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ENOCH CREE NATION



ENVIRONMENTAL LIABILITIES

DATA & CLAIMS RESEARCH & ANALYSIS

JUNE 2024

James Graham CEO & Alexis Pappas CIO, GuildOne Inc.
Suite 944, 333 5th Avenue SW Calgary, Alberta

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Environmental Liabilities

- 2 Canada's failure to adequately prepare for and address end-of-life issues for oil
- 3 and gas wells has a significant detrimental impact on First Nations ability to
- 4 exercise Treaty rights to use of their land and traditional territories. Additionally,
- 5 the cumulative impact of industrial and urban development is now the subject of
- 6 several First Nations claims on the grounds that it interferes with the ability to
- 7 exercise Treaty rights and entitlements to their land.

Well Liabilities & Orphaned Wells

- 9 In Alberta, an estimated 10,000 wells are officially considered to be "orphaned",
- with no ability to enforce Canada's "producer pays" decommissioning requirements.1



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¹ https://thenarwhal.ca/aer-orphan-wells-documents/

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Suspended & Inactive Wells

- 2 A 2020 report found that temporarily suspended wells, which are not producing but
- 3 not subject to expensive abandonment and reclamation processes, totalled almost
- 4 100,000 in Alberta. Described as "zombie wells" by the New York Times, these
- 5 wells exist in a grey zone that allows them to avoid regulatory enforcement of end-
- 6 of-life liabilities through the indefinite suspension period permitted under Alberta
- 7 regulations.²

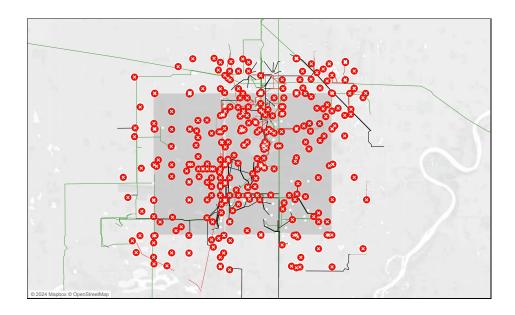


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² https://www.nytimes.com/2020/10/30/climate/oil-wells-leak-canada.html

WELL & SITE ABANDONMENTS



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Remediation & Reclamation Certification & Exemption

The Alberta Energy Regulator (AER) reported a \$33 billion funding requirement for the remediation of Alberta's 466,000 conventional wells. However, the total number of potential well liabilities is predicted to be far higher. The Alberta government holds a reported \$295 million (2023) in security from conventional oil and gas producers to pay for well decommissioning and reclamation, but a 2018 report by the AER and members of industry estimated the full cost of reclaiming conventional

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well sites at \$130 billion³.

³ https://thetyee.ca/Analysis/2023/10/24/Alberta-Abandoned-Wells-Crisis/



What Led to Alberta's Abandoned Wells Mess?

Oil and gas companies should be paying to remediate well sites. But three regulatory failures let them wriggle off the hook.

Shaun Fluker, Drew Yewchuk and Martin Olszynski / 24 Oct 2023 / The Conversation

Shaun Fluker and Martin Olszynski are associate professors of law at the University of Calgary, where Drew Yewchuk is a lawyer at the Public Interest Law Clinic. This article was originally published by the Conversation.















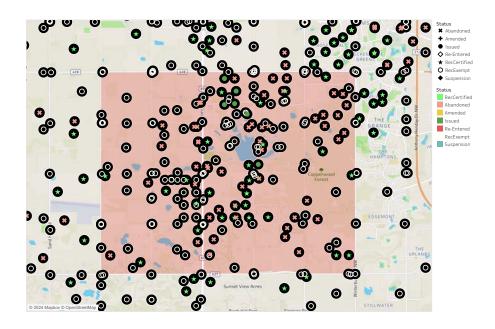
25 Comments



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AER REMEDIATION & RECLAMATION PROGRAMME



End of Life Well Liabilities

- ECN lands are one of the oldest productive oil and gas regions in Alberta and have significant legacy pollution dating to the 1950s. This includes an estimated 240 suspended or decommissioned wells, X of which have been exempted from full reclamation.
 - Impacts from Abandoned and Orphaned Infrastructure

 Damage from orphan, zombie, and improperly abandoned oil and gas wells includes
 groundwater contamination, the health and environmental impacts of methane and
 other hazardous gas leakage, and the inability to use land for productive economic
 purposes such as agriculture, housing, and meeting other needs of the
 communities.

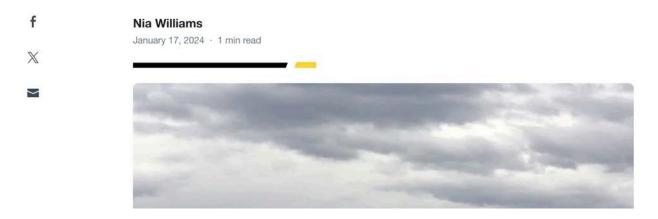
CLAIM DATA RESEARCH & ANALYSIS

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- Return of Funds from Site Rehabilitation Program
- 2 In 2020, the Government of Canada launched a \$1.7 billion fund to address the
- 3 remediation costs of for BC, Alberta, and Saskatchewan. Under Alberta's Site
- 4 Rehabilitation Program, a portion of this funding was distributed to remediation
- 5 companies in 2021. By 2022, the funding had been spent, apart from \$130 million
- 6 which is due to be returned to the Federal Government and is the subject of First
- 7 Nations efforts to access it to support further remediation on reserves.



Canada's oil province, Alberta, cleaned up 9% of inactive wells



Access to Remediation Funding

Through this funding and remediation program and the actions of producers in 2022, only 9% of designated inactive or orphan wells in Alberta had reportedly been remediated by 2023.4 While \$100 million of Alberta's total \$1 billion in Federal funding was allocated to well rehabilitation on First Nations lands, this represents a small portion of the overall environmental liabilities from legacy oil and gas development on reserves.

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⁴ https://ca.finance.yahoo.com/news/canadas-oil-province-alberta-cleaned-220247719.html

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Mismanagement of Rehabilitation Funding

- 2 The distribution of Alberta's rehabilitation funding has drawn criticism, and the
- 3 effectiveness of the program is unclear. More than half of the funding was provided
- 4 to large oil and gas producers and there is no data available to support its effective
- 5 use. According to an inquiry made by Senator Paula Simons to the Parliamentary
- 6 Budget Office, which distributed the funds, there is no evidence that a single
- 7 orphan well was remediated using these Federal funds. 5Sites Decommissioned but
- 8 not Reclaimed
- 9 Many sites that have been decommissioned have not been fully reclaimed, and the
- 10 sites are polluted with old equipment, infrastructure, land damage and
- 11 modifications, and potential leakages of dangerous gases like methane and
- 12 hydrogen sulfide from outdated or improper remediation.

CALGARY News

'What exactly did we get?' Alberta senator questions hundreds of millions to clean up orphan wells

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⁵ https://calgary.ctvnews.ca/what-exactly-did-we-get-alberta-senator-questions-hundreds-of-millions-to-clean-up-orphan-wells-1.5792062

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End of Life Asset Reclamations

- 2 Backwoods Energy Services, a First Nations owned reclamation firm, was provided
- 3 with funding from Alberta's Site Rehabilitation Program to reclaim 56 wells on ECN
- 4 lands in 2020. However, significant liabilities remain, to the detriment of the use of
- 5 the land by ECN farmers and the community. X number of wells on ECN, including X
- 6 active and X suspended, are currently owned by small producers who have
- 7 questionable financial ability to fund the full costs of future reclamation.

Environmental Reconciliation

- Canada's failure to adequately prepare for and address end-of-life issues for oil and gas wells has a significant detrimental impact on First Nations ability to exercise Treaty rights to use of their land and traditional territories. Additionally, the cumulative impact of industrial and urban development is now the subject of several First Nations claims on the grounds that it interferes with the ability to
- 14 exercise Treaty rights and entitlements to their land.

Aggregate Impacts of Oil & Gas Liabilities

The full scope of the impact of oil and gas liabilities on ECN lands requires an analysis of important factors including the state of pipeline infrastructure and decommissioned wells and resident potential gas leakages, the terms under which some wells were exempted from full rehabilitation requirements, and the costs of fully remediating remaining equipment, infrastructure, and damage to the land such as contamination and deforestation.

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Legacy Pollution

- 2 Recent First Nations claims are establishing the degree to which the Federal
- 3 government and its agencies can be held liable for the cumulative effects of
- 4 industrial development and inadequate regulations on the ability of Indigenous
- 5 communities to exercise their Treaty rights.

Cumulative Impacts of Industrial Development

- 7 In 2021, the Blueberry River First Nation in British Columbia, signatories of Treaty
- 8 8, successfully won a Supreme Court of British Columbia case that established that
- 9 the Province had permitted "the cumulative impacts of industrial development to
- 10 meaningfully diminish Blueberry's exercise of its Treaty rights."6

The Future of Treaty Interpretation in Yahey v British Columbia: Clarification on Cumulative Effects, Common Intentions, and Treaty Infringement, 2023 CanLIIDocs 876

Author(s): Robert Hamilton and Nicholas P. Ettinger Source(s): University of Ottawa (www.uottawa.ca)

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Citation: Robert Hamilton and Nicholas P. Ettinger, The Future of Treaty Interpretation in Yahey v British

Columbia: Clarification on Cumulative Effects, Common Intentions, and Treaty Infringement, 2023 54-1 Ottawa Law Review 109, 2023 CanLIIDocs 876, https://canlii.ca/t/7n3xt, retrieved on 2024-05-02

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⁶ https://www.canlii.org/en/commentary/doc/2023CanLIIDocs876

1 Environmental Damages to Treaty Lands

- 2 The impacts referenced in Yahey v British Columbia include damage to lands,
- 3 forests, waters, and wildlife that interfered with the Nation's rights, such as to hunt,
- 4 fish, and trap, by taking up an excessive amount of Treaty lands for development,
- 5 including for logging, roadways, oil and gas, and urbanization.
- 6 Yahey v British Columbia was a landmark decision that established, for the first
- 7 time, that government could be held accountable for the broad impacts of industrial
- 8 development on Treaty rights rather than the impacts of specific regulations or
- 9 activities. The outcome of the court decision was a new set of requirements for the
- 10 Province to ensure that regulatory regimes adequately account for and protect
- 11 treaty rights. British Columbia chose not to appeal the decision.⁷

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⁷ https://www.mandellpinder.com/yahey-v-british-columbia-2021-bcsc-1287-canlii-case-summary/

Insights >

Yahey v British Columbia, 2021 BCSC 1287 (CanLII) – Case Summary

On June 29, 2021, the British Columbia Supreme Court released its decision in <u>Yahey v. British Columbia</u>. This case is significant because it represents the first time that a court in Canada has found treaty infringement based on the cumulative effects of development within a First Nation's territory.



Photo credit: Doane Gregory

OVERVIEW OF THE COURT'S DECISION

Blueberry River First Nations ("Blueberry") is a Dane-zaa and Cree community located in the Upper Peace River region in what is now northeastern British Columbia. Blueberry is a party to Treaty 8, having adhered to the Treaty in 1900. Since adhering to the Treaty, Blueberry's territory has been highly impacted by industrial development of all kinds.

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Prevented Use of Traditional Lands

- 3 The Yahey decision was followed by a court case initiated in 2022 by Duncan's
- 4 First Nation, an Alberta Treaty 8 signatory located on IR No. 151A and IR No. 151K
- 5 in northwestern Alberta near Peace River. The Statement of Claim filed with the
- 6 Queen's Court Bench advances similar grounds to Yahey, including that the
- 7 cumulative impact of industrial development has prevented Duncan's using its
- 8 traditional territories for hunting, fishing, trapping and other cultural activities.

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⁸ https://www.dailyoilbulletin.com/article/2023/3/23/treaty-rights-court-battles-gaining-momentum-in-al/

Indigenous | Legal

Exclusive

Treaty Rights Court Battles Gaining

Momentum In Alberta

By Darrell Stonehouse

March 23, 2023







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CLAIM DATA RESEARCH & ANALYSIS

1 Impact of Industrial Use on Traditional Lands

- 2 Treaty 6 contains comparable language to Treaty 8 on traditional use land rights.
- 3 These actions provide new viability to a case filed by the Beaver Lake Cree Nation
- 4 in 2008, a signatory of Treaty 6, over the impact of oil sands development on their
- 5 traditional territory. This court action had been stalled due to a lack of funding to
- 6 pursue the case until the Supreme Court of Alberta ruled in 2022 that the Province
- 7 must advance funding for legal costs. The initial court date was then scheduled for
- 8 January 2024.9

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⁹ https://jfklaw.ca/beaver-lake-cree-nation-wins-unanimous-supreme-court-of-canada-decision-about-indigenous-access-to-justice/

Beaver Lake Cree Nation wins unanimous Supreme Court of Canada decision about Indigenous access to justice

By Louise Kyle, April 4th, 2022

Please join us in congratulating Beaver Lake Cree Nation on their recent win for Indigenous access to justice at the Supreme Court of Canada! Beaver Lake secured a landmark victory from the Supreme Court of Canada about Indigenous access to justice when the SCC allowed Beaver Lake's appeal of the lower Court's order for advanced costs.

Cumulative Impacts: what this case is about

Beaver Lake filed a lawsuit against the Alberta and federal governments in 2008 arguing that the cumulative impacts of industrial development (like oil and gas) within their territory amounted to a breach of Treaty 6.

Advance Costs

In order to cover the costs of bringing the Treaty rights litigation to trial (scheduled for January 2024), Beaver Lake asked for "advance costs" from the Alberta and federal governments. While Beaver Lake won an Advanced Costs order from the Alberta Court of Queen's Bench requiring Canada and Alberta each to contribute \$300,000 annually until the trial was over, this decision was reversed by the Court of Appeal. Beaver Lake then appealed to the Supreme Court of Canada.

The SCC's Decision

The Supreme Court of Canada refined the law of advanced costs in public interest cases and recognized the "truly exceptional" public interest nature of this case. Beaver Lake could qualify for advance costs if it cannot pay its legal fees, but the Court said that it must go back to the Alberta Court of Queen's Bench for a new hearing using the new legal test.

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Climate Adaptation & Cumulative Impact

- 2 The cumulative impacts of industrialization on the climate are increasingly the
- 3 subject of lawsuits brought globally by vulnerable populations. According to the UN
- 4 Environment Programme, court actions over climate change issues and policies
- 5 more than doubled between 2017 and 2022.10



Climate Inaction as Violation of Charter Rights

- 8 This includes a lawsuit filed in 2019 and approved to proceed in 2023 filed by
- 9 climate change activists on the grounds that climate inaction is a violation of
- 10 Canada's Charter of Rights and Freedoms. The action asserts two novel claims:
- that there is a right to stable climate systems that support human life, and that

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¹⁰ https://www.unep.org/news-and-stories/press-release/climate-litigation-more-doubles-five-years-now-key-tool-delivering

governments have a positive duty to see this right protected.¹¹

'Overwhelming relief' for youth activists cleared to sue Ottawa over climate change

Lawsuit alleges inaction on environment violates charter rights



Padraig Moran · CBC Radio · Posted: Dec 22, 2023 1:02 PM MST | Last Updated: December 22, 2023



Right to Conservation & Preservation

- 4 Canada's commitment to the implementation of UNDRIP also indicates that climate
- 5 protection and adaptation will become increasingly important First Nations issues.
- 6 Under Articles 25 and 29, Indigenous peoples have the right to preserve their
- 7 traditional relationship with their territories and resources and ensure their
- 8 protection for following generations and have rights to the conservation and
- 9 protection of their environments. 12

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¹¹ https://www.cbc.ca/radio/thecurrent/young-activists-climate-change-lawsuit-federal-government-1.7067880

¹² https://indigenousclimatehub.ca/2021/07/what-does-undrip-have-to-do-with-environmental-protection-in-canada/



Home Climate Action Programs Funding Resour

WHAT DOES UNDRIP HAVE TO DO WITH ENVIRONMENTAL PROTECTION IN CANADA?

BLOG



In May 2016, Canada endorsed the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), almost ten years after it was adopted by the UN General Assembly. As an international law, "UNDRIP affirms Indigenous rights to protection of the environment" and has increasing potential to inform environmental protection policy in Canada.

According to Article 25 of UNDRIP: "Indigenous peoples have the right to maintain and strengthen their distinctive spiritual relationship with their traditionally owned or otherwise occupied and used lands, territories, waters and coastal seas and other resources and to uphold their responsibilities to future generations in this regard." Article 29 goes further to highlight the rights of Indigenous peoples to the "conservation and protection of the environment."

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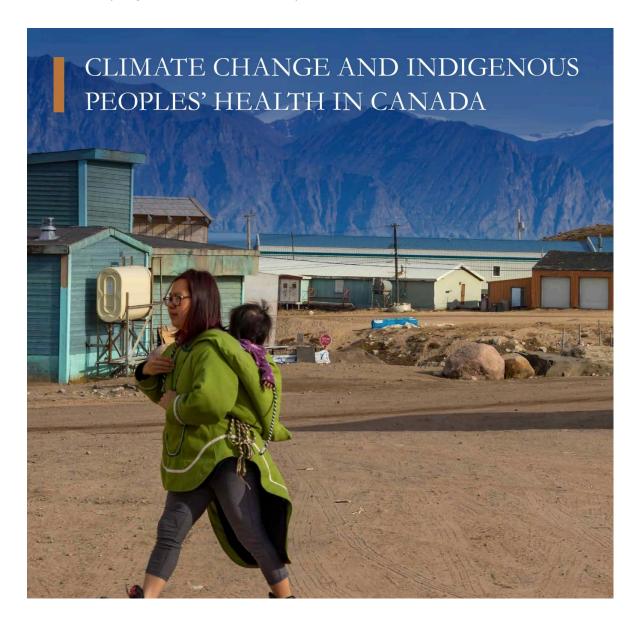
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Increased Risk due to Socioeconomic Inequity

- 4 First Nations in Canada are uniquely vulnerable to the impacts of climate change
- 5 due issues including geographical remoteness and constraints, dependence on the
- 6 environment to maintain traditional ways of life, socioeconomic inequity, and lack of
- 7 funding and support for climate adaptations. Climate change results in poorer

- economic, health, and cultural outcomes and restricts the ability of First Nations to
- 2 exercise Treaty rights to land use and practices. 13



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 $https://www.nccih.ca/Publications/Lists/Publications/Attachments/10367/Climate_Change_and_Indigenous_Peoples_Health_EN_Web_2022-03-22.pdf$

Systemic Regulatory Failure to Protect

- 2 The Yahey decision's outcome on the rights of First Nations to have Treaty rights
- 3 protected against cumulative industrial development may have bearing on the
- 4 ability of Indigenous peoples to pursue claims against the Government of Canada or
- 5 Provincial authorities on the basis that industrial development and systemic
- 6 regulatory failures resulting in climate events are a failure to abide by Treaty
- 7 principles.

Feb. 14 - Written By Beverly Andrews and Tori Cress

ALBERTA'S NEW WATER ADVISORY COMMITTEE FALLS SHORT ON INDIGENOUS REPRESENTATION

For immediate release: FEBRUARY 14, 2024

ALBERTA'S NEW WATER ADVISORY COMMITTEE FALLS SHORT ON INDIGENOUS REPRESENTATION

EDMONTON – It's been forecasted by the Canadian government that much of the country will be facing drought conditions in 2024. Alberta has about 25,000 water licence holders, holding up to 9.5 billion cubic meters of water. Currently, there is no legislation to force holders to share their water allocations, even during severe drought.

Alberta's new Water Advisory Committee claims it will help businesses share, conserve and manage water during a potential drought, yet not one representative from Treaty 8 and 6 territory or the Métis Settlements has been given a seat while at the same time, a former Trans Mountain CEO has. It is abundantly clear that Alberta continues ignoring the people and communities already impacted by these historically low water levels.

The Impact of Climate Change on Wildfire in Canada



Mike Flannigan
University of Alberta,
Canadian Partnership for
Wildland Fire Science



Banff Wildfire Forum 12 May 2021

Impacts of Climate Change

- 3 Alberta is increasingly susceptible to the damaging impacts of climate change. The
- 4 Province is experiencing longer and more severe fire seasons due to unprecedented
- 5 drought conditions and higher than average summer temperatures. 14 Drought that
- 6 may be attributable to climate change is also leading to a greater frequency of
- 7 water restrictions, and Indigenous leaders were left out of participation in Alberta's
- 8 Water Advisory Committee, developed in preparation for expected severe drought
- 9 conditions in 2024.15

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¹⁴ https://banff.ca/DocumentCenter/View/12310/Mike-Flannigan-Climate-Change-and-Wildfire

¹⁵ https://www.keepersofthewater.ca/news/ab-water-committee-response-feb14-2024

projects.

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Insufficient Mitigation Activities & Resources
Current Federal and Provincial funding is not sufficient to mitigate the damaging
effects of current and predicted future climate disruption. If the violation of Treaty
rights to traditional land use by cumulative industrial development and regulatory
inadequacies can be extended to the severe impacts of climate change, this could
result in policy changes and claims that could support funding for essential climate
adaptations like reforestation, resilient buildings and infrastructure, additional
healthcare, advanced systems for water management, and renewable energy

End of Life Liabilities from Industrial Assets Canada's failure to adequately prepare for and address end-of-life issues for oil and gas wells has a significant detrimental impact on First Nations ability to exercise Treaty rights to use of their land and traditional territories. Additionally, the cumulative impact of industrial and urban development is now the subject of several First Nations claims on the grounds that it interferes with the ability to exercise Treaty rights and entitlements to their land.

1 INDUSTRY ASSOCIATED LIABILITIES

- 2 Identifying industry associated liabilities on the nation is driven by several factors
- 3 including well, facility and pipeline data aggregation and analysis on the following:
- 4 a) liability assessment
- ⁵ b) abandonment
- 6 c) decommissioning
- 7 d) remediation and reclamation

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REGULATOR & INDUSTRY DATA AGGREGATION

- 10 We have captured a data set on existing assets from Alberta Energy Regulator
- 11 (AER) and Industry data that can be considered current and/or future liabilities.
- 12 This includes a current count (April 2024) of industry assets by company and
- current asset status in the following categories:
- e) Wells
- 15 f) Pipelines
 - g) Facilities

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RISK MANAGEMENT & MITIGATION

- 19 Regardless of current company ownership and non-operating ownership, operating
- 20 or production status, active or inactive, numerous energy industry liabilities exist
- 21 and will continue to be present as assets age or reach end-of-life status. Effective
- 22 risk management and mitigation plans are needed to avoid future issues.

1 Well Liabilities

- 2 There are 342 wells in total in Government records, 201 after removing
- 3 duplicate events.

4 WELL COUNT BY CATEGORY

Туре	Number
Active- Oil	28
Active- Gas	5
Active Water Injection	3
Suspended Gas	13
Suspended Oil	36
Suspended Water Injection	1
Abandoned	115
Total wells	201

- 6 The average TVD (total vertical depth) of these wells is 1417 mKB
- 7 The average age of these wells is 1982 with many drilled in the mid-1950's
- 8 Risks not factored include holes in casing or suspended or zonally abandoned wells
- 9 that need to be brought up to current regulatory criteria.

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Well Liabilities & Orphaned Wells

- 2 In Alberta, an estimated 10,000 wells are officially considered to be "orphaned",
- 3 with no ability to enforce Canada's "producer pays" decommissioning
- 4 requirements. 16

Suspended & Inactive Wells

- 6 A 2020 report found that temporarily suspended wells, which are not producing but
- 7 not subject to expensive abandonment and reclamation processes, totalled almost
- 8 100,000 in Alberta. Described as "zombie wells" by the New York Times, these
- 9 wells exist in a grey zone that allows them to avoid regulatory enforcement of end-
- of-life liabilities through the indefinite period permitted under Alberta regulations. 17

Inactive Status & Directive 13

Once inactive, wells outlined in Directive 13 must be suspended to ensure public safety and environmental protection. In Alberta, wells can remain suspended until the well is no longer needed for energy development. When a well is no longer needed for oil and gas development, it must be permanently sealed and taken out of service per the abandonment process in Directive 20¹⁸. These "suspended" assets should be considered a priority for liability assessment and management.

¹⁶ https://thenarwhal.ca/aer-orphan-wells-documents/

¹⁷ https://www.nytimes.com/2020/10/30/climate/oil-wells-leak-canada.html

¹⁸ https://www.aer.ca/regulating-development/project-closure/suspension-and-abandonment

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End of Life Well Liabilities

- 2 ECN lands are one of the oldest productive oil and gas regions in Alberta and have
- 3 significant legacy pollution dating to the 1950s. This includes an 165 suspended or
- 4 decommissioned wells.

WELL CATEGORY COUNT BY LICENSED OPERATOR5

No. of the Control of				Grand
Row Labels	Abandoned	Active	Suspended	Total
Advantage Energy Ltd.	8			8
Chevron Canada Limited	9			9
Coastal Resources Limited	1			1
ConocoPhillips Canada Resources				
Corp.	2			2
Dunbar Oil Ltd	1			1
Dundee Energy Limited	2			2
Eagle Oilfield Sales & Fabricating Ltd.	1			1
Gulf Canada Limited	2			2
Hammer Resources Ltd	1			1
Imperial Oil Limited	2			2
Imperial Oil Resources Limited	2			2
InPlay Oil Corp.		1		1
Leddy Exploration Limited	11		4	15
Legal Oil & Gas Ltd.	1			1
Maga Energy Ltd.	61	33	45	139
Northwell Operators Limited	1			1
Obsidian Energy Ltd.	5	2	1	8
Ovintiv Canada ULC	1			1
Paramount Resources Ltd.	1			1
Shell Canada Limited	1			1
Spartan Delta Corp.	1			1
Suffolk Oil & Gas Ltd	1			1
Grand Total	115	36	50	201

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Well Liability Estimation

- 2 Based on current market conditions, we have calculated the average cost to
- 3 abandon gas and oil wells in your area. These costs, as well as the total estimated
- 4 liability are reflected below:

WELL LIABILITY COST SUMMARY

Liability Type	Cost Per	# of Wells	Total Liability
To abandon gas wells	\$130,885	18	\$2,355,930
To abandon oil or injector well	\$140,741	68	\$9,570,388
Total Enoch Well Liability			\$11,926,318

Impacts from Abandoned and Orphaned Infrastructure

Damage from orphan, zombie, and improperly abandoned oil and gas wells includes

groundwater contamination, the health and environmental impacts of methane and

other hazardous gas leakage, and the inability to use land for productive economic

purposes such as agriculture, housing, and meeting other needs of the

12 communities.

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Facility Liabilities

- 2 A current count of 127 active & suspended facilities are present in Enoch territory
- 3 in various capacity and status. The current working interest owners of the assets
- 4 along with the AER should be surveyed as to when these assets have been slated
- 5 for end of life cycle management. The suspended status assets, (92), should be
- 6 explored and addressed;

LICENSEE/OPERATORS WITH SUSPENDED STATUS

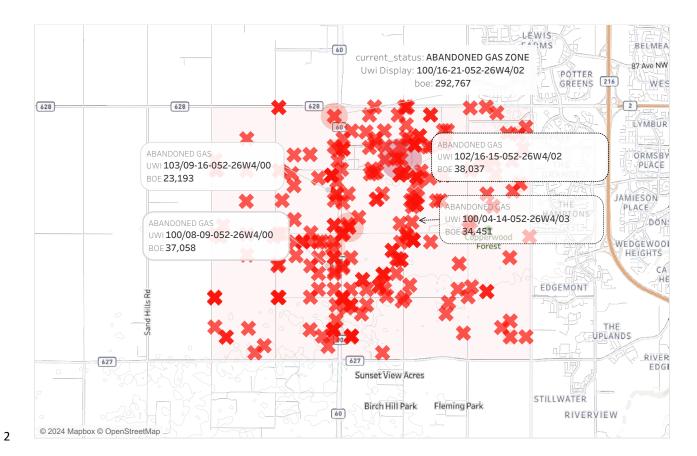
Canadian Jorex Limited	Imperial Oil Resources Limited
Chevron Canada Limited	Tidewater Midstream
Cnpc International (Canada) Ltd.	Hammerhead Resources
Maga Energy Ltd.	Leddy Exploration
Obsidian Energy Ltd.	Dundee
Coastal Resources Limited	Clear Point Holdings
Cabre Exploration Ltd.	Spartan Delta

FACILITY CATEGORIES BY LICENSEE/OPERATOR

Operator	Battery		Injection/ Disposal Facility	Gas Battery - Single Well	Gas Gathering System		CONTRACTOR OF THE PARTY OF THE	Gas Battery- Multiwell	Compressor Station	MORNING CO.	Oil Battery - Multiwell	100 CO 100 CO	Total
Advantage Energy Ltd.			1			1						-	1
Arwaves Resources Ltd	2												2
Atco Pipelines (North Tn8263923)										1	i e		1
Cabre Exploration Ltd.	1												1
Canadian Jorex Limited	3												3
Chevron Canada Limited	2												2
Clearport Holdings Ltd.					1							1	2
Cnpc International (Canada) Ltd.	4					1							5
Coastal Resources Limited	5								1				6
Dundee Energy Limited	1												1
Hammer Resources Ltd			1								ĵ.		1
Imperial Oil Resources Limited	1												1
Leddy Exploration Limited	3												3
Maga Energy Ltd.	34		5		1	1							41
Obsidian Energy Ltd.	25				1								26
Second Wave Petroleum Inc.	1												1
Spartan Delta Corp.	1												1
Tidewater Midstream And Infrastructure Ltd					1								1
Westhill Resources Limited	1												1
Whitemud Creek Resources Ltd.	1		1										2
(blank)		15		7			1	1			1		25
Total	85	15	8	7	4	2	1	1	1	1	1	1	127

CLAIM DATA RESEARCH & ANALYSIS

ABANDONED GAS & GAS ZONES WELLSITES



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ENOCH CREE NATION

Pipeline Liabilities

- 2 A current count of **228 pipelines** are within Enoch territory. These pipelines are
- 3 classified as either: discontinued, operating or permitted. These assets have
- 4 subclassifications as to the category of products that they carry, including:

PRODUCTS IN PIPELINES

Natural Fuel	Fuel Gas	Oil-Well Effluent	Steam	
Salt Water	Fresh Water	Crude Oil	Solvents	
Sour Natural Gas	Mixed Gases	LVP Products	Butane	

Discontinued Pipelines

- 8 Pipelines in discontinued status should be explored as they could become priority
- 9 liabilities. According to the government, Pipeline discontinuation is "the temporary
- deactivation of a pipeline or part of a pipeline in a manner that leaves it safe for
- possible future use." When "future use" is not deemed applicable, the pipeline
- status would move to "pipeline abandonment

DISCONTINUED PIPELINES BY OPERATOR

Company	Discontinued	Operating	Grand Total
Maga Energy Ltd.	111	65	176
Tidewater Midstream & Infrastructure Ltd.	6	10	16
Inplay Oil Corp.		16	16
Atco Energy Solutions Ltd.		12	12
Obsidian Energy Ltd.	1	3	4
Aspenleaf Energy Limited	2		2
Pembina Pipe Line Ltd		1	1
Terasen Inc.		1	1
Grand Total	120	108	228

IDENTIFYING CURRENT RISKS

*Aging assets	*Hazardous materials and contaminates
*Corrosion	*Ground water contamination
*SCVF – gas venting	*Toxic fluids left in pipe (spills)
*Ground disturbance	*Community & wildlife impact
*Ownership changes	*Owner Financial issues
*Effects of natural disasters	*Eco terrorism

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Climate Adaptation & Cumulative Impact

- 4 The cumulative impacts of industrialization on the climate are increasingly the
- 5 subject of lawsuits brought globally by vulnerable populations. According to the UN
- 6 Environment Programme, court actions over climate change issues and policies
- 7 more than doubled between 2017 and 2022.19

Climate Inaction as Violation of Charter Rights

- 9 This includes a lawsuit filed in 2019 and approved to proceed in 2023 filed by
- 10 climate change activists on the grounds that climate inaction is a violation of
- 11 Canada's Charter of Rights and Freedoms. The action asserts two novel claims:
- that there is a right to stable climate systems that support human life, and that
- governments have a positive duty to see this right protected.²⁰

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¹⁹ https://www.unep.org/news-and-stories/press-release/climate-litigation-more-doubles-five-years-now-key-tool-delivering

²⁰ https://www.cbc.ca/radio/thecurrent/young-activists-climate-change-lawsuit-federal-government-1.7067880

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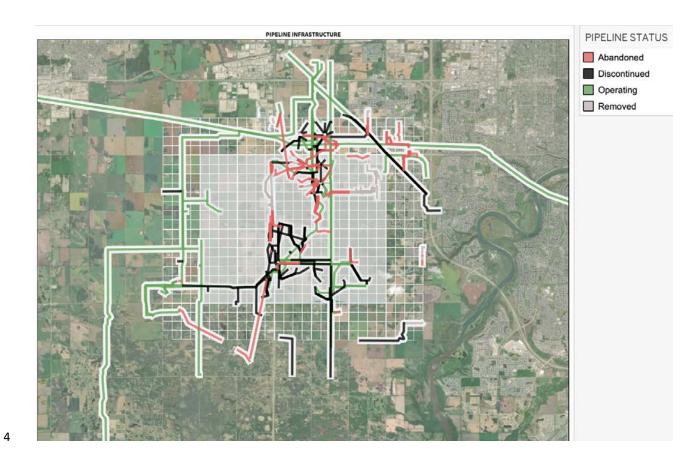
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CLAIM DATA RESEARCH & ANALYSIS

PIPELINE DEACTIVATION LIABILITIES

Asset Scope – Pipeline Decom	# of Pipelines Discontinued Status	*Estimate cost per Asset	Approx Liability
Pipeline deactivation pigging 36" from valve to valve. Install pig blinds and tag as deactivated	120	\$50,000 per	\$6,000,000

PIPELINE INFRASTRUCTURE



SUMMARY OF LIABILITY ESTIMATES

Liability Type	Cost Per	# of Assets	Total Liability
Abandonment - Gas wells	\$130,885	18	\$ 2,355,930
Abandonment - Oil /Inj wells	\$140,741	68	\$ 9,570,388
Decommission - Facilities	\$160,000	92	\$ 14,720,000
Decommission - Pipeline	\$50,000	120	\$ 6,000,000
Total Enoch Well Liability			\$ 32,646,318

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Systemic Regulatory Failures

- 4 The Yahey decision's outcome on the rights of First Nations to have Treaty rights
- 5 protected against cumulative industrial development may have bearing on the
- 6 ability of Indigenous peoples to pursue claims against the Government of Canada or
- 7 Provincial authorities on the basis that industrial development and systemic
- 8 regulatory failures resulting in climate events are a failure to abide by Treaty
- 9 principles.

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