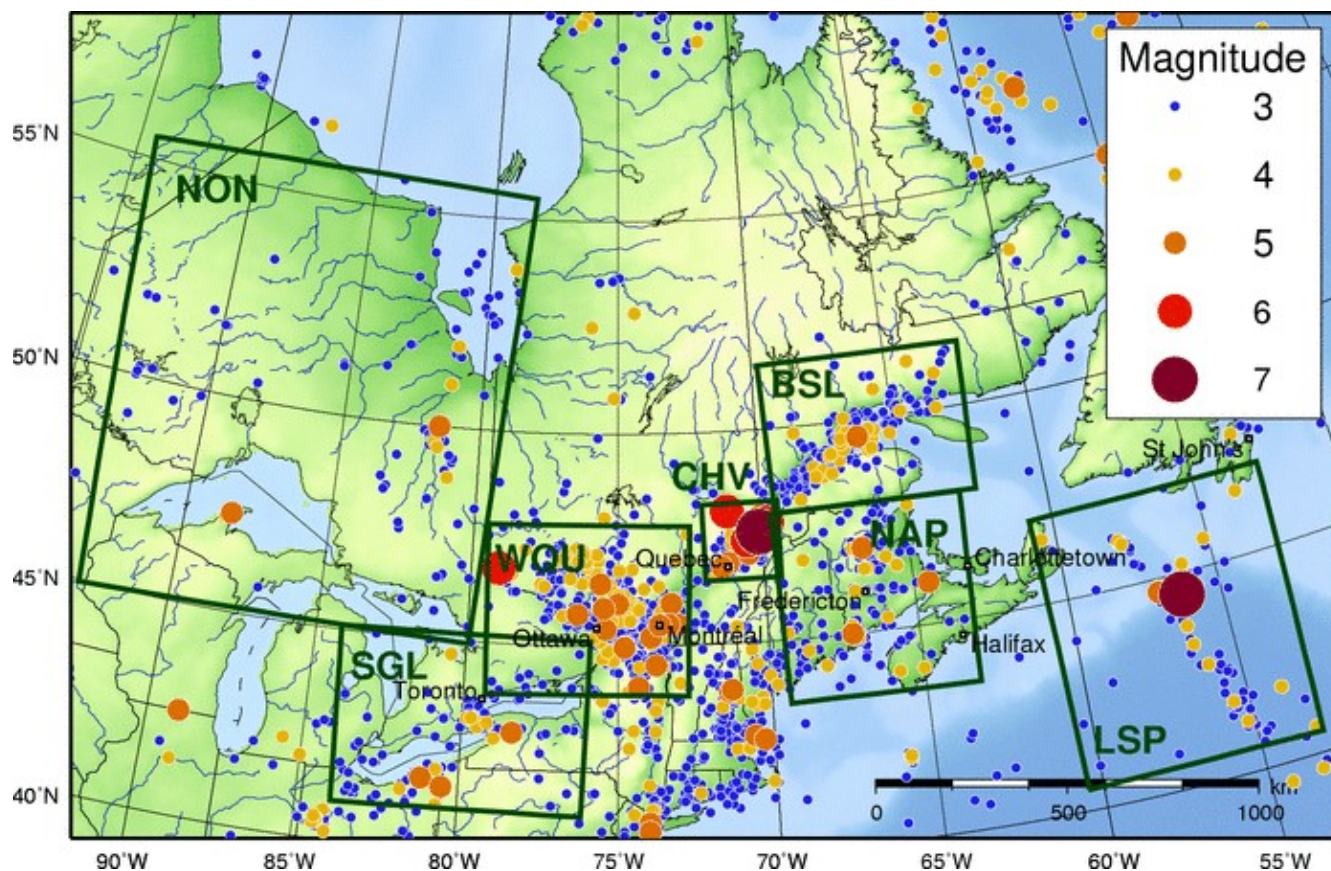


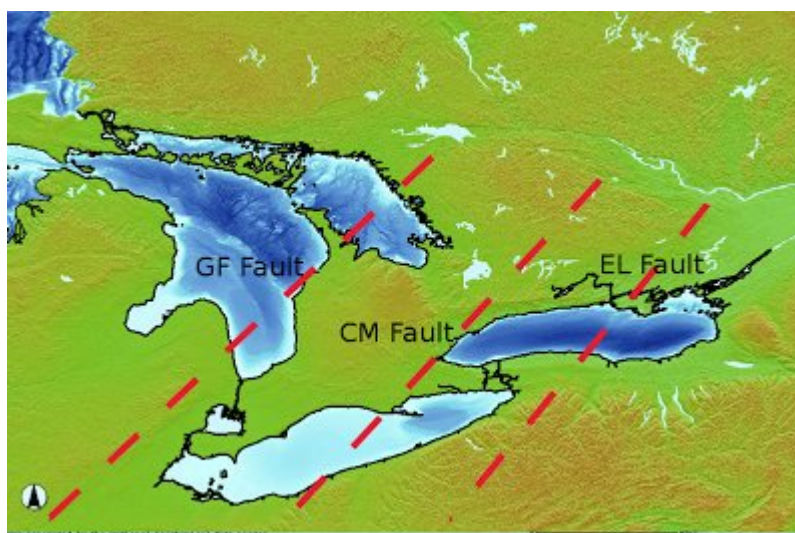
Concerns Re: Enbridge's Proposed Gas Line near Hamilton Ontario
 by Louise Lanteigne
 02/09/20

Seismic Risk of Eastern Canada

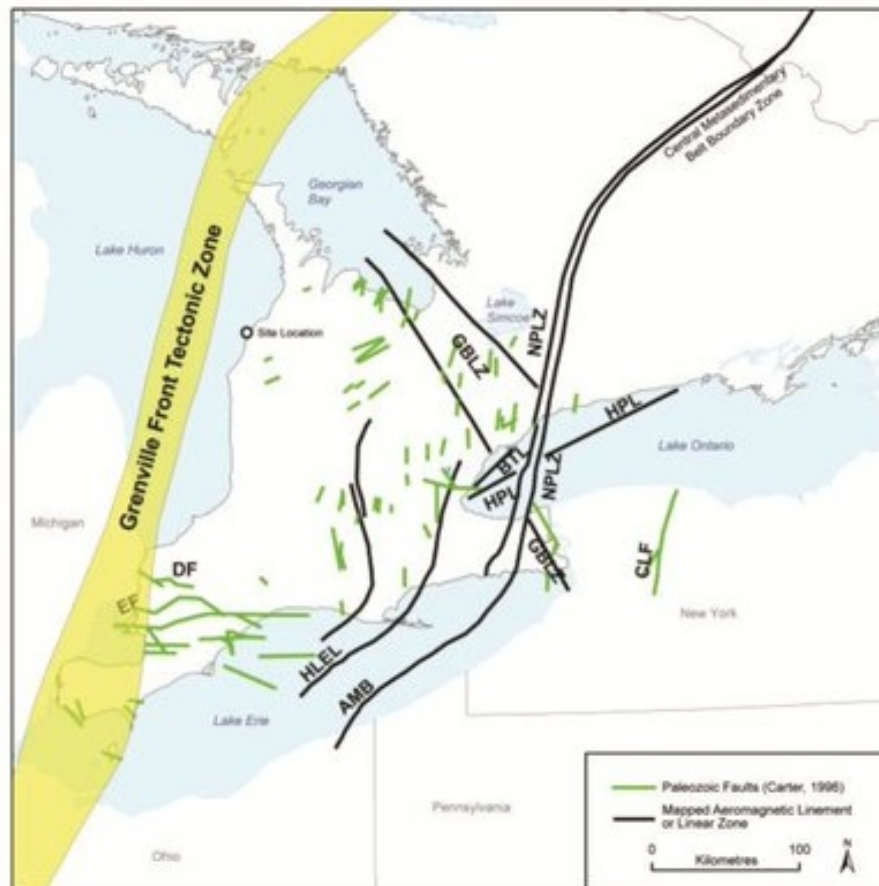
<https://earthquakescanada.nrcan.gc.ca/zones/eastcan-en.php#SGLSZ>



These are known fault lines in South Western Ontario.



This information on fault lines was included with the background reports of the Source Water Protection Act in Hamilton Ontario. See the points of intersection close to the area of this proposed gasline. The Niagara Escarpment is testimony of the seismic activity that has taken place in this area.



Note: Fault data is from Carter et al. (1996) and Armstrong and Carter (2006). Aeromagnetic lineaments are after Carter and Easton (1990), Easton and Carter (1995), Wallach et al. (1998), Jacobi and Fountain (1993). CMBBZ: Central Metasedimentary Belt Boundary Zone; AMB: Akron Magnetic Boundary; NPLZ: Niagara–Pickering Linear Zone; HLEL: Hamilton–Lake Erie Lineament; BTL: Burlington–Toronto Lineament; HPL: Hamilton–Presqu'ile Lineament; GBLZ: Georgian Bay Linear Zone; EF: Electric fault; DF: Dawn fault; CLF: Clarendon–Linden fault (modified from Boyce and Morris 2002).

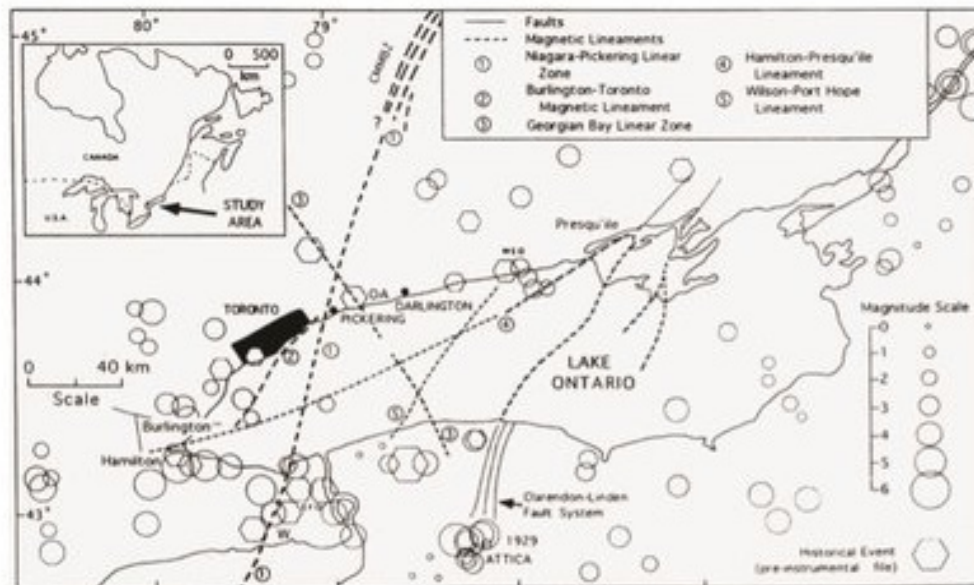
Figure 2.21: Structural Subdivisions of Precambrian Basement with Faults, Aeromagnetic Lineaments and Lithotectonic Domain Boundaries

2.3.1 Glacial Adjustments

Postglacial rebound or glacial isostatic adjustment (GIA) is the response of the solid earth to changing surface loads brought on by the waxing and waning of large-scale ice sheets and

The area of Hamilton was formed in part by glacial movements so the layers make it tricky to see the totality of fault lines that may exist in this area because there are so many layers to it and it's a dynamic system. The understanding of quaternary geology is needed for proper risk assessments.

described in Section 3.3. Other notable structural features identified in the region are described below.



Note: Figure from McQuest Marine (1995)

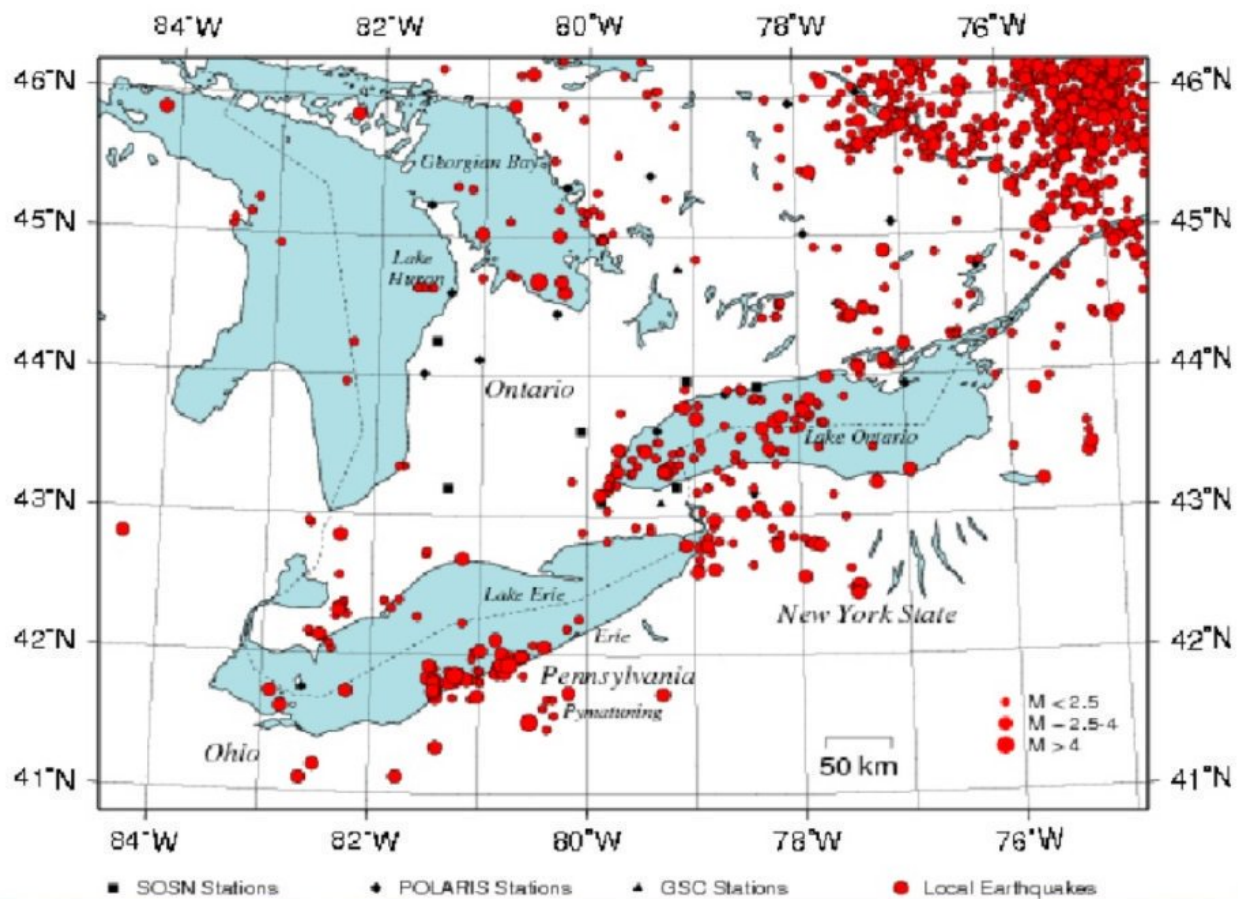
Figure 2.22: Known and Postulated Structural Features of Lake Ontario

2.4.1 Erie-Georgian Bay Lineament

This lineament was identified and named by Boyce and Morris (2002), who recognized it as part of a linear zone of mapped northeast-trending aeromagnetic lineaments in southern Ontario (2-23). Reprocessing and digital image enhancement was used by Boyce and Morris (2002), along with existing regional gravity and aeromagnetic data sets to facilitate lineament mapping. The Erie-Georgian Bay Lineament (EGBL) is the westernmost of a series of parallel "en echelon" lineaments that include the Hamilton-Lake Erie lineament (HLEL) and the prominent Niagara-Pickering linear zone that bounds the series of northeast-trending lineaments on the east (Boyce and Morris 2002). Citing the work of previous investigators (e.g., Wallach and Mohajer 1990), Boyce and Morris (2002) suggest that these northeast-trending lineaments may be associated with reactivated basement faults that are related to Grenville-age terrane boundaries.

Paleozoic faults mapped in southern Ontario by Carter et al. (1996) are approximately parallel to, but not coincident with, the EGBL. The Paleozoic faults are interpreted to reflect the structural grain of the Precambrian basement rocks (Carter et al. 1996).

Seismicity Map For Period 1992-2009



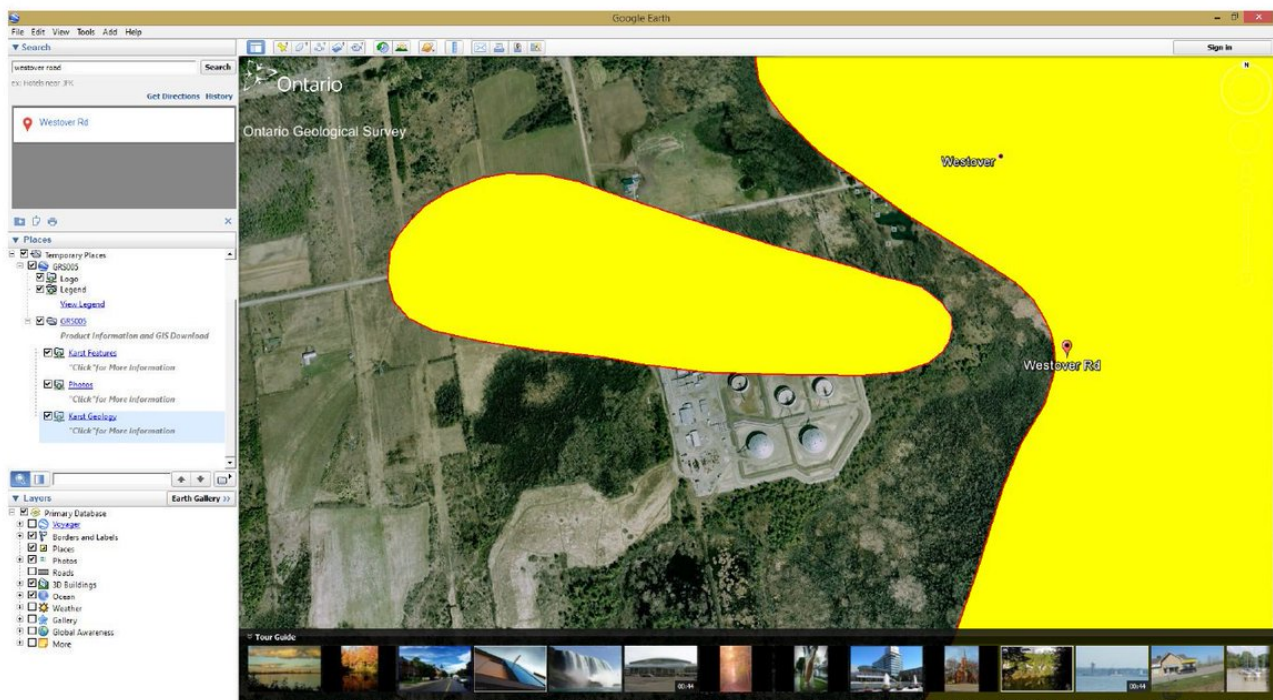
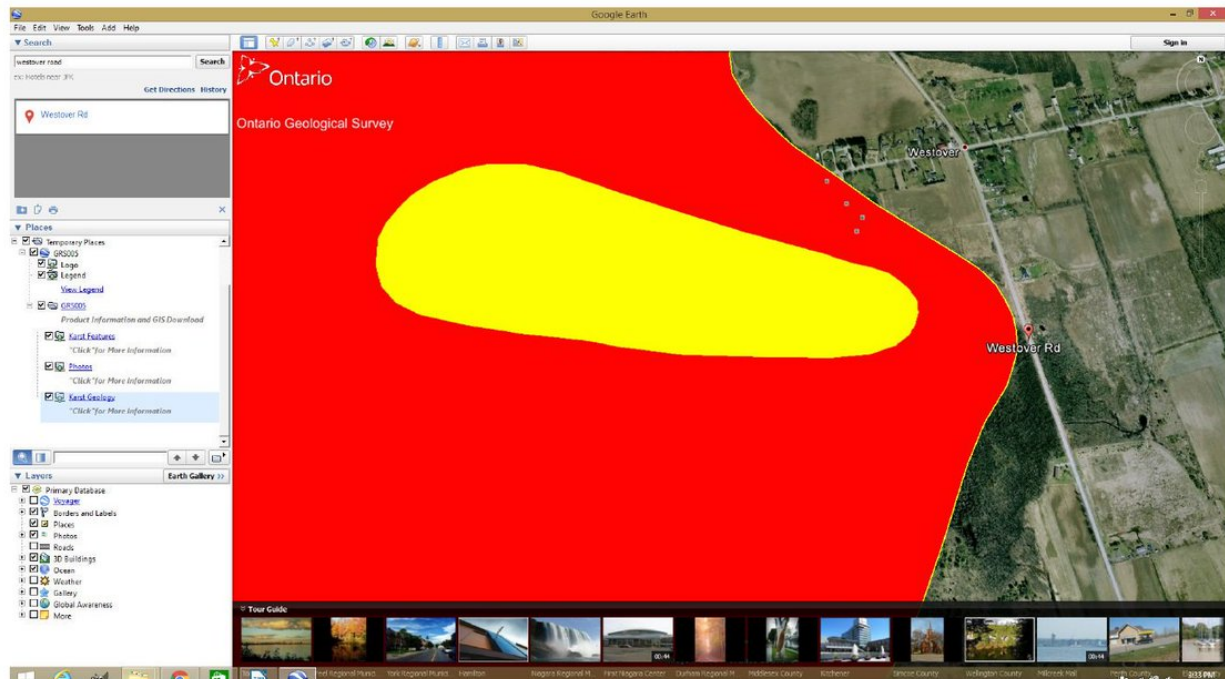
The location is in the Paris Galt Moraine and that opens up further geological risks that we have to consider such as karst. Karst systems are like underground caves that form where water has dissolved minerals and sediment types to create cavern like features. Some of the minerals that can dissolve with the introduction of water include salt, limestone and dolomite which are all found in these areas. We see expression of the collapse of these systems in the many Kettle ponds that formed in the area as the ground caved in underneath. Vertical fractures happen where the ground can dry up and form cracks in such a way that water can enter where these minerals are, either at the surface or subsurface levels. If we alter the flow of an aquifer by removing or altering clay layers, it can also divert water to these deposits. Fracking for oil or gas introduces high pressure water which causes cracks in the sediment. Oil and gas is often located by natural salt deposits. If we introduce pressured water to these locations it can result in man made earthquakes and geologic instability.

Part of the major risks we see today is the fact the science we had in past didn't take into account the knowledge of risks that we have today. It was believed that topography was enough to mitigate risks but now we know that proper geology to a depth is needed to avert risks.

The Risk of Karst

Westover Oil Terminal is built on karst. This information is from the Ontario Geological Survey of Ontario mapping tool. The yellow patch called "potential" karst which is underneath the actual oil tankers etc. I used the mapping tool to remove known karst areas to show you what's under that by aerial photo. This is not safe. This could cave in and it's in area of seismic risk. We didn't have the geological knowledge in the past to map the geology like this. We have to do better than this.

The Westover Terminal is sitting on known karst as indicated in red. The yellow zones are identified as potential karst areas. This mapping information is provided by the Ontario Geological Survey.





Pipeline damages from earthquakes or collapsing karst systems can result in wrinkling, joint weld cracking or separation, bending or shear from localized bending and tension. Joints with oxy acetelyne welds break 100 times more than ones made with electric arc welded joints. We didn't have the knowledge of this when many of these older lines were installed. We can design safer. I highly recommend reviewing the Shake Out Scenerio Supplemental study specific to Oil and Gas lines. You can review it online at this weblink.

https://books.google.ca/books?id=7PU1A6N3ZOAC&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false

Another concern I have is the right of way as done in the past, paired multiple oil and gas lines together within the same corridor and within feet of one another. I observes this issue as a delegate of Enbridge Line 10 pipeline expansion.

Enbridge Line 10: A Look At Enbridge's Corporate Practices

The Line 10 replacement hearing was to replace a section of Enbridge Line 10 from Nanticoke to Westover, replacing a 12 inch pipeline with a 20 inch pipe. This entire project connects to a 12 inch pipeline in the US but that issue was outside the scope of review. The hearing secured MAX CAPACITY FLOW for the 20 inch pipeline and they gave no detail on how a 12 inch pipe can flow into to a 20 inch pipe enough to provide the max flow. It was a bit mind bogging to me. I still don't

quite get how they could do that but the NEB permitted it. This pipeline has since been sold to Westover Express, a shell company created in BC that is wholly owned by United Refining Company which in turn is owned by Trump supporter John Catismatidis. They completed the First Nations consultations before the purchasing company in BC was registered as a company. Westover Express only became a company on March 26 2018 with no assets or liability and by May 2016, with no hearing process, the NEB permitted the conditions of the Canadian MLP to simply slide over to this new firm with the sale of the pipe to the benefit of a US parent company. These are notes from the ruling about the lack of reasonable First Nations Consultation that all took place before Westover Express even existed.

Consultation with Indigenous Peoples

Three Indigenous groups are located in proximity to the Line 10 ROW: Six Nations of Grand River (Six Nations); Haudenosaunee Development Institute (HDI); and Mississaugas of the New Credit First Nation (MNCFN). In January 2018, Enbridge notified representatives from each of these Indigenous communities about the sale of Line 10, and held individual meetings with representatives of Six Nations, MNCFN, and HDI in January and February 2018 to discuss the sale:

- **Six Nations of the Grand River:** Enbridge met with a Six Nations representative on 19 February 2018 to discuss the sale, and no specific concerns about the sale were raised.
- **Haudenosaunee Development Institute:** Enbridge met with the Executive Director for the HDI on 23 January 2018, to discuss the sale, and no specific concerns about the sale were raised.
- **Mississaugas of the New Credit First Nation:** Enbridge met with MNCFN representatives on 23 January 2018 to discuss the sale of Line 10. Enbridge confirmed with MNCFN that the sale of Line 10 will not affect or alter any commitments made by Enbridge regarding Line 10 but more specifically, regarding the archaeological work remaining on tract 73 related to the Line 10 Westover Segment Replacement Project. Enbridge reaffirmed that the working relationship between Enbridge and MNCFN will be ongoing regardless of the sale. MNCFN did not express any specific concerns regarding the sale.

Enbridge committed to meaningful engagement throughout the sale process and to continue to offer opportunities to meet and discuss any issues, concerns or questions that arise.

Views of the Interested Parties


Knolly, J. G. 2018.

The next image is from a letter of response provided by Enbridge to the NEB explaining who Westover Express is as a corporate entity. You will see they didn't actually exist prior to First Nations consultations.

Express, or its parent company.

- Request:**
- a) Provide the most recently available financial reports for Westover Express.
 - b) Provide the most recent annual report for Westover Express' parent company, United.
 - c) Explain Westover Express' capability to finance the ongoing operations of Line 10.

Response:

 a) At this time, Westover Express has no assets or liabilities. Westover Express was incorporated on March 26, 2018 for the purpose of owning the Canadian portion of the Line 10 pipeline. It has applied to the NEB for approval to purchase the pipeline from Enbridge. Assuming NEB approval of the Application, Westover Express will own and be the company authorized to operate these pipeline assets. (Enbridge will continue to operate all of Line 10 until at least 2022.) As set out in the Application (paragraphs. 20-21), the value of the pipeline assets is substantial (i.e. NBV of the existing Line 10 is approximately CAD \$97,000,000 and the current estimated cost of the Line 10 Westover Segment Replacement Project is CAD \$272,000,000, for a total of approximately CAD \$369,000,000). Accordingly, following the completion of the proposed purchase, the structure of the company will be materially different than it is today, with the company owning significant assets.

- b) Westover Express' parent company, United Refining Company, is a privately-held company and is not subject to any requirement that it file an annual report. Westover Express is providing in Attachment 2.2b), in a separate filing, a current financial statement for United,

When you do business with a firm like Enbridge you are assuming many risks. This lack of regard for Indigenous people is part of the corporate culture that exists with Enbridge and the NEB today and OPG needs to be fully aware of that. Some may suggest these concerns are out of scope but I believe there is a fundamental need to review how they do business. In my view, racism and clear lack of regard for science is systemic.

Enbridge's Lack of Environmental Assessments & Lack of Regard for Endangered Species.

During the hearing to replace Enbridge Line 10, I witnessed the lack of bufferzones between oil and gas lines and it may be a concern for this gas line project as well. You need to visit the sites and see for yourself, what is at the location. I did that with Line 10 and I saw how they placed multiple oil and gas lines so close to work on one line you would likely have to remove the ones beside it to excavate the line. What happens if there is a gas explosion here?

This is the photo of what I saw off Governor's Road in Flamborough where the old pipes cross the

street and it's located to the East of the existing Hydro Corridor where Line 10 replacement pipe was rerouted as a result of my complaint.

Copetown to Westover: Pipeline Observations by Louise Lanteigne

On August 4, 2016 I drove to Copetown Ontario in Hamilton to witness pipelines in the area of Line 10 to understand the geology, the land uses around it and the maintenance of signs and above ground features related to pipelines.

The area I examined is the route of various high pressure oil pipelines like Line 7, Line 10 and 11 as well as high pressure gas lines owned by Trans Canada sharing the same Right of Way in places.

The signs I observed did not mention terms like Line 7, Line 10 or Line 11 but it did refer to terms such as Sarnia Products Pipeline and Enbridge.



Photo 1: This is located off Governors Road just west of the intersection with HWY 52 along the Hydro Corridor. First off, the geology of the area is hummocky rolling hills characteristic of Paris Galt Moraine System.

At this point as seen in the photo, there is a high pressure oil pipeline with signage identifying "Sarnia Products Pipeline" as the company responsible for this pipe. The oil line is extremely close to two TransCanada high pressure natural gas lines. The three metallic boxes as photographed are all located within a 5-6 foot width. They are extremely close together.

Note the date of when the pipe was rerouted. The National Energy Board hearing to approve the Line 10 pipeline abandonment and replacement took place on October 18, 2016. There was no actual time for them to complete a new Environmental Assessment (EA) before the NEB hearing and in less than a year they were already regrading the area of the hydro corridor.



Duncan Purvis
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Regulatory Law and Affairs

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Enbridge
200, 425 – 1st Street SW
Calgary, Alberta T2P 3L8
Canada

September 14, 2016

E-FILE

National Energy Board
517- 10th Ave SW
Calgary, AB, T2R 0A8

Attention: Sheri Young, Secretary of the Board

Dear Madam:

**Re: Enbridge Pipelines Inc. ("Enbridge")
Line 10 Westover Segment Replacement Project ("Project")
Hearing Order OH-001-2016 File Number OF-Fac-Oil-E101-2015-09-02
Enbridge Response to National Energy Board ("NEB" or "Board")
Proposed Electrical Transmission Corridor Route**

As a result of Enbridge's consultation on the Project, and particularly the issues raised by the Copetown Landowners Group ("CLG"), Enbridge has re-evaluated its route through the Copetown area. Enbridge had previously identified that a possible route along an existing electrical transmission corridor ("Electrical Transmission Corridor") was the next best alternative to the route filed with the Board in its updated information filed May 4th, 2016.

At that time, Enbridge advised that it would continue to evaluate Project design and routing options, and that it would continue to work with landowners to address their concerns. Enbridge has evaluated the route through the Electrical Transmission Corridor and is filing the enclosed information in order to provide the Board with the Enbridge's revised route through the Copetown area.

Included in this filing are updated maps showing the route revision through the Electrical Transmission Corridor, as well as information with respect to Public Consultation, Aboriginal Engagement, Land Acquisition, Engineering, and updated Environmental studies and surveys.

As a result of the route through the Electrical Transmission Corridor, Enbridge has fully satisfied the concerns of the CLG group. As you will note in the enclosed information, Enbridge has also consulted with all other stakeholders potentially impacted by the revised route, and confirms that there are no outstanding concerns.

This was the only environmental assessment used to approve Enbridge Line 10 and they used the old location of the abandoned pipe without a new assessment on the new route through the Hydro Corridor.

Enbridge Pipelines Inc.
Line 10 Westover Segment Replacement Project
OH-001-2016

Supplemental ESA - Part 1 of 3
Page 1 of 57
Filed August 15, 2016

SUPPLEMENTAL ENVIRONMENTAL AND SOCIO-ECONOMIC ASSESSMENT

Line 10 Westover Segment Replacement Project

Prepared for


Enbridge Pipelines Inc.

August 2016



CH2M HILL Energy Canada, Ltd.
72 Victoria St. South Suite 300
Kitchener, Ontario N2G 4Y9



Dillon Consulting Limited
235 Yorkland Blvd Suite 800
Toronto, Ontario M2J 4Y8

Enbridge's data admitted previously there were Jefferson salamanders in the area and that is why I became a delegate to the process but they also admit they didn't do any new studies. This is from my affidavit.

7. I observed that in the *Line 11 Westover Segment Replacement Project*, Enbridge Responses to NEB IR No. 2 File OF-Fac-Oil-E101-2014-01-01 is specific to Jefferson Salamanders. Line 11 shares the right of way of Line 10 so this data has relevance. In **Attachment 3 page 1, under Preamble, second paragraph** it states the following passage:

In its evaluation of likelihood of occurrence of species at risk (Reference ii), Enbridge states that species-specific surveys for Jefferson Salamander were not conducted but that potential habitat exists in the study area in the form of deciduous swamps and fresh moist thick canopied forests. Enbridge further states that impacts to this species are not likely to occur as potential habitat areas are being avoided. Based on this evaluation, Enbridge did not carry forward an environmental assessment of Jefferson Salamander.

The salamanders are indicator species of aquifers and when they are at risk, municipal water supplies are too. Area farmlands, First Nations and local economic systems rely on a steady supply of potable water. Currently the Source Water Protection Act only prevents contamination, it doesn't protect the source of the water itself. In Ontario we lack laws to reasonably protect Primary Recharge areas so I fight for the protection of salamander habitats in order to protect and preserve this natural commodity . By protecting habitat of salamanders we are protecting water quality, water flow, flow rates and water volumes for future generations. This is an excerpt from the NEB ruling which clearly shows how the NEB was using predictions without science to determine there would be no harmful impacts to these endangered species. I added in the text in red to record my concerns after I witnessed them altering the sites without any new Environmental Assessment (EA) being completed.

Ms. Louise Lanteigne

The NEB is predicting no harm to endangered species without critical habitat mapping. The construction is happening in September not "frozen conditions". The HDD trenchless construction techniques are not being fully implemented. Dramatic land augmentations are taking place currently.

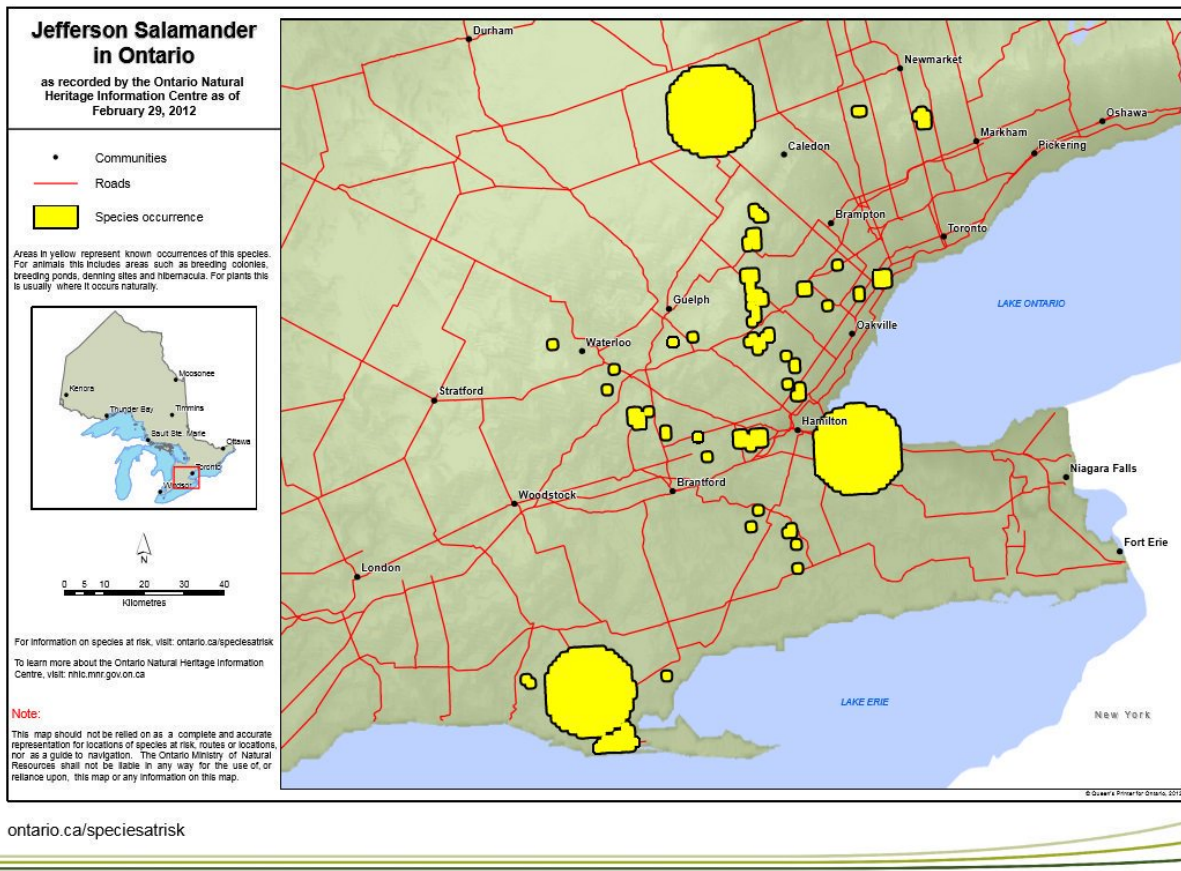
Ms. Lanteigne observed that the Jefferson Salamander is listed as Endangered on the SARA Schedule 1 and noted that critical habitat mapping had not yet been completed for the entire Project.

Views of the Board

The Board notes that Enbridge has developed wetland mitigation measures in consultation with the Hamilton, the Grand River, and the Niagara Peninsula CAs. Further, ECCC indicated that the mitigation proposed by the MNRF, including constructing during frozen conditions and using HDD trenchless construction technique, is adequate and appropriate.

With the mitigation proposed by Enbridge, the Board's **Section 58 Conditions 3 (Environmental Protection)**, **8 (EPP)** and **30 (Post-Construction Environmental Monitoring Report)** as well as the oversight of the MNRF and ECCC, the Board is of the view that serious harm to Jefferson Salamander and Western Chorus Frog or their habitat is not likely to occur, and that any adverse effects are not likely to be significant.

Evaluation of Significance of Residual Effects	Temporal Extent	Reversibility	Geographical Extent	Magnitude
	Short-term	Reversible	LSA	Low
	Adverse Effect			
	Not Likely to cause significant adverse environmental effects.			



The Jefferson Salamander Recovery Team mapped the location of Jefferson Salamanders and the proposed gas line route crosses known habitats. This was included with my affidavit for the hearing.

COSSARO Candidate Species at Risk Evaluation Form for Jefferson Salamander (*Ambystoma jeffersonianum*) Committee on the Status of Species at Risk in Ontario (COSSARO) Assessed by COSARRO as Endangered February 2011 Final Report states:

Repeat surveys over a 15- year timeframe (1990-2005) revealed that most populations were declining and some were extirpated. For example, surveys of 18 historically known breeding sites along the Niagara Escarpment that were documented in 1990-91 revealed only 3 sites that were confirmed to still be supporting *A. jeffersonianum* populations in 2003-04 (COSEWIC 2010, in press), an apparent decline of 83%

One of the reasons why we may have seen such trends is due to the fact the MNR approved testing of ponds for salamanders included the destroying of eggmasses.


I helped to protect habitats of Jefferson Salamanders in Waterloo with OMB case PL070144 and I won concessions that protected the capture zone of their ponds to help protect Waterloo's municipal potable water supply. I also offset the building of a new highway to protect these animals as well. The original testing at Hidden Valley for the River Road Extension found no salamanders but they used rotten

eggmasses to get those results and based on that Jim Bogard at the University of Guelph stated they did not exist in this area. My friend, naturalist Neil Taylor and I helped push for a retest using drop pit traps and toe and tail clipping to verify DNA and they found one of the largest populations in this same area. When we secured the original wildlife collector's permit of the non viable egg masses saw how they had killed 60 specimens simply to determine if they were in the area or not.

This was the protocol used even after the animals were declared threatened and later endangered. It was as if the Province simply wanted these animals dead.

519-826-4929 MIN OF NAT RES 145 P02 MAR 25 '04 14:43

MNR Guelph Copy



Ontario
Ministry of Natural Resources
Ministère des Richesses naturelles

Wildlife Scientific Collector's Authorization
Autorisation pour faire la collecte scientifique d'animaux sauvages

Authorization No / N° d'autorisation	1014637
Local Reference No / N° de référence local	7200
Issuer Account No / N° de compte du titulaire de permis	10001100

This authorization is issued under Section 39 of the Fish and Wildlife Conservation Act, 1997 to:
Cette autorisation est délivrée en vertu de l'article 39 de la Loi sur la protection du poisson et de la faune de 1997 à:

Name of Authorization holder	Last Name / Nom de famille Mr. Fausto	First Name / Prénom J-Arnel	Middle Name / Second Prénom
Name of Business/Organization/Affiliation (if applicable) Nom de l'entreprise/de l'organisme/de l'affiliation (le cas échéant)	LGL Limited		

Street Name & No / PO Box/Rue/Cas. Del. / N° rue/C. P. / R. B. poste restante 3365 Harvester Road, Ground Level	Province/State ON	Postal Code/Zip Code L7N 3N2
City/Town/Municipality / Ville/Village/municipalité Burlington		

This authorization permits the above-named person to:
Cette autorisation permet à la personne nommée ci-haut de:

☒ **Capture wildlife of the species and sex, in the numbers, and in the area set out below.**
Capturer les espèces d'animaux sauvages selon le nombre et le sexe indiqués ci-dessous dans les lieux indiqués ci-dessous and/or / et/ou

☒ **Keep game wildlife or specially protected wildlife in captivity for the purposes of education or science**
Garder des animaux sauvages spécialement protégés et du gibier sauvage en captivité à des fins éducatives et scientifiques

☒ **Release the captured wildlife in the area of capture, if the captured wildlife is not to be removed from that area**
Relâcher les animaux sauvages capturés dans la zone de capture si les animaux capturés ne doivent pas être enlevés de cette zone

OR / OU

☐ **Capture and kill wildlife of the species and sex, in the numbers, and in the area set out below.**
Capturer et tuer les espèces d'animaux sauvages selon le nombre et le sexe indiqués ci-dessous dans les lieux indiqués ci-dessous

Species / Espèces	Sex / Sexe	Numbers / Nombre	Location / Endroit
Jefferson Salamanders + Hybrid		20	Egg Masses in Hidden Valley, City of Kitchener
Jefferson Salamanders + Hybrid		20	Adults in Hidden Valley, City of Kitchener
Jefferson Salamanders + Hybrid		20	Larvae - Hidden Valley, City of Kitchener

Yes/Oui ☒ Additional list attached / Liste additionnelle ci-jointe

Authorization Dates / Dates d'autorisation Effective Date / Date d'entrée en vigueur (YYYY-MM-DD) 2004-03-24	Expiry Date / Date d'expiration (YYYY-MM-DD) 2004-12-31
--	---

Authorization conditions This authorization is subject to the conditions contained in Schedule A.3 included. / Cette autorisation est soumise aux conditions de l'annexe A.3 ci-jointe.

Conditions de l'autorisation YES/OU ☒ NO/OU ☐ Schedule A included. / Annexe A ci-jointe

Authorized by (please print) Autorisé par (s'il vous plaît écrire en caractères d'imprimerie) Craig Selby (District Manager)	Signature of (please print) Signature de (s'il vous plaît écrire en caractères d'imprimerie) <i>[Signature]</i>	Date of issue / Date de délivrance (YYYY-MM-DD) 2004-03-24
Signature of Authorization holder / Signature du titulaire de l'autorisation <i>[Signature]</i>		Date (YYYY-MM-DD) 2004-12-31

Personal information obtained on this form is protected under the authority of the Fish and Wildlife Conservation Act, 1997 and will be used for the purpose of licensing, identification, enforcement, resource management and fisheries services purposes. Please direct further inquiries to the District Manager or the MNR contact district.
Les renseignements personnels obtenus dans ce formulaire sont protégés conformément de la Loi sur la protection du poisson et de la faune, 1997 et ils seront utilisés aux fins de délivrance de permis, d'identification, d'application des règlements, de gestion des ressources et de sondage sur les services à la clientèle. Veuillez communiquer avec le chef de district du MNR qui délivre le permis si vous avez des questions.

The next image is from the minutes from the Enbridge Line 10 Hearing where they confirmed no new EA was done on the Hydro Corridor. I found it bizarre how they reference the term "completed in the spring and summer of 2000" because this hearing took place in 2016. Either this was a typing error or the solicitor and engineer were crafting to deceive by the way this specific question was phrased.

Minutes from Line 10 NEB hearing:

Mr. Jetten was the solicitor for Six Nations and he was cross examining Mr. Newfeld of CH2M at the NEB hearing regarding Enbridge Line 10 oil pipeline from Nanticoke to Westover ON.

1159. MR. JETTEN: Okay. All right. And I take it that the botanical surveys have not yet been completed even.

1160. MR. NEUFELD: There are certain portions along the pipeline that have been rerouted from the initial application where certain botanical surveys are still outstanding.

1161. MR. JETTEN: So -- and the belief is that the additional botanical surveys will be completed in the spring and summer of 2000 along the replacement pipeline route where surveys have not been previously completed, correct?

1162. MR. NEUFELD: Yes, that's correct.

1163. MR. JETTEN: And what percentage of the pipeline route is that that's left to be completed?

1164. MR. YAREMKO: The remaining botanical surveys are primarily associated with the electrical transmission corridor route.

1165. MR. JETTEN: Okay. Any other areas?

1166. MR. YAREMKO: No, that's it.

CH2M hill worked on other pipelines as well as noted here:

899. MR. JETTEN: Okay. Can you give me some examples?

900. MR. NEUFELD: Yes. The Line 3 Replacement Program -- sorry, Enbridge's Line 3 Replacement Program.

901. MR. JETTEN: Can you give me some non-Enbridge examples?

902. MR. NEUFELD: Yeah. I was involved in several environmental and socio-economic assessments for multi-well drilling programs in Saskatchewan. I was involved with a section 58 application for a pipeline replacement in southern Alberta for Plains Midstream.

903. MR. JETTEN: For who?

904. MR. NEUFELD: Plains Midstream.

When work began at the Hydro Corridor, I was worried the work they were doing would one day topple these hydro towers because they altered the flow of the groundwater in this area. The amount of sediment removed had me wondering if they were subsidizing the entire project for the aggregate rather than the pipelines. I saw trucks hauling dirt away and I saw a water truck at the site.

I took this video of when they cut into an aquifer and were forced to install at least 29 wells to offset the water volumes welling up. <https://www.youtube.com/watch?v=OsNoZvzkmYY>

SNC Lavalin did this work. It was confirmed by the MOE and I saw signage at the site.

The Applicant of the Enbridge Line 10 pipeline hearing was Enbridge Pipeline Inc. even though I had proof they sold the pipeline as an asset to Enbridge Income Fund Holdings Inc. I did an article with the National Observer about that issue. They didn't sell just Line 9. They sold off the entire Mainline System which included Line 9.

<https://www.nationalobserver.com/2015/08/20/news/controversial-pipeline-changing-hands>

I wrote emails to Minister Jim Carr about this after the Enbridge Line 10 hearings and he appointed Sam Sele at the NEB to address my concerns. Here is the letter head of that correspondence with the answer they provided to me. They refuse to acknowledge the simple fact that Enbridge Pipeline Inc no longer owns this physical pipeline and that the hearing was done by a firm who no longer owned this asset. It was owned by Enbridge Income Fund Holdings at the time of the hearing and today it is owned by Enbridge Inc. not Enbridge Pipeline Inc.

Apparently the staff at the NEB don't know the difference between a brand name and an actual registered corporate name. The reason we use REGISTERED corporate names is to prevent such confusion. Enbridge Inc. and Enbridge Pipeline Inc. are two legally separate companies with different addresses and different boards of directors. The act of fraud isn't just about misleading people by way of doing a deed, it's also related to not adequately and clearly disclosing information. If you review the corporate summery received by Prime Minsiter and ministers regarding Enbridge's projects they use the brand names not the full names. This point is mentioned in my affidavit for the Line 10 pipeline replacement hearing.

They NEB also failed to double check if the lines owned by Enbridge are impacted by recalled Kobe Steel fittings. We can't simply rely on a faith based system to protect the public. We need proof of concept for actual safety compliance to mitigate the risks.



File #: OF-Surv-Land-E101 40

15 January 2018

Ms. Louise Lanteigne
700 Star Flower Avenue
Waterloo, ON N2V 2L2

Dear Ms. Lanteigne:

Enbridge Pipeline Inc. (Enbridge)
Line 10 Westover Segment Replacement Project (Line 10)
Response to email correspondence dated 19 September 2017, 11 October 2017,
25 October 2017, 9 November 2017, 10 November 2017, 17 November 2017 and
3 January 2018

monitored by the Board. To date, Enbridge has been in compliance with the Integrity Management Program requirements and we have no reason to believe that the company's program has not adequately addressed the potential of Kobe steel being used in its facilities.

Ownership related to Enbridge Income Fund and Enbridge Pipelines Inc.

You have raised several concerns in the past regarding ownership about Enbridge Income Fund and Enbridge Pipelines Inc. As noted in the Board letter dated 16 May 2016:

- The certificate holder for Line 10 is Enbridge Pipelines Inc. The existing certificate authorizes the operation of the pipeline.
- The certificate holder for the Line 10 Westover Segment Replacement Project refers to itself as Enbridge.

~ which entity?

But...
Enbridge Inc
sold the
ASSET to
Enbridge
Income
Fund.

* The Board is aware that Enbridge conducted a restructuring and transferred assets to the Enbridge Income Fund. The Board notes, that Enbridge is not required to seek authorization under section 74 of the *National Energy Board Act* for such a restructuring.

Why Not?

Which corporate
entity of Enbridge?

Environmental Protection

Ontario Endangered Species Act and Species at Risk Act

Enbridge's Environmental Protection Plan (EPP) was submitted in response to the

One may think these issues are all relative to the Line 10 issue but it isn't. I was a delegate of Enbridge's Line 9 hearing as well. They used Section 58 of the NEB Act for approval with Line 9 even though that NEB policy is limited to projects 40km and less. They applied it to the 800 km pipeline from Sarnia to Montreal by dividing the hearing to Line 9 Phase 1 and Line 9B. Those names were crafted by ENBRIDGE. That way if one looks for Line 9 phase 2 or Line 9A they won't find it. They don't technically exist. They divided the process to two separate hearing processes and both times they limited the scope of the Environmental Assessments to the area of the pumping stations only specifically to meet the criteria to use the section 58 order. When we raised concern about aspects between the pumping stations specific to the pipeline we were told it was out of scope.

Line 9 crossed 18 First Nations territories and they were not notified about the hearings. The city of Toronto was notified about the hearing by Ecojustice because Enbridge didn't tell them about it. It turns out that Line 9 runs over top Finch Subway Station and is in front of York University. It runs underneath a fire hall as well. The city of Toronto went to the hearing to ask Enbridge to give them a map of where this pipeline goes because they were scared of a spill hitting the sewers and ending up in their water intakes. Enbridge demands people sign off before viewing it. It's not a public document.

I went into the Line 9 hearing as a delegate and I won concessions to get new valves placed along the pipeline. The placement of valves had no regard for the growth upstream that widened river beds. When the valves were installed they only had one shut off valves along the Grand River, a major waterway and that violated the Navigable Water's Act. The one valve that was there was under water ever spring due to spring thaw. I made them replace some of the valves and the delay of it cost them \$609 million dollars.

<https://business.financialpost.com/commodities/energy/enbridge-inc-reports-609-million-loss-as-charges-line-9-pipeline-delay-take-toll>

On October 6 2014 the National Energy Board ordered Enbridge not to restart its Line 9 pipeline until further notice. In a letter to Enbridge, the NEB noted “only 6 of the 104 Major Water Crossings identified by Enbridge to date appear to have valves installed within 1 km on both sides of the water crossing” as required by regulations. So instead of complying with the rules, Enbridge asked to change them.

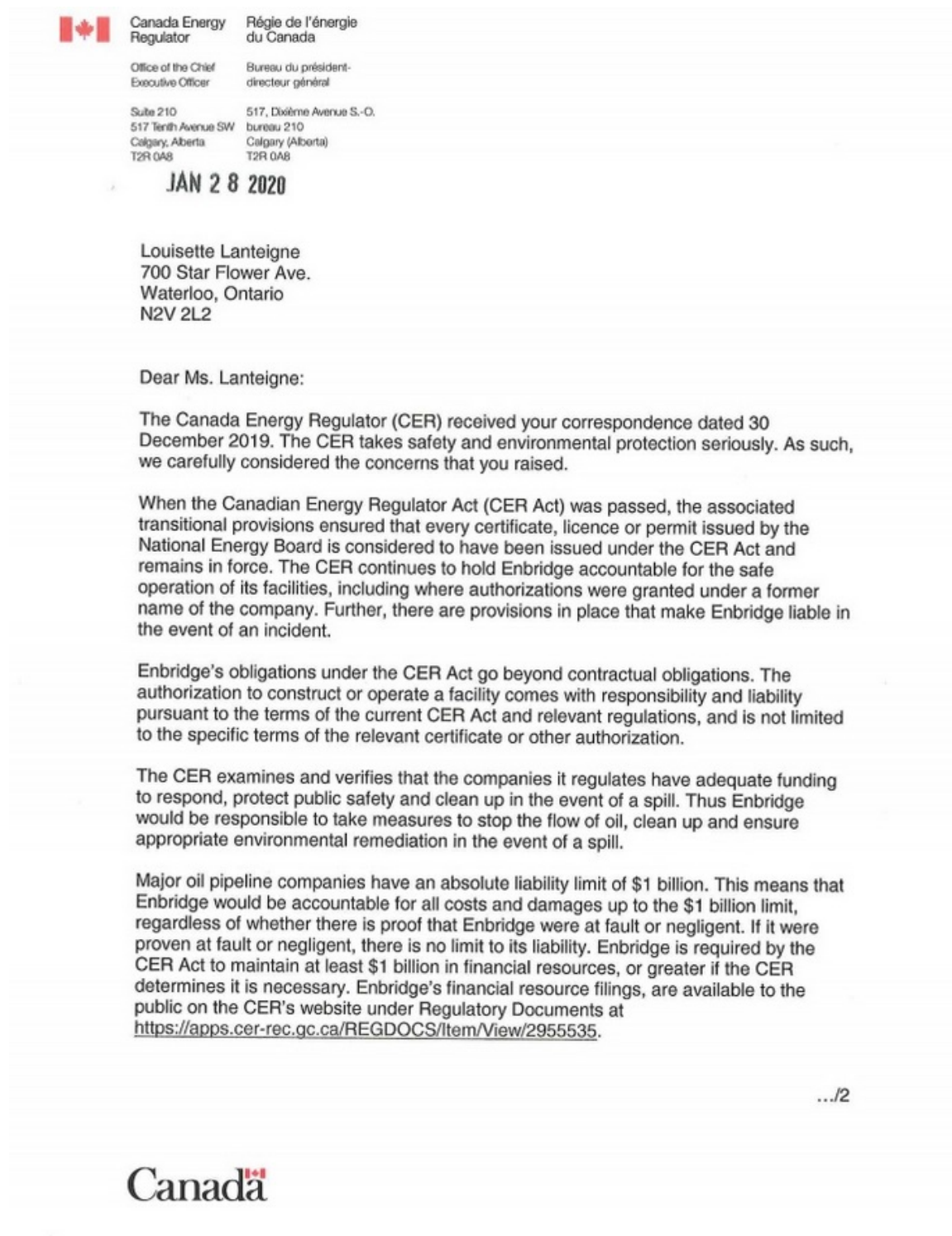
<https://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/enbridge-wants-national-energy-board-to-ease-pressure-on-line-9-pipeline/article21277294/#dashboard/follows/>

The simple truth is that all the valves were placed 12 km from one another. They reversed the flow so the closest shut off valves are all on the wrong side of the rivers. If a flood ruptures the line, and the other valve is miles away, you could see the remaining solvent of a 12 km pipeline pouring uncontrollably into a river. There are still many rivers without the dual valves to protect the water.

The question has to be asked, how many oil and gas lines are like this today?

Concerns For The Lack of Insurance

I just received this email from CER's (formerly NEB) Chair Peter Watson in regards to concerns I had about Enbridge's Lack of Insurance.



-2-

Thank you for bringing your concerns to our attention. I trust this information helps to clarify the issues you have raised. We would be pleased to provide any additional information or clarity you may require. If you have additional questions, please send them to our new centralized Correspondence Unit (contact@cer-rec.gc.ca) and we will respond promptly.

Yours sincerely,



C. Peter Watson, P. Eng., FCAE
Chief Executive Officer

c.c.: The Honourable Justin Trudeau, Prime Minister of Canada
The Honourable Chrystia Freeland, Deputy Prime Minister
The Honourable Seamus O'Regan, Minister of Natural Resources

I reviewed in detail the response of Mr. Peter Watson of CER.

Mr. Watson provided me with a URL that dates back to a funding plan rooted in 2016. It identifies Enbridge's assets as well as the fiscal structure and it's woefully out of date.

Please visit this link as provided to me by Mr. Watson.

<https://apps.cer-rec.gc.ca/REGDOCS/Item/View/2955535>

Click on Form A76389 of that website which will bring you to a new webpage featuring A76389-A. One of the assets identified as Enbridge Pipeline Inc. is Enbridge Line 10 linked to 74,000 bpd worth of product. The problem is Enbridge no longer owns it. This pipe was just sold to Westover Express.

As for the assets of Enbridge Pipelines (Westspur) Inc that was sold off to Tundra Energy Marketing Limited ("TEML") for \$1.075 Billion on Dec. 2016 as noted here:

<https://www.enbridge.com/media-center/news/details?id=122522&lang=en>

You can see a long list of pipelines under the name Enbridge Pipeline Inc. which includes lines 1 through 67 but this has no regard to the fact that Enbridge Pipeline Inc sold these assets to Enbridge Income Fund Holdings Limited.

Now visit this link again <https://apps.cer-rec.gc.ca/REGDOCS/Item/View/2955535> and look at A77040 and open that up and you will see the funding model for the insurance references Enbridge Income Fund Holdings Inc. yet today that company no longer EXISTS. This fact is verified by Enbridge here: <https://www.enbridgeincomefund.com/> and it clearly states this firm it was aquired by

Enbridge Inc.

So to suggest that Enbridge Pipeline Inc. still owns the assets of Enbridge Inc. is FALSE. They are by law, TWO SEPARATE COMPANIES.

According to Bloomberg this is the board of Directors for Enbridge Inc and their address is 3000 Fifth Ave Place 425 1st Street SW Calgary, AB T2P 3L8 Canada
<https://www.bloomberg.com/profile/company/ENB:US>

According to Bloomberg this is the board of Directors for Enbridge Pipeline Inc. and their address is . 200, 5th Avenue Place 425-1st Street Southwest Calgary, AB T2P 3L8 Canada
<https://www.bloomberg.com/profile/company/1180Z:CN>

So why did Mr. Watson send me an out of date response that is no longer factual or relevant regarding the issue of Enbridge's assets and liability coverage?

Where is the fiscal and judicial prudence?

Why doesn't the CER provide current factual data on who owns what asset?

Why doesn't the CER stay on top to make sure that the Certificates of Public Needs are current and that the corporate liability information is up to date?

As of December 2019, Enbridge has divested billions of assets and they are still in debt \$60.9 billion dollars.
<https://calgaryherald.com/commodities/energy/how-enbridge-plans-to-grow-in-the-age-of-pipeline-opposition-and-connect-canadian-oil-to-world-markets/wcm/f07fff26-ed3b-4d20-986e-1640bb4a6aff>

There are new increased tariff rates issued by the FERC which now applies to these pipelines currently which impacts both oil and gas lines.
<https://www.enbridge.com/~media/Enb/Documents/Tariffs/2019/LKH%20FERC%2045190%20CER%20455%20CDMN.pdf>

There are serious concerns in the US, that Enbridge doesn't have proper liability coverage.

“In the event of a catastrophic oil spill, the people of the state of Michigan could be left holding the bag for more than a billion dollars in unfunded liability,” said a statement from Michigan Attorney General Dana Nessel.
<https://www.mlive.com/news/2019/11/enbridge-could-duck-cleanup-costs-from-future-line-5-spill-study-says.html>

The statement was based on this report:

An Analysis of The Enbridge Financial Assurances Offered to the State of Michigan On Matters Related To The Operation of The Enbridge Line 5 Pipeline At the Straits of Mackinac Prepared For The State of Michigan The Michigan Department of Attorney General The Michigan Department of Environment, Great Lakes and Energy The Michigan Department of Natural Resources By American Risk Management Resources Network, LLC October 29, 2019

You can view the entire report online her:

https://www.michigan.gov/documents/ag/Master_Michigan_Enbridge_10_29_final__670367_7.pdf

In light of these concerns, I respectfully requested an updated document to prove that Enbridge has 1 billion liability set aside to address a crisis. Let us see the current view because if a spill happens today, we need clarity on the current situation as it stands right now.

The 2016 information as provided by Mr. Watson is no longer logical or relevant. We need to keep critical data like this updated and *contractually factual*.

I also respectfully request that all the CPCN permits will be updated to reflect the contractual obligation of the current pipeline owners. This is to protect all the workers working on those lines in compliance to labour laws and regulatory procedures. It is needed to facilitate lawful engineering work, maintenance and protection of workers, the communities, investors and the public interest.

This is not an unreasonable request. This is assuring compliance to the law as it was designed.

Fiscal Prudence Needed

Below I include an excerpt from the article *Wet'suwet'en Raids: Canada Chooses Colonialism Again: A future of reconciliation is now squandered along with our billions propping up LNG* by Andrew Nikiforuk published on 6 Feb 2020 in The Tyee. Full article here:

https://thetyee.ca/Opinion/2020/02/06/Wetsuweten-Raids-Canada-Chooses-Colonialism-Again/?utm_source=twitter&utm_medium=social&utm_content=020720-2&utm_campaign=editorial-0220

In Canada, LNG development has become an absurd Soviet engine that ignores costs and environmental damages.

But being Canadian, it drapes itself with the plastic word "responsible."

"Responsible" subsidies for the foreign-funded LNG industry now include low royalties; nearly \$1 billion worth of royalty credits; discounted electricity prices; reduced corporate income taxes; free water for fracking; reduced carbon taxes and the deferral of provincial sales taxes during construction. The Canadian government even invested \$275 million in LNG Canada!

These subsidies, however, still can't make LNG economic. In 2018 the Canadian Energy Research Institute examined the economics of LNG.

It concluded that Western Canada LNG would be \$1 to \$3 more expensive than the current spot price in Japan of \$8 per million (BTU) and needed more subsidies and tax credits.

CERI then calculated what the LNG industry would need in terms of future prices to remain economically viable: a market price of \$8.99 per million BTU or higher in Asia to break even. Or an oil price of approximately \$80 or higher to break even under long-term LNG contracts.

Those conditions don't exist and show no signs of coming into being.

A global LNG supply glut has collapsed prices in Asia to as low as \$5.5 per million BTU in Japan and India. Analysts say the glut could last years.

Meanwhile oil prices, which influence LNG pricing, remain in the doldrums.

Unless the Canadian and B.C. governments are prepared to give away LNG, neither Coastal GasLink nor LNG Canada are economic at this point in time.

These appalling economics explains why Chevron pulled out of the Kitimat LNG project last fall. At the same time, Chevron wrote off \$11 billion in underperforming shale gas assets in Appalachia due to low prices and overproduction.

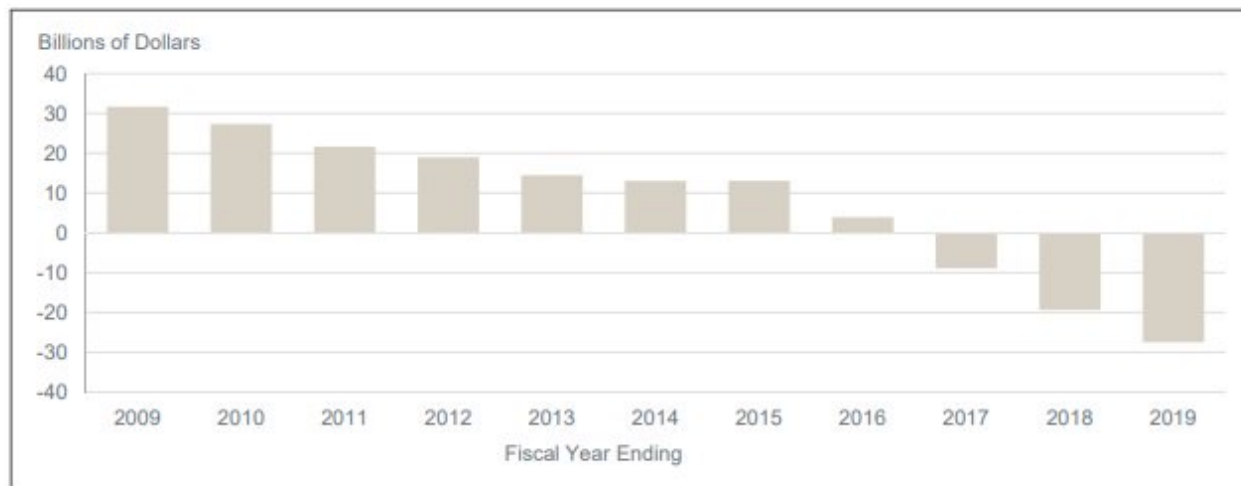
Throughout North America's oil patch, the shale boom has collapsed as more companies go bankrupt and investors refuse to loan more money to companies whose costs exceed their revenue.

Given the volatility of commodity prices, reconciliation should come first.

Albert Blue Ribbon Report

In May of 2019 an independent panel of experts was appointed to review Alberta's finances and economy. This document represents the findings of the panel, also known as the Blue Ribbon Panel on Alberta's Finances or the MacKinnon Panel on Alberta's Finances. It featured this chart showing Alberta's Finances going from Net Assets to Net Debt. Let's not do the same in Ontario.

FIGURE 30: ALBERTA'S FINANCES DROPPED FROM NET ASSETS TO NET DEBT



Source: Alberta Treasury Board and Finance

In Closing I present the Alberta Government's Values featuring the 10 year charts for Natural Gas and Oil. The Canadian prices are featured in orange in the Oil Charts. Alberta product is WCS not WTI.

We need fiscal and judicial prudence to protect future generations and we must act now if we are to survive Climate Change. Consider this report your stitch in time that can save nine.

Natural Gas Prices

Price of natural gas per gigajoule in Canadian dollars.

View data:

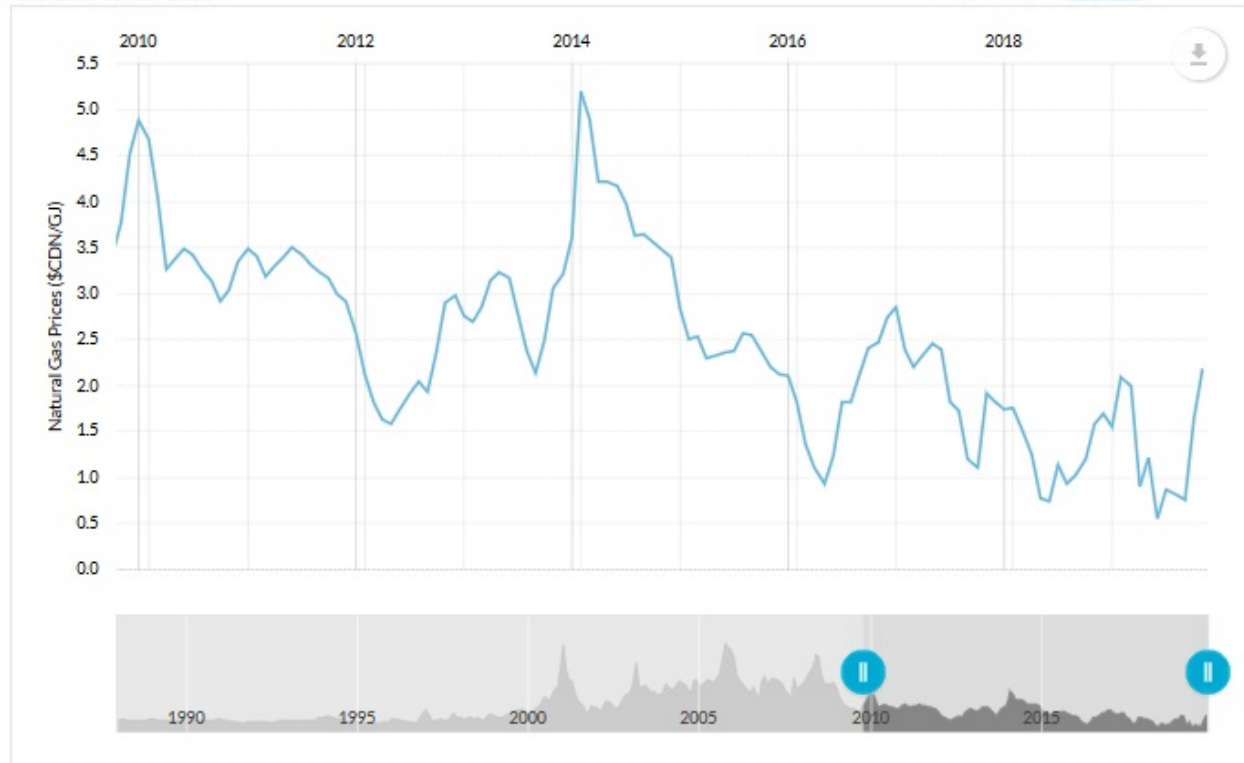
Alberta

Download

Touch the graph for more detail

Nov 2009 to Nov 2019

1 year 5 year 10 year All available



Source: Alberta Energy (Jan 2000 to present)

Natural Gas (\$CDN/GJ)

NOVEMBER				JAN - NOV (AVERAGE)		
TREND	2018	2019	% CHANGE	2018	2019	% CHANGE
↑	\$1.59	\$2.19	37.7%	\$1.25	\$1.33	6.4%

Source: Alberta Energy (Jan 2000 to present)

Analysis

PUBLISHED - Jan 30, 2020

The price of natural gas in November 2019 was CDN\$2.19 per gigajoule, up 37.7% from November 2018.

Oil Prices

Price per barrel of WCS oil in US dollars.

View data:

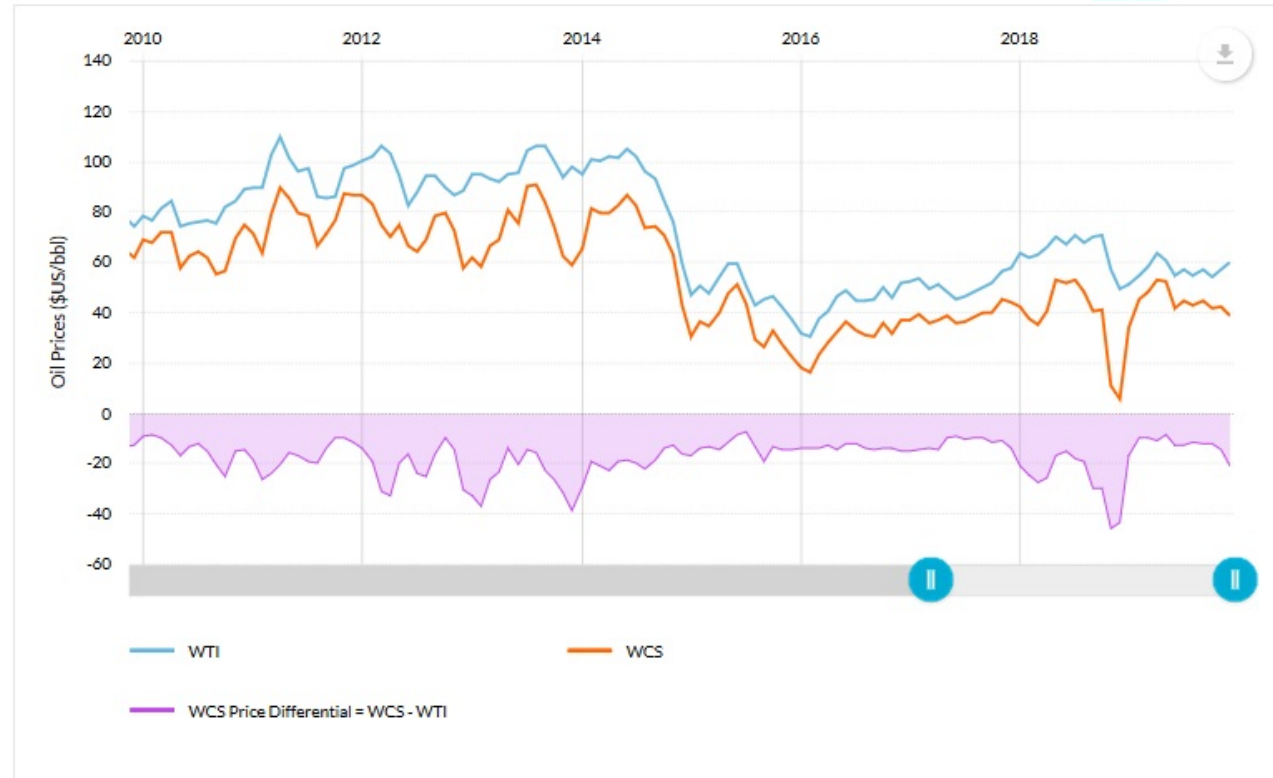
Alberta

Download

Touch the graph for more detail


Dec 2009 to Dec 2019

1 year 5 year 10 year All available




WTI Source: U.S. Energy Information Administration (Jan 1986 to present). WCS Source: Alberta Energy (Jan 2009 to present)

WTI Oil (\$US/bbl)

DECEMBER				JAN - DEC (AVERAGE)		
TREND	2018	2019	% CHANGE	2018	2019	% CHANGE
	\$49.52	\$59.88	20.9%	\$64.84	\$56.98	-12.1%
Source: U.S. Energy Information Administration (Jan 1986 to present)						

WCS Oil (\$US/bbl)

DECEMBER				JAN - DEC (AVERAGE)		
TREND	2018	2019	% CHANGE	2018	2019	% CHANGE
	\$5.97	\$39.11	555.1%	\$38.46	\$44.28	15.1%
Source: Alberta Energy (Jan 2009 to present)						

Analysis

PUBLISHED - Jan 23, 2020

The West Texas Intermediate (WTI) price of oil, often a world reference price quoted in the media, averaged US\$59.88 a barrel in December 2019, 20.9% higher than it was a year earlier. WTI averaged \$56.98 a barrel in 2019, 12.1% lower than 2018's average price.

Western Canada Select (WCS), the price obtained for many Alberta producers of oil, averaged US\$39.11 a barrel in December 2019, 555.1% higher than it was a year earlier. WCS averaged \$44.28 a barrel in 2019, 15.1% higher than 2018's average price.

The differential of WTI over WCS was US\$20.77 in December 2019.