Jones.

Erin McKay photo

⁸⁵² Secret group to decide on gas drilling, Langley Advance, July 15, 1992.

Alderman Campen was “also concerned because the Committee has not decided whether or not the minutes of the meeting should be released to the public,” stating, “They didn’t want open meetings, but they should at least expect to release the information,” and “Something’s got to be cleaned up here.” B.C. Gas Inc.’s Manager for Public Relations, David Bodnar, emphasized that “They are not public meetings.” Campen was concerned about “the limited membership,” and suggested that “groups such as The Friends of the Fraser Valley should have been invited to participate.”⁸⁵³ Campen soon resigned her appointment in early August.

Government and industry’s bungled public relations were off on a thorny start after the government’s June 29th Open House, which quickly renamed the Committee, as the Langley Citizen’s Advisory Council. The Ministry of Energy’s communications officer, Irwin Henderson, stated in Erin McKay’s subsequent July 24 feature article, *Friends say no to meeting*, that the Advisory Council “considered” “nominations” for inviting The Friends of the Fraser Valley “to sit on the Council.”

Friends of the Fraser Valley are refusing to take part in any committee dealing with natural gas drilling in Langley. ... group chairman Al Vickers says the Friends are not interested. “They can nominate as many people as they want, but the Friends will not participate. They will, however, attend the Council’s meetings.” **“Since the Friends of the Fraser Valley has for two and half years stated we are unequivocally opposed to the drilling, we can’t belong to a committee that condones drilling,” Vickers told the Langley Advance Thursday.** According to Vickers, “The object of the Ministry, the industry, and the provincial government is to ignore the residents.” They don’t “have a mandate to consider citizens,” he said, “only to consider the feasibility of the given project.” “Another indication that the community will not be involved,” said Vickers, is the Council meeting format announced by the Ministry. “The format is not open to public debate, but to subdue residents more by a written question period,” he said. According to Vickers very few questions will be answered through this method.”

A week before Energy Minister Anne Edwards gave her approval for the first drilling site in south Langley, The Friends revealed “new information” from the 1991 “experimental Delta well site,” “that well-water contamination occurred between September 13 and October 10, 1991.”

He [Al Vickers] cited information from a letter written on July 20th by Brian Clark, B.C. Environment’s manager of planning and assessment for the Lower Mainland. Clark stated that contamination in the groundwater near the Delta site “could be attributed to the vibration and disturbance from drilling activities.”

In response to the Friends of the Fraser Valley’s fears, Conoco Canada, one of the companies interested in the drilling sites, sent The Langley Advance a copy of a letter from Piteau Associates engineering firm, which was hired by Conoco to monitor the Delta well. ... According to Piteau’s letter, a groundwater sample was collected at the site the day before the drilling began. The sample collected almost a month later “displayed some increase in sulphide and total metals.”⁸⁵⁴

⁸⁵³ Ibid.

⁸⁵⁴ *Gas drilling moves one step closer*, Langley Advance, July 29, 1992.

That tip-off from Al Vickers led Vancouver Sun reporter Harold Munro to investigate and publish, *Contamination spectre raised by ministry officials*, on August 6, 1992, two days after Energy Minister Edward's drilling permit approval for two sites.

Brian Clark, an environment ministry biologist, said in a July 20 report that there is evidence the vibration of heavy equipment and other activities related to drilling could increase groundwater turbidity.

According to Clark, tests he conducted last fall on groundwater near a Delta gas well drilled in September revealed signs of contamination. The biologist said he found levels of sulphate, iron, manganese, arsenic, barium and chromium in Delta that exceeded Canadian drinking water standards.

"We are concerned that people's health could be impacted," Patricia Kilt, a B.C. environment public affairs coordinator, said Wednesday. "The reality is that our concerns about vibrations still persist," said Kilt.

Dynamic Oil president Wayne Babcock said the consortium's own hydrological consultant found no evidence of groundwater contamination at the site.

Anne Edwards stated on August 4 that her "decision is the result of three years of study and public involvement," and that the "results of the well drilled in Delta last September showed there were no negative impacts, and certainly influenced the decision." At the same announcement, Candace Kenyon with the Energy Ministry's communications department "said the applications have gone through the entire referral process, and have been approved by all agencies involved, including the Ministry of Agriculture, Fisheries and Food and the Ministry of Environment. "It's a fairly strict process," said Kenyon. She said the Ministry "studied it all and felt the results of the Delta well" were satisfactory.⁸⁵⁵ It appears that not everyone at the Ministry of Environment agreed with the Ministry of Energy's conclusions.

On the evening of August 4, after Anne Edward's decision was announced, Langley Township Council Mayor John Beales:

... expressed the "disappointment that people in the valley and people at this Council feel" that the drilling was approved. "This is only the beginning," he warned. Beales said the Ministry assured there would be no underground gas storage, "but they said there would be no gas drilling." With "the municipality urbanizing rapidly," Beales feels it is "inappropriate" to undertake the project in an urban area. "We did lose this battle, but the war is still on."⁸⁵⁶

Though Fraser Valley and Langley residents were very disappointed by the Ministry of Energy's decision for the go-ahead of the gas consortium's two drilling sites, surprising news came out at the end of August 1992 that the consortium was unable to raise the necessary funds, some \$5.8 million in total. B.C. Gas Inc. was obligated to front \$4.4 million, 75 percent of the funds, with Dynamic Oil and Conoco coughing up the remaining \$1.4 million.

⁸⁵⁵ *Gas drilling project given definite go-ahead*, Langley Advance, August 7, 1992.

⁸⁵⁶ Ibid.

B.C. Gas Inc., the private utility corporation, was struggling financially after the B.C. Utilities Commission “rolled back a three-per-cent interim increase granted to B.C. Gas January 1,” a decision that would “cost B.C. Gas about \$18 million” in 1992. So, B.C. Gas applied to the B.C. Utilities Commission for “approval to raise the money” for the two drilling operations “from its customers.” The Utilities Commission denied B.C. Gas’s request, stating “that **drilling for natural gas was not in the public interest.**” The Commission’s decision left “B.C. Gas scrambling this week to raise the \$4.4 million, possibly from shareholders, while its partners wait for it to live up to the contract signed by the three parties.”⁸⁵⁷

B.C. Gas’s external relations manager Ted Schellenberg stated to Vancouver Sun reporter Harold Munro that “the ... decision by the (Commission) may affect our participation in the Fraser Valley Gas Project.”⁸⁵⁸ It did. B.C. Gas would soon terminate its two-and-a-half-year-old partnership agreement with consortium members Conoco and Dynamic Oil, resulting in the postponement of the two Fraser Valley drilling operations, with the two stranded partners looking for another petroleum corporation for the remaining funds.

Learning of the news, Friends member and volunteer researcher Glen Breaks was “cautiously optimistic that the project may not go ahead:”

It seems like it’s tempting fate to say it’s over because we’ve been disappointed too many times,” said Breaks, whose group has fought the proposal for more than two years. “But I feel a lot better than I did two weeks ago when we figured that those two wells would be drilled.”⁸⁵⁹

Regarding B.C. Gas Inc. requesting approval from the B.C. Utilities Commission for controversial rate hikes from its consumers to pay for its exploration drilling, Glen Breaks had brought this possibility – the spectre of filing ‘allowable expenses’ by B.C. Gas – before the Anderson Commission on July 11, 1990, at a public hearing in Aldergrove (see end of Section 18 of this Chapter, *July 11, 1990: The Final Public Hearing*). At that meeting, Friends chairman Al Vickers stated:

I would also like to allude to what Mr. Glen Breaks has just said, in terms of the pricing. It would appear to me from what Mr. Breaks has said that the more these people spend the more money they make. And the money they spend is my money, because the rates will go up. And indeed, the rates will not go down, they will go up, not down. They have been caught clearly tonight with their fingers in the cookie jar. And its my cookie jar and I want the Premier to know that we don’t want that to happen.

The B.C. Utilities Commission was no doubt aware that this sensitive issue had been specifically raised before the Anderson Commission and was now, therefore, making the correct decision, denying B.C. Gas Inc.’s application to raise customer rates.

⁸⁵⁷ *Ruling stalls plans to drill 2 gas wells*, Vancouver Sun, August 26, 1992.

⁸⁵⁸ Ibid.

⁸⁵⁹ Ibid.

The Friends of the Fraser Valley, on standby, were awakened from their hibernation ten months later, on June 10, 1993, to learn that the wounded two-member petroleum consortium had found a new drilling and financial backing partner, Stateside Energy Corp. of Calgary (also referred to in the media as Stateside Energy Ltd. of Vancouver), with an accompanying announcement that drilling would begin in a month's time.

Two exploratory wells will be drilled in Langley and Aldergrove this summer. The two wells, to be located 248th and 256th Streets near Zero Ave. in Aldergrove, and at 232nd St. and Old Yale Road in Langley, were granted regulatory approval in August 1992. Dynamic Oil and Conoco Canada announced on Thursday, June 10th, that an agreement in principle has been reached to form a new partnership with Stateside Energy of Calgary to perform the drilling. According to Conoco, Stateside Energy is an independent Canadian oil and gas company whose interest in the Fraser Valley is "solely to find and produce natural gas." Drilling was postponed to this summer when B.C. Gas left the original partnership. Conoco will continue to operate the drilling program.⁸⁶⁰

The 2,000-member Friends of the Fraser Valley vow to renew their fight to stop the drilling. "We'll be getting together this weekend and figuring out what we're going to do," spokesman Glen Breaks said yesterday [June 10, 1993]. Breaks accused Premier Mike Harcourt of breaking an election promise to allow residents to decide if drilling should go ahead.⁸⁶¹

"We have a meeting of our core group," Friends of the Fraser Valley official Glen Breaks said. "We don't know anything about the new partner."⁸⁶²

Stateside, unbeknownst to The Friends, got a piece of the Fraser Valley exploration action some 21 months earlier. On September 9, 1991, with petroleum operations in Alberta and operations formerly in the North Sea, and with former mining interests south of Golden B.C. (the Crystal Creek property), Stateside quietly:

... jumped into the lineup of companies seeking to score new natural gas or oil discoveries in the Fraser Delta near Vancouver. Stateside and Britain's Hardy Oil & Gas Ltd. each own 50 per cent in 2,640 hectares of "freehold" resource prospects, leased from private landowners in southwestern British Columbia. The pair made their move on the heels of a B.C. government decision to open up the thickly populated, environmentally sensitive region for drilling by a group led by Calgary-based Conoco Canada Ltd.⁸⁶³

There was scant information in the media about Stateside's September 1991 buy-in. The only other brief reference, two months later, was in the Financial Post, stating that Stateside "entered the play by acquiring mineral rights for 6,000 acres in Delta," and as a junior company it had "not traded above \$1.00 since 1985, has recently been around 35 cents."⁸⁶⁴

⁸⁶⁰ *Natural gas drilling begins*, The Langley Advance, June 11, 1993.

⁸⁶¹ *Valley gas feud heats up*, The Province, June 11, 1993.

⁸⁶² *Drilling foes seek data on consortium's new partner*, Vancouver Sun, June 12, 1993.

⁸⁶³ *Stateside Energy eyes Fraser Delta*, Calgary Herald, September 10, 1991.

⁸⁶⁴ *Renewed hunt starts for Fraser River delta gas*, The Financial Post, November 4, 1991.

Slide # 23A
Campbell River site (air)

THE SECOND LOCATION IS NEAR THE INTERSECTION OF 248TH STREET AND ZERO AVENUE, IN THE CAMPBELL RIVER AREA OF LANGLEY TOWNSHIP . . . AN AREA CURRENTLY USED FOR PASTURE. THE WELL HERE WOULD BE DRILLED IN FIVE TO SIX WEEKS, REACHING AN APPROXIMATE DEPTH OF 3,200 METRES (10,500 FEET).



S 1/2 OF S 1/2

REM B
REF. PLAN 1499

REM. 1
PLAN 17551

2.2 Campbell River Site

Anderson Commission, Exhibit C-41

The Campbell River site, shown on Figures 4 and 5, is situated adjacent to the Canada-U.S. border, within the District of Langley. The property is a privately owned dairy farm within the ALR. The area required for exploration involves 1.7 ha, including the access road.

The proposed drilling site is located on agricultural pasture at the base of a prominent knoll. The uphill area is forested with predominantly deciduous species, with some conifers in the understory. The tree species include red alder, birch, red cedar and Douglas fir. The proposed site clearing will require removal of about 0.3 ha of this timber.

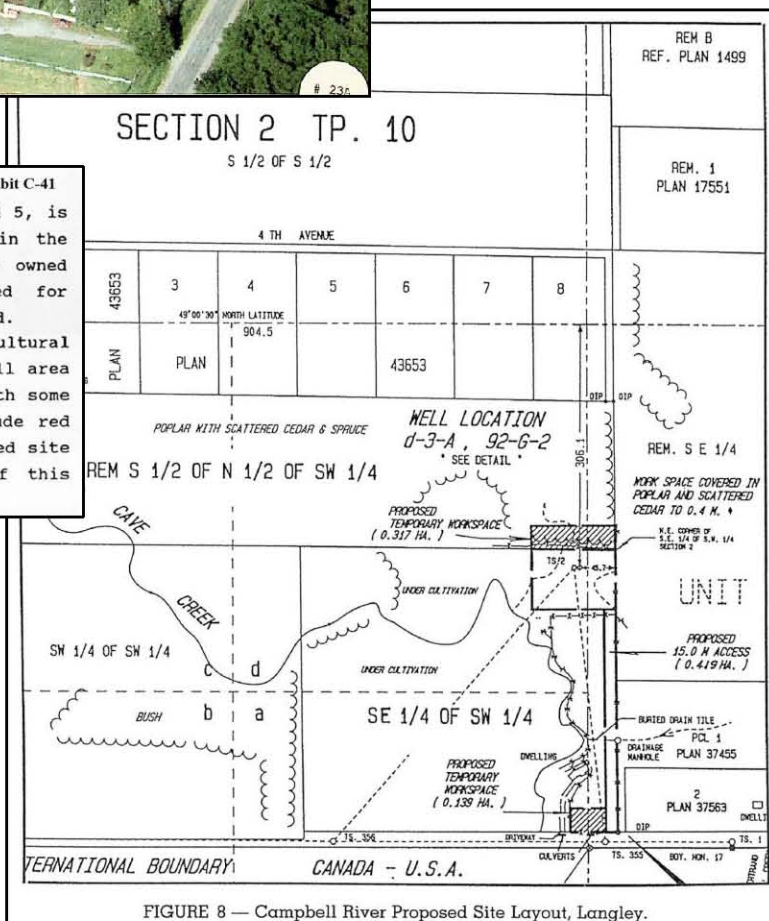


FIGURE 8 — Campbell River Proposed Site Layout, Langley.

A surprised Langley Township Council, “which has repeatedly gone on record as opposing the drilling,”⁸⁶⁵ thought that the new consortium was required to go through added regulatory and consultation hoops before given the green light by the Ministry of Energy in mid-1993. Kandice Kenyon, the Ministry’s communications and public affairs manager, said that “approval for the wells was granted by all the necessary regulatory bodies last summer,” and that “the drilling didn’t go ahead, however, due to the involved companies’ lack of funding.”

The same Langley Advance news article summarized the conditions mentioned in Energy Minister Anne Edwards’s July 12 letter to Langley Township:

The terms and conditions outlined by the Ministry “safeguard public safety, protect the environment and respond to the concerns expressed by the municipality and local residents. We have included the recommendations of all government agencies and have paid attention to the concerns of those living in the vicinity,” she stated.

Included in the conditions is a groundwater monitoring program that will see Conoco drilling two water wells on the site as primary observation points for groundwater monitoring. Residents near the site have been invited to have their wells tested as part of the monitoring program, and some tests have already taken place. The groundwater program will be supervised by an independent hydro-geological consultant, and reports will be submitted to Township Council and to the federal and provincial environment ministries.

Edwards said that, in terms of insurance and bonding, the drilling companies have \$50-million coverage for property or bodily damage, \$62.5-million coverage for well seepage and pollution, and will post a \$100,000 bond against damage to local roads.

To protect the environment, all waste, drilling fluid, and runoff water must be contained and disposed of. All land disturbance and reclamation of the site and access road will be supervised by a qualified agrologist, and fish habitats must not be disturbed, she said.

With public pressure focussed on Langley and Fort Langley/Aldergrove Liberal party MLAs Lynn Stephens and Gary Farrell-Collins, they accused “Premier Harcourt of “the worst form of political deception”.”

Stephens pointed out that gas drilling was a major election issue in Langley and the position of the local NDP candidates had been made very clear. “They campaigned with Mike Harcourt on that issue and now we see that their word was not worth the official letterhead it was written on when he was in opposition,” she said. In a letter to Al Vickers of the anti-drilling group Friends of the Fraser Valley, dated July 5th, 1991, Harcourt stated, “I want a moratorium on natural gas exploration and storage in the Fraser Valley.” The two MLAs are calling for the Premier and the past NDP candidates to live up to their written commitment and declare an immediate moratorium on drilling in the Fraser Valley.

[Al] Vickers claimed that the decision to proceed with the drilling would not have been made had the NDP candidate for Langley been successful in the last election. He called the decision to drill a

⁸⁶⁵ *Wells given green light*, Langley Advance, July 16, 1993.

Slide # 24
Murray Creek site (ground)

Slide # 24A
Murray Creek site (air)

THE THIRD LOCATION - MURRAY CREEK - IS NEAR THE INTERSECTION OF 232ND STREET AND OLD YALE ROAD IN LANGLEY TOWNSHIP. IT'S AN AREA NOT CURRENTLY USED FOR AGRICULTURE. PLANS HERE CALL FOR THE DRILLING OF A WELL IN FIVE TO SIX WEEKS, AGAIN TO AN APPROXIMATE DEPTH OF 3,200 METRES (10,500 FEET).

2.3 Murray Creek Site

Anderson Commission, Exhibit C-41

The Murray Creek site, shown on Figures 6 and 7, is located off Old Yale Road in the District of Langley. One residence is located, 125m west of the well site, and a second residence is located 150m to the south, on both adjacent properties. The property is located within the ALR. The exploration phase will require 1.7 ha of land.

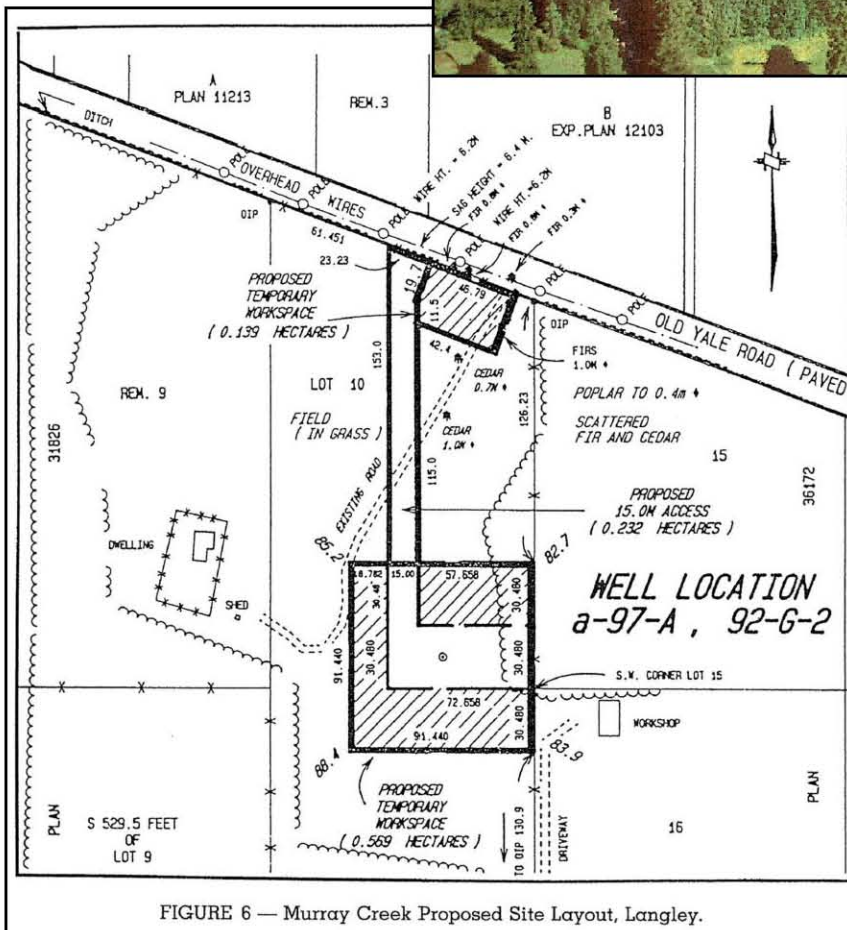
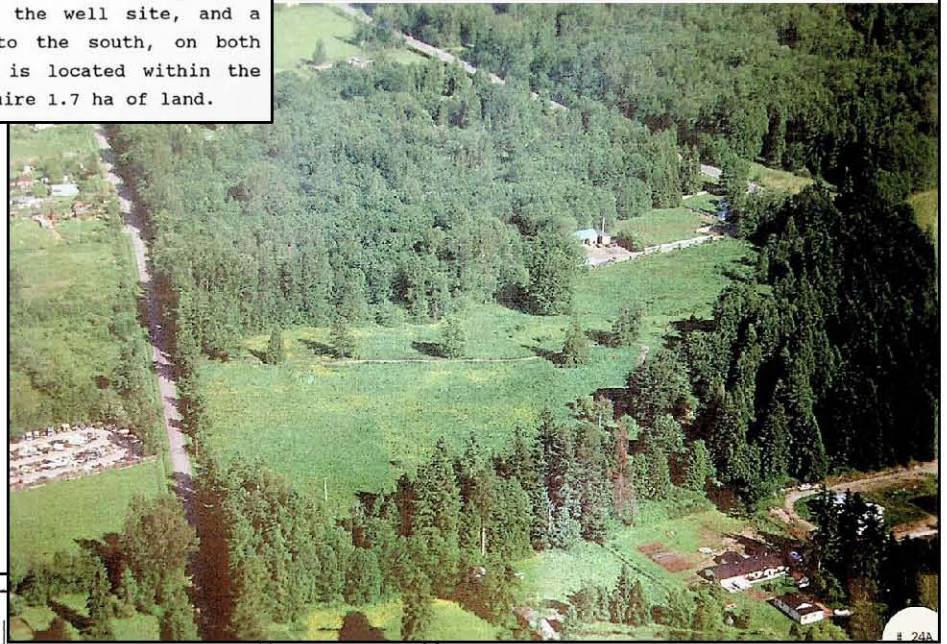


FIGURE 6 — Murray Creek Proposed Site Layout, Langley.

“vindictive measure” by the NDP against the people of Langley, Farrell-Collins, Stephens, and the Liberal party of B.C.

PROMISES CONSULTATION IN FUTURE

Aldergrove Star
November 15, 1990

Mike likes gas

By KURT LANGMANN

ALDERGROVE - Mike Harcourt told reporters that a proposal to store natural gas underground in the Fraser Valley was a valid concept but the NDP would have approached it a bit differently and would have done a better job of negotiating it than the present government.

Speaking to a small scrum of reporters after his Friday night speech to local party members, Harcourt said, “the process stunk from the beginning.”

He charged that the energy ministry “awarded the rights secretly” and then set in process a study which “set everybody up”. The rights

were sold by public auction to the highest bidder in 1988.

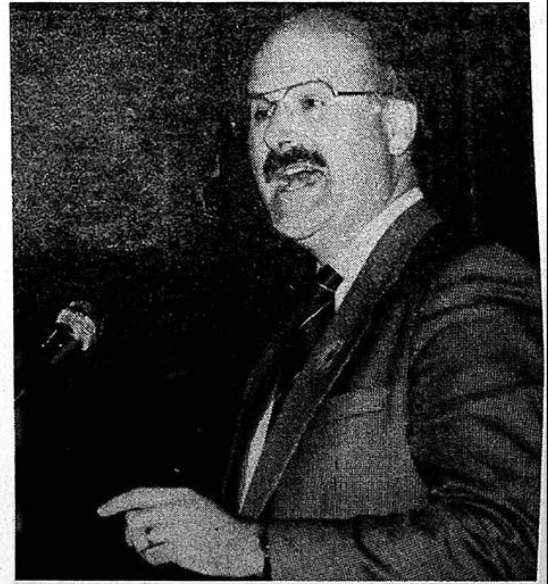
“Dan Peterson (Langley MLA) ridiculed our environment critic last March for asking for an environmental assessment,” said Harcourt. “It’s gone off the rails right from the start.”

“The commission (on gas exploration) seems to have spontaneous change of hearing process.”

However, Harcourt spoke glowingly of commission head, David Anderson. “I would not challenge the integrity of David Anderson... (but he has) two-and-a-half strikes against people accepting his recommendations” adding that VanderZalm has unfairly put him on the spot.

“I would prefer to see natural gas used in cars, in homes rather than oil, as well as industrial use. There’s a legitimate public interest involved, but it’s a severely impaired commission,” said Harcourt.

He said the NDP would have consulted with affected property owners prior to sale of mineral rights in the area. However, he did not elaborate on how this might have pleased property owners here who wish to see no such proposal go through whatsoever, nor did he explain why an exploration company would spend money on seeking a proposal for properties to which they had no legal rights.



In the B.C. Legislature on June 17, 1993, Farrell-Collins rose out of his opposition seat to ask:

G. Farrell-Collins: My question is to the Minister of Energy, Mines and Petroleum Resources. On July 5, 1991, during the lead-up to the election campaign, the Premier stated in a letter to the residents of the Fraser Valley: “I want a moratorium on natural gas exploration and storage in the Fraser Valley. I also want ... 59 recommendations brought back to Fraser Valley residents for full public consultation, so all questions can be answered about the environmental and economic impact of drilling and storage.” Can the minister tell us where the Premier’s promise went?

Hon. A. Edwards: As you are probably aware, we had an extensive review process before we arrived at the decision last summer that we must follow the legal requirements under the previous government. A company had purchased leases, permits and licences, which they can do. Two companies were given a permit to drill two wells for natural gas. Those authorizations are still in place, and two of the companies -- there were three in the consortium -- have now found a third partner. They have given notice that they want to carry out that drilling under the authorization granted last summer, so that will happen. The Speaker is asking me to hurry, but you will be pleased to know that there will be very stringent controls on anything that happens. Before anything happens, there will be a repeat referral of these applications to all of the governments involved.

G. Farrell-Collins: I don’t recall the Premier saying anything about the legal implications having to be determined by the community, but I do see that the Premier went on to say: “New Democrats believe key decisions on land use must be made with the full participation of those who must live with the results.” Can the minister tell us which people in the community she consulted before allowing these permits to go ahead?

Hon. A. Edwards: Public meetings were held in the Fraser Valley last summer, as you may well recall. A council of community people was put together to monitor what would happen under a

drilling process. This council will again be put in place to assure the community that there will be a number of very stringent requirements on the application. I have consistently met with members of that community, and I have also met with other people who have an interest. I will continue to do that, and hope that that will assure the community that this is going ahead with public process.⁸⁶⁶

Farrell-Collins asked the question again on July 15, 1993, this time directly to the Premier who deflected answering the question, with Minister Edwards coming to the rescue:

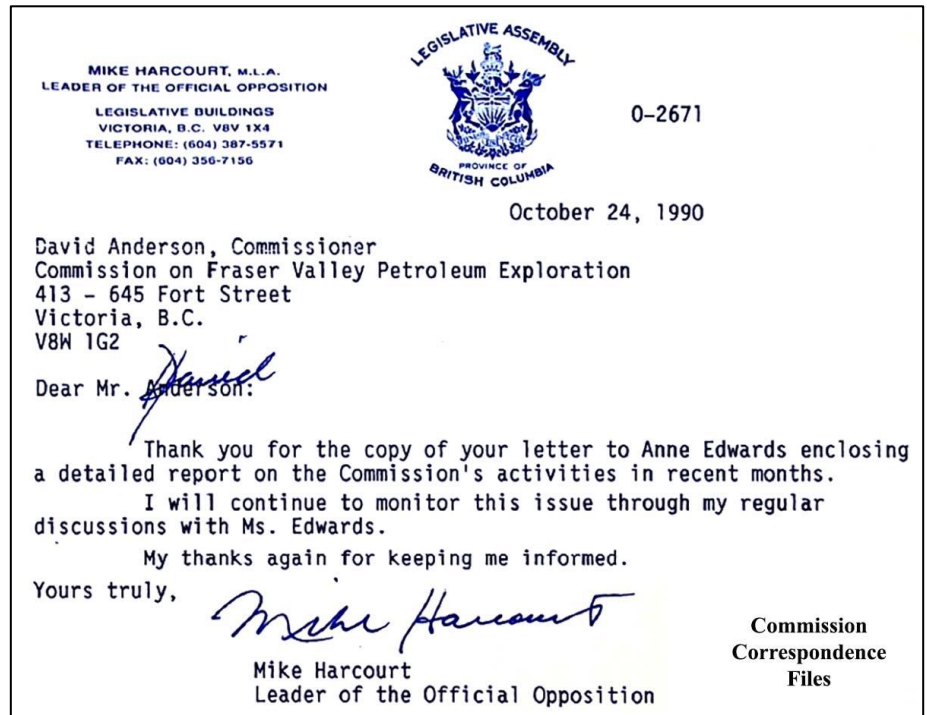
G. Farrell-Collins: My question is to the Premier. Yesterday the Minister of Energy announced that the two Langley drill sites proposed for natural gas are going ahead. During the last election the Premier promised the people of the Fraser Valley, in a letter written on his own letterhead, that he wanted a moratorium on natural gas exploration in the Fraser Valley. Can the Premier tell us what happened to that promise?

Hon. M. Harcourt: The matter was reviewed very thoroughly. The minister's staff dealt with a lot of the concerns raised about safety and some of the other issues that people in the Fraser Valley brought to our attention. On the basis of that very considered review by the minister, permission was given to go ahead.

G. Farrell-Collins: I will quote from the Premier's letter: "I also want David Anderson's 59 recommendations brought back to Fraser Valley residents for full public consultation, so all questions can be answered." When did that full public consultation take place? I would like the Premier to answer this question, and not pass it off to his Minister of Energy.

Hon. A. Edwards: Everyone should know that the issue of drilling for natural gas in the Fraser Valley has been one of considerable delicacy. Three wells were proposed. When one well was drilled -- under the previous government, under very stringent conditions -- that well indicated.... The reports that we had and the reviews by various ministries and various levels of government indicated that the drilling could be repeated safely in the Fraser Valley. That is the basis for the decisions.

The Speaker: Final supplemental, hon. member.



⁸⁶⁶ *Hansard*, Thursday, June 17, 1993, Afternoon Sitting, Volume 11, Number 8, 2nd Session, 35th Parliament.

G. Farrell-Collins: I notice that once again the Premier has abdicated his responsibility. The fact of the matter is that the promise of full public consultation given by the Premier in writing was broken and violated. Can the Minister of Energy tell us whether these are the only wells that are going to be drilled in the Fraser Valley, or will further wells be drilled if requests come?

Hon. A. Edwards: I think the member knows full well that as far as we know, all indications are that these are the two wells that will be drilled. This does not mean that if someone has already bought a lease.... Pardon me, the term is a permit or another term; they don't turn it into a lease until later. But if they have one, then they have the right to apply to drill. If they apply to drill, the application goes through a stringent process. It is reviewed by any number of ministries and levels of government, and by the local people. It would go through that whole process before there would be any allowance to drill.⁸⁶⁷

In the July 16 Langley Advance article, *Premier accused of gas drill deception*, MLA Farrell-Collins, who in eight years time (after switching to the provincial riding of Vancouver-Fairview) would be appointed by the May 2001 Premier Gordon Campbell as B.C.'s Finance Minister, raised the issue of underground gas storage on July 15 to reporter Erin McKay as the underlying motive and spectre for the scheduled drilling sites.

According to Farrell-Collins, the original application made by Conoco and its partners had been for gas storage, but due to opposition, the gas companies "changed their tune" and sought to only drill for natural gas in Langley. Farrell-Collins believes that that companies will not find a commercial supply of natural gas when they drill but will tell the provincial government that the two Langley locations are a good place for gas storage. Farrell-Collins added that the leases on the drilling won't expire until 1995, and extensions could be applied. He said that the Ministry of Energy, Mines and Petroleum Resources will be looking at other drilling applications during that time. No applications to drill have ever been turned down in B.C., he said.

A4★ The Province

Friday, June 11, 1993

Valley gas feud heats up

By Brian Lewis
and Charlie Anderson
Staff Reporters

Exploratory drilling set for July spurs foes to form fight strategy

The Fraser Valley gas feud appears about to erupt anew.

Drilling of two exploratory gas wells in Langley will start next month now that the companies involved have their funding in place.

But the 2,000-member Friends of Fraser Valley vow to renew their fight to stop the drilling. "We'll be getting together this weekend and figuring out what we're going to do," spokesman Glen Breaks said yesterday.

"There's lots of things we can do."

He did not elaborate.

Breaks accused Premier Mike Harcourt of breaking an election promise to allow residents to decide if drilling should go ahead.

The New Democrat government authorized the drilling last summer, but the companies involved — Conoco Canada of Calgary and Dynamic Oil of Vancouver — had to find a new partner before going ahead.

They've now been joined by Stateside Energy Ltd., also of Calgary.

Research shows the Fraser Valley could contain major reserves of natural gas, said Dynamic Oil president Wayne Babcock.

"There's never been a deep sedimentary basin on Earth that didn't have large gas reserves. And at 30,000 feet, the Fraser's sedimentary level is one of the deepest."

The pair of exploratory wells, to be drilled to about 3,050 metres (10,000 feet) each, are expected to be completed by October.

Breaks said his group still believes the companies are actually "working their way towards an underground gas-storage facility," not just gas extraction.

And his group remains adamant that "gas storage and populated areas don't mix."

But Conoco spokesman Bob Spring insisted: "This is a pure gas-exploration play that has nothing to do with underground natural-gas storage."

Energy Minister Anne Edwards said stringent environmental conditions must be met.

⁸⁶⁷ Hansard, Thursday, July 15, 1993, Afternoon Sitting, Volume 12, Number 8, 2nd Session, 35th Parliament.

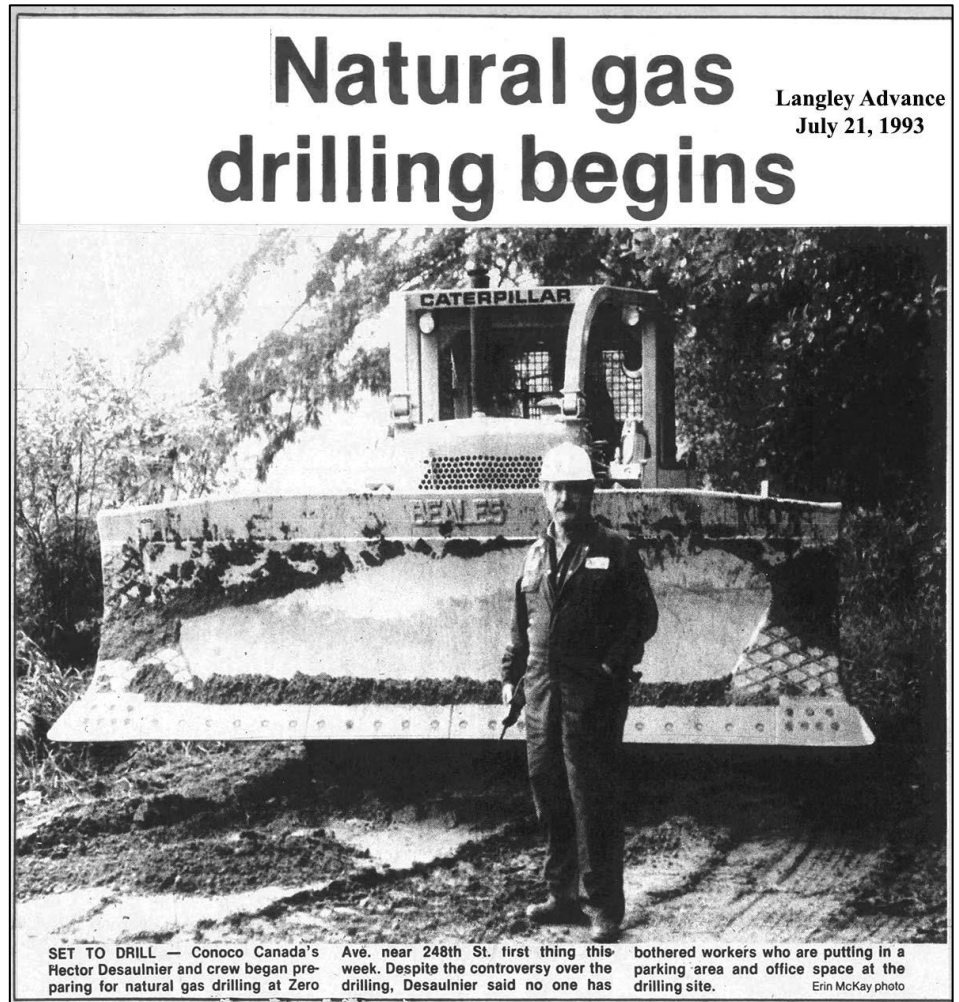
On the morning of July 19, 1993, the consortium's drilling crew arrived at the south Aldergrove "Burke family" farm at 25175 Zero Avenue "to begin constructing a parking area, a visitor's centre, and a reception and office area for safety personnel," with the drilling rig "located some 300 metres north." "The Burkes refused to comment on the activity in their front yard," said Langley Advance reporter Erin McKay.⁸⁶⁸ "Because the drill site is taking place on Agricultural Land Reserve property ... the topsoil had to be stripped and covered ... placed in piles between the road the drilling location," with the piles helping "buffer potential disturbances to sight and sound."⁸⁶⁹

As the drilling controversy raged, gigantic blasts rocked the city of Shenzhen in China on August 6, 1993, killing some 70 people, with the city's Red Cross hospital administering aid to about 200 injured people. "A release of nitric acid sparked a blast in an explosives warehouse," and "an hour later, a second explosion took place at a natural gas storage area." The explosion "has the Friends of the Fraser Valley afraid that a similar disaster may occur here in Langley ... Jack

Breaks Senior, a member of

the anti-natural gas drilling group, told The Advance that last week's blast in the city of Shenzhen "shows how explosive and dangerous natural gas really is".

Breaks said that the Ministry's assurance that storage will not be allowed in Langley, although drilling is permitted to go through, can be "compared to putting in a stop light at an intersection" after a number of accidents have already occurred. "It should be stopped before its starts," Breaks stated.⁸⁷⁰



⁸⁶⁸ *Natural gas drilling begins*, Langley Advance, July 21, 1993.

⁸⁶⁹ *Drill site visited by CAC [Citizens Advisory Committee]*, Langley Advance, August 6, 1993.

⁸⁷⁰ *China blast sparks fear for Langley*, Langley Advance, August 11, 1993.

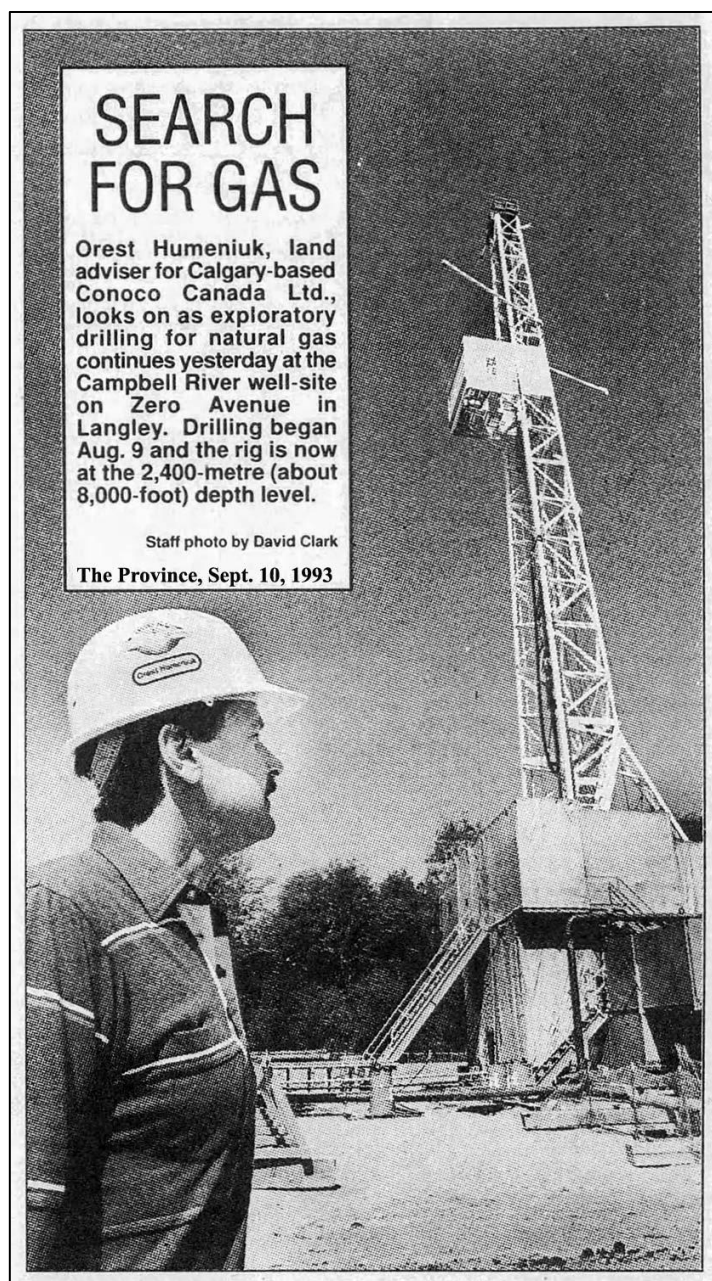
On Thursday, September 9, Stateside Energy invited media for a tour of the Zero Avenue operations. The Vancouver Sun newspaper stated the following day: “**Here’s how not to handle public relations:**”

There [at the drilling site] officials conscious of strong local opposition took pains to explain all the safety precautions that have been taken. Trouble was the invitation was accompanied by two glossy Stateside brochures featuring color photographs gas wells being flared. The resulting images: huge orange and black fireballs billowing skywards.⁸⁷¹

At the end of September 1993, the consortium announced that the exploration drilling site at Zero Avenue “has failed to produce conclusive results,” and the site “has been completed and properly abandoned.” Dynamic Oil’s representative Mike Bardell “said that the lack of results at the first site is “not at all” considered a waste of time by the drilling companies,” because “that’s what our business is all about.”⁸⁷² After shutdown, “monitoring of the groundwater aquifers” continued “for another three to four weeks.”⁸⁷³

At the end of September 1993, the consortium prepared the second drilling site at Old Yale Road and 232nd Street in Langley, named the Murray Creek site. After drilling to a depth of 2,635 metres, “Dynamic’s operating partner, Calgary-based Conoco Canada Ltd., announced last week [end of October] that the third and final exploratory well in the group’s exploratory program in the Fraser Valley failed to find commercial quantities of natural gas.”

“Of course we’re disappointed, but we’re pleased with the geological information the wells produced,” [Wayne] Babcock [the president of Dynamic Oil Ltd.] said. “We’ll spend the next three or four months evaluating that data.” Conoco exploration vice-president Bob Spring said his company hasn’t given up on the Fraser River basin, but added **the B.C. government’s regulatory process would have to be streamlined before Conoco will drill again.** [Bold emphasis] The two



⁸⁷¹ *A real gas*, The Province, September 10, 1993.

⁸⁷² *Drillers come up dry*, Langley Advance, September 29, 1993.

⁸⁷³ *Gas drilling site reclaimed*, Langley Advance, October 29, 1993.

wells drilled this fall were completed without any environmental incidents, he said, and cost the companies approximately \$3.6 million.

There were a few sour grapes from the drilling at Zero Avenue. Conoco was being billed \$10,000 from the Township of Langley for "staff time associated with this project." But Conoco was refusing to pay up, stating that "paying fees to the Township would set a precedent for all other drilling companies in other municipalities," with Conoco advising that "the issue should be resolved between the Township and the provincial government."⁸⁷⁴

No gas in third well

Staff Reporter The Province
October 31, 1993

Calgary-based Conoco Canada Ltd. says the third and final natural-gas exploration well drilled in the Fraser Valley has come up dry.

It said Friday that the well, in the Langley-Aldergrove area at Murray Creek, was drilled to a depth of 2,635 metres (8,600 feet).

"A thorough evaluation of this well failed to detect any zones capable of producing commercial amounts of natural gas," the company said.

Conoco and partners Stateside Energy of Calgary and Vancouver-based Dynamic Oil Ltd. will abandon the well and reclaim the site.

The first well was drilled in Delta in 1991, and the second well was drilled and abandoned earlier this fall.

Langley Advance, January 14, 1994

B.C. Companies whose services were utilized with respect to drilling two Exploration wells in Langley Township in 1993:

Husky Tank Rentals & Sales Ltd.	Tswwassen Best Western
Ladner Downs	Big A Super Suction & Flushing Ltd.
Sierra Construction (1982) Ltd.	Cantel
Shell Canada Products Limited	BC Hydro
Pinkerton of Canada Ltd.	Valley Water Services
Alnor Services Ltd.	Polar Industrial First Aid Service Ltd.
Atco Structures	Avis
Burns Development Ltd.	Priority Signs
A & A Anderson Tank Service Ltd.	Fabarc Mobile Service Ltd.
Western Canada Rent a Fence Ltd.	Coast Agri Ltd.
Aldergrove Trailer Park	Canada Safeway
Griffiths Crane	Dave Keillor Tractor Towing
Laidlaw Waste Systems	Custom Plastics
B.C. Tel	Stonehouse Enterprises
Team Manufacturing Ltd.	Coast Wholesale
Talisman Land Resource Consultants	Langley Best Western
Piteau Associates	Mullen Trucking
Dominion Steel Ltd.	Action Crane
McElhanney Engineering Services Ltd.	Field Water Well Drilling
Greater Vancouver Regional District	Transtec Data Services
Aldergrove Best Western	Rays Power Tongs Ltd.
Municipal District of Langley	Neilex Geotechnical Products Inc.
Sur Van Electric	Columbia Water Wells
EPP Electric Ltd.	Greyhound
West Shore Construction Ltd.	Matrix Projects Limited
ECL Envirowest Consultants Limited	Murray McIvor
Steels Industrial Products	Atkinson & Terry Insurance
Quaser Communications Ltd.	Various Restaurants,
Strait Express	Convenience stores
	and Service stations located in
	The Township of Langley.

conoco

Conoco Canada Limited on behalf of Dynamic Oil Limited, Stateside Energy Corporation and itself wish to extend our thanks to the numerous B.C. Companies listed above whose services were contracted for the drilling of the Campbell River and Murray Creek Exploration wells in the Township of Langley during the last half of 1993.

In total the drilling consortium has invested \$1,475,342.14 into the local economy as a direct result from its drilling operations.

(26w-1)

With canine-like instincts, the Fraser Valley petroleum consortium marked its territory by leaving behind its advertisement scents or marks of thanks

⁸⁷⁴ Gas drillers billed for service, Langley Advance, October 20, 1993.

With the concerns resurfacing in the media by Fraser Valley residents and provincial and municipal politicians in mid-1993 about the gas consortium's underlying motive for underground storage, Energy Minister Anne Edwards stated in her July 12, 1993, letter to Langley Township Mayor and Council that her Ministry was preparing a discussion paper on "underground storage in B.C.," and that the "paper should be completed and "circulated for public comment" this fall.⁸⁷⁵ Edwards initially stated in the B.C. Legislature on June 23, 1993, that, in tandem with the B.C. Energy Council reviewing the storage issue and "seeking public input over the summer on this issue," her Ministry "have proposed a provincewide study of storage," which is "likely to be put together within months."⁸⁷⁶

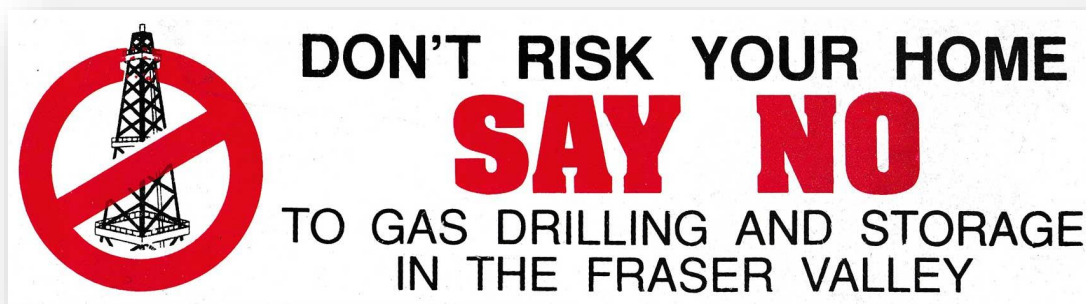
The Ministry's final discussion paper was released in April 1994, well after the consortium's two 1993 drilling sites in Langley and Aldergrove came up dry. In the April 20, 1994, edition of *The Abbotsford News*, *Gas storage ruled out – 'Friends' gain victory in a long battle*, reporter Natasha Jones wrote:

Underground storage of natural gas has been permanently ruled out in Langley. The decision was made in a discussion paper on the supply and deliverability of natural gas, prepared by the Ministry of Energy, Mines and Petroleum Resources.

Drilling for gas was vigorously fought by the 2,000 strong Friends of the Fraser Valley group which was formed four years ago. One of the Friends' prime incentives to fight drilling was their contention that the true agenda of a consortium of companies was to store natural gas in the ground, not to drill for it, as they contended, to meet growing demand for the fuel.

That storage was the real itinerary of Conoco Canada, Dynamic Oil and Stateside Energy Ltd. is reinforced by the ministry's paper. The paper noted that the companies drilled three wells in the Lower Mainland, two in Langley. It said: "Although the drilling target was natural gas, it was evident from the drilling results in the Langley area that there was insufficient caprock material to provide an effective storage seal, with the result that this area can not be considered prospective either for natural gas, or by extension, for underground gas storage."

Pat Lawrence, a member of the Friends, called the ruling "the most appropriate and intelligent decision considering all the information we gathered from around the world."



⁸⁷⁵ *Gas storage denied*, Langley Advance, July 30, 1993.

⁸⁷⁶ *Hansard*, Wednesday, June 23, 1993, Afternoon Sitting, Volume 11, Number 13, 2nd Session, 35th Parliament.

Appendixes A - E

Appendix A: Transcript of Margaret Ormston's July 9, 1990, Oral Presentation at the David Anderson Royal Commission Public Hearing in Chilliwack (Transcribed from a Commission audio tape)

Ormston:

"I am speaking as someone, like the gentleman over here, who also left the northeast part of the province.⁸⁷⁷ And my involvement with the oil companies started many years ago.

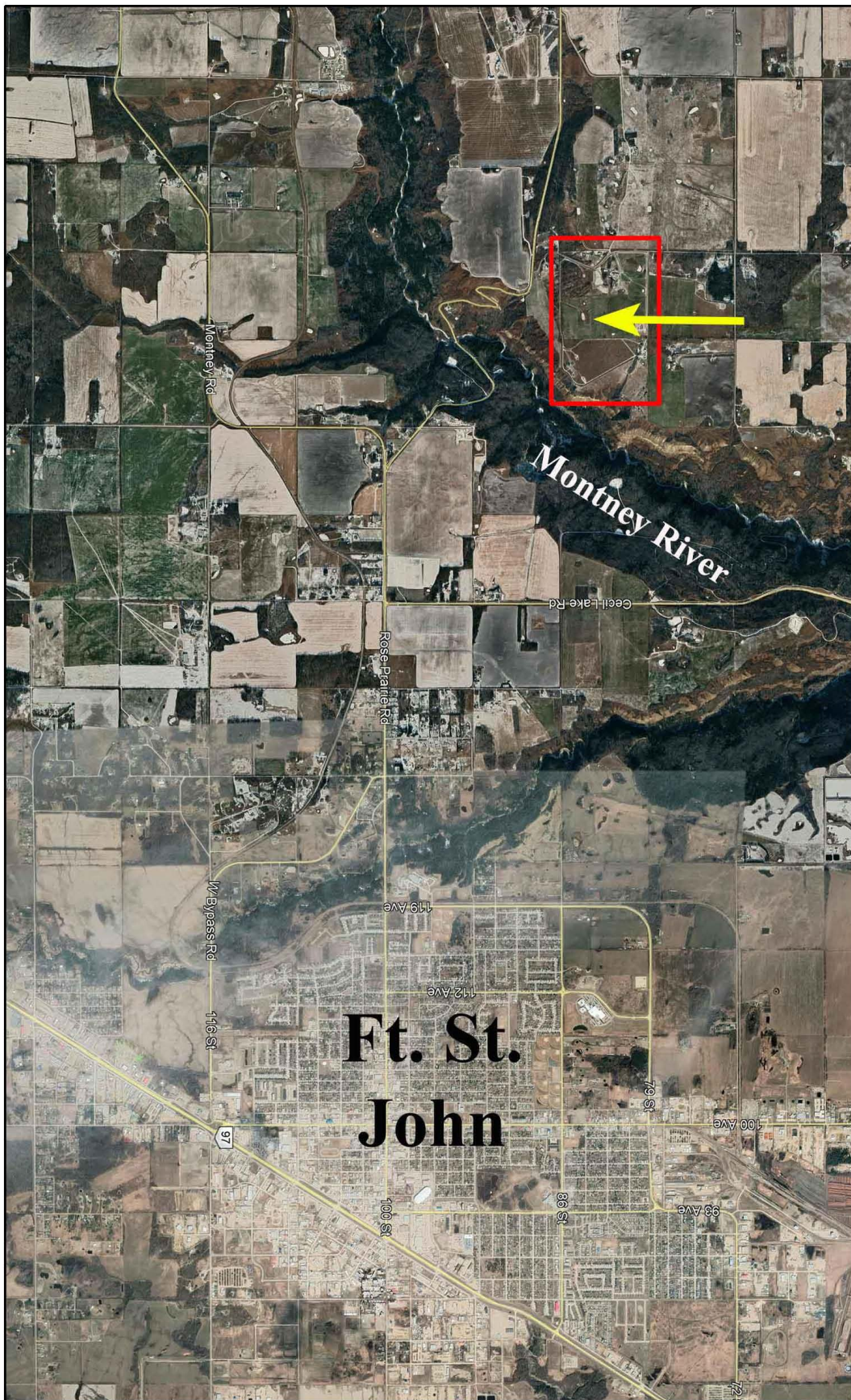
I bought a piece of property which was to me a most beautiful and desirable piece of property. And on it there was an old oil well that had been drilled in about 1959. I bought this property in 1974. And I was assured that it was a non-producer, that nothing would be done with it. But, within a couple of years of buying that property it had gone through several hands in fact, of small-time oil company owners in Calgary. Some of them produced it, some of them just sat on it. But it went on. It was never closed in. So, we had this original, very old oil well that was sitting there. And it was badly neglected because it was not a producer. The companies didn't have enough money to inspect it. It was not inspected by the department of Energy, Mines and Petroleum Resources [EMPR] on any kind of a regular basis. And about six years ago it did blow. And the formation up there consisted of oil and gas mixed together under pressure. Not enough to be productive, but enough to cause problems if they let the packing deteriorate. And out it all blew and contaminated fields and trees and some waterways. Now, oil contamination can be cleared up. The grass is burned away. However, I did lose a stand of trees to that blowout.

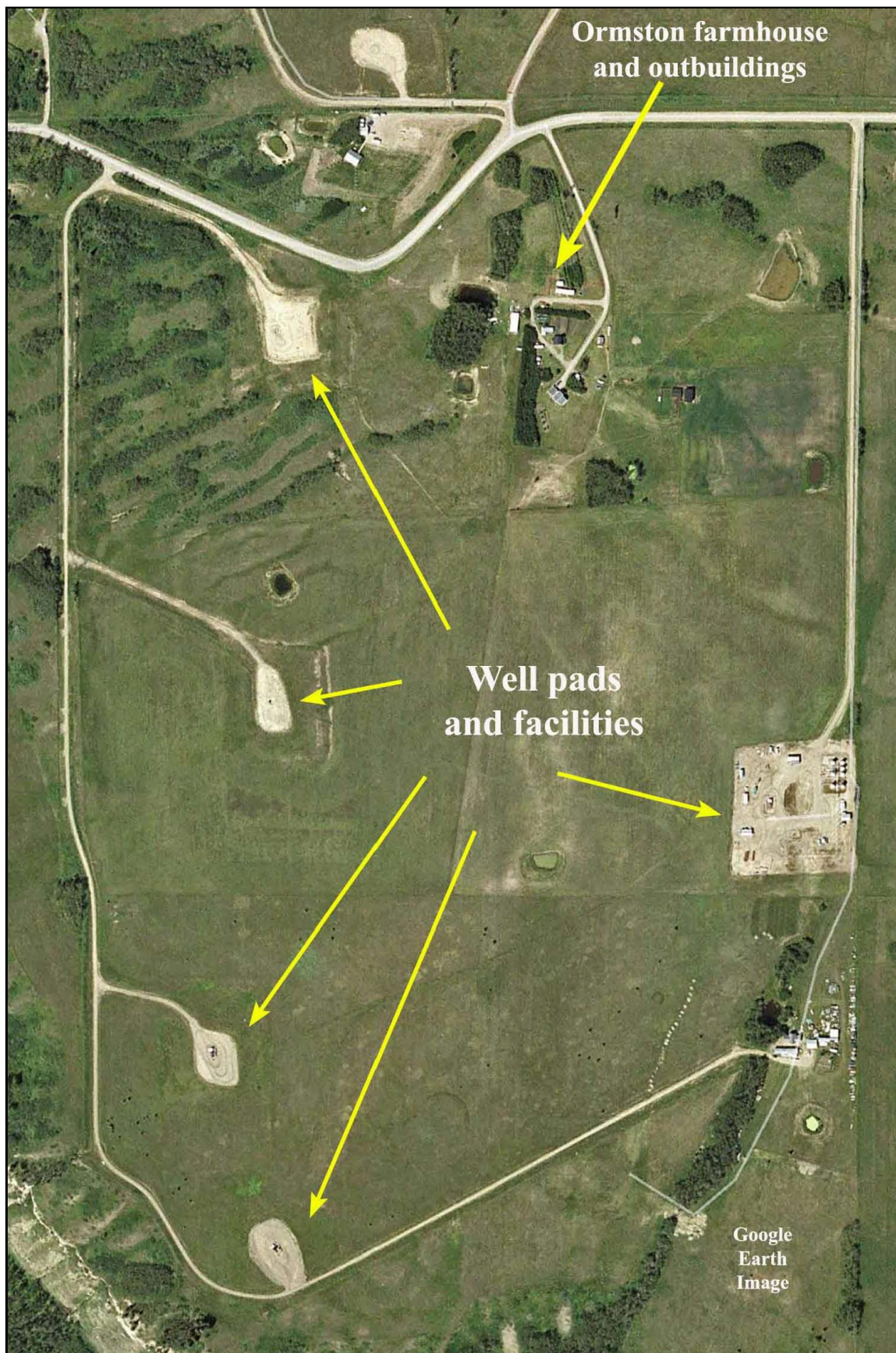


That particular well was produced intermittently for a few more years. A very poor producer, as I say. One owner after another who lavished pathetic care on it. And it blew again in the middle of the winter! And the inspection by the EMPR at that time was non-existent. In the middle of winter there was six feet of packed snowdrifts on the road into this non-productive oil well. And, in fact, it took two days for the road to be snow-plowed in to even attempt to stop this blowout. And a blowout is a very unpleasant thing. It roars. There was this constant roar that I could hear from my house of so heavily sulphurated oil and gas going into the air. The oil and sulphur mixture covered all the fence posts and the trees in the area. The ground was heavily contaminated. And although the company did a good, reasonable job of clearing it up, it did go downhill into a stock watering pond, which after that event was dead, and the water was totally unusable.

And it does disturb me that the Ministry of Mines and Petroleum gave very inadequate inspection to wells such as this, and the companies were allowed to, in fact, own installations and not maintain them in any way at all.

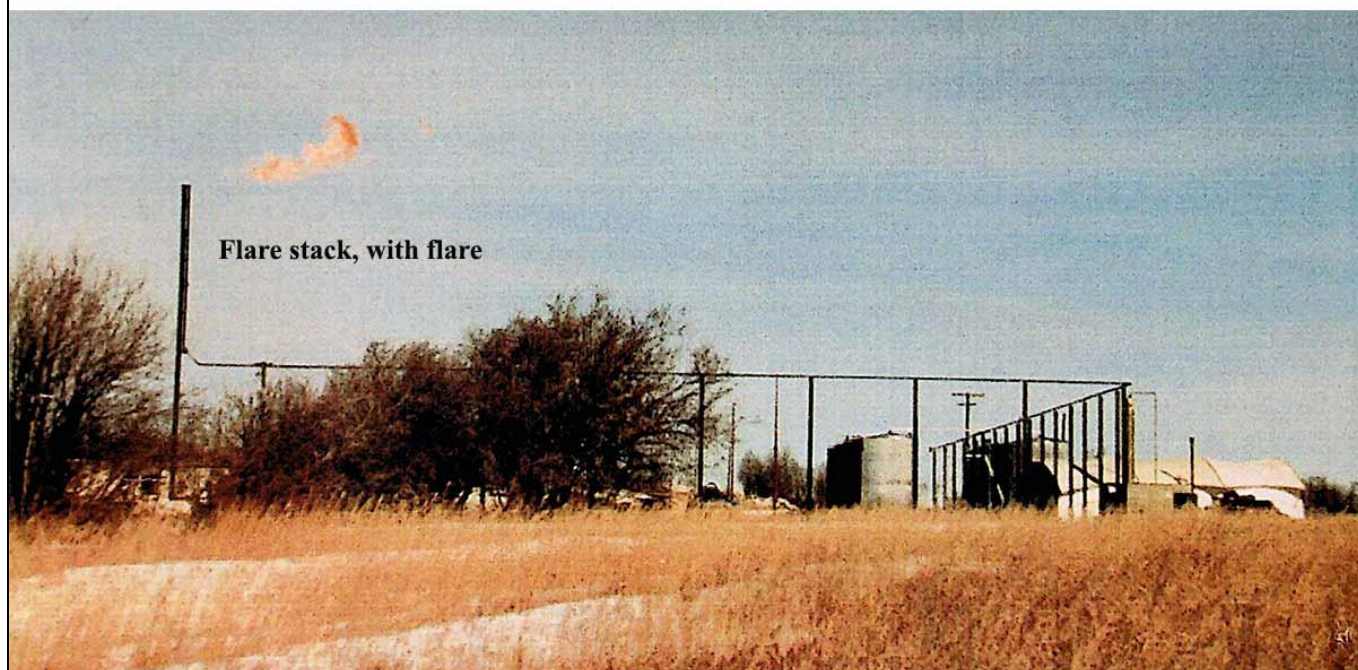
⁸⁷⁷ See Bonus Transcript, below.





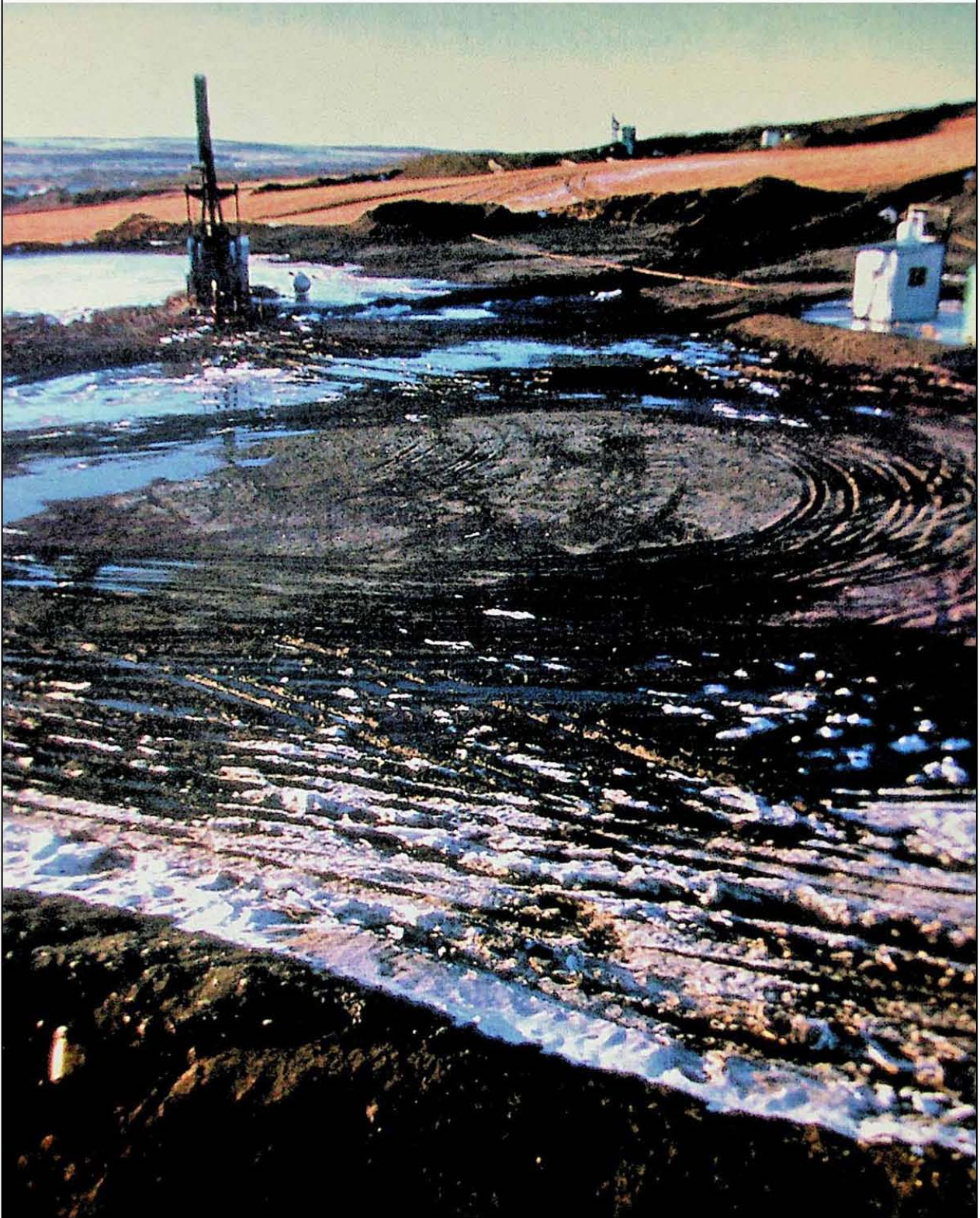
At the bottom of my property, perhaps as people can look at [the photos] afterwards, the property went as a sort of gentle incline hill into a very deep creek. And about ten years ago a [oil] well was dug in the bottom of that creek and a road put into it. Now, that road lasted two or three years and was washed out with the Spring. And to my knowledge that well has never ever been inspected, except from the air and by me on horseback. Now, that's a very small area of the north Peace part of the Province. There are 7,000 or so wells in the northeast. And, so, I have very direct knowledge of the lack of maintenance that is allowed by the present Ministry in the oil business in the northeast.

**Margaret Ormston's presentation photo
of her property, north of Ft. St. John**



I would just like to go on and say a few things as a landowner. I am sure that you all know by now, that under the *Mines and Petroleum Act* that entry into your land by exploration is compulsory. You have no right to stand against that. The companies would always wish, however, to negotiate with the landowner and arrange to put their leases in the most mutually pleasing area. But the mutually pleasing area generally pleases the industry, and the regulations of the Ministry of Energy, Mines and Petroleum which regulate the placing of wells for spacing, so that one owner doesn't extract oil and gas that might belong to another owner. So that for instance from a farming point of view you can't put a lease up against your section line because it goes too close to the adjoining sub-surface lease holders. So, all of the oil wells that I eventually had on my property were in fact in the middle of the fields. And as Mr. Anderson mentioned, this does raise considerable difficulties for farmers. And the farms up there are larger, generally grain farms. And recently they have gone into better road construction with a more gradual, not with a ditch on either side on the road, but just with a gradual rise which allows the combines to up and over the roads rather than having to go around the roads. But that is in the realm of large-scale grain farming. For other landowners I would also point out that the present regulations allow installations of the sizes that I show there [in attached photos], battery stations within 80 metres of a house, and 200 metres of an oil well. And that is both on the landowner's property and on your neighbour's property, so that your poor neighbour doesn't even get the benefit of the one thousand or so dollars a year for having four acres of his land wrecked. He gets nothing. But he gets the awful stench or noise from these compressor stations.

**Margaret Ormston's presentation photo
of her property, north of Ft. St. John**



The oil under my property was very influenced by a water injection program that was started six miles northeast of my area, where a company called Scurry [?] Rainbow injected water under pressure to improve the production of the faltering oil wells. And to their surprise, in fact, they moved the oil under my property which had previously had this poor producing well, and also in 1981 on, in fact, a dry well. And in 1989 a company became interested and directional drilled from a neighbour's property because I put up so many objections and was going to delay them considerably. They directional drilled from my neighbour under my house and got a real gusher. Now from then on there is no holding the companies, as the gentleman there rightly said, it is a Pandora's box. Manners go out of the window. They were entitled to drill, to put an oil well on every forty acres. As it happens about forty of my acres were over the creek, which meant I could in fact have an additional well besides the eight that they thought they might put on. Or, not an additional well, but on only 300 acres I could have 8 wells.

The other influencing factor was a royalty holiday for oil wells which came off in June 1989. Now lay people don't understand this terribly well. But the government, influenced very strongly by the oil industry, at times gives royalty holidays which are very beneficial to the oil industry. And the oil industry, if they have drilling and completion essentially to production by June of last year on the wells on my property got a three-year royalty holiday, which is very, very significant. So, I end up on this property with one directional well under my house, four large producing wells, a compressor station. The provincial government end up with nothing for three years. Now, I don't know how long this oil production will last. Although the rate is governed, I must say by regulations also. But who knows how long it will last?

And I do feel very strongly that royalty holidays encourage this kind of drilling which is in an established area. It is easy, cheap drilling. The intention of the government in giving royalty holidays was to encourage the industry to go into new and unproven areas. And, in fact, they did not. And the person that devised the royalty holiday scheme in the Ministry of Mines and Petroleum agreed with that, and this is Miss Vermeer.⁸⁷⁸ Perhaps we'll get an opportunity to talk to her.

I hope that you would have a chance to look at the photographs. An oil well production site is an incredibly ugly site. It's very heavily contaminated with oil. The topsoil is put aside, but I'm not really sure that after the production well has been going for some years whether that agricultural property is ever usable.

The other one or two things that I would point out from the photographs is that unwanted gas is presently being burned off in northeastern British Columbia rather than being pipelined. And this practice is condoned by the EMPR. There are two pictures of flares going, and most of the compressor stations and the flares can either be cleaning off condensate or the smaller ones are burning off unwanted gas from mixed oil and gas wells.

So, I have raised many points. I think that I personally on my 300 acres in Ft. St. John have more than adequate evidence of groundwater contamination. I had no water well because there never was a water well on the property. But peoples' water wells in the northeast of the Province are generally unusable although there are a few good spring wells, but that is about it. And I also saw two blowouts. Now, in the

⁸⁷⁸ Rebecca Vermeer appeared as a technical witness before the Anderson Commission on August 27, 1990, at the Town & Country Inn. Vermeer stated on that day: "I hold a Masters of Science Degree in Chemistry, and a Master of Arts Degree in Economics. I have worked with the Ministry as an Economist for ten years. I presently hold the position of Senior Policy Advisor with the Oil and Gas Policy Branch." (Proceedings, Volume 1, page 10)

information from the EMPR they said that there only have been two blowouts in the entire history of mining in British Columbia. I just find that hard to believe that they both occurred on my property.

So, in closing I would like to stress that the present permits that the industry have [for the Fraser Valley] are for both oil and gas drilling. There has been no offer from the companies to say, you know, we don't want to take you up on this oil production offer. They have licenses to drill for both oil and gas.

Thank you, Mr. Anderson."

Anderson: "Before you go, Margaret, just a couple of questions. You mentioned the area contaminated. Can you give me any idea of what the acreage might have been with the first time it blew out?"

Ormston: "I would say perhaps 200 yards by 300 yards, something like that."

Anderson: "And the second time in the winter was much the same?"

Ormston: "It was a different shape. It was much longer, and it did go down hill with the snow, unfortunately."

Anderson: "And then your stock pond that you had never used again."

Ormston: "Well that probably 200 yards from the blowout site. So, I do feel it is very important for Mr. Anderson to call field workers from the northeast part of British Columbia, particularly Mr. Johnson who is familiar with the problems in that area."

Anderson: "Sure. Okay, that's a very good suggestion. So, we'll get some people from the northeast and we'll be discussing with you some of the suggested names. And I have noted the royalty holiday which brings up an interesting question in theoretical economics, whether royalty is really a great way of collecting money by government. But anyways, you've raised a new point completely on the way of taxation which we perhaps will not have all the time in the world to look into. But it is a very interesting aspect of what are the true returns to the government as well as of course to the community at large outside of simply the government coffers."

CHILLIWACK MEETING JULY 9/90

C.25

COMMISSION ON FRASER VALLEY PETROLEUM EXPLORATION

I am presenting information to the Commission relating to my own experience in the north east of the province, where a very pleasing 300 acre property was turned very quickly into an undesirable industrial wasteland.

The points of discussion and emphasis include the following:

- 1) Compulsory entry.
- 2) Positioning of lease sites on a property is governed by
 - a) EMPR Regulations
 - b) Subsurface lease holders wishes.
- 3) Non applicability of the Agricultural Land Commission review process.
- 4) The influence of royalty holiday schemes in encouraging development in established fields rather than true exploratory areas.
- 5) The effects of royalty holidays on surface development i.e. rushed drilling programmes with little or no thought given to production planning.
- 6) Lack of inspection of readily accessible wells by EMPR personnel.
- 7) Ground water contamination.
- 8) Acreage requirements for so called drilling islands are regulated and increase exponentially with each well drilled.
- 9) Distance from residences.
- 10) The constant flaring of unwanted gas is a practice condoned by the EMPR in the north east.
- 11) The exploration licences for the Fraser Valley are for both oil and gas.

Margaret Ormston

Aldergrove.

Commission files

C-10

June 19th 1990

Margaret Ormston

The Commission on Fraser Valley Petroleum Exploration.

The proposal to store natural gas in the Aldergrove-Langley and/or Delta areas is the third storage proposal for the Fraser Valley in twelve years.

In 1978, the gas division of B.C. Hydro proposed aquifer storage in south Surrey on the Sunnyside upland north of 16th Ave between 148th Street and 152 Street. The entire water supply for the City of Whiterock was derived from wells within one kilometre of the site.

Of particular interest was the industry's plan to dispose of its drilling mud or slurry in an abandoned gravel pit on 20th Ave near 134th Street. Drilling mud additives may be methyl cellulose, potassium chloride, sodium hydroxide, oil, diesel or almost any chemical to hand.

The proposal is detailed in a report by Environmental Consultants to B.C. Hydro which I would like to ask the Commission to accept as an exhibit, attached to it the refusal by the then Minister of Energy Mines and Petroleum Resources to allow the storage application.

I would also like to present as an exhibit, an industry booklet, distributed this spring by Dynamic Oil and Conoco, titled the Search for Gas and Oil which explains, on page 34 the use of oil in drilling mud.

Mrs. Irene Breaks would like to add some detail on the 1978 proposal. The second B.C. Hydro Gas Division bid for storage was an above ground liquified natural gas project in the watershed behind Port Moody. In striking similarity to the present proposals, B.C. Hydro claimed huge savings for gas customers if only the residents of Port Moody would lie down, play dead and not worry about the possibility of being incinerated by a fiery ball of liquified natural gas as it came down the hillside when the tank ruptured. The residents were considerably upset by the plan

(2)

and raised many objections and in 1983 B.C. Hydro withdrew, hurt and unwanted and have since stored their gas at Jackson Prairie in Washington.

I ask the Commission to consider this information on two rejected storage proposals in the area and to conclude that such rejections are quite compatible with a continuing and comfortable life in Vancouver and the Fraser Valley.

Margaret Ormston.

JUNE 25, 1990, C-
LANGLAY

Commission files

June 25, 1990

COMMISSION ON FRASER VALLEY PETROLEUM EXPLORATION

I would like the Commissioner to know that I feel that the Petroleum Industry and in particular B.C. Gas has been grossly negligent in failing to make known to the people of the Fraser Valley the complexities and complications associated with underground storage of natural gas.

I will give a short history of a gas storage field in Wyoming which is given in a book by M.R. Tek which I know the Commissioner has in his office.

This aquifer storage area was developed in 1970 with one initial testing well and when this proved satisfactory the drilling of a further five wells as injection and observation wells.

Three more wells were drilled in 1972 and by 1973 with 3.5BCF in the inventory two more wells for injection and withdrawal were drilled, making a grand total of twelve.

In 1973, gas began blowing out around the casing of one of the wells and this was found to be due to corrosion of both the intermediate casing and the production casing inside it, caused by a chemical reaction with sulphide ions present in surrounding waters.

Two more wells were drilled in 1975, and in 1977 the leaking well was plugged and abandoned after attempts to repair it had failed. A replacement well was drilled and yet another as an aquifer observation well.

In 1978 gas was observed bubbling to the surface of an adjacent creek and pond, and in 1979 the fifteenth well in the area was drilled to locate a possible collecting zone above the reservoir.

Various tracers were injected into the reservoir in attempts to track the problem but in 1982, six years after the first evidence of gas migration, gas tagged with a tracer was still bubbling to the surface, although by that time it was taking five months to get there.

One can only assume from the simplistic information emanating from B.C. Gas that either they know absolutely nothing about gas storage or that they are determined that the residents of the Fraser Valley shall know nothing about it until they are faced with the necessity of evacuating their homes and farms as the reservoir gas migrates upwards.

This Commission sets out to gauge public opinion on various aspects of the exploratory petroleum industry, but despite

more than adequate opportunity, the gas industry has presented the important topic of gas storage in a most facile manner which is an insult to the people who live and work in the area, and, unless one is prepared to search out expensive books, there is no information available on which affected residents can base their opinion.

There is one remote storage facility in the north eastern part of the province which is in a depleted gas field, the Fraser Valley is no place to embark on new and hazardous techniques. Unlike many of the American states, B.C. has a huge supply of its own gas safely stored in natural reservoirs - why convert that to dangerous man made storage which is still separated from its consumers by a pipeline.

Two years ago there was a very cold spell here in the valley and many homes were without heat for several days, but all the gas storage facilities in the world wouldn't have made any difference, as the problem was Hydro power failure and without that no gas furnace functions.

I am sure that the Commission after consideration of technical information will have no difficulty recommending that no storage of natural gas be permitted in the Fraser Valley.

Bonus Transcript: Unidentified Speaker, July 9, 1990, Chilliwack Hearing

"Mr. Chairman. I just want to agree with the two past speakers regarding the earthquake. I was going to mention that, but I think that has been well covered.

I just moved from living 17 years in northeastern B.C., obviously where B.C.'s major gas exploration is done. And up there it is a problem, even in an area that is spread out, very spread out.

The farmers up there, and I know quite a number of them, have problems with the drilling rigs. Obviously, there is a great deal of racket. There is a great deal of smell at times. They are very disturbing. And this is when the farms are two and three sections [in total area], and they may have one well on their property, maybe one or two. So, you can see what it might be in a very restricted area such as we are looking at here.

It goes on and on. And once the well is capped, it quiets down. They are there fairly constantly after that, to check wells and so on like that. During drilling, there can be problems with the wells. This has happened in the Dawson Creek area and there was one in Alberta just a few years ago. The fumes can spread thirty, forty miles which they did in the Dawson Creek area and they had to evacuate most of the people from that area. In an area like Langley or Delta or any of those areas it would be a major disaster I would think with the area being heavily populated.

I don't think it is desirable. I say, I'm very much against any drilling activity in the area. This is an area where we are trying to encourage, or the B.C. government has been trying to encourage, people to come and live. It's a beautiful area of the world and that's the way we want to keep it. I don't feel the gas is required. Northeastern B.C., every year they find millions and millions, in fact, billions of cubic feet of gas every year. There is no need for drilling in this area at all at this point in time. In fact, as far as the drilling as it is required, and the storage that people have already discussed, is for export to the States. And obviously that has been brought up in the [news] paper the other day with the Free Trade Agreement, that our gas will markedly go up fifty percent in the next five years due to the American demand. Now, this not part of the subject, but I don't see why we should, why our gas prices should go up because of the American demand. It's our product. And I don't see why we should have to pay through the hat because the American demand will go up. And that is happening with this Agreement, and I think that is the reason for this [underground gas] storage. And I disagree with it on that point and obviously as a danger to the communities involved.

But I don't believe, as I say, that the farmers and the people that have the well on their property don't get anything for it. There is no, as it says here, "the benefits of exploration." There is no benefit. The farmer gets something to have the road put in, and it is a very minor amount per year, might be a couple a hundred dollars per year, and that's all they get! And they get all the disturbance, dust and fumes that go with it. And I don't think people down here should be willing to accept that in mainly residential and small farm areas. And even if they were going to get more, I don't think they would want it in any case. I don't think it is applicable. And I don't think for anybody to say acknowledge the bringing in of oil rigs in this particular area to me is ludicrous.

As I say, as far as any other benefits I don't feel ... Employment is short-term. And once the wells are in there is very few people involved. It's like a hydro-electric project: there's quite a few people involved for drilling, and everybody goes away, and then there's some people to keep an eye on things, and that is about it.

So, as I say, I am very much against the drilling in this particular area and I would do all I could possible to make sure it doesn't occur."

Appendix B: Transcript of Al Vickers' July 9, 1990, Oral Presentation at the David Anderson Royal Commission Public Hearing in Chilliwack

(Transcribed from a Commission audio tape)

Vickers:

"When it comes to underground storage, from which we have done research on, there are basically five situations that would be considered as suitable to not very suitable under which they will store gas. The situation down in the southern part of Washington State is in what is known as an aquifer system, and we will get to see that shortly.

Let me first of all say that as we got down to the site, we came across this which was on top of the underground storage itself. This is about a half a mile located from the actual gas plant. This is a very large rig, in my view, an extremely large rig. I couldn't believe how big it was. I would like you to keep



these pictures in mind, ladies and gentlemen, and later on go and see what Dynamic Oil has put up on the board for you, their little rinky-dink rigs. This rig, I don't know how many feet it is. We were told later by the people at the gas plant. And by the way, we did an awful lot of running around, we looked at the site, and asked a lot of people at the site many, many questions.

Let me click to the next [slide] one here. My good buddy Bill [Esdale]. Bill, will you show the people where am standing. That's me. I'm six feet [tall]. And that gives you some idea how tall this rig is. The people at the gas plant

told both Bill and I that it was an average size rig. So, I believe that either this kind of rig or one even larger would come into this [Fraser Valley] area. Bill, could you please go up there again and show that ramp. That ramp, which is at a horizontal angle at about 45 degrees, goes down right into the ground, right into the audience, and that is where the [drilling] pipes get loaded and pulled up. And I want you to know the [drilling] holes in the Fraser Valley have been proposed for a depth of 10,000 feet. Each of the pipes is 50 feet long. So, I hope you understand that would mean there would be 200 pipes that would have to be set down and dragged up, one by one, and put in place and drilled. And please don't forget that the [drilling] bits do get worn out. So, all those pipes, from time to time, have to be brought up, one by one, smashed down and the bit finally retrieved. A new one put on and it goes down again. The process goes on and on for approximately six to eight weeks we are told. We've been told other things too. But that goes on non-stop on the clock, 24 hours a day. Once they get going, they cannot stop. And this is for just one hole.

Next slide. Another shot of the same rig. You can see in the foreground all of the stuff that has to go with it. I'm sure it's much more than that as well when the rig is properly set up. This is some of the material

that is inherent with the project. They have to have all kinds of rigs coming in, brining in equipment. They have to have places where people can stay for a shift, and there is all kinds of bits and things hanging around like that. I don't know what those gizmos are, but I sure don't want them in my backyard, I'll tell you.

This is the rear end shot of the rig. It is just incredibly big. Bill, maybe you can show the people the little motors that run these things. Okay, there's one, two, three there. Conoco and Dynamic people have been up into our area several times and said, don't worry about the noise. These are electric drills, with all the noise abatements that any modern society can enjoy.

Perhaps I should show you the size of one of these babies. There it is there. That's me. That is one of those machines. It is a diesel electric generator. And they put three of those birds there. And that is what makes that rig go. Now, bear in mind, those are going 24 hours a day. We've been told by the same people who are here tonight that it's not too bad, the noise, it is just like noise talking within three feet of each other. It's no greater than that. There are two other generators that they need, and those generators of course are for auxiliary things that are going on. So, there are a total of five generators for each well that is being drilled. And please don't make any mistake that one well will go in, and then of course if they get favourable results, they will then pursue the drilling of any number of wells that they want for this gas storage.

[Next slide] Now, before I get into explaining what this is all about. That's actually a photograph of the Jackson Prairie site. They have 22,000 acres. And they [gas storage facilities] basically all look like that. It is very obvious to see when you go down highway 12 which heads east into Washington State. There are no people. There are no homes. You can see that. That's not true here in the Fraser Valley, and it's going to be increasingly less true as time goes on. We know that.

[Next slide] Here's another picture of the general area where ... Bill, perhaps you can show that little, what do you call that, Bill, a well head? Is this the one where there's debris all over that they say they don't have? Yes. There's a pile of debris there. Bill. You can see it just to the ... yes, again to the right. This is the stuff they say they don't leave around. You'll notice in general that the terrain is essentially the same. It is virtually wilderness compared to where we live. There's another little site with the well head popping out. And these well heads will pop out as many times as they want them to. And, as Margaret Ormston said tonight, they have access to your land and even though you don't want them there they will be there.

Bill Esdale: There are 72 gas well heads on this, what is referred to as a fairly small gas storage facility.⁸⁷⁹

Vickers: That's right. The gentleman that told us that also told us there will be ongoing drilling programs – ad infinitum – until they have as many as they choose. And they are acquiring more and more land. And they now have 22,000 acres of land with virtually nobody on it. Bill, perhaps if you don't mind, you can show them where the gas plant is. Way in the boondies, way, way in there. Okay, I don't know of anywhere around here. Certainly, where I live, where they are going to have that kind of a vacancy of

⁸⁷⁹ In the Commission's Preparatory Session submission, T-50, *Jackson Prairie Gas Storage Project, Chehalis Washington*, by Fred H. Wurden and Donald M. Ford, Washington Geologic Newsletter, Volume 5, Number 3, July 1977, the authors state that a total of 76 wells had been drilled by 1977.

land. Well, we thought we would tell you what the oil industry doesn't tell you. You see, folks, once they put the 72 to 100 holes in for every storage site. They then happen to leave with you in your backyard this huge storage processing plant. This is the plant, and I don't know all the details of it, that occupies anywhere from 10 to 15 acres. And it will have pumping systems in which we will take you through and you will be able to hear the noise. And those pumping stations, those pumping units, actually will pump gas into the ground and, in this case, 3,500 feet below the surface. And they will actually extract the gas. And those great big four things in the back, I guess there are about eight of them altogether, they are things ... what do they do Bill?

Bill Esdale: [Off in the distance of the auditorium, away from the microphone, Bill says something about sending the gas back down.]

Vickers: And, I did want to say too that this storage site is twelve miles south of Chehalis and 70 miles south of Tacoma, Washington. So, it is certainly far away from any populated area. It is not like having it five miles from Langley City, or near Chilliwack, or around your homes. It's not like that at all. That's why we are here tonight. We are not against the oil industry making a profit or trying to give us good fuel. We are against them exploring in the Fraser Valley. It's too late, that's the problem.

Next slide. Just to show you where we were. We are not fooling around here. We were at the Jackson Prairie gas storage. This is embarrassing. That's me with one of the chiefs. That's Frank Ross, and he's the chap that checks all the bells and whistles I don't know how often but I would imagine at least once every hour on the hour. This is I guess looking west of the storage site. You can see it is a considerable facility. And I now recall what I was going to tell you. This is the sort of thing that the oil company and gas companies don't really want to tell you much. You see, they leave this behind too, as well, with all those little things sticking out in the field behind. It's a huge plant. And this will be one of many.

Okay, that's me behind a gigantic beast. What's the name of that one Bill? It produces 1,200 horsepower. Starts with a "W." Ya, really big, really big. 1,200 horsepower in order to pump the gas down into the ground at depth, at various depths, but essentially no deeper than about 3,500 feet. That beast doesn't get used very much, but it's these things that get used. As you can see carefully, they are not very large, not as large as the last one. These are jet engines! They are fueled by natural gas. There are four of them. You can see four stacks all in this one shed along with that other red one: one, two, and three and four. They are jet engines. Each one of them produces 2,000 horsepower of energy. They can be going all at once. Perhaps we can hear one of them going here. [A loud jet engine whooshing noise is heard when Bill Esdale presses the play button on the tape recorder from an audio recording taken on the visit to the Jackson Prairie storage facility.] I'm going to talk over it [the sound] because it is kind of like that all the time. That's the kind of noise you are going to hear. I hope that you can hear me. That's outside. We are not inside yet. We are outside within about 50 feet of this storage gas shed. I want to go inside now. We are going into the larger shed. Here it is. [In the audio recording, you can hear a voice talking over the sound of the roaring jet engine.] Larger shed. That's it right there. There are two of these. These are 4,000 horsepower turbines. And that one was in operation that day. You can barely hear yourself on the outside. It is incredible. So, they have a total of six generators, four 2,000 horsepower and two 4,000 horsepower. And they are all be going at the same time.

[The audio sound of the jet engines is turned down.] I want to go backwards because we do leave that area. The noise will dissipate in a minute, and we'll be outside. Now this shot was taken when this noise

was going on. That is some of the spaghetti work they are going to leave behind in your Fraser Valley for each storage site. It's not quite as noisy. I don't know if you want to live with that. I don't!

Let's go back. This is interesting. We did some homework with the real estate people. Let me give you a quote. Mr. [Glen] Breaks went into the real estate office and asked the gentleman there, and he said, what about the real estate there? And this is a direct quote: "Doesn't do anything for the homes and the property around the field. Doesn't help it at all." He went on to say: "As far as the future development goes, forget having anything close as long as the field is there." We've referred to that [something in the slide photo] as the plywood house. We laugh but it is not funny, it is very sad.

Before I show you the rest of the slides, I would just like to tell you a few things that the gentleman in the slide that I took my picture with told me, and this is something the industry won't want to hear, but I'm sorry to the gentleman [referring to Bob Spring from Conoco], you'll have to stay and listen to it. The residences in the area had to be evacuated twice, not once but twice. In 1966 there was an evacuation, just like you will be in an evacuation zone. They call them "safety zones." I call them 'kill zones.' They are not safe. These people were evacuated because in 1966 the companies involved began drilling. Perhaps I can back up here. They began drilling more holes, actually just to the left of that picture, and just behind this particular [slide] frame. They drilled a hole. And according to Frank Ross, here's a quote, he said, "you know, when you are drilling you never know what is going to happen. Nobody knows what you are going to hit." Well, they hit the storage area by mistake at 3,000 feet. And the local farmer said the 3,000 feet of piping, four-inch thick, came flying up into the BOP. BOP is a Blowout Preventer valve, which the consortium, here tonight, says prevents all problems. He went on to say that all of the 3,000 feet of drill pipe went flying up into the rig, jammed the rig, jammed all of the dials and bells and rendered the BOP useless. It ran out of control for three days. They had to bring in reddidair to shut it off. And more bad news. There was a fog when it happened. It happened in the winter. And the gas snuck underneath the fog and had a very low-lying layer. Highway I-5 had to be shut at both ends for half a day. The town of Chehalis twelve miles north – the sound of the escaping gas could be heard in Chehalis. Is that the community you want to live in? That's with natural gas storage. Blowout number two. Well, you could say it was a blowout. They had to be evacuated again in 1972, because a three-foot mainline, almost dead ahead of us [referring to the slide photo], in the tree line straight ahead, blew. The neighbours who lived there in the 'kill zone' told the people at the plant they started to smell increasing supplies of gas. By the way, the gas smell is always there, as Irene [Breaks] has already told you. They ignored the local people. Well, what happened they figured was enough gas was escaping, and a rock went up and finally came down and struck the pipe, ignited the gas, and it burned for three hours out of control. Now, they were fortunately able to turn it off because it is in the pipeline. As I told you before, that you can turn off the pipeline from both sides, and finally it died down. But, in the meantime the farmer that we spoke to said he was evacuated to a place called Applevine, four and a half miles away, and he said: "You know I could read my newspaper from the flare at 3 a.m. in the morning." And he went on to say that 70 miles north from that the people in Tacoma could see the flare. And again, is that the community, are they the standards that you want to live with, and you want to have your children live with?

A few other things, and then we'll get on to the end of the slides and that's it. It's not as simple as you think. I mean, we have told you the truth. 72 holes, and more to come. Not one, but 72. And that's why I have said, your darned rights its going to be thousands of wells. There's no question about it. These people represent the scouts of the industry. There's a consortium of three. The leases go from Hope west

to Sechelt peninsula. If these people are successful and get their foot in the door there are dozens of companies waiting to come in.

Every once and a while, Frank Ross told us, these wells get clogged up, you see, with sand coming in. And every foot of pipe has to be replaced. So, from year to year, different wells get done. And he says, quote: "They have to pull up all the old steel casing and its just like drilling a new well." Now, there's from someone who knows. So, once your wells have been drilled, you can expect them to come back and drill them again, and again, and again. It is endless.

And, by the way, it leaks underneath. They have three layers: layer one, two and three. For simplicity, let's say [number] one is the top, and three is bottom. They daren't store anything in layer one because they have found a fracture between two and three. And that fracture is so severe that they have to circulate the gas from layer one down to layers two and three, because the PSI, the Pounds per Square Inch, is supposed to stay at 500 and it leaks into it at 800 PSI.

Well, as I said, the real estate people don't think much of the project either. God help the people around it too. The plywood house. Some more high-class real estate [referring to a film slide]. How about that? That is on the perimeter of this storage site. And how about that? [Another slide] The air conditioning is on. The door is open. It doesn't attract exactly big investors. Big bucks, no. I can assure you, it is not so.

I have another thing to play and that's the end of my slide show. This is where I come from, and these are the sounds where I live. [Audio recording of birds singing and an owl hooting in a quiet background] I don't want to lose that, and I know you don't want to lose yours. These [on the slide] are the fancy ads that the consortium put in the paper. But they don't know what the hell they are talking about. I feel this. Here is another home near us. It's not the real estate that is around the gas storage site. This is where Irene Breaks and Jack Breaks live too, the lady with the asthmatic condition. Why should she have to vacate. Think about people from B.C. Gas, and the rest of you. And the community. You are going to lose it, and you will never get it back. Thank you very much.

Appendix C: Glen Breaks' 'Three of the Thirteen Pages' of Notes Presented to the Anderson Commission

A LIST OF SOME STORAGE FIELDS BEARING A MORE THOROUGH INVESTIGATION

Redfield, Iowa had undetected leakage to an upper zone. An observation well was drilled into this zone, resulting into a severe blow-out. One farmer reports connate water percolating upwards into his water supply.

Leroy, Wyoming hard to get current facts on this field from non-industry sources, as all population has been removed from field.

Waverly, Illinois had cap rock leakage which eventually forced the company to completely abandon one horizon.

Manlove, Illinois same situation as Waverly. As Bob Means reported (supervisor at Manlove 1973-89) this abandonment resulted in the loss of several million dollars in 1970. Multiplied by a factor of at least ten for today's dollars.

Vincent, Iowa this field was operated for about ten years during the late 1960's and early 1970's, until a cap rock leakage problem forced complete abandonment of this field.

Troy Grove, Illinois - I have talked with a farmer who owns land here when this field was first developed. After several years of injection, he encountered a problem with his well. It would occasionally explode when his submersible pump would cut in. This would send the heavy planks on top of the well flying across his yard. One of these planks came down through the back window of his car on one occasion. He notified the gas company who were very concerned about the possibility of his home exploding, even though the farmer said he gave it little thought at the time. He said the gas company monitored his home for gas two to three times per day for several months. During this time they made several attempts to vent off the leaking gas. Finally, the company decided to "buy up the liability" as the farmer put it. He now lives away from the storage area, but still farms his original piece of ground which he leases from the company. He told me that the company had tried everything over the years but could not stop the leakage. They now vent the shallow water bearing zones to the atmosphere with holes bored down in the road ditches. He told me that he could light these vents at the end of the injection cycle in late August or September.

Brooksville, Illinois - Facility abandoned due to cap rock leakage encountered

Lake of the Woods, Indiana - Facility abandoned due to cap rock leakage encountered.

Crescent City, Illinois - Ray Hibner of the Illinois Department of Mines and Minerals told me he had plugged this storage off in 1982. He thought that it had leaked so much as to lose money.

Leaf River, Illinois - Storage facility abandoned - reason unknown at this date.

Herscher, Illinois - Long history of problems. The entire town of Herscher lost its water supply during initial injection. It has been reported that one home blew-up during these initial problems. Upper water-bearing zones remain charged with gas and unuseable to this day. Some leakage through the cap rock above the Galesville strata still takes place today, even though the facility is operating at greatly reduced pressure. Thirty-eight condemned farm water wells and several condemned village water wells are monitored for the presence of gas. When these water wells begin to show gas recycling operations are stepped up. They are currently recycling about two months per year. The exact location of leakage at Herscher has never been determined, even though all of today's methods of solving these problems have been tried. It has been stated by industry that it is possible with current methodology one could predict the problems that occurred at Herscher and avoid using such a structure. I question this view point on the basis that if current methods have been unsuccessful in locating the source of leakage, even after a problem is known to exist, how could the same methods locate a potential as yet unknown problem?

Ancona Garfield, Illinois - This is the largest aquifer storage field in North America, possibly the world. A.G. has been used in the 1990 text by Katz and Lee as a model by which other fields may be developed. The A.G. pump test evaluations are used to instruct today's engineers on this topic. It is considered to be a successful field and uses the Mount Simon Sand and Eau Claire cap rock, of which it is stated "it had a good record to hold gas in other reservoirs". In spite of favourable geology and development by the

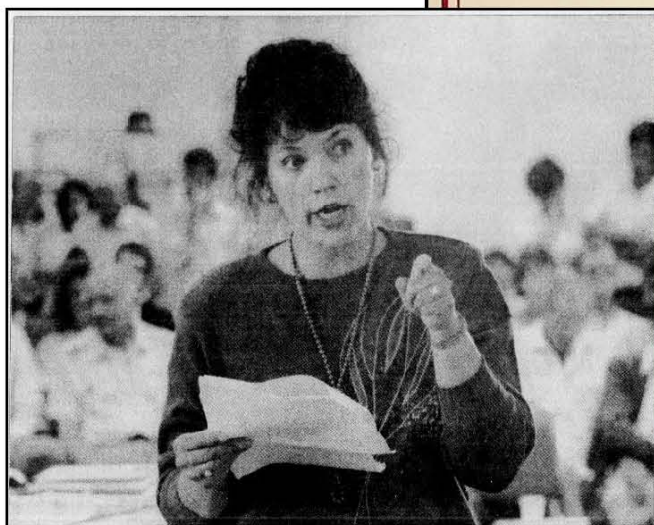


most knowledgeable and experienced people in the industry, A.G. has a severe problem in at least one location today. This problem began in 1971 nine years after development, and involves leakage into the upper zones and thereby into well water and through the soils killing corn in some areas. An attempt has been made to control this problem using uncased bore holes in road ditches down into shallow water bearing zones exactly as at Troy Grove. This has created another problem, that of drawing nitrogen rich and polluted ditch water down the open bores into the well water supplies below. For this reason the road side vents have now been sealed, resulting in more leakage through wells and corn fields. A.G. represents another facility where a problem is known to exist but the exact location of leakage cannot be pin-pointed nor plugged. As the city of Chicago is partially dependent on this facility for its gas supply it is unlikely that the facility will ever be shut down, even with this severe currently irreparable problem.

Ontario, Canada - The only Canadian attempt at aquifer storage was made here in the late 1960's. This attempt failed when it was found that gas was leaking into the upper zones.

Niagaran Reef, Michigan - Tom Bahumian, a storage specialist with the Federal Energy Regulatory Commission in Washington, D.C. told me of this incident. Michcon Gas Company developed this field in a depleted oil reservoir. They experienced lateral migration for some unknown reason, possibly due to over inflation. This uncontrolled gas found its way up some old unrecorded test holes which had been improperly plugged. The gas then travelled laterally just below the surface and contaminated an aquifer used for potable water supplies. Our own valley has had drilling activity for many years and may well have unrecorded holes.

**Appendix D: Gina Breaks' September 4, 1990, Oral Presentation
on Boycotting of the David Anderson Commission**
(From the Commission's Technical Proceedings' Transcripts)



WATER CONTAMINATION FEARED: Gina Breaks speaks at hearings into natural gas drilling Tuesday

PROVINCE OF BRITISH COLUMBIA
COMMISSION ON FRASER VALLEY PETROLEUM EXPLORATION
TECHNICAL HEARINGS

Langley Conference Centre
Langley, B.C.

SEPTEMBER 4, 1990

PROCEEDINGS

VOLUME 6

TRS

TOTAL REPORTING SERVICE LTD.

VANCOUVER, B.C.
(604) 682-1030

12 MR. MacADAMS: I think, Mr. Commissioner, we wish
13 bring this session to an end.

14 COMMISSIONER ANDERSON: Very good. Thank you.
15 We will meet again then at 7:00, with the experts on underground
16 storage.

17 --- DINNER RECESS AT 5:40 P.M.

18 --- PROCEEDINGS RESUMED AT 7:05 P.M

19 COMMISSIONER ANDERSON: Ladies and gentlemen, I
20 apologize for the lack of chairs. We started the day with
21 probably enough chairs for everybody, but then in a battle
22 between janitors we lost half our chairs, and they went to
23 another room for another meeting. We're trying to get them back
24 again, but if possible we'd like to start, and perhaps interrupt,
25 if necessary, when a few more chairs come along. If that's okay

TOTAL REPORTING SERVICE LTD.

1 with those of you who are standing, I have not forgotten about
2 you, and we'll try and get you --

3 MS. BREAKS: Mr. Commissioner, Mr. Commissioner.
4 My name is Gina Breaks, and on behalf of the Friends of the
5 Fraser Valley, I rise on a point of order and information.

6 COMMISSIONER ANDERSON: Please, go ahead.

7 MS. BREAKS: We object to the process of this
8 Commission on the following grounds:

9 In our initial discussion with you we raised
10 concerns about our lack of legal counsel and adequate funds to
11 meet the limitless resources of the gas and oil companies. We
12 were assured by you that proponents and opponents would be
13 treated equally, in that Commission counsel would, throughout the
14 technical hearings, ask all questions, and should intervenors
15 wish to ask questions they would be submitted in written form for
16 consideration by Commission counsel and put to the witness by him
17 if relevant.

18 There was no mention of the preparatory sessions,
19 and we were not aware that such were to be held until July 9th,
20 and were not aware of their significance until they were well
21 under way. It became obvious that the Commission's counsel's
22 line of questioning was being established during the preparatory
23 sessions, and his enquiries were influenced by the presence of
24 proponents and opponents who, except in one case, were allowed
25 equal access to witnesses, with, however, the startling inequity

TOTAL REPORTING SERVICE LTD.

1 of the proponents being invariably represented by legal counsel,
2 sometimes three in number, while the opponents had no legal
3 counsel whatsoever. Despite having been earlier assured by you
4 that such would be unnecessary.

5 There is no doubt that we would have been well
6 served by way of more effective questioning during that phase,
7 had we been encouraged to acquire legal counsel. On one occasion
8 during the preparatory sessions we were put in the invidious
9 position of having to write out our questions while the
10 proponents were able to use oral communication with your counsel,
11 and on occasion with the proposed witnesses.

12 Counsel for the proponents was deliberately
13 inflammatory and insulting to a member of the Friends of the
14 Fraser Valley on one occasion, and on another made grossly
15 inaccurate statements about the origin and content of a document
16 which counsel thought was in the hands of the Commission but
17 which had in fact been passed to B.C. Gas by the British Columbia
18 Utilities Commission.

19 The fact that the counsel for the Commission has
20 attended only two of the nine public meetings has resulted in
21 his being ill-informed about the concerns raised by the public,
22 and the particular topics that were requested to be dealt with
23 in the technical hearings.

24 We were informed by Commission counsel after the
25 preparatory sessions that in his opinion the evidence accumulated

TOTAL REPORTING SERVICE LTD.

1 up to that point, and which was to be presented at the technical
2 hearings, indicated that the petroleum industry's project could
3 be safely carried out in the Fraser Valley. Raising a very
4 strong apprehension of obvious bias.

5 This has been evident at the technical hearings
6 that we have been able to attend, which more resemble a public
7 relations exercise than any honest inquiry.

8 The procedure which the Commission adopted,
9 compelling us to full disclosure of our information prior to the
10 hearing, has placed us in a very disadvantageous position.
11 Despite our limited funds and despite the limited time at our
12 disposal, as most of us are involved in full-time occupations,
13 we were able to make significant enquiries in Illinois,
14 Washington, Michigan and Wyoming. But persons within the
15 industry in those areas who talked to us or suggested further
16 lines of investigation have been contacted by the proponents and
17 pressured and embarrassed into withdrawing their support.

18 The evidence of the Ministry of Energy, Mines
19 and Petroleum Resources, the self-proclaimed protector of the
20 public interest, has clearly shown that the Ministry regards
21 itself as the handmaiden of the petroleum industry, whose
22 principal objective is to advance the interests of the industry.

23 This philosophy is demonstrated by the Ministry's
24 admitted total absence of planning for the various possibilities
25 that could result from a gas storage program. This suggests

TOTAL REPORTING SERVICE LTD.

1 either complicity, negligence or deception by the gas companies,
2 all of which should have been rigorously pursued by Commission
3 counsel, rather than the lame and ineffectual cross examination
4 we witnessed last week.

5 Either the Ministry knew of the true intentions
6 of B.C. Gas and its associates, in which case it is guilty of
7 negligence, and also complicity in deceiving the public, or it
8 was itself deceived by the gas companies, in which case it was
9 a victim of a deliberate fraud by the very people who seek your
10 approval of the scheme they have concocted.

11 During the early discussions on the procedures
12 the Commission was to follow, we were assured that all aspects
13 of the problems raised in the public meetings would be
14 investigated by the Commission, and that persons from outside the
15 influence of the industry would be sought and subpoenaed, if
16 necessary. One has only to look at the schedule for the
17 technical hearings to see a large contingent of industry experts,
18 and an equally large number of government bureaucrats that will
19 between them bring a bias to the hearings.

20 No government employee would risk his future by
21 suggesting that any course of action other than that ordained by
22 the party line be followed. What is unforgivable is that the
23 Commission appears to have made no attempt to go beyond that
24 party line.

25 We asked you, Mr. Commissioner, to visit

TOTAL REPORTING SERVICE LTD.

1 Illinois, where there are several well-known problem underground
2 gas storage fields. Chicago and environs seem to have no appeal,
3 but a visit to Paris, France was made, which has fewer storage
4 facilities than a single company in the State of Illinois.
5 France has a known reputation for technical secrecy, but
6 doubtless more attractions.

7 We sent you a letter dated the 8th of August,
8 1990, directing your attention to a number of issues raised in
9 the public meetings but not scheduled to be dealt with in the
10 technical hearings. The issues covered such topics as real
11 estate values, insurability, air quality and health concerns.
12 These issues have been ignored, and do not form a part of these
13 proceedings.

14 During our initial conversations with you we were
15 assured that you would accept information from all sources, even
16 anonymous telephone calls. Although our industry contacts in
17 the United States have been silenced, we were able to find a lay
18 person from outside the industry with very relevant information
19 and experience. However, we were informed by Commission counsel
20 that evidence could be given by this person on one particular
21 topic only, made subject to obligatory cross examination by
22 industry counsel, and that all other information that this person
23 would be able to give would be repetitive and would be better
24 dealt with by other witnesses.

25 This is an extraordinary statement when one has

TOTAL REPORTING SERVICE LTD.

1 observed the well-rehearsed, note-perfect and virtually identical
2 renditions of the singular Mr. Ball, and Messrs. Tek, Griffith
3 and Thrasher.

4 Mr. Anderson, we will no longer acquiesce in,
5 nor condone this bizarre process you call a Commission of
6 Inquiry, which has taken on the appearance of a well-planned
7 whitewash. (INAUDIBLE DUE TO APPLAUSE) deceiving the general
8 public into believing that a full and proper inquiry has been
9 made into a dangerous and unprecedented proposal, which can only
10 be implemented at the expense of public safety, ground water,
11 agricultural land and lifestyle in the Fraser Valley.

12 We have so far taken part in this Commission in
13 good faith, relying on your assurances of fair play. But the
14 reality is so far removed from those assurances that we will no
15 longer play any role in your farce.

16 We invite members of the public present at this
17 hearing to join us in boycotting this and all future meetings of
18 this Commission as a sign of our determination not to be a party
19 to this whitewash. I invite you to join us in room 103 up the
20 stairs if you have questions, and we can bring you up to date on
21 what brought us to this decision.

22 Shame on you, Mr. Chairman.

23 COMMISSIONER ANDERSON: Naturally, after those
24 unsupported allegations I expect you would wish to leave. If you
25 would like to stay I would be willing to point out the names of

TOTAL REPORTING SERVICE LTD.

Appendix E: Information Lists of Anderson Commission Public Hearings, Preparatory and Technical Meetings

Below: Copy of Public Meetings List from Appendix D of the February 1, 1991, Final Commission Report

List of Inquiry Public Meetings

An initial public information session was held June 12, 1990 at the Kinsmen Community Centre in Aldergrove. The purpose of this session was for the Fraser Valley Gas Project to outline its proposed program. This session was followed by nine public meetings over the next month, where the public had an opportunity to participate. These meetings were held at the following locations and dates:

1. **Abbotsford/Clearbrook Public Meeting, June 18, 1990**
Ag. Rec. Building
Central Fraser Valley Exhibition Park
Tretheway & Maclure Street
Clearbrook
2. **Cloverdale/Surrey Public Meeting, June 19, 1990**
Community Centre Boardroom
Cloverdale Fairgrounds
6050-176th Street
Cloverdale
3. **Langley Public Meeting, June 25, 1990**
The Langley Conference Centre
20381-66th Avenue
Langley
4. **Tsawwassen/Delta Public Meeting, June 26, 1990**
Town & Country Inn
Junction of Highway 17 & 99
Delta
5. **Maple Ridge Public Meeting, July 3, 1990**
The Old Library Auditorium
11963 Haney Place
Maple Ridge
6. **White Rock Public Meeting, July 4, 1990**
The Upper Town Centre Hall
15150 Russell Avenue
White Rock
7. **Chilliwack Public Meeting, July 9, 1990**
Best Western Rainbow Country Inn
43971 Industrial Way
Chilliwack
8. **Mission Public Meeting, July 10, 1990**
The Mission Leisure Centre
7621 Taulbut Street
Mission
9. **Aldergrove Public Meeting, July 11, 1990**
Kinsmen Community Centre
26770 29th Avenue
Aldergrove

* All meetings commenced at 7:30 p.m.

Below: Copy of Preparatory Sessions List from Commission Records



Province of
British Columbia

Commission on
Fraser Valley
Petroleum Exploration

No. 105, 20611 Fraser Highway
Langley
British Columbia
V3A 4G4
Telephone: (604) 533-0667
Facsimile: (604) 533-5451

PREPARATORY SESSION SUBMISSIONS &/OR MISC

dated September 17/90

**Fax from - Peter Ostergaard
- Energy Resources Div - EMPR**

**Memo from - Lynne Ewing
- Senior Policy Advisor/Oil & Gas Policy Branch - EMPR**

Letter containing preparatory session schedule sent to:

**Peter Ostergaard - EMPR
Doug MacAdams
Glen Breaks
Al Vickers
Fraser Valley Gas Project
Victoria Office**

Preparatory session Submissions by:

- Item 1 - M.R. Tek for session Aug 19 from 1 - 3 p.m.**
- Item 2 - ConGas Engineering Canada Ltd for session Aug 24 from 7 - 9 a.m.**
- Item 3 - BC Gas for session Aug 14 from 9 a.m. - 9:30 p.m.**
- Item 4 - Conoco Canada Ltd for session Aug 21 from 12 - 9:30 p.m.**
- Item 5 - Gary Runka, Land Sense Ltd for session Aug 16 from 9 a.m. - noon**
- Item 6 - Robert D. Means for session Aug 20 from 1:30 - 3:30 p.m.**
- Item 7 - Bill Lingley for session Aug 16 from 6 - 8 p.m.**
- Item 8 - John R. Nichol for session Aug 13 from 3 - 4 p.m.**
- Item 9 - Dr. D. Weichert for session Aug 24 from 2:30 - 4:30 p.m.**

- Item 10 - Liam Finn for session Aug 29 from 9 - 11 a.m.
- Item 11 - Gary Runka for session Aug 20 for session Aug 22 from 11 a.m. - 9:30 p.m.
- Item 12 - Al Kohut for session Aug 17 from 9 - 11 a.m.
- Item 13 - Al Kohut for session Aug 17 from 9 - 11 a.m.
- Item 14 - Douglas Ball for session Aug 25 from 1 - 4 p.m.
- Item 15 - John Ahern for session Aug 23 from 6:30 - 9:30 p.m.
- Item 16 - Allan Dakin for session Aug 17 from 9 - 11 a.m.
- Item 17 - Mark Nida for session Aug 24 from noon - 2 p.m.
- Item 18 - Stephen Palmer for session Aug 24 from 9 - 10:30 a.m.
- Item 19 - Art Willms for session Aug 24 from 9 a.m. - noon
- Item 20 - J.R. Nichol for session Aug 13 from 3 - 4 p.m.
- Item 21 - E.J. Morin for session Aug 13 from 3 - 4 p.m.
- Item 22 - Conoco for session Aug 21 from noon - 9:30 p.m.
- Item 23 - Mark Bustin for session Aug (?)
- Item 24 - Kirk Miller for session Aug (?)
- Item 25 - Gary Ely for session Aug 28 from 9 - 11 a.m.
- Item 26 - Yannick Guerrini for session Sept 5 from 8 - 10 a.m.

Preparatory Submissions	Page 1
<p>Aug 10 - Prep Schedule given to: Al Vickers, Glen Breaks, Doug Mac Adams, FAX & C Peter Ostergaard, Fraser Valley Gas Project, Victoria</p>	(P.U. & courier)
<p>(1) Aug 13 - Summary by M.R. Dek - given by me to Doug Mac Adams, Al Vickers (Al Vickers requested Glen Breaks copy. He'll deliver it to him tonight.) spread & given to FVGP & Peter Ostergaard Courier</p>	
<p>(2) Aug 14 Congas - Mr. Westlow - given to Doug faxed to Peter & FVGP - couriered to FVGP / Peter / Al / Glen</p>	
<p>(3) Aug 15 - BC Gas 1-4 - given to Laura for FVGP, given to Al & also Doug. <u>Courier</u> to Peter & Glen</p>	
<p>(4) Aug 15 - cones - Given to Laura for FVGP given to Doug Mac Adams & Al Vickers <u>Courier</u> to Peter & Glen</p>	
<p>(5) Aug 16 - Gary Runka - outline of prep statement - given to Doug, Al & Laura (FVGP) <u>Courier</u> to Glen & Peter</p>	
<p>(- note all three sent in same envelope Aug 16 pick-up.)</p>	
<p>(6) Aug 17 - Robert Means Submission handed to: Doug Mac Adams, Bob Spring, Al Vickers</p>	

- Item # ⁶7) Continued: - Means Submission
faxed to Peter Ostergaard; Courier
to Glen Breaks & Peter Ostergaard.
- Item ⁷8) Aug 17 - Bill Kingley Submission
handed to Al Vickers, Doug
Mac Adams, Bob Spring,
faxed to Peter, couriered to
Peter & Glen.
- Item ⁸9) Aug 17 - John Nichol - Reports on
- ERCB -
various areas per conference call
request Aug 13 - faxed to Doug &
Peter - Handed to Glen & Bob Spring
Couriered to Glen, Peter & Doug.
- Item ¹⁰10) ~~New Prep. Session Schedule.~~
- Item ⁹11) Aug 20 - Geofacts - Dr Dieter Weichert
faxed to Doug & Peter Courier to Peter
Doug & Al Vickers handed to
Bob Spring
- Item ¹⁰12) Peace & Seasonic Risks Assoc. with gas
field exp development in Fraser Valley.
Liam Zinn - Handed to Bob Spring faxed to Doug &
Peter Courier to Al, Doug & Peter
- Item ¹¹13) Land use Overview - Tony Kurka
handed to Doug, Bob Spring Courier
to Al Vickers, Glen Breaks & Peter
- Item ¹²14) Ground water program - Al Kheub
Handed to Doug, Bob Spring Couriered
to Peter, Al & Glen.

Prep. Submissions

Page 3.

- ~~Item 13~~ ~~However, not part of Submission~~ Ostergaard
Item 15 - Letter to Tony from Peter Fogarty.
Handed to Doug & Bob Spring
134 Courier to Glen, Al & Peter
Item 16 - Guidelines for min. Standards
- Al Kehut handed to Doug,
Bob Spring courier to Al,
14 ~~13~~ Glen & Peter
Item 17 - Ball Associates - 3 part report
handed to Bob Spring &
Doug by Tony Aug 21 handed
to Peter Ostergaard (Bon Van Oert)
(Courier ~~William~~ Elizabeth
Aug 23 To Al Vickers & Glen
Breaks)
Item 15 - John Ahern report - Courier to
Al Vickers & Glen Breaks via
Elizabeth ~~William~~ Aug 23 handed
to Bob Spring, Doug & Peter Ostergaard.
Item 16 - Al Hakin - Piteau Associates
Courier via Elly or Hill to
Al Vickers & Glen handed to
Doug, Bob Spring & Peter Ostergaard.
Item 17 - Moody & Associates - Mark Hiden
US Analysis report ~~submitted~~ given
to Al, Glen by Tony (Al's given to
Glen for Al) handed to Doug
& given to Peter on Aug 27

Rep. Submissions

Page 4

- Item 18 - Steven Palmer report
handed to Glen & Al at home
by Ed. Aug 23. Given to
Doug & ^{given} handed to Peter ~~Aug 27~~
Aug 27
- Item 19 - West Coast Energy - ART Williams
~~given~~ ^{given} to Peter Aug 27, given to
Beh Spring & Doug A24, handed to Glen A25
by Tony who gave him A15
copy & give to Al.
- Item 20 - ERCB - material requested at
Aug 13 Conf call - J.R. Nichol
~~handed~~ to Peter Aug 27 handed
to Glen A25 by Tony he gave
him A15 copy as well. Handed
Doug & Beh Spring their
copies A24
- Item 21 ERCB - E. J. Merin report - given to
Al, Doug, Glen, Peter, Vic. ~~Aug~~

- Item 22 CQ Engineering - Bob Spring
Submission - Copy given to Al &
Glen via Tony copy given Doug,
(Bob Spring) by Tony copy given to
Peter Ostergaard Aug 27
- Item 23 Bustin Report - Given to Doug,
Al, Glen, Peter, Bob Spring via Tony
early August.
- Item 24 Kirk Miller Report - given to Doug,
Al, Glen, Bob & Peter at hearings
- Item 25 Contract between B.C. Gas &
Wash. water power company
- Release of Jackson Prairie Storage
Capacity. Given Al, Glen, Doug,
Bob & Peter at hearings.
- Item 26 Washington water power submission
Given Al & Glen on Aug 25 by Tony
Given Peter, Doug & Bob theirs on Aug 27
- Item 27 Sofregay - Yarnick Lining
Given to all at the Prep Assoc.

List of Technical Hearings, Witnesses and Subjects Discussed

Sixteen technical hearings took place between August 27 and September 6, 1990. In the week of August 27-31, technical hearings were held at the Town & Country Inn, Junction of Highway 17 and 19, Delta. In the week of September 4-6, technical hearings were held at the Langley Conference Centre, 20381-66th Avenue, Langley.

Technical Hearing 1, August 27, 1990

Witnesses:

Dave Johnson, Ministry of Energy, Mines and Petroleum Resources
Bruce Hanwell, Ministry of Energy, Mines and Petroleum Resources
Gerald German, Ministry of Energy, Mines and Petroleum Resources
John MacRae, Ministry of Energy, Mines and Petroleum Resources
Bou van Oort, Ministry of Energy, Mines and Petroleum Resources
Joan Hesketh, Ministry of Energy, Mines and Petroleum Resources
Rebecca Vermeer, Ministry of Energy, Mines and Petroleum Resources
Ken Kindjerski, Ministry of Energy, Mines and Petroleum Resources

Subjects Discussed:

Ministry Overview
Petroleum Geology in British Columbia

Technical Hearing 2, August 27, 1990

Witnesses:

Gary Runka, G.G. Runka Land Sense Ltd.
Kirk Miller, Agricultural Land Commission

Subjects Discussed:

Land and Water Use Overview in the Fraser Valley

Technical Hearing 3, August 28, 1990

Witnesses:

John MacRae, Ministry of Energy, Mines and Petroleum Resources
Dave Johnson, Ministry of Energy, Mines and Petroleum Resources
Bou van Oort, Ministry of Energy, Mines and Petroleum Resources
Gerald German, Ministry of Energy, Mines and Petroleum Resources
Bruce Hanwell, Ministry of Energy, Mines and Petroleum Resources
Harold Larson, Ministry of Energy, Mines and Petroleum Resources

Subjects Discussed:

Geology
Petroleum Title in British Columbia
Petroleum Engineering and Operations in British Columbia

Technical Hearing 4, August 28, 1990

Witnesses:

Dave Holowachuk, Conoco Canada Ltd.
Ed Nordquist, Conoco Canada Ltd.
Bob Spring, Conoco Canada Ltd.
Bruce Hanwell, Ministry of Energy, Mines and Petroleum Resources
Dave Johnson, Ministry of Energy, Mines and Petroleum Resources
Ken Kindjerski, Ministry of Energy, Mines and Petroleum Resources

Subjects Discussed:

Groundwater Protection
Drilling Methods Proposed by the Consortium

Technical Hearing 5, August 29, 1990

Witnesses:

Allan Dakin, Piteau Associates
Hugh Liebscher, Environment Canada
Al Kohut, Ministry of Environment

Subjects Discussed:

Groundwater and Hydrological Issues

Technical Hearing 6, August 29, 1990

Witnesses:

Dr. Dieter Weichert, Pacific Geoscience Centre
Dr. Liam Finn, Department of Engineering, University of British Columbia
Dr. Stephen Palmer, State of Washington

Subjects Discussed:

Seismological Risk and the Impact of Seismological Happenings on Petroleum Installations

Technical Hearing 7, August 30, 1990

Witness:

John Ahern, Legal Consultant

Subjects Discussed:

Regulatory and Statutory Frameworks Governing Exploration, Drilling, and Production of Hydrocarbons and Storage of Natural Gas

Technical Hearing 8, August 30, 1990

Witnesses:

Graham McCredie, United Resource Safety Ltd.
Bob Spring, Conoco Canada Ltd.
Ed Nordquist, Conoco Canada Ltd.
Dave Johnson, Conoco Canada Ltd.
Ken Kindjerski, Ministry of Energy, Mines and Petroleum Resources
Bruce Hanwell, Ministry of Energy, Mines and Petroleum Resources
Harold Larson, Ministry of Energy, Mines and Petroleum Resources

Subjects Discussed:

Emergency Response Plan

Technical Hearing 9, August 31, 1990

Witness:

Gary Ely, Washington Water Power Company

Subjects Discussed:

Underground Storage of Natural Gas- Economics
Role of Underground Storage in the Pacific Northwest

Technical Hearing 10, August 31, 1990

Witnesses:

John Nichol, Alberta Energy Resources Conservation Board
Emil Morin, Alberta Energy Resources Conservation Board

Subjects Discussed:

Sour Gas, Blowouts and Regulations for Safety

Technical Hearing 11, September 4, 1990

Witness:

Art Willms, Westcoast Energy Ltd.

Subjects Discussed:

Description of the Westcoast Gas Delivery System from the Peace River
Economics of Gas Transmission and the Role of Storage

Technical Hearing 12, September 4, 1990

Witnesses:

John Thrasher, BC Gas Inc.
Robert Stepan, BC Gas Inc.
Patrick Lloyd, BC Gas Inc.

Subjects Discussed:

Introduction to the Storage Proposal

Technical Hearing 13, September 4, 1990

Witnesses:

Howard Griffith, TXG Consulting Ltd.
Paul Dubois, TXG Consulting Ltd.
Dr. Rasin Tek, University of Michigan

Subjects Discussed:

Underground Storage of Natural Gas
Problem Areas and Operating Requirements

Technical Hearing 14, September 5, 1990

Witnesses:

Ivan Cuthill, Tecumseh Gas Storage Ltd. and Consultant to Consumers Gas
Vince Grass, formerly with Jackson Prairie Storage Facility
Yannick Guerrini, Gaz de France