IN THE MATTER OF AN ARBITRATION UNDER CHAPTER ELEVEN OF THE
NORTH AMERICAN FREE TRADE AGREEMENT AND THE UNCITRAL
ARBITRATION RULES

BETWEEN:

LONE PINE RESOURCES INC.

Claimant

AND

GOVERNMENT OF CANADA

Respondent

CLAIMANT'S REPLY

ICSID CASE NO. UNCT/15/2
22 May 2017

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1. **INTRODUCTION**

1. Through the actions of the Government of Quebec, Canada has expropriated the Claimant's valuable rights to natural gas. These actions were arbitrary, grossly unfair, and idiosyncratic. These actions breached the NAFTA's prohibition against expropriation in Article 1110, and fell below the minimum standard of treatment required by Article 1105.

2. Canada is responsible for Quebec's actions and must therefore compensate the Claimant.

3. The expropriation was simple. Quebec adopted Bill 18, *An Act to limit oil and gas activities*,¹ ("Bill 18") on 10 June 2011. The law was clear and deliberate. It is only five sections long. It expressly "revoked" a targeted set of valid exploration permits in a precise territory of Quebec, and extinguished the Enterprise's rights to explore under the St. Lawrence River. The revocation expressly entailed "no compensation from the State".

4. Before deciding to adopt Bill 18, the Quebec government knew that 29 valid exploration permits were in the territory covered by Bill 18. The Deputy Prime Minister of Quebec and Minister of Natural Resources, Nathalie Normandeau, and her government knew that their actions could result in lawsuits for lost revenue and sunk costs. They went ahead anyway.

5. The River Permit was revoked by Bill 18. The expropriation of permits without compensation in Bill 18 prevented the Enterprise from continuing its efforts to develop the promising shale gas resources located under the River Permit. At the time Bill 18 revoked the River Permit, the Enterprise validly held the intangible property rights under the River

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¹ Bill 18, s. 2 (C-063).
Permit in accordance with the requirements of Quebec law. It had spent money, pursuant to a contract and its obligations under Quebec regulations, to "prove up" the existence of gas under the River.

6. The River Permit Rights were very valuable. Since 2006, multiple geological and petrophysical tests and analysis had been conducted. The results confirmed an economically viable shale gas play, with desirable rock attributes, significant gas-in-place and excellent contents of methane and natural gas liquids that would attract a premium in the market.

7. Testing revealed that just one of the Enterprise's wells could have provided enough gas to heat 800 Quebec homes for a year.

8. The Enterprise was on track and close to producing gas from the resources under the River Permit Area and flowing gas for commercial sale, gas that was economically valuable.

9. The Enterprise anticipated distributing the gas to close-by customers in Quebec and the north-east United States using Quebec's existing natural gas pipeline distribution network. All requisite certificates and authorizations had been obtained and every regulation had been met along the way. Financing was available to complete the last step in exploration, tie in the wells and proceed to commercial gas production.

10. The Enterprise believed that this shale gas play had "world class" potential. The River Permit Area was in the heart of the play. It was the sweet spot.
11. From the outset in 2006, it was obvious to Forest Oil, Junex and the Quebec government that drilling activities on the land, including horizontal drilling, would be required to access gas resources under the river. There was never any intention to drill in the water.

12. When Minister Normandeau announced a moratorium on oil and gas exploration and exploitation in the St. Lawrence River in November 2010, it was her ministry’s position that the horizontal drilling activities were safe. That is, the government’s internal position on what it knew the Enterprise had always planned to do – to drill horizontally from onshore locations, hundreds of meters below the surface, into the gas resource under the river – was that it could be done safely.

13. That position was contained in internal government documents, including a draft memorandum about Bill 18 from Minister Normandeau to the Quebec Executive Council, until at least late April or early May, 2011.

14. But just before Minister Normandeau presented her memorandum and Bill 18 to her colleagues, the position abruptly changed – or at least it was no longer wise to mention it. The point was removed from Minister Normandeau’s memorandum just before it was sent. But in reality, the government had no new or additional evidence to contradict or justify a change in its own position.

15. The real problem was that the position did not support the new position Minister Normandeau had decided to take through Bill 18: that all the river permits should be revoked outright and immediately, without any compensation, even if that meant preventing land-based drilling activities as collateral damage.
16. Canada and its witnesses attempt to justify the Minister's decision using the SEA-1 report and the BAPE 273 report, in an effort to find support for Bill 18. Canada even argues that one or both of those reports form the basis for Bill 18. But those studies do not in fact lend any support for immediately stopping drilling activities on land (including horizontal drilling activities), let alone the immediate and permanent revocation of permits for the exploration of resources under the river.

17. The explanation for Bill 18 is in Minister Normandeau's own words. In her testimony before a National Assembly Committee on 31 May 2011, she stated:

"...it is a political decision for which we assume complete responsibility."

18. With respect to compensation specifically, Minister Normandeau also made no secret of how political considerations dictated why the government refused to compensate permit holders for revoking their permits:

In terms of compensation, Mr. Bouchard, in the current context, let's say it frankly. I do not think that the citizens would have appreciated us compensating gas companies in the extremely highly emotional context that has occupied us in recent months, in recent weeks.  

19. She immediately continued:

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2 Translation of Quebec, National Assembly, Committee on Agriculture, Fisheries, Energy and Natural Resources, Journal des débats, 2nd Sess., 39th Leg., Vol. 42 No. 12 (31 May 2011) (Minister Normandeau) at 16 (C-066).

3 Translation of Quebec, National Assembly, Committee on Agriculture, Fisheries, Energy and Natural Resources, Journal des débats, 2nd Sess., 39th Leg., Vol. 42 No. 12 (31 May 2011) (Minister Normandeau) at 12 (C-066).
That said, Mr. Chairman, I recognize the validity of your arguments from a legal perspective. But from a political perspective, the government has communicated a very different message. 4 [Emphasis added]

20. Bill 18, the expropriation of permits and the decision not to pay compensation were strictly political decisions made by Minister Normandeau and the Quebec government. None of the evidence adduced by Canada in this arbitration discredits these statements. Indeed, evidence that Canada and Quebec subsequently produced lends further support to this conclusion.

21. Quebec's actions breached the legal standard in both Article 1110 (Expropriation) and Article 1105 (Fair and Equitable Treatment) of the NAFTA.

22. Canada's Counter-Memorial contains grave warnings, for example that daring to base an expropriation claim on a measure adopted by the Quebec National Assembly in reaction to public sentiment and electoral concerns amounts to "challenging the democratic system". 5 That is simply incorrect. The question before this Tribunal is not whether to strike down, invalidate or nullify Bill 18. The question is whether Canada has violated Articles 1105 and 1110 of the NAFTA.

23. For the reasons set out below and in its Memorial, the Claimant submits that Canada has violated Articles 1105 and 1110, and Canada must pay compensation.

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4 Translation of Quebec, National Assembly, Committee on Agriculture, Fisheries, Energy and Natural Resources, Journal des débats, 2nd Sess, 39th Leg, Vol. 42 No. 12 (31 May 2011) (Minister Normandeau) at 12 (C-066).

5 Counter-Memorial, 24 July 2015, 350.
A. Supporting materials filed

24. In addition to this Reply and accompanying Exhibits and Authorities, the Claimant has filed the following Reply Witness Statements:

(a) Reply Witness Statement of Douglas Axani (CWS-006);

(b) Reply Witness Statement of Roger Wiggin (CWS-007);

(c) Reply Witness Statement of Peter Dorrins (CWS-008); and

(d) Reply Witness Statement of Jean-Yves Lavoie (CWS-009).

25. The Claimant has also filed the following Expert Reports:

(a) Expert Report of Professor Hugo Tremblay, professor of property law, natural resources and energy law, and environmental law at the University of Montreal (CER-003).

26. The Claimant has also filed the following Reply Expert Reports:

(a) Reply Expert Report of GLJ Petroleum Consultants (CER-004); and

(b) Reply Expert Report of FTI Consulting (CER-005).
Timeline of Key Events

The Claimant’s progress in Quebec

- 5 May 2006
  Junex and Forest Oil enter into Farmout Agreement.

- 28 July 2006
  Enterprise applies to QMNR for River Permit.

- 29 November 2006
  Junex and Forest Oil enter into River Permit Agreement.

- 10 May 2007
  Forest Oil elects to exercise its option under the Farmout Agreement to earn 100% working interest in Original Permits and River Permit.

- 1 April 2008
  Forest Oil first announces significant discovery of a shale gas play in the Utica Shale following successful drilling and fracturing in the Bécancourt/Champlain Block.

- 10 November 2008
  Forest Oil completes capital investment to 100% working interest in the Original Permits and River Permit.

- 26 March 2009
  QMNR approves additional Junex exploration permits, including the River Permit.

- 8 April 2009
  Forest Oil assigns all rights, duties, benefits, and obligations in the Farmout Agreement to the Enterprise.

- 23 April 2009
  Forest Oil advises Junex of the Assignment Agreement.

Actions by the Government of Quebec

- 4 May 2006
  Government of Quebec releases report entitled Using Eneray to Build the Quebec of Tomorrow: Quebec Eneray Strategy.

- 23 June 2009
  Nathalie Normandeau becomes Quebec Minister of Natural Resources.

- June 2009
  SFA-1 program begins with SFA-1 on hydrocarbon extraction in the maritime Estuary and northwestern part of the Gulf of St. Lawrence.
<table>
<thead>
<tr>
<th>The Claimant’s progress in Quebec</th>
<th>2010</th>
<th>Actions by the Government of Quebec</th>
</tr>
</thead>
<tbody>
<tr>
<td>28 January 2010</td>
<td>Under two Assignment Agreements between Junex and the Enterprise, Junex transfers the River Permit and Original Permits to the Enterprise.</td>
<td>25 February 2010</td>
</tr>
<tr>
<td>19 April 2010</td>
<td>Junex applies to QMNR to request the transfer of the rights in the River Permit and the Original Permits.</td>
<td>July 2010</td>
</tr>
<tr>
<td>27 May 2010</td>
<td>QMNR formally transfers rights in the River Permit and the Original Permits.</td>
<td>August 2010</td>
</tr>
<tr>
<td>30 September 2010</td>
<td>Lone Pine is incorporated under the laws of the State of Delaware as a subsidiary of Forest Oil.</td>
<td>31 August 2010</td>
</tr>
<tr>
<td>10 November 2010</td>
<td>Junex and the Enterprise learn of moratorium through article published in Montreal Gazette.</td>
<td>27 September 2010</td>
</tr>
<tr>
<td>5 October 2010</td>
<td>QMNR asserts &quot;Development of the natural gas industry in Quebec is an economic opportunity that favours the increase of the collective riches in addition to improving energy autonomy.&quot;</td>
<td>3 November 2010</td>
</tr>
<tr>
<td>7 December 2010</td>
<td>QMNR confirms its position that horizontal drilling is safe in the Information Note.</td>
<td></td>
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### Timeline of Key Events

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>12 January 2011</td>
<td>Annex and the Enterprise met with QMNR to discuss Enterprise's plans for developing the River Permit. QMNR officials do not mention any impediments to development.</td>
</tr>
<tr>
<td>7 April 2011</td>
<td>Forest Oil meets with QMNR to discuss the relationship between QMNR and Ministry of Environment. Forest Oil advises that pending an understanding of new regulations no further exploration will be conducted.</td>
</tr>
<tr>
<td>26 May 2011</td>
<td>Forest Oil transfers ownership of the Enterprise to Lone Pine.</td>
</tr>
<tr>
<td>1 June 2011</td>
<td>Lone Pine completes an IPO in Canada and the US.</td>
</tr>
<tr>
<td>30 September 2011</td>
<td>Lone Pine becomes standalone public company.</td>
</tr>
<tr>
<td>27 January 2011</td>
<td>Actions by the Government of Quebec</td>
</tr>
<tr>
<td>3 February 2011</td>
<td>BAPE 273 report is submitted to Minister Normandean and the Minister of Sustainable Development.</td>
</tr>
<tr>
<td>28 February 2011</td>
<td></td>
</tr>
<tr>
<td>8 March 2011</td>
<td>BAPE 273 report is released to the public.</td>
</tr>
<tr>
<td>8 March 2011</td>
<td>Minister Normandean announces that SEA-SG on shale gas in Quebec will be conducted.</td>
</tr>
<tr>
<td>29 April 2011</td>
<td></td>
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<tr>
<td>4 May 2011</td>
<td></td>
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<tr>
<td>6 May 2011</td>
<td></td>
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<tr>
<td>12 May 2011</td>
<td>Bill 18 introduced by Minister Normandean.</td>
</tr>
<tr>
<td>30 May 2011</td>
<td></td>
</tr>
<tr>
<td>31 May 2011</td>
<td>QDGA attends committee hearings on Bill 18. Minister Normandean defends the bill before the Committee: “It is a political decision for which we assume complete responsibility.”</td>
</tr>
<tr>
<td>10 June 2011</td>
<td>Bill 18 passes in National Assembly.</td>
</tr>
<tr>
<td>13 June 2011</td>
<td>Bill 18 receives Royal Assent.</td>
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</tbody>
</table>
Timeline of Key Events

The Claimant's progress in Quebec

2012

2013

6 September 2013
Claimant files Notice of Arbitration.

2014

11 September 2013
Final SEA-2 report on the Gulf of St. Lawrence released.

17 February 2014
Final SEA 5G report on shale gas in Quebec released.

28 November 2014
BAPE final report regarding SEA-SG released.

2015

2016

8 April 2016
Quebec unveils 2030 Energy Policy which calls for the development of hydrocarbon resources.

7 June 2016
Quebec introduces Bill 106: An Act to implement the 2030 Energy Policy which includes comprehensive hydrocarbon regulation and to permits fracking.

15 June 2016
Petrolia Inc. receives a Section 22 certificate authorizing fracking on Anticosti Island.

10 December 2016
Bill 106 receives Royal Assent.

Actions by the Government of Quebec
II. FACTS

A. An Act to limit oil and gas activities

27. On 4 May 2011, Quebec Minister of Natural Resources Nathalie Normandeau introduced Bill 18 to the Quebec Executive Council (Cabinet).6 Eight days later, on 12 May, Bill 18 was introduced into Quebec’s National Assembly, where the “principle” of the Bill was adopted one week later.7 Bill 18 was adopted by the National Assembly on 10 June 2011 and received Royal Assent three days later on 13 June 2011 as An Act to limit oil and gas activities.

28. The Act states in part:

   1. No mining right provided for under Divisions IX to XIII of Chapter III of the Mining Act (R.S.Q., chapter M-13.1) may be issued for the part of the St. Lawrence River west of longitude 64°31'27" in the NAD83 geodetic reference system or for the islands situated in that part of the river.

   2. Any mining right referred to in section 1 and issued for the zone described in that section is revoked.

   […]

   4. The application of sections 1 and 2 entails no compensation from the State. [Emphasis added]

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7 RWS-004-Normandeau, para. 60; RWS-002-Dupont, para. 68; and RWS-005-Sauvé, para. 46.
29. As a result of Bill 18's entry into force, 29 valid exploration permits, including the River Permit, were revoked.8

B. Regulation of oil and gas exploration and exploitation activities in Quebec before An Act to limit oil and gas activities

1. Quebec begins the process of reforming its regulatory framework to facilitate the realization of the 2006 Energy Strategy

30. When Nathalie Normandeau became Quebec's Minister of Natural Resources on 23 June 2009 the government was three years into its 2006 Energy Strategy, which articulated the government's desire to increase the production of Quebec's natural gas resources.9 As a result of the government's enthusiasm for natural gas production, exploration activities in Quebec increased; however, the government's administrative resources and capacity committed to the hydrocarbon sector did not grow concurrently with the sector's activities. Minister Normandeau admitted that government resources for the sector were "limited" at the time she became minister.10 In order to increase her ministry's capacity to more effectively manage the growth of this sector, she asked one of her deputies, Mr. Sauvé, to reorganize ministry staff.11

31. QMNR set into motion the process for properly realizing Quebec's objective to exploit its natural gas resources with the announcement on 27 July 2009 of the SEA process – two

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8 Memoire au Conseil des Ministres De: Madame Nathalie Normandeau, Ministre des Ressources naturelles et de la Faune - "Projet de loi limitant les activités pétrolières et gazières et modifiant la Loi sur les mines" (4 May 2011) (C-132).


10 RWS-004-Normandeau, 19.

11 RWS-004-Normandeau, 19.
studies whose purpose was to assist in identifying the conditions under which oil and gas exploration and exploitation activities could advance while simultaneously ensuring environmental protection.\textsuperscript{12} The area subject to the SEA, the Gulf and Estuary of the St. Lawrence, covered a "major territorial expanse"\textsuperscript{13} As a result, the SEA was split into two different studies: SEA-1, which focused on the maritime Estuary and northwestern part of the Gulf of the St. Lawrence; and SEA-2, which focused on three eastern zones of the Gulf. A third region, the St. Lawrence River, itself, was excluded from the study process.

32. While the SEA process began, environmental groups grew active and called on the government to ban shale gas activities; a request the government and Minister Normandeau continuously rejected.\textsuperscript{14}

33. During the period where the SEA process was underway, the government relied on provisions in the \textit{Environment Quality Act} ("EQA"), to provide it with the necessary regulatory oversight tools. It particularly relied on the authorization certificate regime under section 22 and the Ministry of Environment's well inspection program.\textsuperscript{15}

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\textsuperscript{12} RWS-004-Normandeau, 25.

\textsuperscript{13} RWS-004-Normandeau, 24.

\textsuperscript{14} RWS-004-Normandeau 37, 29.

\textsuperscript{15} Email from C. Deshaies to D. Lapointe and J. Courtemanche re: "Demande de journaliste – sujet delicat – demande de moratoire et exploration des shales gazifères" (23 February 2010) (C-103).
34. In July 2010, with government activities to enhance the regulatory framework continuing, the SEA-1 Report was released.\(^{17}\)

35. The SEA-1 Report focused almost exclusively on studying offshore drilling for oil and gas resources. It drew a distinction between hydrocarbon resources contained in marine environments and those contained in land.\(^{18}\) In 800 pages of discussion, the Report mentioned shale gas twice and horizontal drilling three times. One of the instances that addressed horizontal drilling provided an overview of the technique:

Horizontal drilling is a technique that notably allows drilling underneath watercourses. Therefore, from installations situated on land, it is possible to conduct horizontal drilling under the basin of those watercourses in order to allow for the passage of tunnels without having to install drilling equipment in the water... Its primary advantage is to avoid all contact with the maritime environment.\(^{19}\) [Emphasis added]
36. In another instance, horizontal drilling was mentioned where the report noted that it foresees a framework for hydrocarbon exploration and exploitation in the Gulf and Estuary that would include horizontal drilling.\textsuperscript{20}

37. The SEA-1 Report also noted concluded the fact that techniques for horizontal drilling allowed drilling for resources up to 10 km from drilling installations, the effect of which "would permit obtaining reserves at sea from the riverbank and would limit the visual impact in certain cases."\textsuperscript{21} In situations involving horizontal drilling from the riverbanks, the report suggested permanent drilling installations be limited when in proximity to tourist sites, as a mitigation measure to maintain the quality of the coastal countryside.\textsuperscript{22} The report stated that other risks from drilling, such as eruptions with the potential to cause explosions and fires, were all risks that could be considered at the stage of individual project assessments.\textsuperscript{23}

38. The SEA-1 Report noted other risks it recommended should be accounted for during oil and gas drilling activities in marine environments. These risks included those to coastal Aboriginal communities and marine mammals, the latter of which could be impacted by

\textsuperscript{20} SEA-1, 6-9 AECOM TecSult Inc., Évaluation environnementale stratégique de la mise en valeur des hydrocarbures dans le bassin de l’estuaire maritime et du nord-ouest du golfe du Saint-Laurent, Rapport préliminaire en appui aux consultations, juillet 2010, 800 p. (R-021).


noise levels in the water. The report section "Ecosystems, habitats and species" similarly focused on risks related to species that live in and around marine environments, such as birds, fish stocks, whales, and turtles.

39. At no point in the report did its authors conclude that any of the risks necessitated an outright prohibition on the activities studied. In the section titled "Considerations touching the planning of exploring and exploiting hydrocarbons in the basin," the report recommended to "limit permanent drilling installations in the maritime environment in proximity to coasts and areas (less than 24km) near tourist sites."

40. Another recommendation in the SEA-1 Report was for the government to commission the BAPE to study the issue of shale gas development. The government did so, issuing its mandate on 31 August 2010.

41. The SEA-1 Report allowed the government to begin properly devising its approach and policies for shale gas development. The QMNR decided that some of its should focus on putting in place a clear and predictable business environment

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25 SEA-1, section 7.4.3.4, "Ecosystems, habitats and species" AECOM Tascott Inc., Évaluation environnementale stratégique de la mise en valeur des hydrocarbures dans le bassin de l'estuaire maritime et du nord-ouest du golfe du Saint-Laurent, Rapport préliminaire en appui aux consultations, juillet 2010, 800 p. (R-021).


of shale gas. It stated its desire for a framework where companies and investors were able to

42. With the government attaining a clearer picture on its 'next steps' for the development of shale gas, it prepared a "Shale Gas Q&A" in August 2010 that answered some basic questions about the direction of the government's future policy. The Q&A stated that the Quebec government did not support a moratorium on shale gas development. The Q&A maintained the overall strategy set out in 2006 to develop Quebec's shale gas, and declared that it was "time to put into place conditions for harmonious development of the industry." The Q&A further maintained the government position that section 22 of the EQA afforded it the necessary means to oversee the industry, and that by further modifying the provision, the Minister of Environment would be able "to fully exercise his role in the area of environmental protection."

43. The Q&A addressed the forthcoming BAPE process and clarified that the BAPE 273 was not mandated to provide a conclusion or recommendation that shale gas development was to be forbidden. The fourth question in the Q&A was why "[t]he mandate of the BAPE does not foresee the possibility to ban the exploitation of shale gas in Quebec, [even] though several people have expressed a desire in that way. Why limit thus the mandate of

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29 Development Durable des Gaz de Schiste au Quebec (August 2010), p. 10 (C-108).
30 Gaz de Schiste Questions - Réponses (August 2010) (C-107)
31 Gaz de Schiste Questions - Réponses (August 2010) (C-107)
32 Gaz de Schiste Questions - Réponses (August 2010) (C-107)
the BAPE?" The answer given was: "The government of Quebec has already expressed its desire to develop the gas resources of Quebec," and that it was "waiting" for the recommendations of the BAPE commission in order to improve the framework for shale gas exploration and exploitation projects."\(^{34}\)

2. **Minister Normand de implements a prohibition based on the SEA-1 Report and proceeds to extend it into the St. Lawrence River**

The SEA-1 Report was issued in July 2009.\(^{35}\) Minister Normand de discussed the report with "members of my office and the government employees in the [QMNR]."\(^{36}\) Following these discussions, on 27 September 2010, Minister Normand de announced a moratorium on oil and gas exploration and exploitation in the maritime Estuary and the northwest of the Gulf of the St. Lawrence.\(^{37}\) The Minister based her decision on the findings of SEA-1 and noted that the government's next steps would follow the findings presented by the SEA-2 Report, which was expected in the fall of 2012.\(^{38}\) This same point was expressed in Minister Normand de's speaking notes for her 27 September announcement, prepared on

\(^{33}\) Gaz de Schiste Questions – Réponses (August 2010) (C-107)

\(^{34}\) Gaz de Schiste Questions – Réponses (August 2010) (C-107)


\(^{36}\) RWS-004-Normand de, para. 27.


24 September. These notes also reinforced the government's commitment to develop Quebec's natural gas resources:

The objective of the government is to develop the oil and gas resources of Quebec in order to strengthen supply security and to use energy as a lever of economic development, all the while ensuring protection of the environment.

45. While the OMNR relied on the SEA process to guide its reform efforts, the Ministry of Environment enhanced its reliance on section 22 of the EQA to supervise the onset of hydraulic fracturing activities in Quebec. On 3 October 2010, the Ministry of Environment published an instructional memorandum that confirmed stimulation of wells by hydraulic fracturing required a section 22 authorization certificate. The ministry would also begin an inspection program for all well-simulation projects authorized by OMNR and those used for hydraulic fracturing. The section 22 certificate program permitted the continued expansion of shale gas activities, which the OMNR Hydrocarbon Bureau confirmed on 5

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39 Plan de notes d'allocution pour la vice première ministre, ministre des Ressources naturelles et de la Faune, ministre responsable du Plan Nord et ministre responsable de la région de la Gaspésie-Iles-de-la-Madeleine, Mme Nathalie Normandeau - À l'occasion d'une conférence de presse pour annoncer la décision de ne pas procéder à l'exploitation et à l'exploitation des hydrocarbures en environnement marin (Le 27 septembre à 2010) (C-110).

40 Plan de notes d'allocution pour la vice première ministre, ministre des Ressources naturelles et de la Faune, ministre responsable du Plan Nord et ministre responsable de la région de la Gaspésie-Iles-de-la-Madeleine, Mme Nathalie Normandeau - À l'occasion d'une conférence de presse pour annoncer la décision de ne pas procéder à l'exploitation et à l'exploitation des hydrocarbures en environnement marin (Le 27 septembre à 2010) (C-110).

41 Ministère de l'Environnement, Note d'instructions 10-07, Assujettissement des travaux de réalisation des puits gaziers à un certificat d'autorisation en vertu de l'article 22 de la Loi sur la qualité de l'environnement, 3 octobre 2010 (R-050).

42 RWS-003-Gosselin, 43.
October 2010 was "an economic opportunity that enhances communal wealth, in addition to improving energy autonomy."\(^{43}\)

\(a)\) **Questions over extending the prohibition into the river portion of the St. Lawrence**

46. Following Minister Normandeau's announcement on 27 September, some environmental groups in the province requested that she extend the moratorium on exploration and exploitation activities into the river portion of the St. Lawrence.\(^{44}\)

47. The request of the environmental groups was made public in an 8 November 2010 press release. It requested the "suspension" of oil and gas exploration and exploitation in the St. Lawrence River in order to let the government conduct an environmental study in the river.\(^{45}\) A similar request for a SEA over the river portion was submitted to the BAPE by the *Stratégies Saint-Laurent and Regroupement des comités de zones d'intervention prioritaire*.\(^{46}\)

48. Minister Normandeau has asserted that "many discussions" ensued within the government on the question of extending the suspension to the river portion of the St. Lawrence "in the weeks following" her September 2010 announcement.\(^{47}\) Presumably at the same time as

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43 Ministère des Ressources naturelles et de la Faune - Direction générale des hydrocarbures et des biocarburants - Document d'orientation gouvernemental sur le développement durable du gaz de shale au Québec (5 October 2010) (C-112).

44 RWS-004-Normandeau, 30.


46 Développement Durable de L'Industrie des gaz de Schiste au Québec (November 2010) (C-113).

47 RWS-004-Normandeau, 30, 31.
the "many discussions" were taking place, the QMNR Hydrocarbon Bureau prepared a memorandum dated 9 November 2010 that in part responded to this question. The note did not recommend whether or not to accept the request from the environmental groups, but did assert that Quebec's ability to monitor and regulate shale gas activities was already "well overseen by several laws and regulations".  

49. The government ultimately decided not to pursue a SEA over the river portion of the St. Lawrence, as requested by the environmental groups, concluding it would be "unnecessary" in light of the findings in the SEA-1 Report.  

50. On 9 November 2010, Minister Normandeau announced that the moratorium over oil and gas exploration and exploitation activities in the Estuary and northwest portion of the Gulf would be extended into the St. Lawrence River. The evidence discloses no formal announcement by Minister Normandeau. There are no speaking notes or evidence of preparatory work for an announcement extending the moratorium into the river portion of the St. Lawrence. Minister Normandeau has only stated that: "I communicated my intention to extend the prohibition announced on September 27, 2010 to the entire river up to the border of Québec with Ontario in an interview with The Gazette newspaper on November  

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48 Moratoire sur les activités d'exploration et d'exploitation d'hydrocarbures dans le fleuve du Saint-Laurent (partie fluviale) pour les permis de recherche localisés entre la pointe Est de l'Île d'Orléans et la frontière provinciale Québec/Ontario (9 November 2010) (C-114).
49 Moratoire sur les activités d'exploration et d'exploitation d'hydrocarbures dans le fleuve du Saint-Laurent (partie fluviale) pour les permis de recherche localisés entre la pointe Est de l'Île d'Orléans et la frontière provinciale Québec/Ontario (9 November 2010) (C-114).
50 RWS-005-Sauvé, 24.
51 RWS-003-Gosselin, 52.
9, 2010." The Montreal Gazette reported this 'intention' in an article the following day. In the 357-word article, Minister Normandeau's announcement was made without any reasons provided: "The ban we announced to the estuary applies to the rest of the river." Three internal Information Notes prepared by the QMNR Energy Sector and dated between 7 December 2010 and 28 February 2011 do not provide any other source, backup or supporting evidence for Minister Normandeau's announcement.

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52. Monique Beaudin, "Oil, gas development in St. Lawrence is frozen to Ontario border", The Gazette (10 November 2010) (C-057).

53. Monique Beaudin, "Oil, gas development in St. Lawrence is frozen to Ontario border", The Gazette (10 November 2010) (C-057).


56. The
manner in which the announcement was made led to a situation of uncertainty amongst companies potentially affected by it.57

52. When Minister Normandeau announced the geographic extension of the moratorium, her QMNR officials understood that it was to be a temporary measure, limited in time until the government put in place a revised regulatory framework.58 A QMNR memorandum cautioned against implementing a permanent measure because continued technological innovation was foreseeable, and such innovation could permit environmentally safe hydrocarbon development activities "in the maritime environment."59

53. After Minister Normandeau's November announcement that applied the government's post-SEA-1 moratorium to the river, the government continued to emphasize that it would be inappropriate to apply conclusions from the studied area of SEA-1 to other maritime settings, namely those being studied by SEA-2, because the SEA-2 was still ongoing.60 The Interministerial Press Line on shale gas development still conveyed the government's overall optimism that shale gas could be developed, and noted that its potential in the marine environment "remains to be evaluated".61 As such, the government was not willing to enact a complete moratorium in the entirety of the marine environment before the

58 Etat de situation (20101109-40) - Proposition de deux scenarios visant à interdire de façon permanente toutes activités d'exploration et d'exploitation pétrolière et gazière dans l'estuaire du Saint-Laurent (11 November 2010) (C-115).
59 Etat de situation (20101109-40) - Proposition de deux scenarios visant à interdire de façon permanente toutes activités d'exploration et d'exploitation pétrolière et gazière dans l'estuaire du Saint-Laurent (11 November 2010) (C-115).
60 Ligne de presse interministérielle – Titre: Mise en valeur de la filière gazière (gaz de shale) (November 2010) (C-117).
conclusion of the SEA-2 Report, which the documented noted "will not be known until 2012."\footnote{62}

54. Despite Minister Normand's announcements, and uncertainty about what the government was and was not permitting,\footnote{63} industry continued its plans for shale gas activities because the moratorium was known to be limited to oil and gas activities on the surface.\footnote{64} That is, the moratorium restricted only exploration and exploitation activities in the St. Lawrence River, and "subsurface exploration and exploitation [could] take place."\footnote{65}

55. On 12 January 2011, representatives of the Enterprise and Junex met with Deputy Minister Sauvé and other officials at the QMNR office in Quebec City.\footnote{66} This meeting was set up at the request of Junex to clarify the uncertainty that resulted from the article in the Montreal Gazette.\footnote{67} The first portion of this meeting was set aside to discuss the Enterprise's plans for drilling on land beside the St. Lawrence River and using horizontal drilling to drill under the St. Lawrence River.\footnote{68} Neither the Deputy Minister nor the two other QMNR officials present suggested at any time during the meeting that this activity would be inconsistent with the moratorium announced by Minister Normand in

\footnote{62}{Ligne de presse interministérielle – Titre: Mise en valeur de la filière gazière (gaz de shales) (November 2010) (C-117).}
\footnote{63}{Email from D. Roney to B. Dearden re: "Quebec" (2 May 2011) (C-120).}
\footnote{64}{Quebec — Public Relations Issues (23 December 2010) (C-1.9).}
\footnote{65}{Quebec — Public Relations Issues (23 December 2010) (C-1.9).}
\footnote{66}{RWS-005-Sauvé, 36.}
\footnote{67}{P. Dorrins Reply Witness Statement, para 32 (CWS-008) and J-Y. Lavoie Reply Witness Statement at para 27 (CWS-009).}
\footnote{68}{RWS-005-Sauvé, 36; P. Dorrins Reply Witness Statement, para 34 (CWS-008) and J-Y. Lavoie Reply Witness Statement, para 28 (CWS-009).}
November. They also made no mention of, nor asked any question, related to the fact that the Enterprise would be drilling from the area under one permit to area located underneath a separate, contiguous permit.

56. Peter Dorrins, who attended along with Jean-Yves Lavoie on behalf of Junex, recounted how the attendees "clarified and articulated our development plans, which required accessing the resources under the river from positions onshore." Mr. Dorrins also noted that from discussing the development plan, "it was also obvious that drilling would occur across the surface boundaries of permits. I did not recall Mr. Sauvé expressing any concern about that."

3. QMNR officials move to implement the moratorium Minister Normandeau announced in September and November 2010

a) QMNR officials prepare policy options and recommendations for the implementation of Minister Normandeau's moratorium

57. Officials at QMNR began developing proposals for ways the government could implement Minister Normandeau's announced moratorium in November 2010. These proposals feature in a series of Information Notes, memoranda, and draft memoranda. The first iteration of these proposals was on the same day as Minister Normandeau's announcement, and outlined two options for implementing the moratorium: drafting a future law, or placing the area under a state reserve pursuant to section 204 of the Mining Act. As early

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69 P. Dorrins Reply Witness Statement, para 37-38 (CWS-008) and J-Y. Lavoie Reply Witness Statement, para 29 (CWS-009).

70 P. Dorrins Reply Witness Statement, para 37 (CWS-008).

71 P. Dorrins Reply Witness Statement, para 37 (CWS-008).

72 État de situation (2010-119-40) - Proposition de deux scénarios visant à interdire de façon permanente toutes activités d'exploration et d'exploitation pétrolière et gazière dans l'estuaire du Saint-Laurent (11 November 2010) (C-115).
as 19 November 2010, a QMNR Information Note specified three options to implement the moratorium:

(a) A special law;

(b) Using the authorization certificate scheme under section 22 of the EQA; or

(c) Tightening conditions for drilling in the St. Lawrence by subjecting the activity to an environmental impact assessment under section 31 of the EQA.\textsuperscript{73}

58. Policy options continued to develop into December 2010. The ongoing development and revisions led to distinctions drawn between drilling activities in marine environments and those done only on and through dry land. The QMNR Information Note dated 7 December 2010

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\textsuperscript{73} Secteur de l'énergie, Direction générale des hydrocarbures et ces biocarburants - Activité d'exploration et d'exploitation d'hydrocarbures dans le fleuve Saint-Laurent (partie fluviale) pour les permis de recherche localisés entre la pointe Est de l'île d'Orléans et la frontière provinciale Québec/Ontario (19 November 2010) (C-116).

\textsuperscript{74} Ministère des Ressources naturelles, Direction du bureau des hydrocarbures, Interdiction des activités d'exploration et d'exploitation pétrolières et gazières dans le fleuve et l'estuaire du Saint-Laurent, Note d'information (20101123-1/20101109-40), 7 décembre 2010 (R-042).

\textsuperscript{75} Ministère des Ressources naturelles, Direction du bureau des hydrocarbures, Interdiction des activités d'exploration et d'exploitation pétrolières et gazières dans le fleuve et l'estuaire du Saint-Laurent, Note d'information (20101123-1/20101109-40), 7 décembre 2010 (R-042).
61. Simultaneously, while QMNR worked to devise policy options for the Minister, it was also considering the consequences of implementing her announcement of an extended moratorium.


78 Exploration pétrolière et gazière - Conséquences d’un moratoire (27 January 2011) (C-121).

79 Exploration pétrolière et gazière - Conséquences d’un moratoire (27 January 2011) (C-121).
63. In contrast to the other Information Notes, which were restricted to offering policy proposals, the Information Note prepared by Ms. Gagné offered its own conclusion as to the desirability or not of implementing the moratorium. The note concluded that a moratorium should be rejected because several laws already provided adequate regulation of hydrocarbon activities that collectively were able to assure "the safety of the public and the protection of the environment." The note concluded:

In this context, the Government of Quebec rejects the idea of imposing a moratorium on the development of shale gas, as the development of this natural resource represents:

- An important economic potential;
- An advantageous alternative solution on the environmental front; and
- A contribution to the energy security of Quebec.

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80 Exploration pétrolière et gazière - Conséquences d'un moratoire (27 January 2011) (C-121).
81 Exploration pétrolière et gazière - Conséquences d'un moratoire (27 January 2011) (C-121).
82 Exploration pétrolière et gazière - Conséquences d'un moratoire (27 January 2011) (C-121).
64. As the government continued to internally develop its policy in the winter of 2011, QMNR officials continued to raise questions about the scope, length in time, and geography that may be affected by the implementation of a moratorium.  

65. QMNR officials expressed opposition to a total moratorium until the end of April 2011. The Director General of the Hydrocarbon Bureau wrote to QMNR Assistant Deputy Minister Gosselin on 27 April 2011 and emphasized:

> If a total moratorium is applied in the St. Lawrence River (i.e. no horizontal drilling either), why does the same logic not apply as well to the Richelieu Valley? It is for this reason that the approach we recommended is more measured. It avoids creating precedents that will be difficult to follow.

(1) QMNR officials prepare the first draft of the memorandum that Minister Normandeau ultimately presents to the Cabinet

66. The development of QMNR's Information Notes occurred alongside the development of a memorandum Minister Normandeau ultimately presented to the Cabinet on 4 May 2011 when she introduced Bill 18. Initial drafts of this memorandum began at least as early as February 2011. The first draft made available to the Claimant was dated 3 February 2011.

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83 Email from M. Rousseau (DARSOEMT) to P. Perron (DGHB) re: "Plan d'affectation du territoire public" (7 February 2011) (C-123); Bordereau 201101063 (8 February 2011) (C-124).

84 Email from A. Lefebvre (DGHB) to M. Gosselin (BSMA – Energie) re: "Projet de loi spéciale sur le fleuve Saint-Laurent - État de situation" (27 April 2011) (C-126).

85 Email from A. Lefebvre (DGHB) to M. Gosselin (BSMA – Energie) re: "Projet de loi spéciale sur le fleuve Saint-Laurent - État de situation" (27 April 2011) (1449) (C-126).


87 Memoire au conseil des ministres - De: Madame Nathalie Normandeau, Ministre des Ressources naturelles et de la Faune - Objet: Projet de loi qui interdit les activités d'exploration et d'exploitation pétrolière et gazière dans le fleuve, l'estuaire et la partie nord-ouest du golfe du Saint-Laurent (3 February 2011) (C-122).
67.

(a) 

(b) 

Memoire au conseil des ministres - Dc: Madame Nathalie Normandeau, Ministre des Ressources naturelles et de la Faune - Objet: Projet de loi qui interdit les activités d'exploration et d'exploitation pétrolière et gazière dans le fleuve, le secteur et la partie nord-ouest du golfe du Saint-Laurent (3 February 2011) (C-122).

Memoire au conseil des ministres - Dc: Madame Nathalie Normandeau, Ministre des Ressources naturelles et de la Faune - Objet: Projet de loi qui interdit les activités d'exploration et d'exploitation pétrolière et gazière dans le fleuve, le secteur et la partie nord-ouest du golfe du Saint-Laurent (3 February 2011) (C-122).
Memoire au conseil des ministres - De: Madame Nathalie Normandeau, Ministre des Ressources naturelles et de la Faune - Objet: Projet de loi qui interdit les activités d'exploration et d'exploitation pétrolière et gazière dans le fleuve, l'estuaire et la partie nord-ouest du golfe du Saint-Laurent (3 February 2011) (C-122).

Memoire au conseil des ministres - De: Madame Nathalie Normandeau, Ministre des Ressources naturelles et de la Faune - Objet: Projet de loi qui interdit les activités d'exploration et d'exploitation pétrolière et gazière dans le fleuve, l'estuaire et la partie nord-ouest du golfe du Saint-Laurent (3 February 2011) (C-122).
70. No further drafts of the memorandum, subsequent Information Notes, or documents of any kind prepared in February 2011 contradicted or modified the government’s position that horizontal drilling under the river bed from the banks could be done safely.

h) The BAPE 273 Report is released

71. On 28 February 2011 the BAPE 273 Report was issued. It was released to the public on 8 March 2011. The report outlined and analyzed the many considerations related to shale gas development. The BAPE clarified that its mandate required it to:

- Propose a framework for the development and exploration of shale gas in order to promote harmonious cohabitation with the population, the environment, and other industries already present;
- Propose guidelines for a legal and regulatory framework that ensures the safe and secure development of the industry [...]; and
- Appoint[ ] scientific experts who will evaluate issues relating to this mandate.

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92 Memoire au conseil des ministres - De: Madame Nathalie Normandeau, Ministre des Ressources naturelles et de la Faune - Objet: Projet de loi qui interdit les activités d'exploration et d'exploitation pétrolière et gazière dans le fleuve, l'estuaire et la partie nord-ouest du golfe du Saint-Laurent (3 février 2011) (C-122).


94 RWS-003-Gosselin, 44.

72. The BAPE 273 report did not specifically study or address shale gas resources under the St. Lawrence River. It only mentioned the presence of shale gas under the river at one instance, when the report introduced southern Quebec's three "exploration corridors".  

73. The report also did not directly focus on the question of accessing shale gas through hydraulic fracturing. Instead, hydraulic fracturing appears in the report where discussion of its feasibility is appropriate to another topic. For example, in a section on groundwater issues, the report acknowledged an opinion provided by QMNR that "hydraulic fracturing operations that are at least 1,000m under aquifers and drilling methods would protect drinking water supplies." In one other instance where horizontal drilling is mentioned, the report noted its minimal impact on the surface: "The footprint resulting from the wells would be minimized in particular because a single horizontal drill can extend over a distance of more than 1 km and several wells can be drilled on the same site." At another section it noted, "the technique of horizontal drilling permits a certain flexibility related to the location of sites for exploration and exploitation."
74. In the end, the report noted the absence of conclusive evidence on the effects of hydraulic fracturing, and recommended continued drilling activity to facilitate further study of potential impacts: "In order to evaluate some of the potential environmental impacts and find, if there are any, solutions to the problems, it is necessary to drill, including hydraulic fracturing."  

75. The report provided examples of areas that might not be compatible with shale gas development because of the high risks. These included areas with high radon emission potential and areas susceptible to landslides. "Protected areas" that are listed under the Natural Heritage Conservation Act were identified by the report as not compatible with shale gas activities. However, even for these protected areas, the report proposed ways to mitigate any risk and stated that shale gas development would be feasible if appropriate "buffer zones" were established.

76. In sections where the report identified specific, potential environmental risks, it also identified possible mitigation measures. The report stated, "The Board of Inquiry is of the view that the Government of Quebec should encourage the development of safe


103 C-61.01 (C-155).


technologies to replace fracking water and the use of environmentally friendly chemicals."\textsuperscript{106} A separate section of the report highlights that "risk management would require appropriate communication methods."\textsuperscript{107}

77. The report included an opinion by the Order of Geologists of Quebec that there was a sufficient level of knowledge about new drilling techniques, like combining horizontal drilling and hydraulic fracturing, to already "understand the risks as well as the control measures."\textsuperscript{108}

78. Two statements in the BAPE 273 report highlight its adherence to its mandate to produce a report that demonstrated ways in which shale gas resources in Quebec could be developed in a sustainable fashion:

The Board of Inquiry is of the opinion that any hydraulic drilling permits should be conditional upon an assessment of the contamination risks based on the geological, structural, and hydro-geological conditions in the area covered by the application.\textsuperscript{109}

And:

In the preceding chapters, it has been shown that the shale gas industry in Quebec is in its infancy and that a solid base of technical and scientific knowledge must be developed with respect to this resource, particularly in

\textsuperscript{106} BAPE 273 Report, Développement durable de l'industrie des gaz de schiste au Québec, Rapport d'enquête et d'audience publique, février 2011, 336 p. 140 (R-024).

\textsuperscript{107} BAPE 273 Report, Développement durable de l'industrie des gaz de schiste au Québec, Rapport d'enquête et d'audience publique, février 2011, 336 p. 163 (R-024).

\textsuperscript{108} BAPE 273 Report, Développement durable de l'industrie des gaz de schiste au Québec, Rapport d'enquête et d'audience publique, février 2011, 336 p. 70 (R-024).

\textsuperscript{109} BAPE 273 Report, Développement durable de l'industrie des gaz de schiste au Québec, Rapport d'enquête et d'audience publique, février 2011, 336 p. 127 (R-024).
the areas of geology, hydro-geology, sewage treatment, land use planning or cohabitation with the population.\textsuperscript{110}

79. The BAPE 273 report did not contain any statements that drew special attention to the risks of drilling under the bed of the St. Lawrence River. Nor did it recommend that such activity be prohibited. Instead, the BAPE Commission stated that it "retains a range of 150-600 horizontal wells drilled per year for several decades."\textsuperscript{111} It continued that with favourable conditions, "[t]he pace of 600 wells/year can be surpassed."\textsuperscript{112}

80. The BAPE 273 report made one recommendation that Minister Normandeau accepted on 8 March 2011: that Quebec undertake a SEA specific to shale gas to further study the development of the province's shale gas resources.\textsuperscript{113}

81. In addition to the SEA-SG, Quebec continued to build upon its efforts to properly regulate shale gas development using section 22 of the EQA.\textsuperscript{114} In the spring of 2011, the Ministry of Environment drafted guidelines to expand the scope of section 22.\textsuperscript{115} Draft regulations to modify section 22 were issued on 29 April 2011.\textsuperscript{116} On 5 May 2011, the Ministry of Environment announced that implementation of the new regulations would require all

\textsuperscript{110} BAPE 273 Report, Développement durable de l'industrie des gaz de schiste au Québec, Rapport d'enquête et d'audience publique, février 2011, 336 p. 224 (R-024).

\textsuperscript{111} BAPE 273 Report, Développement durable de l'industrie des gaz de schiste au Québec, Rapport d'enquête et d'audience publique, février 2011, 336 p. 95 (R-024).

\textsuperscript{112} BAPE 273 Report, Développement durable de l'industrie des gaz de schiste au Québec, Rapport d'enquête et d'audience publique, février 2011, 336 p. 95 (R-024).

\textsuperscript{113} RWS-004-Normandeau, 43.

\textsuperscript{114} RWS-002-Dupont, 121.

\textsuperscript{115} RWS-002-Dupont, 124.

\textsuperscript{116} Draft Regulation - Environment Quality Act (R.S.Q., c. Q-2) - Regulation to amend the Regulation respecting the application of the Environment Quality Act (29 April 2011) (C-129).
drilling work to be subject to obtaining an authorization certificate under section 22 of the EQA.\textsuperscript{117}

82. Following the announcement of 5 May, the QOQA solicited comments from its members on the proposed changes.\textsuperscript{118} It emphasized that the regulatory changes were intended as interim measures while the SEA-SG was underway, and that they were an attempt to follow recommendations made in the BAPE 273 report.\textsuperscript{119}

83. The new section 22 regulations entered into force on 10 June 2011 after they were accepted by the Quebec Executive Council on 8 June 2011. The changes imposed by the new regulations were:

(a) Drilling to prospect or develop shale gas was subject to obtaining a section 22 authorization certificate;

(b) Hydraulic fracturing activities in hydrous environments or wetlands required a section 22 authorization certificate; and

(c) The requirements for obtaining a certificate were made more stringent.\textsuperscript{120}

\textsuperscript{117} BAPE, Rapport 273, Développement durable de l'industrie des gaz de schiste au Québec, Rapport d'enquête et d'audience publique, février 2011, 336 p. (R-024); RWS-001-Asselin, 17.

\textsuperscript{118} Email from R. Welch to G. Howe re: "Action Required, Deadline COB Tuesday on Comments to draft regulation" (16 May 2011) (C-140).

\textsuperscript{119} Email from R. Welch to G. Howe re: "Action Required, Deadline COB Tuesday on Comments to draft regulation" (16 May 2011) (C-140).

\textsuperscript{120} Gazette Officielle du Québec, Lois et règlements, 143e année, n°23B, 10 juin 2011; Dupont WS, 133-138 (R-033).
c) **Bill 18 is presented to the Quebec Executive Council**

84. The Quebec Executive Council met on 4 May 2011. In advance of Minister Normandean's presentation of Bill 18 that day to the Executive Council, QMNR officials updated and developed the memorandum that was first prepared on 3 February 2011. The next iteration of the memorandum that has been provided to the Claimant was dated 29 April 2011. 121

85. By 29 April two months had passed since the government's receipt of BAPE 273 report, enabling ample time to incorporate changes that were necessitated based on the conclusions in the report.

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121 Memoire au Conseil des Ministres De: Madame Nathalie Normandeau, Ministre des Ressources naturelles et de la Faune - Objet: Projet de loi limitant les activités pétrolières et gazeuses et modifiant la Loi sur les mines (29 April 2011) (C-127)


However, the Government of Canada provided some information concerning the redacted information, and confirmed that:

the redactions [in the documents] discuss the interplay between Bill 18 and the Accord entre le gouvernement du Canada et le gouvernement du Québec sur la gestion conjointe des hydrocarbures dans le golfe du Saint-Laurent (the « Accord »), an inter-governmental agreement between the governments of Canada and Quebec concerning the joint management of petroleum resources in the Gulf of St-Lawrence.130

89. The Government of Canada further advised that the redacted information "relates to the impact that Bill 18 could have on the interpretation and implementation of the Accord if the territory covered by Bill 18 overlaps with the part of the Gulf of St-Lawrence that is subject to the Accord."131

90. In light of this information, it may be inferred that the eastern boundary of the moratorium was affected by considerations not linked to the SEA-1 Report.

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129 Document De Travail – Confidentiel - Notes Préliminaires - Projet de loi no 18 et limite est du moratoire Réflexions de travail (6 June 2011) (C-146).

130 Letter from Respondent to Counsel for the Claimant, 21 April 2017 (C-151).

131 Letter from Respondent to Counsel for the Claimant, 21 April 2017 (C-151).
92. The contents of this recommendation are not known. The Government of Canada redacted this section, contrary to the Tribunal’s Order dated 24 February 2017. It is possible to infer that at some point the contents of the redacted recommendation favoured option one. This could correspond to Mr. Sauvé’s representation that after “consulting” with him and other officials, Minister Normandeau “decided to prohibit” all oil and gas exploration activities in the river portion of the St. Lawrence. But Canada produced no documentary evidence to corroborate any ‘consultation’ between Minister Normandeau, Mr. Sauvé, and other officials.

93. In tandem with the preparation of the memorandum, the government prepared for how it would communicate its decision to the public. Three communication plans, two dated 29 April 2011 and a third dated 3 May 2011, were created. The considerations, messaging strategy, and communication lines contained in those documents are, however, also,

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133 Memoire au Conseil des Ministres De: Madame Nathalie Normandeau, Ministre des Ressources naturelles et de la Faune - Objet: Projet de loi limitant les activités pétrolières et gazières et modifiant la Loi sur les mines (29 April 2011), pp. 7-8 (C-128).

134 RWS-005-Sauvé, 41.

135 See entries 147, 168, and 215 of Canada’s Privilege Log.
unknown. Canada refused to produce these documents to the Claimant, again contrary to the Tribunal’s Order dated 24 February 2017.136

94. After 29 April, the (unknown) authors of the memorandum to the Executive Council continued to develop the memorandum in advance of the 4 May Cabinet meeting.  

95. [REDACTED]

Now, in the subsequent draft, that option was removed with no explanation or further elaboration. Canada has not adduced any evidence to support this fundamental change of position.

136 Letter from the Respondent to Counsel for the Claimant, 17 March 2017 (C-149) and letter from the Respondent to the Tribunal, 10 April 2017, p. 3 (C-150).


there was just over one month left before the Quebec National Assembly rose for its summer recess. The current session of the National Assembly at that time, the 2\textsuperscript{nd} session of the 39\textsuperscript{th} Legislature, would be on summer recess after 10 June until 20 September 2011.\footnote{Schedule of Quebec National Assembly Legislative Sessions (C-157).}
98. Minister Normandeau presented draft Bill 18 to the Quebec Executive Council on 4 May 2011.  

99. [Redacted]

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143 RWS-004-Normandeau, 59; Email from: D. Blasi to: P. Reid re: "CONSEIL DES MINISTRES (2011-05-04) - Projet de loi limitant les activités pétrolières et gazières et modifiant la Loi sur les mines" (3 May 2011) (10660) (C-130); Projet de loi No 18 – Loi limitant les activités pétrolières et gazières (1 June 2011) (C-145).

144 Projet de loi No 18 – Loi limitant les activités pétrolières et gazières (1 June 2011), arts. 2, 4 (C-145).

145 Projet de loi No 18 – Loi limitant les activités pétrolières et gazières (1 June 2011) (C-145).

146 Memoire au Conseil des Ministres De: Madame Nathalie Normandeau, Ministre des Ressources naturelles et de la Faune - "Projet de loi limitant les activités pétrolières et gazières et modifiant la Loi sur les mines" (4 May 2011) (C-132). The only version of Minister Normandeau's memorandum to the Executive Council from 4 May 2011 is unsigned. This means that if she presented a signed version, it was not been produced to the Chairman.

100.

(a) 

(b) 

Memoire au Conseil des Ministres De: Madame Nathalie Normandeau, Ministre des Ressources naturelles et de la Faune - "Projet de loi limitant les activités pétrolières et gazières et modifiant la Loi sur les mines" (4 May 2011) (C-132).

Memoire au Conseil des Ministres De: Madame Nathalie Normandeau, Ministre des Ressources naturelles et de la Faune - "Projet de loi limitant les activités pétrolières et gazières et modifiant la Loi sur les mines" (4 May 2011) (C-132).


101. [REDACTED]

(a) [REDACTED]

(b) [REDACTED]

(c) [REDACTED]

102. [REDACTED]


Memoire au Conseil des Ministres De: Madame Nathalie Normandeau, Ministre des Ressources naturelles et de la Faune - "Projet de loi limitant les activités pétrolières et gazières et modifiant la Loi sur les mines" (4 May 2011), p. 6 (C-132).


The fact that only two of the three added advantages appear in track-changes format (p.4) suggests that there may be a further version of the memorandum that tracks the addition of the added advantage that the law "will stop the realization of horizontal drilling under the river." If such a version exists, it has not been provided to the Claimant.


109. On 11 May 2011, QMNR's Hydrocarbon Bureau also prepared an Information Note. In its note, the Hydrocarbon Bureau repeated Minister Normandeau's declaration "that, in all logic, the conclusions [of the SEA-1 Report] apply equally to the river [and its islands], notably by taking into account the geography and the activities that take place in the
maritime sea route." The Information Note also specifies which companies are registered as permit holders for those permits that will be fully or partially revoked by Bill 18.\textsuperscript{169}

d) \textit{Bill 18 proceeds through the Quebec National Assembly}

110. Bill 18 was introduced into Quebec's National Assembly on 12 May 2011.\textsuperscript{170} It was adopted "in principle" one week later.\textsuperscript{171}

111. Representatives of the Enterprise were caught off guard. Meetings between the Enterprise and QMNR and the Ministry of Environment in April 2011 had not included any mention by government officials that the plans for the development of the River Permit would no longer be possible, given that the River Permit was to be revoked.\textsuperscript{172} On 19 May 2011, the Enterprise's Senior Landman, Robert Welch, stated that he had been under the understanding that the moratorium announced in November 2010 "was to only apply to the surface, and subsurface exploration could take place."\textsuperscript{173}

112. The government was aware of the fact that the section 4 of Bill 18, which stated that no compensation would be provided for revoked permits, was being singled out by industry

\textsuperscript{168} Email from N. Klein (BSMA – Energie) to P. Perron (DGHE) re: "TR: Fiche - Projet loi limitant les activités pétrolières et gazières" and attachment (11 May 2011) (C-139).

\textsuperscript{169} Email from N. Klein (BSMA – Energie) to P. Perron (DGHE) re: "TR: Fiche - Projet loi limitant les activités pétrolières et gazières" and attachment (11 May 2011) (C-139).

\textsuperscript{170} Quebec National Assembly, "Bill n°18 : An Act to limit oil and gas activities"(C-158).

\textsuperscript{171} Quebec National Assembly, "Bill n°18 : An Act to limit oil and gas activities"(C-158).

\textsuperscript{172} Meeting with MRNF April 7 2011 in Quebec City - CFOL representatives - Virginie Lavoie, Dana Roney - MRNF representatives — Jean-Yves Laliberté, Robert Theriault, Isabelle Leclerc, Sébastien Desrochers; Meeting with MDEP April 8 2011 in Montreal - CFOL representatives - Virginie Lavoie, Dana Roney - MDEP representatives — Sylvie Laurence, Julien Paquet, Paul Benuiti, Daniel Savoie (13 April 2011) (C-125).

\textsuperscript{173} Email from R. Welch to G. Howe re: "Quebec Major Development" and attachments (19 May 2011) (C-141).
113. On the same day, the QMNR assembled a document titled "Oil and Gas Exploration". In addition to reviewing Bill 18's revocation of permits, the document affirmed the QMNR's commitment to the BAPE and SEA process. It emphasized that the SEA-SG would provide the government with further information and knowledge from which it would base its policies, and that the SEA-SG "is a required step, as much for the process of transparent decision making as for the search of better social acceptance."
115. On 10 June 2011, the National Assembly voted to pass Bill 18 on the final day of sitting before its summer recess.\textsuperscript{180} 10 June 2011 was the same day that the Ministry of Environment's new regulations under section 22 of the EQA entered into force. Bill 18 entered into force three days later.\textsuperscript{181}

e) Quebec continued studying shale gas development after Bill 18 entered into force

116. After Bill 18 entered into force, and permit holders questioned the extent of the impact it had on their permits,\textsuperscript{182} the Government of Quebec continued with the SEA-2, and with its efforts to study the development of shale gas through the SEA-SG.\textsuperscript{183} The SEA-2 Report was not to be released for another two years, on 13 September 2013.\textsuperscript{184} The SEA-SG took

\textsuperscript{180} Programme d'évaluation environnementale stratégique – Rapport préliminaire de l'EESI (Bassin de l'estuaire maritime et du nord-ouest du golfe du Saint-Laurent) (2011) (1455) (9527) (C-144).

\textsuperscript{181} Quebec National Assembly, "Bill n°18 : An Act to limit oil and gas activities" (C-158).

\textsuperscript{182} Quebec National Assembly, "Bill n°18 : An Act to limit oil and gas activities" (C-158).

\textsuperscript{183} Email from S. Desrochers (DGHB) to P. Perron (DGHB); L. Bernard (DGHB) re: "TR : Clarification - avis de revocation et processus à suivre - ré-allocation des dépenses d'exploration appliquées sur les permis expropriés, etc" (11 August 2011) (C-148).

\textsuperscript{184} GENIVAR, Évaluation environnementale stratégique sur la mise en valeur des hydrocarbures dans les bassins d'Anticosti, de Madeleine et de la baie des Chaleurs, Rapport d'enquête, septembre 2013, 302 p. (R-023).
nearly three years to complete, with its report submitted on 15 January 2014, and made public in February 2014.  

117. The completion of the SEA-2 and SEA-SG prompted even further study by the Government of Quebec over how to sustainably develop the province's oil and gas resources. The government initiated another BAPE study related to shale gas exploration in the Utica shale and St. Lawrence Lowlands, the BAPE 307. The BAPE 307 was "largely based on the SEA-SG". On 30 May 2014 the province proposed a "vision" for the development of hydrocarbons. This "vision" entailed a further two SEA studies: a general SEA covering the province's hydrocarbon channel, and a SEA to specifically examine Anticosti Island.  

118. More than three years after the passage of Bill 18, on 30 July 2014, the Ministry of Environment distributed new guidelines related to oil and gas exploration.  

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187 Counter-Memorial, 24 July 2015, para 166.  
188 RWS-001-Asselin, 20.  
189 RWS-001-Asselin, 22.  
190 Ministère de l'Environnement, Lignes directrices provisoires sur l'exploration gazière et pétrolière, Bibliothèque et Archives nationales du Québec, 2014 (R-073).
119. After the BAPE 307 report was issued in November 2014, the QMNR announced it was undertaking further efforts to develop the province's oil and gas resources, and would begin work on the "social acceptance" of natural resources projects.191

120. While this work took place, the SEAs established in May 2014 continued, and completed the first phase of their studies on 2 April 2015.192 One year following that, and 10 years after issuing the 2006 Energy Strategy, Quebec unveiled its 2030 Energy Policy on 8 April 2016.193 The 2030 Policy was consistent with the 2006 Energy Strategy in calling for the development of the province's natural gas resources.194 The 2030 Policy further noted that the legislative and regulatory framework for hydrocarbon development would be based on the SEA reports.195

121. Quebec's new legislative and regulatory framework was introduced on 7 June 2016 as Bill 106, An Act to implement the 2030 energy policy.196 Bill 106 received Royal Assent on 10 December 2016. In Chapter IV, it enacted the Petroleum Resources Act. Articles 87-89 of the Petroleum Resources Act address hydraulic fracturing, which is permitted so long as a licence holder obtains a special authorization granted by the Minister. Article 89 specifies

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191 RWS-001-Asselin, 25.
192 RWS-001-Asselin, 24.
that when hydraulic fracturing activities also require an authorization certificate under section 22 of the EQA, that certificate must be obtained first.197

122. On 15 June 2016, before the passage of Bill 106, the Ministry of Environment issued its first section 22 authorization certificate to conduct hydraulic fracturing, on Anticosti Island in the Gulf of the St. Lawrence.198

C. Canada's non-production of critical documents and redaction of other critical documents in violation of the Tribunal's Order should lead to the finding of adverse inferences against Canada

123. On 17 March 2017 Canada produced certain documents in response to the Tribunal's Order dated 24 February 2017. At that time, Canada refused to produce certain documents that were ordered to be produced, in violation of the Order. Canada also redacted certain documents, also in violation of that Order.

124. By letter 31 dated March 2017, the Claimant objected to Canada's breaches of the Order.

125. On 10 April 2017, Canada responded to the Claimant's objections. Canada also produced further documents. In producing documents. Canada again declined to produce one document at all and redacted other documents, both in violation of Tribunal's Order dated 24 February 2017. Additional correspondence ensued.

126. The Tribunal issued a Procedural Order dated 4 May 2017. Following paragraph 17 of that Procedural Order, by letter dated 8 May 2017, the Claimant objected to documents Canada

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197 Québec, Bill 106, An Act to implement the 2030 Energy Policy and to amend various legislative provisions, 1st Sess., 41st Leg (2014), (entered into force 10 December 2016), art. 89 (C-152).

did not produce and documents Canada produced in redacted form on 10 April 2017, both contrary to the Tribunal's Order.

127. Canada refused to produce the following documents contrary to the Tribunal's Order:

(a) Two documents that are presentations to the Quebec Executive Council entitled [REDACTED], both dated 31 January 2011;

(b) Three Communications Plans related to a memorandum to the Executive Council. Two versions are dated 29 April 2011 and one version is dated 3 May 2011;

(c) An Information Note dated 10 May 2011 from government officials to the Minister of the Environment; and

(d) Extracts from decisions made by the Quebec Executive Council on 6 April 2011, 10 May 2011 and 15 December 2011.

128. The documents that Canada produced in redacted form, contrary to the Tribunal Order were the following:

(a) eight (8) versions of a memorandum to the Quebec Executive Council (Quebec's provincial Cabinet) that have been redacted to remove the recommendations made by one or more Ministers, including Minister Normandeau; and

(b) two (2) memoranda redacted for reasons of "pertinence". These two documents are addressed elsewhere in this Reply.
129. Of the eight versions of the memorandum to the Executive Council, six (6) are drafts. They are dated successively:

(i) 29 April,\textsuperscript{199}

(ii) 29 April (blacklined version),\textsuperscript{200}

(iii) 3 May (blacklined version),\textsuperscript{201}

(iv) 4 May,\textsuperscript{202}

(v) 4 May\textsuperscript{203} and

(vi) 5 May 2011 (blacklined version)\textsuperscript{204}.

\textsuperscript{199} Mémoire au Conseil des Ministres Gouvernement du Québec - De: Madame Nathalie Normandeau, Ministre des Ressources naturelles et de la Faune/Monsieur Serge Simard, Ministre délégué aux Ressources naturelles et à la Faune - Objet: Projet de loi limitant les activités pétrolières et gazières et modifiant la Loi sur les mines (5 May 2011), (C-178).

\textsuperscript{200} Mémoire au Conseil des Ministres Gouvernement du Québec - De: Madame Nathalie Normandeau, Ministre des Ressources naturelles et de la Faune/Monsieur Serge Simard, Ministre délégué aux Ressources naturelles et à la Faune - Objet: Projet de loi limitant les activités pétrolières et gazières et modifiant la Loi sur les mines (5 May 2011), (C-127).

\textsuperscript{201} Mémoire au Conseil des Ministres Gouvernement du Québec - De: Madame Nathalie Normandeau, Ministre des Ressources naturelles et de la Faune/Monsieur Serge Simard, Ministre délégué aux Ressources naturelles et à la Faune - Objet: Projet de loi limitant les activités pétrolières et gazières et modifiant la Loi sur les mines (5 May 2011), (C-160).

\textsuperscript{202} Mémoire au Conseil des Ministres Gouvernement du Québec - De: Madame Nathalie Normandeau, Ministre des Ressources naturelles et de la Faune/Monsieur Serge Simard, Ministre délégué aux Ressources naturelles et à la Faune - Objet: Projet de loi limitant les activités pétrolières et gazières et modifiant la Loi sur les mines (5 May 2011), (C-131).

\textsuperscript{203} Mémoire au Conseil des Ministres Gouvernement du Québec - De: Madame Nathalie Normandeau, Ministre des Ressources naturelles et de la Faune/Monsieur Serge Simard, Ministre délégué aux Ressources naturelles et à la Faune - Objet: Projet de loi limitant les activités pétrolières et gazières et modifiant la Loi sur les mines (5 May 2011), (C-132).

\textsuperscript{204} Mémoire au Conseil des Ministres Gouvernement du Québec - De: Madame Nathalie Normandeau, Ministre des Ressources naturelles et de la Faune/Monsieur Serge Simard, Ministre délégué aux Ressources naturelles et à la Faune - Objet: Projet de loi limitant les activités pétrolières et gazières et modifiant la Loi sur les mines (5 May 2011), (C-134).
All of these versions have two separate redactions: (i) the recommendation of Minister Normandeau and Minister Simard to the Executive Council; and (ii) the recommendation of two other Ministers.

130. [REDACTED]

131. [REDACTED]

132. The content of these successive draft memoranda to the Quebec Executive Council is reviewed in detail elsewhere in this Reply, including above in the discussion of facts. With one exception, Canada has not disclosed which individuals actually drafted, revised, or had input into these documents as the successive drafts were made.


246 Mémoire au Conseil des Ministres Gouvernement du Québec - De: Madame Nathalie Normandeau, Ministre des Ressources naturelles et de la Faune/Monsieur Serge Simard, Ministre délégué aux Ressources naturelles et à la Faune - Objet: Projet de loi limitant les activités pétrolières et gazières et modifiant la Loi sur les mines (5 May 2011), (C-137).
133. By refusing to produce documents at all and by refusing to produce complete, non-redacted documents in accordance with the Tribunal's Order of 24 February 2017, Canada has failed to produce documents ordered to be produced by the Arbitral Tribunal within the meaning of Article 9(5) of the IBA Rules on the Taking of Evidence in International Arbitration.

134. As a consequence, the Claimant requests that the Tribunal make the following findings of fact, either on the basis of the documents themselves and the surrounding circumstances, or on those bases together with an adverse inference against Canada as permitted by IBA Rule 9(5):

(a) The presentations to the Quebec Executive Council entitled ______________ dated 31 January 2011, set out the Quebec government's plan for shale gas. This ______________ was created before the release of the BAPE 273 Report and well before the SEA-SG was announced. Nothing specific is known about its contents. It is not cited by any witness, including Minister Normandeau or M. Sauvé, as a factor in deciding to enact Bill 18 and specifically, Quebec's decisions to revoke permits and not to pay any compensation.

(b) The Tribunal and the Claimant have not received copies of the Communications Plan dated 29 April (2 versions) and 3 May 2011 due to Canada's violation of the 24 February 2017 Order. As a result, nothing specific is known about its contents.

(c) The Quebec government redacted the Ministerial recommendations from all of the drafts of the Ministers' memorandum to the Executive Council and in the two
finalized versions. The contents of the redacted recommendations, and the reasons for the recommendations, will not be known to the Tribunal or to the Claimant.

(d) The redacted recommendations in the 8 versions of the draft memorandum to the Executive Council and the Communication Plan are intimately related. The dates of the three Communication Plans that Canada did not produce coincide with the dates of three of the redacted versions of the draft memorandum to the Executive Council. Canada's description of the Communication Plans in its Privilege Log noted that they are related to memoranda to the conseil des ministres and are annexed to the ministerial recommendation.

(e) Canada and the Government of Quebec decided not to produce, or to redact, all of the documents on the purported grounds of special political or institutional sensitivity (referring to IBA Rules, Art. 9(2)(f)). While the Tribunal had already ruled against Canada on the application of that rule in its 24 February 2017 Order, it cannot be argued that Communication Plans for a provincial Cabinet or a Minister have "institutional" sensitivity. Thus the Tribunal should find as a fact that it was political sensitivity that caused the Quebec government to violate the Tribunal's Order by failing to produce complete copies of the Communications Plan that was prepared for Minister Normandeau and the Executive Council.

(f) The Tribunal should find as a fact that, to sell Bill 18 to Quebeckers and use Bill 18 to the government's political advantage, the Communications Plan must have relied upon one or both of
(i) the immediate and permanent revocation of the permits (in section 1 of Bill 18); and

(ii) the decision not to pay compensation (in section 4 of Bill 18).

(g) The Tribunal should find as a fact, or draw an adverse inference against Canada, that these aspects were purely political contents of the Communications Plan that were withheld when Canada and Quebec refused to produce the documents contrary to the Tribunal's Order on 24 February 2017.

(h)

(i)

(k) The successive drafts of the memorandum to the Executive Council include both clean and blackline versions. As the discussion elsewhere in this Reply demonstrates concerning the progression of these draft memoranda (i.e., what is changed or removed in successive drafts over time), significant changes may have been made both to the recommendation(s) and to the reasons why those recommendations are being made as the draft memorandum evolved. This content is not available to the Tribunal or to the Claimant in this matter. Given the extent of the blacklining in other parts of the draft versions over time, the Tribunal should conclude as a fact that the redacted versions also contained changes over time.

(l) The Tribunal should find as a fact that the failure to produce and the redaction of these documents goes to the heart of critical issues in this arbitration: Minister Normandeau's reasons or rationale for proposing Bill 18 to her Cabinet colleagues (and specifically the decision to revoke permits and the decision not to pay compensation as set out in section 1, 2 and 4 of Bill 18); the government's purported reasons and justification for it, particularly related to environmental protection; and
its Communication Plan on how to sell it to the people of Quebec and use Bill 18 to its political advantage starting in May and continuing over the summer of 2011 after the National Assembly adjourned until its autumn session.

(m) The Tribunal should find as a fact that Canada and the Quebec government have intentionally deprived this Tribunal of critical or central facts in assessing the Minister's reasons for the revocation of the permits and the decision not to pay compensation as set out in sections 1, 2 and 4 of Bill 18.

(n) For the reasons set out in the Claimant's letters dated 31 March and 8 May 2017,\textsuperscript{208} the Tribunal should find as a fact that Canada and Quebec's conduct in violation of the Tribunal's Order dated 24 February 2017 was deliberate and serious. No satisfactory reason or explanation has been provided in relation to Canada's breaches of the Tribunal's Order.

(o) The Tribunal should draw adverse inferences against Canada, as permitted by IBA Rule 9(5), that production of these documents would be adverse to the interests of Canada because they would:

(i) support the Claimant's position that Bill 18 was in fact motivated by political or partisan-political considerations; and

\textsuperscript{208} And further verified by Canada's letter in French dated 10 April 2017 at pp. 2-3.
(ii) undermine Canada's claim that the revocation of permits and the decision not to pay compensation in Bill 18 was implemented for *bona fide* reasons of environmental protection.

(p) The Tribunal should find that Canada and Quebec's actions in breach of the 24 February 2017 Order have deprived the Tribunal of a complete record of evidence. Canada and Quebec have also deprived the Claimant of its right to fully argue its case and respond to claims for justification made by Canada on the basis of police powers, as discussed further below. Canada and Quebec have done so:

(i) by refusing to produce and redacting documents that may contradict or modify Canada's position or its evidence, and

(ii) by depriving the Claimant of the opportunity to cross-examine witnesses (particularly Minister Normandeau and her Deputy, M. Sauvé) on the content of the information withheld.

135. In the submissions below, the Claimant will indicate where additional adverse inferences or findings of fact should be made.

136. The following section sets out additional acts relating to the activities and operation to develop the River Permit Area prior to its revocation.
D. The Enterprise's activities and operations to develop the area under the River Permit up until 12 June 2011

1. Forest Oil and Junex come together


138. Part of Junex's business strategy in Quebec was to secure as significant an acreage position as possible in areas it considered prospective for oil and gas. This was also the strategy of other small companies in Quebec. Thus at the time that Forest Oil was interested in entering the Quebec market, there was little available unpermitted land in the St. Lawrence Lowlands where a great deal of the Utica shale is located.209

139. Junex had no illusion that it would be able to develop all of its acreage in Quebec alone. Junex's stated goal was to develop the potential of its landholdings while minimizing the dilution of its shareholders. So Junex established a partnership strategy. It actively sought partnerships with larger and more experienced producers having more capital than Junex in order to explore and develop some of these permit areas.210

140. When Junex went the Prospect Expo in Houston, one of the primary reasons was "to find a suitable company that could explore for and exploit shale resources contained

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209 P. Dorrins Reply Witness Statement, para 20 (CWS-008).

210 P. Dorrins Reply Witness Statement, para 21 (CWS-008).
underground on lands for which Junex held exploration permits". Junex had been eager to exploit this resource since 2004. 211

141. In 2006, Forest Oil recognized the geological quality and economic potential of the Utica Shale. 212 In Houston, Forest Oil became aware that Junex was looking for an experienced oil and gas company to help develop land permits which Junex held to the north and south of the St. Lawrence River. 213

142. Following their initial meeting in Houston, Forest Oil sent geologists to Quebec City to more closely examine Junex's data. After that, Junex understood that Forest Oil obtained promising samples that indicated strong prospects for exploiting the Utica's shale gas resources. 214

2. Horizontal drilling in Quebec's Utica shale

143. At this time, as Forest Oil sought to enter the Quebec market, the province's oil and gas industry was evolving and becoming increasingly active. Personnel at the QMNR were receptive, responsive, and proactive. 215 Forest Oil believed that this made Quebec a suitable location for horizontal drilling for unconventional shale resource plays. Horizontal

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212 R. Wiggin Reply Witness Statement at para 10 (CWS-007); J-Y. Lavoie Reply Witness Statement, para 5 (CWS-009).
drilling programs have a much smaller footprint than vertical drilling programs since they affect fewer surface-area interests.\textsuperscript{216}

144. At the time Forest Oil made its entry into the Quebec market, the benefits of horizontal drilling were well known throughout most of North American industry and governments. Horizontal drilling projects had already proven particularly successful in Texas and Oklahoma, in the U.S., as well as in Alberta, Canada.\textsuperscript{217} Given the industry's experience and the experience of personnel at Forest Oil with directional and horizontal drilling, Forest Oil did not see the St. Lawrence River as an impediment to access the shale deposit located beneath it.\textsuperscript{218}

145. Recognizing that shale gas exploration was new to Quebec, Junex entered into the Farmout Agreement with Forest Oil on 5 June 2006 so that it could develop the natural gas resources in the Utica.\textsuperscript{219} From Junex's perspective, the Farmout Agreement with Forest Oil enabled Junex to work with a sophisticated partner having the size, capacity and technical skill necessary to develop shale gas resources in Quebec.\textsuperscript{220} Forest Oil lived up to its reputation; Junex was impressed with the quality of the work done by Forest Oil and had confidence in its operations and technology.\textsuperscript{221}

\textsuperscript{216} R. Wiggin Reply Witness Statement at para 5 (CWS-007).
\textsuperscript{217} R. Wiggin Reply Witness Statement at para 6 (CWS-007).
\textsuperscript{218} R. Wiggin Reply Witness Statement at para 7 (CWS-007).
\textsuperscript{219} R. Wiggin Reply Witness Statement at para 7 (CWS-007).
\textsuperscript{220} J-Y. Lavoie Reply Witness Statement, para 8 (CWS-009).
\textsuperscript{221} J-Y. Lavoie Reply Witness Statement, para 9 (CWS-009).
Because the land permits in question ran parallel to both sides of the St. Lawrence River, Forest Oil believed that it could use horizontal drilling to unlock the energy potential of the shale deposits under the riverbed. As a result, it took steps to obtain a permit for the area underneath the river. Ultimately, Forest Oil and Junex agreed that Junex would obtain the permit and assign it to Forest Oil pursuant to the same terms as the Farmout Agreement.

From the outset, it was obvious to Forest Oil, Junex and the Quebec government that drilling activities on the land, including horizontal drilling, would be required to access the resources under the St. Lawrence River.

There was never any intention or plan to do any work, such as drilling, in the river. The Quebec government was also aware of this from the outset. That was the basis on which the River Permit was issued. In Mr. Wiggins's words:

Forest Oil's plans for the River Permit never included any drilling from sites located between the banks of the St. Lawrence River. We were aware of the prohibition of drilling activities in the river and knew that the permit did not authorize us to conduct operations of any kind on its surface.

Our intention was always to engage in drilling activities significantly below the riverbed and only accessed from dry land locations such that the fluvial environment would not be impacted. This intention was communicated to the QMNR in the summer of 2006. Indeed, it was on the basis of these

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\(^{222}\) R. Wiggins, Reply Witness Statement at para 13 (CWS-007).
\(^{223}\) R. Wiggins Reply Witness Statement at para 14 (CWS-007).
\(^{224}\) Letter Application from the Enterprise to QMNR, dated 28 July 2006 (C-018).
\(^{225}\) J-Y. Lavoie, Reply Witness Statement, para 13 (CWS-009).
\(^{226}\) R. Wiggins Reply Witness Statement at paras 15-16 (CWS-007).
communications with the QMNR, and its clear understanding of Forest Oil's drilling plans, that the River Permit was issued.\textsuperscript{227}

149. Forest Oil also sought to inform the QMNR of the full range of positive implications and opportunities associated with horizontal drilling and hydraulic fracturing, technologies with which it was less familiar. Indeed, time and resources were invested by Forest Oil to ensure that QMNR understood its plans for using horizontal drilling to exploit the natural gas resources of the Utica Shale.\textsuperscript{228}

3. The business arrangement in the Farmout Agreement and how it worked

150. The 100\% working interest provided for under the Farmout Agreement was transferred to Forest Oil after its significant capital investment that took the form of drilling, completions, the construction of facilities, and the other expenditures. The 100\% working interest was intended to transfer to Forest Oil all property rights held by Junex in the defined geological horizon. It was, as M. Lavoie stated, "far more than a mere personal obligation between the parties".\textsuperscript{229} As Mr. Dorrins stated, Junex "did not have any rights of ownership in Forest Oil/the Enterprise's strata of the permit".\textsuperscript{230} That is also the understanding in industry: a working interest is understood as an ownership right.\textsuperscript{231}

\begin{footnotesize}
\begin{enumerate}
\item R. Wiggins Reply Witness Statement at paras 15-16 (CWS-007).
\item R. Wiggins Reply Witness Statement at para 8 (CWS-007).
\item J-Y. Lavoie Reply Witness Statement, para 10 (CWS-009).
\item P. Dorrins Reply Witness Statement, para 24(a) (CWS-008).
\item It is not an option to have a commercial interest, or stated differently, a future economic interest. Once a company "cams in" on a resource, it "has" that resource: P. Dorrins Reply Witness Statement, para 25 (CWS-008).
\end{enumerate}
\end{footnotesize}
151. Forest Oil's 100% working interest (after earn-in) was subject to a [REDACTED] convertible to a [REDACTED] at project payout in favour of Junex.\textsuperscript{232} From an industry perspective, a gross overriding royalty is a right to receive revenues without paying the drilling or monthly operating expenses from producing well(s). It is not understood as being an ownership right.\textsuperscript{233}

152. The Farmout Agreement benefitted Junex as well as Forest Oil. As described by Mr. Dorrins, Forest Oil was to earn in on a defined horizon, or stratum of the subsurface. From Junex's perspective, this area was defined by the interests that Junex sought to retain, specifically (i) access to the Trenton-Black River Formation and deeper formations, which are deeper, older rocks with greater likelihood of conventional resource deposits; (ii) access to the brine production potential in this deeper horizon; and (iii) access to potential gas storage in the shallower sand/gravel and in the deeper formations. As he noted, this was a "split rights" situation in industry parlance, which is not an unusual situation in farmout/farmin arrangements.\textsuperscript{234}

153. As a result of Forest Oil’s drilling under the bed of the St. Lawrence, Junex would be able to obtain the [REDACTED] and access to the brine reserves contained below the Utica shale deposit. These terms of the River Permit

\textsuperscript{232} J-Y. Laviole Reply Witness Statement, para 10 (CWS-009); R. Wiggins Reply Witness Statement at para 12 (CWS-007); P. Dorrins Reply Witness Statement, para 23 (CWS-008).

\textsuperscript{233} P. Dorrins Reply Witness Statement, para 24 (CWS-008).

\textsuperscript{234} P. Dorrins Reply Witness Statement, para 22 (CWS-008).
Agreement were considered "essential" by Junex, and provided the company with "significant financial advantages and business development opportunities".235

154. Further to its commitment to Forest Oil, and at Forest Oil's request, Junex recorded the assignment of its property rights in the Mining Registry. It is M. Lavoie's understanding that the Mining Registry is the only place to record an assignment of property rights resulting from permits awarded by the QMNR and is consistent with standard business practice. It was how the oil and gas industry made known to third parties who held what rights over a particular area.236

155. The 100% working interest in the Farmout Agreement meant, among other things, that Forest Oil led all exploration and exploitation operations. In Junex's understanding, upon the transfer of the 100% working interest, Forest Oil, not Junex, was directing and controlling the operation because it was the company that held the rights to it.237

156. Junex's role as a [REDACTED] holder was passive;238 it could not direct work or do any development activity.239 After Forest elected to earn its working interest, Junex's activities became limited to a supporting role.240 Junex's objective was to assist Forest Oil to realize its plans for the applicable permits and provide equipment on an as-needed, contractual

236 J-Y. Lavoie Reply Witness Statement, paras 18-19 (CWS-009). M. Lavoie noted that he is aware of other assignments of rights that were also recorded in the Mining Registry, including the assignment of a permit by Junex in the Gazpe region.
238 P. Dorrins Reply Witness Statement, para 24 (CWS-008).
239 P. Dorrins Reply Witness Statement, para 24(a) (CWS-008).
basis. As the permit holder, when required, Junex made applications to the government on Forest Oil's behalf.\textsuperscript{241} Any permissions granted by Junex, such as the permission it granted for the Enterprise to shoot seismic in 2010, was a formality because Junex remained the permit holder overall. This did not, however, reflect the true relationship between the companies as regards the River Permit.\textsuperscript{242}

\textsuperscript{241} J-Y. Lavoie Reply Witness Statement, paras 23-24 (CWS-009).

\textsuperscript{242} P. Dorrins Reply Witness Statement, para 24(b) (CWS-008).
4. Forest Oil’s activities in anticipation of the River Permit

157. The exploratory and initial drilling activities undertaken by Forest Oil on the lands covered by the Original Permits were done in anticipation of the River Permit being granted and of Forest Oil being allowed to proceed with its plans.\textsuperscript{243} The fact that the River Permit was

\textsuperscript{243} R. Wiggin Reply Witness Statement at para 17 (CWS-007).
not yet issued did not affect Forest Oil's operations as these were necessary to eventually conduct horizontal drilling under the St. Lawrence River and relevant to proving up the resources underneath the River.\textsuperscript{244}

158. In his Witness Statement, Mr. Lavoie of Junex stated that he does not agree with the characterization that the River Permit as having entailed no work or capital commitments on the part of the Enterprise. Junex knew that Forest Oil's plans for accessing the shale resources under the area of the River Permit required drilling activities to be conducted on the land. It would therefore not have been possible to impose further requirements in the River Permit Agreement stipulating certain capital and work expenditures over the area of the River Permit. This would have entailed working in the river, which was never anyone's intention.\textsuperscript{245} There was no doubt in Mr. Lavoie's mind that the work conducted as a result of the Farmout Agreement was necessary and in furtherance of the Enterprise's ability to develop the lands under the River Permit Agreement through horizontal drilling from the land.\textsuperscript{246}

159. The Claimant's Memorial outlines the steps the Enterprise took to develop the area under the River Permit until 12 June 2011, the day before Bill 18 entered into force.\textsuperscript{247}

\textsuperscript{244} R. Wiggin Reply Witness Statement at para 18 (CWS-007).
\textsuperscript{245} J-Y. Lavoie Reply Witness Statement, para 13 (CWS-009).
\textsuperscript{246} J-Y. Lavoie Reply Witness Statement, para 14 (CWS-009).
\textsuperscript{247} Memorial, 10 April 2015, paras 88-124.
5. **Five-year development plans**

160. A small to mid-cap oil and gas company like the Enterprise makes plans for its projects with a five-year time horizon. This does not mean that the project will be completely developed or have run the course of its life in 5 years. Oil and gas development, particularly the development of unconventional resources, requires iterative planning that is refined as new information becomes available. This is why the company does not produce a single document that is a "development plan". Instead, the development plan is a shared understanding among the people working on the project about how development will proceed.\(^{248}\)

6. **An economically viable and successful shale gas play**

161. Utica Shale gas play in Québec and specifically, the rock properties and gas-in-place in the River Permit Area, were economically viable and would have been developed successfully if Bill 18 had not expropriated the rights held by the Enterprise.\(^{249}\)

162. The River Permit Area contains valuable, liquids-rich gas, located near an existing pipeline gathering system to transport the gas to nearby customers and to the Quebec and American markets generally.\(^{250}\)

\(^{248}\) D. Axani Reply Witness Statement, para 16 (CWS-006).

\(^{249}\) D. Axani Reply Witness Statement, para 7 (CWS-006).

\(^{250}\) D. Axani Reply Witness Statement, para 8 (CWS-006).
163. The area under the River Permit was in the heart of this play; it was the sweet spot, and the most logical and economic place to start developing the resource.\(^{251}\)

7. Geological data

164. In his Reply Statement, Mr. Axani explained that by 2011, the Enterprise knew a considerable amount about the resources and they were comfortable that it was economically viable and would be successful. The Enterprise had analyzed core sampling, done a vertical test, a horizontal test, and had proven that fracturing would work. It knew it would get gas out and that it was a liquid-rich form of gas. The next step was to refine its "completion recipe" to maximize gas extraction, then tie in one or more wells and start producing and selling the gas.\(^{252}\)

165. The Dolgeville layer of the Utica Shale was "upthrown" and near the surface in the River Permit Area. From the Enterprise's participation in ten operations of wells drilled from 2006-2010, it was aware that the shale gas potential in the Utica Shale was considered "high" in the Dolgeville unit across the basin.\(^{253}\) The Dolgeville layer was considered the best rock interval to target with a horizontal well. The Enterprise knew the attributes of the Dolgeville layer and found them attractive.\(^{254}\)

\(^{251}\) D. Axani Reply Witness Statement, para 16 (CWS-006).

\(^{252}\) D. Axani Reply Witness Statement, para 24 (CWS-006).

\(^{253}\) D. Axani Reply Witness Statement, para 29 (CWS-006).

\(^{254}\) D. Axani Reply Witness Statement, para 29 (CWS-006).
166. Within the Dolgeville unit, the Enterprise's internal estimate of gas-in-place for the upthrown block in the Bécancour Champlain area was 34 Bcf per section.  

167. More generally, the attributes of the Utica formation were known and "very encouraging". For example:

(a) The rock was over-pressured, a very desirable attribute for shale gas;

(b) The rock was brittle and therefore good for fracturing;

(c) There was significant thickness to develop the gas play;

(d) Microfracturing was developed and interpreted to be enhanced on blocks running parallel to the Yamaska Fault trend; and

(e) Crack test results showed that the Dolgeville formation was consistent with some of the best shale plays.

168. In addition, the overall gas quality was high. It would have commanded an extra premium due to its content. The Bécancour #8 well near the River Permit Area contained good percentages of methane and liquids such as propane and ethane. Just as importantly, there was no other contents to remove that would have been costly to extract prior to sale.
169. The gas extracted from the Bécancour area also compared favourably to gas from the well-known and well-exploited Barnett Shale deposit in Texas, and the Haynesville shale deposit in the southern United States.259

170. The River Permit Area itself was "de-risked" because wells had already been drilled to the north and south of it on the two banks of the St. Lawrence River, which gave the Enterprise a good understanding of the rock located on both banks. Thus there was a "high degree of confidence" about the properties of the rock between these two points under the St. Lawrence River in the River Permit Area, given that "[g]eology does not know permit boundaries."260

171. In addition to its own successful horizontal drilling and successful fracturing of the Utica shale, the Enterprise was aware that other companies' results from exploration in the area were promising and consistent with its results.261 At its St. Eduard well, for example, Talisman had done a months-long production test involving a multistage fracture-stimulated well whose results were very encouraging.262 The gas flow over a month and over the 134-day test were excellent.263 This well focused on the Dolgeville formation.264

8. **Commercially attractive**

172. In addition to the rock attributes and high quality of the shale gas that could be extracted from the River Permit Area, it was also commercially attractive.

173. First, the River Permit Area is located near an existing pipeline-gathering system in place that would transport gas regionally on both sides of the St. Lawrence River and into the nearest industrial park.265

174. Second, the industrial park and the nearby industry at Trois Rivières were "natural customers" for produced gas sale; that is, there was a concentrated local pool of potential customers.266 TransCanada has a cogeneration facility in the industrial park. Because they were located so closely, the pipeline infrastructure and cogeneration facility meant that the additional infrastructure which would be needed to get the gas to market would be less expensive and faster to build.267

175. Third, after diversifying into the industrial park, Forest Oil intended to expand out of that system incrementally, reaching broader markets in Quebec and the northeastern United States.268 In 2009, the Enterprise obtained a proposal for building facility requirements

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266 D. Axani Reply Witness Statement, para 44 (CWS-006).
related to the Champlain area to strip out the natural gas liquids and compress the gas prior to pipeline transportation.\textsuperscript{269}

176. Fourth, given that 0.5 to 1.0 Bcf/day of gas was being imported into Quebec from Alberta, the project would have quickly had a positive cash flow.\textsuperscript{270}

177. Lastly, among the other commercial opportunities and advantages were:\textsuperscript{271}

(a) favourable terms for doing business with the Province of Quebec;

(b) a strong business partnership with Junex;

(c) the Enterprise had considerable experience in developing shale gas plays that used the same drilling and fracturing techniques as those proposed for use in Quebec;

(d) The success of similar shale gas plays elsewhere in North America that used the same drilling techniques;

(e) The Enterprise had comfort and confidence that it would obtain all necessary permits, particularly given its existing history of receiving permits.

9. \textit{The completion of exploration and development}

178. Mr. Axani explained the plans to complete the final step of exploration and move to development (i.e. production of gas).

\textsuperscript{269} D. Axani Reply Witness Statement, para 43 (CWS-006).

\textsuperscript{270} D. Axani Reply Witness Statement, para 44 (CWS-006).

\textsuperscript{271} D. Axani Reply Witness Statement, paras 45-46 (CWS-006).
179. After refining the "completion recipe" to maximize the economic potential of the wells to be drilled,\textsuperscript{272} the Enterprise was ready by December 2010 to complete the exploration phase by placing a drilling rig in the St. Grégoire area in Bécancour in late 2011-2012. One rig would drill three wells in which the Enterprise would have a 100% working interest, with an estimated capital expenditure for three wells of $13.5 million.\textsuperscript{273}

180. As noted above, the River Permit Area was in the heart of the play and was the "sweet spot". It was the most logical and economic place to start developing the resource.\textsuperscript{274} Mr. Axani would have been in favour of completing the exploratory phase and then developing for production purposes into the River Permit Area from both the north and south banks of the St. Lawrence River.\textsuperscript{275} The Enterprise had had spent significant capital early to gather data surrounding it and had produced liquids-rich gas tests surrounding it. Its proximity to the Yamaska fault was preferred on the upthrown block. The rock was brittle and successfully fracture stimulated in the Dolgeville unit. As Mr. Axani stated, the Enterprise was "ready to move quickly towards development with the data we had at the time".\textsuperscript{276}

181. The Enterprise planned to ramp up its development to a 5 rig program by 2014 starting in the Bécancour area. That is, 5 rigs would be drilling wells at the same time. Each well takes about two weeks to drill. Wells would initially concentrate in the Bécancour area, with a

\textsuperscript{272} D. Axani Reply Witness Statement, para 48 (CWS-006).
\textsuperscript{273} D. Axani Reply Witness Statement, para 49 (CWS-006).
\textsuperscript{274} D. Axani Reply Witness Statement, para 8 (CWS-006).
\textsuperscript{275} D. Axani Reply Witness Statement, para 60 (CWS-006).
\textsuperscript{276} D. Axani Reply Witness Statement, para 50 (CWS-006).
target of 200 potential well locations. The Enterprise expected approximately 430 wells to be drilled in Québec by 2018.

182. In December 2010, the Enterprise expected a drilling inventory of 1000 wells near the Bécancour/Champlain area in the upthrown position, which included the River Permit Area. The Enterprise also expected full development of the downthrown area, covering all lands that the Enterprise had earned, to require an additional 2200 to 4500 wells.

10. **Funding**

183. The Enterprise would have had sufficient funding to complete the exploration phase of the project and to proceed to production. It had significant capital budgets; in 2011, its actual capital spend on exploration and development projects in Canada was over $270 million.\(^{277}\)

184. As Mr. Axani explained:

> Good projects attract capital within a company. We had sufficient money or access to it; it was really a question of where to allocate that capital. This project deserved the capital. Québec gas was also commanding a premium price in the market compared with western Canada gas (as a result of the transportation costs from Alberta to Québec), which made this revenue stream more attractive.\(^{278}\)

185. Given the Enterprise's actual funding, as well as its access to and ability to raise funds, there can be little doubt that financing would have been available to it.\(^{279}\)

\(^{277}\) D. Axani Reply Witness Statement, para 56 (CWS-006).

\(^{278}\) D. Axani Reply Witness Statement, para 59 (CWS-006).

11. **A world class, successful shale gas play**

186. As an internal December 2010 internal presentation deck stated, there was "World Class" potential in the Utica Shale play. It included 5.1 Tcf potential in the downthrown areas covered by Forest Oil's net acreage and approximately 750 Bcf upthrown near the Yamaska Fault, using a 20% recovery factor.

187. The Champlain 1H well production tested over 200 mcf/day of gas. That well alone could have generated enough gas to heat over 800 homes for a year. That well is currently capable of producing gas today, as it was in 2011.\(^{280}\)

188. The December, 2010 presentation concluded that "[t]he rock properties and gas-in-place are sufficient to generate a successful shale gas play". The River Permit Area contains very valuable gas resources that would have been developed successfully if the Government of Quebec had not expropriated the rights held by the Enterprise.

12. **The Enterprise's development plan relied on proven and successful techniques for extracting shale gas**

189. The Enterprise's project to exploit the shale gas resources under the St. Lawrence River was not “unprecedented” nor did it carry “high risk” as Canada asserts.\(^{281}\)

190. Due to its pressure and configuration, the Utica Shale under the river was considered by the Enterprise to be an excellent horizontal drilling candidate. The Enterprise was also

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\(^{281}\) Counter-Memorial, 24 July 2015, para. 17.
confident that the area under the river could be effectively exploited from drill sites located on dry land at a safe setback distance from the fluvial setting.\textsuperscript{282}

191. The gas extracted from the Bécancour area also compared favourably to gas from the well-known and well-exploited Barnett Shale deposit in Texas, and the Haynesville shale deposit in the southern United States.

192. With respect to the River Area more specifically, the Enterprise considered the area under the bed of the St. Lawrence River to be “de-risked” since, according to Mr. Axani:

The data from these two wells (Bécancour #8 and Champlain 1H) gave us a very good understanding of the rock on both sides of the River. This meant that we could have a high degree of confidence about the properties of the rock between these two points. Geology does not know permit boundarics. The subsurface geology does not change because there is a permit boundary or a river hundreds of meters above where the resource.\textsuperscript{283}

193. By 2011, through testing and analysis of various kinds, the Enterprise knew a considerable amount about the resources that could be exploited via the Original Permits and the River Permit, and was comfortable that this would generate considerable revenue.

194. Moreover, to drill horizontally some 700 metres below the riverbed in the River Permit Area, close to the natural microfractures around the Yamaska fault and into the shallower

\textsuperscript{282} R. Wiggin Reply Witness Statement at para 170 (CWS-007).

\textsuperscript{283} D. Axani Reply Witness Statement, para 37 (CWS-006).
"upthrow" of the Utica Shale, was clearly the right approach to take full commercial advantage of the geology in the River Permit Area.\textsuperscript{284}

195. This technique is nothing new and is integral to the commercial success of the wells. For example in Alberta, by June 2011 over 300 horizontal operations were conducted at similar depths and completed with hydraulic fracturing technology. The number of such operations has more than tripled since then to more than 1,100.\textsuperscript{285}

\begin{quote}
a) The area selected for the projects was suitable for shale gas exploration and exploitation
\end{quote}

196. Although Canada refers to the St. Lawrence River in its Counter-Memorial as a "priceless jewel of ecological heritage,"\textsuperscript{286} this Tribunal can take judicial notice of the fact that it is one of the most heavily trafficked watercourses in the world.

197. Goods flowing to and from Montreal and the Great Lake city ports often make use of the St. Lawrence River as their route of choice. The building of the St. Lawrence Seaway is a testament to the river’s strategic importance.

198. In this respect, the St. Lawrence River has long been a vital key to unlocking the economic potential of the North American continent.

\textsuperscript{284} D. Axani Reply Witness Statement, para 38 (CWS-006).

\textsuperscript{285} D. Axani Reply Witness Statement, para 38 (CWS-006).

\textsuperscript{286} Counter-Memorial, 24 July 2015, para 173.
199. In addition to its use as a major commercial artery, the river has also been used to transport waste from the numerous cities that dot the Great Lakes – and from the Montreal, more particularly – to the Gulf of the St. Lawrence and the Atlantic Ocean beyond.

200. These utilitarian uses of the river have not been deemed by Canada or the Province of Quebec to be intolerable desecrations of its priceless character. Rather, the relevant authorities, through oversight, lawmaking and regulation, have found a pragmatic way of promoting economic development while mitigating risk.

201. The granting of the River Permit to conduct hydraulic fracturing far below the bed of the St. Lawrence River was consistent with the practical commercial uses to which the river has been put throughout much of its history.

13. 

"But for" Bill 18, the Enterprise would have begun production in accordance with its development plan and forecasts

202. At the time when Bill 18 came into effect, the project was not at a preliminary stage of its operation.

203. As stated by Mr. Axani, when using the term "early" it should be remembered that the life of a project like the one the Enterprise undertook at the time of the Farmout Agreement could represent 30-40 years of drilling and production. 287

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204. While an early exploration stage could be considered to be the gathering of technical information in the first 1-5 years, it is not long before a project stops being “early stage” and converts to a “mature,” low-risk development stage.\textsuperscript{288}

205. In the normal course, as commercial gas begins to flow, pressure and rates are recorded to determine the estimated ultimate recovery for the well while gas is being sold to market via a pipeline. The operator becomes comfortable over time that the gas flowing from numerous wells is sufficiently predictable such that the company can use the information to optimize facility design.\textsuperscript{289}

206. By December 2010 Forest Oil “was ready to put a drilling rig in the St. Grégoire area in Bécancour in late 2011-2012. The intention was to have one rig drill 3 wells in which the Enterprise would have a 100% working interest. We estimated a capital expenditure of [redacted] million (3 wells at [redacted] million each).”\textsuperscript{290}

207. The installation of the three wells in question “would complete the exploration phase of the Enterprise’s plan. We would then proceed to development.”\textsuperscript{291}

208. Furthermore, the Enterprise planned to ramp up to a 5 rig program by 2014 starting in the Bécancour area. That is, five rigs would be drilling wells at the same time. As each well would take about two weeks to drill, the pace would be quick. The Enterprise would

\textsuperscript{288} D. Axani Reply Witness Statement, para 14 (CWS-006).
\textsuperscript{289} D. Axani Reply Witness Statement, para 15 (CWS-006).
\textsuperscript{290} D. Axani Reply Witness Statement, para 49 (CWS-006).
\textsuperscript{291} D. Axani Reply Witness Statement, para 49 (CWS-006).
initially concentrate in the Bécancour area (both upthrown and downthrown) and target potential well locations in that area. 292

209. The Enterprise expected approximately [REDACTED] wells to be drilled in Québec by 2018. 293

210. As of December 2010, the Enterprise expected a drilling inventory of 1,000 wells near the Bécancour/Champlain area in the upthrown position which including the River Permit Area. Full development of the downthrown area covering all lands that the Enterprise had earned was anticipated to require an additional [REDACTED] to [REDACTED] wells. 294

211. These multifaceted, far-reaching exploitation plans demonstrate that the Enterprise was on the point of transitioning into production at the very time Bill 18 came into effect.

14. Farmout Agreements are valid means to effect transfer of oil and gas exploration and exploitation rights

212. Canada is correct when it states that Forest Oil did not become "co-holder" 295 of Junex's rights - it became the holder of validly dismembered rights through the Farmout and River Permit Agreements, as further evidenced by the Assignment Agreements.

213. Indeed, between 2006 and 2009, Forest Oil spent more than the [REDACTED] required by the Farmout Agreement for it to earn 100% of the Working Interest. As stated by Mr. Lavoie,

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293 D. Axani Reply Witness Statement, para 51 (CWS-006).
295 Counter-Memorial, 24 July 2015, para 250.
"Junex was impressed with the quality of the work done by Forest oil and had confidence in its operations and technology." \[296\]

214. Accordingly, Junex registered the Working Interest acquired by the Enterprise in the Mining Registry since Junex agreed it was appropriate that the split in ownership rights be publicly registered. \[297\]

215. As stated by Mr. Dorrins, Junex was aware that in other jurisdictions, registering ownership rights in a public registry may be an important aspect of ensuring recognition for ownership (e.g., for title searches relating to resource deposits). \[298\]

216. The registration was thus consistent with standard business practice. It was how the oil and gas industry made known to third parties who held what rights over a particular area. \[299\]

217. Moreover, as stated by Mr. Lavoie, he was aware of other transfers of rights that were also recorded in the Mining Registry, including the assignment of a permit by Junex in the Gaspé region. \[300\]
218. In order to facilitate registering the transfer of the Working Interest with the Government of Quebec, Mr. Dorrins contacted Mr. Laliberté to inquire about the registration process. Further to these discussions, Mr. Laliberté sent the required paperwork to Junex. 301

219. The appropriate forms were completed and filed, and were submitted together with the relevant permit numbers and a detailed description of the rights to the stratigraphic interval being transferred. This application was accepted and acknowledged by the QMNR. 302

15. Development of the River Permit was separate from the development of the Original Permits

220. When the Forest Oil first arrived in Quebec it was already very familiar with shale plays of the kind underlying the Utica shale formation extending north of the Adirondack Mountains and into the St. Lawrence Lowlands. Forest Oil knew that where these rocks are thermally mature – as is the case for the Utica Shale in the St. Lawrence Lowlands – there is sufficient organic material to make them suitable targets for shale gas and shale oil exploration and development. 303

221. Forest Oil was particularly eager to explore the development potential of the shale gas existing underneath the St. Lawrence River. Due to its pressure and configuration, the Utica Shale under the river was considered by Forest Oil to be “an excellent horizontal drilling candidate.” 304

301 P. Dorrins Reply Witness Statement, para 27 (CWS-008).
302 P. Dorrins Reply Witness Statement, para 27 (CWS-008).
303 R. Wiggin Reply Witness Statement at para 6 (CWS-007).
304 R. Wiggin Reply Witness Statement at para 10 (CWS-007).
222. It was always Forest Oil’s intention to engage in drilling activities significantly below the riverbed and only accessed from dry land locations such that the fluvial environment would not be impacted. 305

223. That Forest Oil had a plan from the outset to exploit the shale resources under the St. Lawrence River is evidenced by the fact that it took pains to inform the QMNR of his intention in the summer of 2006. 306

224. Indeed, it was on the basis of these communications with the QMNR, and the Ministry’s clear understanding of the Enterprise’s drilling plans, that the River Permit was issued. 307

225. The exploratory and initial drilling activities undertaken by the Enterprise on the lands covered by the original permits were done in anticipation of the River Permit being granted and of the Enterprise being allowed to proceed with its plans. 308

226. The fact that the River Permit was not yet issued did not affect the Enterprise’s operations as these were necessary to eventually conduct horizontal drilling under the St. Lawrence River and relevant to proving up the resources underneath the River. 309 In short, “[t]he area under the River Permit was in many respects the heart of this play; it was the sweet spot,

305 R. Wiggin Reply Witness Statement at para 16 (CWS-007) and Letter Application from the Enterprise to QMNR, dated 28 July 2006 (C-018).

306 R. Wiggin Reply Witness Statement at para 16 (CWS-007) and Letter Application from the Enterprise to QMNR, dated 28 July 2006 (C-018).

307 R. Wiggin Reply Witness Statement at para 16 (CWS-007).

308 R. Wiggin Reply Witness Statement at para 16 (CWS-007).

309 R. Wiggin Reply Witness Statement at para 18 (CWS-007).
that was the most logical and economic place to start developing the resource [the Enterprise] was interested in.

III. JURISDICTION

227. Canada does not contest certain key aspects of the Claimant's jurisdictional arguments. Canada does not dispute that the Claimant properly brought its claim under NAFTA Article 1117 on behalf of the Enterprise. Canada also does not dispute that Lone Pine is an investor of the United States and that the measure in question was "adopted or maintained" by a Party, Canada, as required by Article 1101(1).

228. Three points of disagreement remain between the Parties concerning the Tribunal's jurisdiction to decide this claim. They are:

(a) Whether Bill 18 "relates to" the River Permit as required by Article 1101(1);

(b) Whether the Claimant's rights in the River Permit qualify as an "investment" under Article 1139(g) and whether the Claimant, through its Enterprise, was the proper holder of those rights; and

(c) Whether the River Permit qualifies as an "investment" under Article 1139(h).

229. The Claimant meets the necessary threshold for each of these questions in fact and law:

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311 Counter-Memorial, 24 July 2015, para. 274: "The fact of owning or controlling LPRC would therefore enable it to satisfy the criteria of Articles 1101 and 1117 for "in personam" jurisdiction."

312 Counter-Memorial, 24 July 2015, paras. 270, 271, 272, and 276.
(a) Bill 18 relates to the River Permit. Bill 18 was designed and adopted with the deliberate intention to revoke a targeted subset of permits that included the River Permit. This evidences a legally significant connection between the River Permit Rights and Bill 18.

(b) The River Permit qualifies as an investment under Article 1139(g): The Enterprise's River Permit Rights were validly constituted and held under Quebec law.

(c) The River Permit qualifies as an investment under Article 1139(h): The Enterprise committed financial resources (i.e. capital) to seek out and acquire the River Permit.

A. Lone Pine meets all the jurisdictional requirements in Article 1101(1)

230. NAFTA Article 1101(1) sets out three requirements that must be met for a tribunal to have jurisdiction over a claim:

(a) There must be an investor of a Party;

(b) That investor must challenge a measure "adopted or maintained" by another Party;

(c) The impugned measure must relate to the investor or its investment.

1. Bill 18 relates to the River Permit as required by Article 1101(1)

231. Canada argues that Bill 18 does not relate to the River Permit because "there is no "legally significant connection" between the Act and LPRC or its interests."\textsuperscript{313} Canada states, "At

\textsuperscript{313} Counter-Memorial, 24 July 2015, para 273.
most, these interests were indirectly affected, which does not meet the conditions of Article 1101."\(^{314}\)

232. Canada's position is not supported by the facts in this case. Bill 18 relates to the River Permit as required by Article 1101(1): the bill nullified the River Permit Rights and revoked the River Permit. Lone Pine, through the Enterprise, was the holder of the River Permit Rights.\(^{315}\) There was no intermediary between the Enterprise and its ability to conduct exploration activities in realization of the River Permit Rights. Similarly, no third party had a right to restrict the Enterprise's activities pursuant to its River Permit Rights. The Enterprise held a 100% working interest in those rights pursuant to its completion of the terms set by the River Permit Agreement. When Bill 18 came into force, the Enterprise was the sole party engaged in natural gas exploration in the River Permit Area.\(^{316}\) Therefore, when it came to the exploration of natural gas in the River Permit Area, the Enterprise was directly precluded from exercising its rights because Bill 18, related to those rights, revoked them.

\(^{a)}\) The Claimant meets the legal test for determining that Bill 18 "relates to" the River Permit

233. The Claimant and Canada are in agreement that the appropriate legal test for ascertaining if a measure relates to an investor or investment is set out by Methanex v. USA, and requires the existence of a "legally significant connection between the measure and the investor or

\(^{314}\) Counter-Memorial, 24 July 2015, para 273.

\(^{315}\) Expert Report of Professor Hugo Tremblay, 13.2 (CER-003).

\(^{316}\) Cite t D. Axani Reply Witness Statement, paras 3, 5, 7, 18 (CWS-006) and J-Y. Lavoie Reply Witness Statement, paras 11, 23 (CWS-009).
the investment." The facts in this case demonstrate that the Claimant meets this test. Canada misapplies the Methanex test, ignoring factual differences that distinguish the two cases, particularly that the Enterprise was the party acting in accordance with the River Permit Rights up until the point when they were revoked by Bill 18. Methanex supports the existence of a legally significant connection in the present dispute and is clearly distinguishable.

234. Unlike the Claimant's situation, the impact of the measure in question on Methanex in that case was ancillary and not the target of the measure. Methanex was an independent producer, transporter, and marketer of methanol. One third of the methanol it produced was for downstream use in the fuel sector, \(^{318}\) as an input for methanol-based MTBE. California's Executive Order D-5-99 of 25 March 1999, required the removal of MTBE from all gasoline by 31 December 2002. As a result of California's ban on MTBE, Methanex could no longer sell its methanol for use in MTBE California. Methanex was a supplier, whose business was impacted by regulations imposed on its customer product.

235. The tribunal's decision in Methanex depended on the fact that the measure in question banned MTBE, not methanol. Any consequences of the ban for Methanex were merely ancillary; Methanex and methanol producers were not the target of the ban.

236. The Methanex tribunal observed that given the extensive nature of business value chains, government decisions such as the ban on MTBE can have far reaching consequences. Any

\(^{317}\) Memorial, 10 April 2015, para. 190, quoting from Methanex Corporation v. United States of America, Partial Award (7 August 2002) at 147 (CLA-046), and Counter-Memorial, 24 July 2015, para. 294.

\(^{318}\) Methanex Corporation v. United States of America, Partial Award (7 August 2002), 24 (CLA-046).
number of companies may be aggrieved and adversely affected by prohibitions on certain activities, including upstream suppliers such as Methanex. For this reason, the tribunal cautioned against "an indeterminate class of investors making a claim alleging loss."\textsuperscript{319}

237. Unlike \textit{Methanex}, the Claimant is not part of an indeterminate class of investors. The Enterprise was a member of a small number of companies who held the rights to engage in specific activity, in a defined territory, that were targeted by Bill 18. As a direct consequence of the government's decision to revoke these specific permits, the Enterprise's rights were extinguished.

238. An investor that belonged to the kind of "indeterminate class" considered in \textit{Methanex} would be one of the many suppliers and service providers that provide equipment to parties developing the resource and would not hold the property rights under the revoked permits.

239. Canada also relies on the decisions in \textit{Apotex v. USA} and \textit{Cargill v. Mexico} to demonstrate situations where there would be a determinate number of investors to support the tribunal's jurisdiction.\textsuperscript{320} These cases merely established that there needs to be a direct link between the measure and the investor or investment. These cases are not distinguishable from the present dispute. In \textit{Apotex}, \textit{Cargill}, and the present matter, there is a direct correlation between the impugned measure and the NAFTA investor. In all three instances, the measure deliberately targeted a claimant's investment at first instance. There is no ripple effect like in \textit{Methanex}; the number of investors is determinate.

\textsuperscript{319} Methanex Corporation v. United States of America, Partial Award (7 August 2002), 137 (CLA-046).

\textsuperscript{320} Counter-Memorial, 24 July 2015, paras. 321-322.
b) There is a "legally significant connection" between Bill 18 and the River Permit

240. The jurisdiction decision in *Bilcon v. Canada* further supports finding a legally significant connection between Bill 18 and the River Permit.

241. Like the present case, *Bilcon* also addressed a situation where one business held rights under a permit first acquired by a different business. In *Bilcon*, the American claimant had a partnership agreement with the Canadian company, Nova Stone, that gave it ownership over a rock quarry whose original permit was obtained by Nova Stone. Canada argued that under the permits in question, issued under municipal law, "neither the Claimants nor their investment had any rights or obligations under that approval."\(^{321}\) Canada further argued there was no legally significant connection because, under municipal law, Nova Stone "was prohibited from transferring, selling, leasing, assigning or otherwise disposing of the approval" without following the certain municipal regulatory requirements.\(^{322}\)

242. The tribunal rejected Canada's position, dismissing the notion that questions about the existence and ownership of rights under municipal law could obviate an otherwise clear existence of a legally significant connection. Bilcon had that connection on account of the partnership agreement with Nova Stone.\(^{323}\)


243. Lone Pine's situation is analogous to *Bilcon*. The Enterprise had an agreement with the business to whom the permit was initially issued, and subsequently became the controlling and operational entity for the purposes for which the permit was obtained. The acquisition of a 100% working interest in the River Permit Rights demonstrates an even greater legally significant connection than in *Bilcon*. While Bilcon still had to share its rights with Nova Stone, the Enterprise held *exclusive ownership rights* and ownership that were extinguished by Bill 18.

244. Furthermore, the River Permit Agreement and its subsequent assignment evidence the intent of both Junex and Forest Oil to provide the Enterprise with full and exclusive rights and control over the specified area associated with the River Permit.\(^{324}\) Pursuant to the Enterprise's fulfillment of the terms contained in the River Permit Agreement, it entered into an Assignment Agreement with Junex on 28 January 2010, constituting a transfer of rights.\(^{325}\) Junex's request that QMNR transfer the River Permit Rights to the Enterprise,\(^{326}\) confirms that both parties respected and adhered to the original intent that the River Permit Rights be held by the Enterprise, which afforded the Enterprise the rights to which Bill 18 had a legally significant connection.\(^{327}\)

\(^{324}\) P. Dorrins Reply Witness Statement, para 25 (CWS-008) and J-Y. Lavoie Reply Witness Statement, para 11 (CWS-009).

\(^{325}\) Expert Report of Professor Hugo Tremblay, 13.2 (CER-003).

\(^{326}\) Letter from QMNR to Junex re: confirming receipt of application for assignment of rights to the Enterprise (21 April 2010) (C-038) and Letter from QMNR to Junex re: confirming assignment of rights to the Enterprise (27 May 2010) (C-036).

\(^{327}\) P. Dorrins Reply Witness Statement, paras 26-27 (CWS-008) and J-Y. Lavoie Reply Witness Statement, paras 17-18 (CWS-009).
c) "The immediate effect" of Bill 18 prevented Lone Pine from exercising its rights

245. Other NAFTA tribunals have used similar language to arrive at the existence of a legally significant connection to establish that a measure "relates to" an investor or investment.

246. In Cargill, the tribunal noted that the Methanex test was met by the imposition of an import permit requirement that "had an immediate and direct effect on the business of Cargill de Mexico." The tribunal held that this immediate effect "constituted a legal impediment to carrying on the business of Cargill de Mexico..."

247. The Apotex tribunal also relied on the Methanex test, including how it was expressed in Cargill. In order to demonstrate that the Methanex test was met in that case, the tribunal examined "the immediate effect" of the measure as a means of illustrating how a measure relates to an investment. In Apotex, the tribunal noted that the "immediate effect" of the measure was that "Apotex-US was prevented from carrying on that major part of its business of sourcing."

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328 Cargill, Inc. v. United Mexican States, ICSID Case No. ARB(AF)/05/2, Award (18 September 2009), 175 (CLA-027).

329 Cargill, Inc. v. United Mexican States, ICSID Case No. ARB(AF)/05/2, Award (18 September 2009), 175 (CLA-027).

330 Apotex Holdings Inc. and Apotex Inc. v. United States of America (Affaire CIRDI n° ARB(AF)/12/1) Award, 25 août 2014, 6.13 (RLA-045).


332 Apotex Holdings Inc. and Apotex Inc. v. United States of America (Affaire CIRDI n° ARB(AF)/12/1) Award, 25 août 2014, 6.23 (RLA-045).
248. As in Cargill and Apotex, the Enterprise also confronted an immediate effect and legal impediment to realizing its River Permit Rights. The impugned measure, Bill 18, revoked them.

249. Any additional inquiry about the extent to which the Enterprise was prohibited from realizing its rights, and the nature of that prohibition, must be reserved for the merits inquiry under Article 1105 or 1110. In its examination of the immediate effect of the measure in question, the Apotex tribunal called for an approach that guards against leaving investors without recourse in the face of a state measure. The tribunal sought to avoid a situation whereby a claimant "might have a legitimate claim for breach of a substantive NAFTA provision, made in good faith and upon reasonable grounds, without any remedy under NAFTA's Chapter Eleven." 333

250. If a tribunal was mandated to inquire further at the jurisdictional stage, it would, in the words of the Apotex tribunal, deprive this Tribunal the opportunity to properly assess the Claimant's claim for breach of a substantive NAFTA provision, made in good faith and upon reasonable grounds.

251. Offering a useful and succinct way of framing the nature of the inquiry at the jurisdictional stage, the tribunal in GAMIT v. Mexico directed one to question, "whether a breach of NAFTA leads with sufficient directness to loss or damage in respect of a given

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333 Apotex Holdings Inc. and Apotex Inc. v. United States of America (Affaire CIRDI n° ARB(AF)/12/1) Award, 25 août 2014, 6.28 (RLA-045).
investment."\textsuperscript{334} Ultimately, this choice in phraseology that tribunals have adopted does not present any obstacle to meeting the NAFTA's threshold. The Enterprise's River Permit Rights were directly and deliberately revoked by Bill 18. This meets the requirement in Article 1101(1) that the measure "relates to" the investment.

\textit{d) There is no requirement to demonstrate a state's intention to penalize the investor}

\textbf{252.} Canada incorrectly argues that an intention to penalize an investor is a "guiding principle" for a tribunal seeking to ascertain a legally significant connection.\textsuperscript{335} Canada suggests that the Tribunal must conclude that Canada specifically intended to penalize foreign investors in order to find a legally significant connection.\textsuperscript{336}

\textbf{253.} This position cannot be supported. Canada bases this argument on the \textit{Methanex} Partial Award, but in actuality, neither the \textit{Methanex} Partial or Final Award supports Canada's position. After making its argument in the first place, Canada, at footnote 428 of the Counter-Memorial, acknowledges that the Partial Award held "that evidence of intent was not always necessary to meet the threshold of Article 1101."\textsuperscript{337} Further confirming this point, the \textit{Methanex} Final Award explicitly rejected an interpretation of the Partial Award that requires finding "malign intent" to demonstrate that a measure relates to an investor:

\[\ldots\] it is not correct that the Tribunal, in its Partial Award, confined its interpretation of the relevant phrase – "relating to" – to cases of malign

\textsuperscript{334} \textit{GAMI Investments Inc. v. The Government of the United Mexican States}, UNCITRAL, Final Award (15 November 2004), 33 (CLA-086).

\textsuperscript{335} Counter-Memorial, 24 July 2015, para 308.

\textsuperscript{336} Counter-Memorial, 24 July 2015, para 308.

\textsuperscript{337} Counter-Memorial, 24 July 2015, footnote 428.
intent. There could be cases of a "legally significant connection" without such malign intent.338

254. Therefore, Canada's argument that the Claimant must do more than satisfy the existence of a legally significant connection in order to demonstrate that Bill 18 relates to the River Permit Rights must be rejected. The finding of a legally significant connection, which exists, is all that is required to demonstrate the impugned measure relates to the River Permit Rights.

B. Lone Pine's River Permit Rights are an investment pursuant to Article 1139

255. The Claimant's River Permit Rights meet the definitions of an "investment" under NAFTA Article 1139(g) and (h): the investment in the River Permit Agreement constituted an intangible property right and an interest that arose from the commitment of capital.

256. Canada disputes this position and argued in its Counter-Memorial that the Enterprise never held a property right because the Farmout and River Permit Agreements did not grant any right to the Enterprise. It also argued that the Enterprise did not have an interest that arose from the commitment of capital because "no expenditures" were made "to obtain its interests in the River Licence, other than those made to acquire interests in the four Land Licences." 339

338 Matheson Corporation v. United States of America, Final Award of the Tribunal on Jurisdiction and Merits (3 August 2005), para. 8 (CLA-045), referenced at Counter-Memorial, 24 July 2015, footnote 428.

339 Counter-Memorial, 24 July 2015, para. 278.
257. In the following sections the Claimant will demonstrate that Canada's argument is incorrect in law and fact. The Farmout and River Permit Agreements did constitute a valid transfer of rights under the laws of Quebec. As well, its interests in the River Permit Agreement did arise from its commitments of capital.

1. **The Claimant's investment satisfies the definition in Article 1139(g)**

258. In the Memorial, the Claimant demonstrated how its investment in the River Permit Rights meets the definition of "investment" in Article 1139(g), which is:

real estate or other property, tangible or intangible, acquired in the expectation or used for the purpose of economic benefit or other business purposes.\(^{340}\)

259. The Claimant argued that the Enterprise's intangible property rights in the River Permit, which it acquired through the River Permit Agreement and Assignment Agreement "conferred on the Enterprise 100% of the Working Interest in the area defined under these agreements and registered in the Quebec Mining Registry."\(^{341}\) In particular, it stated that the Enterprise's River Permit Rights include:

(a) The entitlement to use and enjoy the property, including by undertaking a variety of exploration activity for which the Enterprise obtained permits and authorizations in its own name from Quebec government entities; and


\(^{341}\) Memorial, 10 April 2015, para. 200.
(b) The ability for Forest Oil to assign the River Permit Rights to the Enterprise and relinquish its ownership interest in the River Permit in favour of the Enterprise.\textsuperscript{342}

260. Last, the Claimant asserted that it acquired the River Permit Rights "for commercial purposes and in order to develop the shale gas opportunity it perceived in Quebec's Utica Shale basin."\textsuperscript{343}

261. In the Counter-Memorial, Canada adopted the position that the Claimant was not the holder of the River Permit Rights, and argued that "[t]he Claimant’s allegations are based on a flawed understanding of the nature of the rights conferred by the Farmout Agreement and an inaccurate presentation of the facts."\textsuperscript{344} Canada based its argument on the Expert Report provided by Maître Gagné and its conclusion "that the River Licence Agreement conferred on the claimant no real right in the resources of Junex’s exploration licence."\textsuperscript{345} A proper understanding of the Farmout and River Permit Agreements, as well Quebec law, however, demonstrates that it is Canada whose argument is based on a flawed understanding.

262. The Claimant and Canada agree that the ownership of the River Permit Rights is to be determined in accordance with Quebec law.\textsuperscript{346} Canada also agrees with the Claimant that

\textsuperscript{342} Memorial, 10 April 2015, para. 200.

\textsuperscript{343} Memorial, 10 April 2015, para 205.

\textsuperscript{344} Counter-Memorial, 24 July 2015, paras 277-278.

\textsuperscript{345} Counter-Memorial, 24 July 2015, para 282.

\textsuperscript{346} Memorial, 10 April 2015, para 198; Counter-Memorial, 24 July 2015, para 281.
"an exploration licence gives its holder an immovable real right" that can also "be the object of an innominate dismemberment."\(^{347}\)

263. Where the Claimant and Canada disagree is whether or not the Farmout and River Permit Agreements satisfied the necessary conditions to dismember Junex's rights, and grant them to the Enterprise. As will be shown, the Farmout and River Permit Agreements meet the requirements set out by Quebec law for the innominate dismemberment of rights.

264. The Expert Report of Professor Hugo Tremblay, a professor of property law, natural resources and energy law, and environmental law at the University of Montreal, concluded that Mr. Gagné's "conclusion that Junex has not assigned to CFOL any real right over its five exploration licences under the terms of the Agreements, is erroneous."\(^{348}\)

265. After setting out the legal framework of property rights in Quebec, Professor Tremblay analysed the content and effects of the Farmout and River Permit Agreements, and the subsequent Assignment Agreements. He concluded that there was a valid transfer of rights from Junex to the Enterprise:

Junex dismembered the real rights constituted by its five exploration licences and transferred them in their entirety, within a specific geologic interval, to CFOL. Accordingly, I conclude that CFOL held real rights under the St. Lawrence River when the Limiting Act came into force.\(^{349}\)

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\(^{347}\) Counter-Memorial, 24 July 2015, para 283.

\(^{348}\) Expert Report of Professor Hugo Tremblay, para 21 (CER-003).

\(^{349}\) Expert Report of Professor Hugo Tremblay, para 22 (CER-003).
266. Professor Tremblay explains that under Quebec law, holders of exploration licences may transfer an exploration license by contract "to a third party, who thereby becomes the new recipient of the prerogatives conferred by the licence."\(^{350}\) A licence holder can grant rights or prerogatives conferred by that licence through dismemberment of its real rights.\(^{351}\) This has the effect of granting the "prerogatives that directly bear on the licence itself or on the corporeal and immovable properties subject to the licence."\(^{352}\) Professor Tremblay concluded that the Gagné Report minimizes the ability of a licence holder to transfer its prerogatives to a third party: "The extent of the prerogatives conferred by an exploration licence is therefore greater than purported by the Gagné Report."\(^{353}\)

267. To demonstrate that the Enterprise actually acquired the rights from Junex, Professor Tremblay examined the Farmout and River Permit Agreements. He found that the Farmout Agreement constituted a dismemberment of Junex's real rights to Forest Oil. Regarding the Farmout Agreement, Professor Tremblay concluded:

I find that the assignment by Junex to Forest Oil of 100% of the working interest in the Original Permits within the Contract Area under the Farmout Agreement would constitute a dismemberment of Junex's real rights through their complete transfer to Forest Oil over the geological interval extending, on top, from slightly below the surface of the land, down to a depth of 743 meters at bottom. Further to such dismemberment and transfer, Junex would not retain any real rights in the Contract Area, within which Forest Oil would hold the incorporeal and immovable immovable real rights conferred by the Original Permits. After the assignment of the real rights to Forest Oil in the Contract Area, Forest Oil rather than Junex would

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\(^{350}\) Expert Report of Professor Hugo Tremblay, para 55.5 (CER-003).

\(^{351}\) Expert Report of Professor Hugo Tremblay, para 55.6 (CER-003).

\(^{352}\) Expert Report of Professor Hugo Tremblay, para 55.6 (CER-003).

\(^{353}\) Expert Report of Professor Hugo Tremblay, para 56 (CER-003).
exert therein the prerogatives conferred by the Original Permits, as implied by the exploration and production operations required to reach "Project Payout" in clause 8 of the Farmout Agreement.354

268. Regarding the River Permit Agreement, Professor Tremblay similarly concluded that the effect was that Junex's right was dismembered and transferred, along with all prerogatives, to Forest Oil. He concluded:

In light of the terms of the contract and the intention of the co-contracting parties, I conclude that the River Permit Agreement obliges Junex to dismember the real right constituted by the River Permit under the bed of the St. Lawrence River within a geological interval corresponding to the Contract Area, and transfer the prerogatives it confers to Forest Oil. The dismemberment and transfer would provide Forest Oil with an incorporeal and immovable innominate real right over the Utica Shale and Lorraine geological strata under the bed of the St. Lawrence, and grant Forest Oil the prerogatives to explore for oil and gas within that interval. The terms of the River Permit Agreement that prompt this conclusion refer to, and must be read in light of, the Farmout Agreement.355

269. The 28 January 2010 Assignment Agreement that followed the River Permit Agreement resulted in the Enterprise acquiring "an incorporeal and immovable innominate real right over the Contract Area within the territory covered by the River Permit."356

270. Professor Tremblay's conclusion comports with how Junex, the party that transferred its rights, understood what it was doing. As explained in the Reply Witness Statement of Jean-

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354 Expert Report of Professor Hugo Tremblay, para 60 (note omitted) (CER-003).
355 Expert Report of Professor Hugo Tremblay, para 63 (notes omitted) (CER-003).
356 Expert Report of Professor Hugo Tremblay, para. 68 (CER-003).
Yves Lavoie, Junex's intention was "to transfer to Forest Oil all property rights held by Junex in the defined geological horizon."\(^{357}\)

271. Mr. Lavoie further confirmed that recording the assignment in the Mining Registry was how the parties sought to make known the fact that the Enterprise, and not Junex, was the holder of the appropriate rights: "the recording of an assignment of this type was consistent with standard business practice. It was how our industry made known to third parties who held what rights over a particular area".\(^{358}\)

272. The Enterprise's incorporeal and immovable innominate real right satisfied the requirement that it possessed a valid right under the law of Quebec. The Enterprise's valid possession of this intangible property right also satisfies the definition of an investment under Article 1139(g).

C. **The Claimant's investment satisfies the definition in Article 1139(h)**

273. The Claimant has also argued why its investment meets the definition under Article 1139(h), which defines an investment as:

\[(h) \text{ interests arising from the commitment of capital or other resources in the territory of a Party to economic activity in such territory, such as under} \]

\[(i) \text{ contracts involving the presence of an investor's property in the territory of the Party, including turnkey or construction contracts, or concessions, or} \]

\[(ii) \text{ contracts where remuneration depends substantially on the production, revenues or profits of an enterprise.}\]

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\(^{357}\) J-Y. Lavoie Reply Witness Statement, para 10.

\(^{358}\) J-Y. Lavoie Reply Witness Statement, para 19.
274. The Memorial sets out that the Claimant meets this definition for two reasons. First, its ownership interest in the River Permit was contingent upon it spending a certain amount of money.\textsuperscript{359} Second, the Enterprise "committed capital and other resources through its expenditures on" the development of the River Permit.\textsuperscript{360}

275. Canada argues that: (1) the River Permit Agreement did not require the performance of any work and stated that the Enterprise was deemed to have earned its rights through the Farmout Agreement,\textsuperscript{361} and (2) that the Claimant did not perform any work on the River Permit.\textsuperscript{362}

276. Each of Canada's arguments is founded on a departure from the facts concerning the Enterprise's activities relating to the River Permit. First, Canada's argument that the River Permit Agreement did not impose any work requirements does not accurately reflect the context in which the Agreement was negotiated. The River Permit Agreement was negotiated after the conclusion of the Farmout Agreement. When Junex and Forest Oil entered into the River Permit Agreement, it was known that because development of the River Permit depended upon work done on land, the expenditures demanded in the Farmout Agreement were applicable to the River Permit.\textsuperscript{363}

\textsuperscript{359} Memorial, 10 April 2015, para 209.

\textsuperscript{360} Memorial, 10 April 2015, para. 210.

\textsuperscript{361} Counter-Memorial, 24 July 2015, para 288.

\textsuperscript{362} Counter-Memorial, 24 July 2015, para 272.

\textsuperscript{363} R. Wiggin Reply Witness Statement, para 17 (CWS-007) and J-Y. Lavoie Reply Witness Statement, paras 13-14 (CWS-009).
277. Canada's second argument is also based on an mischaracterization of the nature of the Enterprise's development plan for the River Permit. Since the Enterprise knew from the beginning that it would not engage in offshore activities, its capital expenditure to develop the River Permit was always going to be directed at activities that originated onshore. However, the fact that the expenditures were onshore does not mean that they were not focused on the development of the River Permit and securing the resources that would be accessed through horizontal drilling under the riverbed.\textsuperscript{364}

278. Canada's argument also ignores the fact that the Enterprise's acquisition of the River Permit was part of its broader efforts to acquire permit areas in the Utica shale throughout Quebec.\textsuperscript{365} In order to acquire permits, like the River Permit, the Enterprise was operating in a typical fashion for an oil and gas company seeking prospective territories and projects. Its visit to Quebec City to obtain and analyze Junex's core samples is one example of how the Enterprise was expending resources, including capital, in order to acquire permits throughout Quebec.\textsuperscript{366} The acquisition of the River Permit is a direct result of these expenditures.

279. The argument that the Enterprise's interest in the River Permit did not entail a commitment of capital also ignores the fact that the Enterprise was required to pay annual fees to Quebec to maintain the permit. This requirement meant that the Enterprise was legally bound to

\textsuperscript{364} D. Axani Reply Witness Statement, paras. 8, 9, 24, 26, 30, 32, 33, 37, 50 (CWS-006); R. Wiggins Reply Witness Statement, para 17-18 (CWS-007); J-Y. Lavoie Reply Witness Statement, paras 12-14 (CWS-009).

\textsuperscript{365} D. Axani Reply Witness Statement, paras. 18-22 (CWS-006).

\textsuperscript{366} J-Y. Lavoie Reply Witness Statement, para 6 (CWS-009).
commit capital pursuant to the River Permit specifically until that obligation was abrogated by Bill 18. The Reply Witness Statement of Mr. Dorrins confirms how the required payments, as well as the report of annual expenditures, were needed to keep permits "in good standing".\textsuperscript{367}

280. Therefore, Canada's arguments that there has not been a commitment of capital must fail.

281. Next, Canada dismisses the Claimant's reliance on the \textit{Mondex} decision to argue that interests acquired through its conclusion of certain contracts amount to an interest that, by virtue of its commitment of capital, qualified as an investment under Article 1139(h). Canada argued that \textit{Mondex} is distinguishable on account of the fact that the investor in that case made a commitment of capital pursuant to a contract it entered into with the City of Boston.\textsuperscript{368} Differences between the context and nature of the contracts in \textit{Mondex} and the present dispute make it, according to Canada, inappropriate for the Claimant to rely on.

282. Canada based its argument on its erroneous conclusion that the Enterprise was not the valid holder of a "mining or real right in the resource and that the sole interests arising from the commitment of capital are those in the Land Licences."\textsuperscript{369}

283. The Claimant has already proven that it was the holder of valid real rights under Quebec laws, thus rebutting Canada's first claim. Second, as has also already been demonstrated above, the Claimant's plan for developing the River Permit required it to conduct certain

\textsuperscript{367} P. Dorrins Reply Witness Statement, para 28(a) (CWS-908).

\textsuperscript{368} Counter-Memorial, 24 July 2015, para 291.

\textsuperscript{369} Counter-Memorial, 24 July 2015, para 292.
necessary activities onshore. That Quebec law required the commitment of capital for the River Permit to be spent onshore in no way detracts from the fact that the Enterprise's expenditures were made with a view to realizing its River Permit Rights. As such, Canada's second claim, about the nature of the Enterprise's commitment of capital is also disproven.

IV. ARTICLE 1110

284. NAFTA Article 1110(1) imposes a three-step test to determine if an expropriation in contravention of the NAFTA has occurred. The Claimant meets this test:

(a) The Claimant has a qualifying investment under Articles 1139 (g) and (h);

(b) Bill 18 expropriated those intangible property rights (1139(g)) and interests arising from the commitment of capital (1139(h)); and

(c) Bill 18 was not adopted for a public purpose in accordance with subsection (a), nor was it accompanied by payment of compensation to holders of expropriated permits in accordance with subsection (d).

285. Furthermore, contrary to Canada's submissions, Bill 18 is not a valid exercise of Canada's police powers.

A. Bill 18 violated the prohibition against expropriation in the NAFTA

1. Bill 18 constituted a direct expropriation of the River Permit

286. On 12 June 2011, the Enterprise was in possession of a real and immovable right in the form of its rights in the River Permit. The River Permit Agreement and Assignment
Agreement gave the Enterprise real rights of access, use, and enjoyment. On 13 June 2011, Bill 18 became law under the title An Act to limit oil and gas activities. Bill 18 states in part:

1. No mining right provided for under Divisions IX to XIII of Chapter III of the Mining Act (R.S.Q., chapter M-13.1) may be issued for the part of the St. Lawrence River west of longitude 64°31'27" in the NAD83 geodetic reference system or for the islands situated in that part of the river.

2. Any mining right referred to in section 1 and issued for the zone described in that section is revoked.

[...]

4. The application of sections 1 and 2 entails no compensation from the State. [Emphasis added]

287. There is no ambiguity in the text of An Act to limit oil and gas activities. Upon its coming into force, the Enterprise's rights in Permit PG2009PG490 was "revoked". Furthermore, "no compensation from the State" was provided for this taking.

288. Taking the River Permit from Lone Pine, with its intangible and immovable real rights, constitutes a direct expropriation under international law.

289. Canada treats the expropriation of the River Permit Rights as an indirect expropriation, arguing that the Enterprise "did not suffer a substantial deprivation of its investment..."

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370 Expert Report of Professor Hugo Tremblay, 13.2 (CER-003).
371 Bill 18, s. 2 (C-063).
372 Bill 18, s. 4 (C-063).
373 Counter-Memorial (24 July 2015), para. 393.
This argument ignores the fact that Bill 18 patently constituted a direct taking. There is no need to prove substantial deprivation as the Enterprise's investment was taken, full stop. Nevertheless, in the sections that follow, the Claimant responds to Canada's argument and proves that regardless of the terminology used to describe the taking, Bill 18 expropriated the River Permit Rights in their entirety in contravention of the NAFTA.

2. **The effect of Bill 18 on the River Permit constituted a substantial deprivation, making it a measure tantamount to expropriation**

290. Bill 18's revocation of the River Permit Rights also satisfied the legal test to qualify as a measure tantamount to expropriation. The threshold for a measure tantamount to expropriation is explained by the tribunal in *El Paso*, which stated, "The investor should be substantially deprived not only of the benefits, but also of the use of his investment." 374

This is exactly what happened upon Bill 18's revocation of the River Permit and River Permit Rights; Lone Pine was deprived of the use and benefit of its investment.

291. Canada argues the Claimant does not meet the test for substantial deprivation because Bill 18 kept the Original Permits in place. 375 This argument is based on the misapplication of precedents, which the Claimant addresses later in this section. In the result, Canada's arguments for why the Claimant was not substantially deprived of its investment are flawed and incorrect. Any measurement of whether or not Bill 18 substantially deprived the Claimant of its investment must be made against its investment in the River Permit, meaning the River Permit Rights.

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375 Counter-Memorial, 24 July 2015, para 443.
a) Lone Pine was substantially deprived of the use of its investment

292. Lone Pine meets all of the tenets of being substantially deprived of the use of its investment. As set out by the tribunal in *Archer Daniels v. Mexico*, it "lost control of the investment by losing rights of ownership,"\textsuperscript{376} which the tribunal in *El Paso* called "the decisive factor" in its inquiry.\textsuperscript{377}

293. The deprivation of use that resulted from Bill 18 was a permanent loss of control. The River Permit was expressly "revoked" by Bill 18. This brings the effect of the measure in line with the requirement set out by the tribunals in *S.D. Myers*, making it a "lasting removal of an owner to make use of its economic rights."\textsuperscript{378}

b) Lone Pine was substantially deprived of the benefit of its investment

294. The revocation of the River Permit substantially deprived Lone Pine of the benefit of its investment. Tribunals have used various terms when describing the high threshold required to demonstrate substantial deprivation from the benefits of an investment, such as: "as if

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\textsuperscript{376} Archer Daniels Midland Company and Tate & Lyle Ingredients Americas, Inc. v. The United Mexican States, ICSID Case No. ARB(AF)/04/5, Award (21 November 2007), 244 (CLA-078).


\textsuperscript{378} S.D. Myers, Inc. v. Canada, Partial Award (13 November 2008), 283 (CLA-058), see also LG&E Energy Corp., LG&E Capital Corp. and LG&E International Inc. v. Argentine Republic (Affaire CIRDI n° ARB/02/1) Decision on Liability, 5 octobre 2006, 193 (RLA-065).
the rights related thereto... had ceased to exist,"379 "virtually annihilated,"380 and "the destruction of the economic value."381

295. The substantial deprivation of the benefits of the River Permit comports to these descriptions. The River Permit has literally ceased to exist. Any benefit that could have been derived has been annihilated. Its economic value has been destroyed. The tribunal in *Philip Morris* directed one to look at the existence of sufficient value remaining after the alleged expropriation. As the River Permit has ceased to exist, it, as an investment, does not retain any value.

c) *Bill 18 does not satisfy the conditions in Article 1110(a-d)*

296. The Claimant will address subsection (a), "for a public purpose" when it responds to Canada's defence that Bill 18 constitutes a valid exercise of Canada's police powers.

297. However, even if it were concluded that subsections (a), (b), and (c) were satisfied, Bill 18 fails the requirement in Article 1110(1)(d) for "payment of compensation in accordance with paragraphs 2 through 6."382 Section 4 of Bill 18 states that there will be "no compensation from the state."383 This was a deliberate decision on the part of the

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379 *Glantus Gold, Ltd. v. United States of America*, Final Award (3 June 2009), 357 (CLA-039), citing *Tecnicas Medicambientes Tecmed S.A v. United Mexican States*, ICSID Case No. ARB(AF)/00/2, Award (29 May 2003), 115 (CLA-061).


381 *Tecnicas Medicambientes Tecmed S.A v. United Mexican States*, ICSID Case No. ARB(AF)/00/2, Award (29 May 2003), 117 (CLA-061).


383 Bill 18, s. 4 (C-063).
government.\textsuperscript{384} As such, Bill 18 fails the test for instances where measures otherwise expropriatory in nature, are saved by the subsections in Article 1110(1).

**B. The Claimant's responses to Canada's positions**

298. There are five fundamental disagreements between the Claimant and Canada related to Canada's expropriation of the River Permit Rights:

(a) The parties disagree on the proper interpretation of Article 1110's prohibition against expropriation;

(b) Is the River Permit is "an investment" covered under Article 1110? The Claimant submits that the answer is Yes;

(c) Did the Claimant possess the River Permit Rights? Again, the answer is Yes;

(d) Does expropriation of the River Permit Rights constitute an expropriation of the Claimant's investment? Yes, as illustrated above under heading A; and

(e) Was Bill 18 enacted for a public purpose or in accordance with the police powers doctrine? The Claimant submits that the answer is No.

299. The Claimant addresses each of these questions below.

\textsuperscript{384} Translation of Quebec, National Assembly, Committee on Agriculture, Fisheries, Energy and Natural Resources, Journal des débats, 2nd Sess, 39th Leg, Vol. 42 No. 12 (31 May 2011) (Minister Normandeau) at 16 (C-066).
1. The proper interpretation of Article 1110(1)

300. The NAFTA's prohibition on expropriation in Article 1110(1) protects investors against direct and indirect expropriation, as well as measures tantamount to expropriation:

"No Party may directly or indirectly nationalize or expropriate an investment of an investor of another Party in its territory or take a measure tantamount to nationalization or expropriation..."\(^{385}\)

301. The distinction in Article 1110 between the different types of expropriation is practically meaningless in the present case. By any standard, direct or indirect, the Claimant was deprived of the entitlements inherent in the property rights represented by a permit, thus rendering its now annulled permit entirely without value.

302. Direct expropriation occurs when an investor's property is formally taken: "a forcible taking by the Government of tangible or intangible property owned by private persons."\(^{386}\) This can constitute actual physical taking, or the transfer of title from the investor to the state.\(^{387}\) Indirect expropriation is, per Giamis v. United States, when "some entitlements inherent in the property right are taken by the government or the public so as to render almost without value the rights remaining with the investor."\(^{388}\) The term indirect should not be read to mean something other than a taking. As declared in Waste Management v.

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\(^{385}\) NAFTA Article 1110(1) (CLA-001).

\(^{386}\) Tecnicas Medicambientales Tecmed S.A v. United Mexican States, ICSID Case No. ARB(AF)00/2, Award (29 May 2003), 113 (CLA-061).

\(^{387}\) Giamis Gold, Ltd. v. United States of America, Final Award (8 June 2009), 355 (CLA-039); El Puro Energy International Company v. Argentine Republic, ICSID No. ARB/03/15, Award (31 October 2011), 265 (CLA-035).

\(^{388}\) Giamis Gold, Ltd. v. United States of America, Final Award (8 June 2009), 355 (CLA-039).
Mexico, "An indirect expropriation is still a taking of property," though formal transfer of title is not a requirement.389

303. The sections that follow will demonstrate that the Enterprise's investment in the River Permit Rights was expropriated, and in a manner that exceeds the Glamis threshold of being left 'almost without value'.

2. The River Permit is an investment capable of being expropriated

304. Lone Pine's investments under Article 1139 (g) and (h) constitute investments that are capable of being expropriated.

305. Canada argues that an investment under Article 1139 is not necessarily an "investment" capable of being expropriated under Article 1110.390 This line of argument is not supported by Article 1110. The definitions in Article 1139 apply to the entire NAFTA. The word "investment" in Article 1139 is used in Article 1110 and nothing in the text of Article 1110 suggests that the word "investment" has a unique meaning different than the definition in Article 1139, or as compared to its other usages throughout Chapter 11. As required by the principles of interpretation set out in the Vienna Convention, "investment" in Article 1110 must be interpreted consistently with the text of the NAFTA.391

389 Waste Management, Inc. v. United Mexican States, ICSID Case No. ARB(AF)/00/3, Award (30 April 2004), 143 (CLA-064).


391 Article 31(1) of the Vienna Convention on the Law of Treaties (27 January 1980) 1155 UNTS 331, 8 ILM 679 [Vienna Convention] provides that a "treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose" (CLA-003).
306. Canada's argument contradicts its own previous positions in other arbitrations under NAFTA and conclusions in other arbitral awards. In its Counter-Memorial in *Windstream v. Canada*, filed in January 2015, Canada's position was that an investment under Article 1139 qualified as an investment capable of being expropriated.\(^3\) It argued that "... the Claimant must demonstrate that the FIT Contract is among the exhaustive list of investments found in Article 1139."\(^4\) Canada submitted that Article 1139(g) and (h) were appropriate definitions of the investment to be considered under the expropriation analysis.\(^5\) Canada has not offered any explanation why it no longer accepts that an investment under Article 1139 is an investment under Article 1110.

307. Tribunals adjudicating expropriation claims consistently rely on the definition of investment under the relevant treaty. The *Chemtura v. Canada* tribunal engaged in a detailed examination as to whether "elements such as goodwill, customers or market share are covered by the definition of investment in Article 1139 of NAFTA."\(^6\) It confirmed that they were covered by Article 1139, which was held sufficient for purposes of analyzing the expropriation claim.\(^7\) In *Merrill & Ring v. Canada*, the tribunal stated that its first question was "whether the Investor's claim concerning expropriation relates to an

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\(^6\) *Chemtura Corporation (formerly Crampton Corporation) v. Canada*, Award (2 August 2010), 243 (CLA-030).

\(^7\) *Chemtura Corporation (formerly Crampton Corporation) v. Canada*, Award (2 August 2010), 243, 263 (CLA-030).
investment as defined under the NAFTA treaty," and then proceeded to look at the definitions of investment in Article 1139.\footnote{Merrill & Ring Forestry L.P. v. Canada, ICSID Administered Case, Award (31 March 2010), 139 (CLA-043).}

308. This approach has been followed by other NAFTA and BIT tribunals.\footnote{Marvin Feldman v. United Mexican States, ICSID Case No. ARB(AF)/99/1, Award (16 December 2002), 96, 100 (CLA-042); Methanex v. United States, IV.D.16 (in Methanex it was the US that argued that an investment for expropriation purposes had to qualify under Article 1139) (CLA-045); Ennisk v. Hungary, 161 (RLA-052); Suez, Sociedad General de Aguas de Barcelona S.A. and Vivendi Universal S.A. v. Argentina (Affaire CIRDI n° ARB/03/19) Decision on Liability, 30 juillet 2010, 130 (RLA-083); European Media Ventures SA v. Czech Republic (CNUDCI) Partial Award on Liability, 8 juillet 2009, 41 (RLA-055).} In \textit{European Media Ventures v. Czech Republic}, the tribunal disposed of a similar argument as the one raised by Canada, and stated in a footnote that while a tribunal must determine if an investment is capable of expropriation, that investment is to be defined in accordance with the treaty in general.\footnote{European Media Ventures SA v. Czech Republic (CNUDCI) Partial Award on Liability, 8 juillet 2009, footnote 4 (RLA-055).}

309. It is plain that the text of Article 1110(1) that prohibits expropriation of "an investment" must be interpreted to prohibit the expropriation of an investment as defined by the treaty itself, meaning in accordance with the definitions set out in Article 1139.

\begin{quote}
\textit{a) The rights under the River Permit are rights under domestic law capable of being expropriated}
\end{quote}

\begin{enumerate}
\item \textbf{Investment under Article 1139(g)}
\end{enumerate}

310. In the Memorial, the Claimant based part of its expropriation claim on the fact that it was the valid holder of the expropriated River Permit Rights: "intangible property rights that were duly registered in the Mining Registry and are enforceable against the state."\footnote{Memorial, 10 April 2015, para. 221.}
311. Canada challenged this, arguing in the Counter-Memorial that the Enterprise did not hold property rights in the River Permit. It agreed with the Claimant that Junex's rights were capable of dismemberment. However, it argued that Junex did not dismember and transfer rights to the Enterprise. Canada took the following positions:

(a) The Enterprise was not the holder of the River Permit;

(b) The River Permit Agreement did not transfer a right of ownership in the River Permit from Junex to the Enterprise; and

(c) The River Permit Agreement did not grant the Enterprise a real right.

Canada's argument derived from the conclusion of the Gagné Report that under Quebec law, the Enterprise held no real right that was enforceable against the state.

312. As explained in response to Canada's jurisdiction objections, the Enterprise did hold valid rights in accordance with Quebec law. The Farmout and River Permit Agreements did validly transfer real rights.

313. Canada argued that there must be a legal relationship between an investor and a property right. In the present matter, such a relationship existed. Professor Tremblay concluded

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401 Counter-Memorial, 24 July 2015, para. 391.
402 Counter-Memorial, 24 July 2015, para. 429.
403 Counter-Memorial, 24 July 2015, para. 432.
404 Counter-Memorial, 24 July 2015, para. 432.
405 Counter-Memorial, 24 July 2015, para. 416.
that the recording of the Enterprise's real rights in the Mining Registry "makes the transfers effective against the State." 406

314. Furthermore, as Professor Tremblay demonstrates, it is possible to transfer a defined geological layer of territory from a permit holder to a third party and isolate that layer as a discrete right, and this is what the Farnout and River Permit Agreements did. 407

315. Therefore, Canada's argument fails because it is based on an incorrect interpretation of Quebec law.

(2) Investment under Article 1139(h)

316. The Claimant also submitted that its investment under Article 1139(h), "namely its interests arising from its commitment of capital pursuant to the Farnout and River Permit Agreements" was expropriated. 408

317. Canada argued that this right could not be expropriated because it was a right that had yet to vest. 409 As with Canada's other argument on the nature of the right under Article 1139(g), this argument is also based on an incorrect understanding of Quebec law in the Gagné Report. The Gagné Report incorrectly concluded that the Enterprise's right did not grant a right to extract resources and that it was only a future, potential right. 410

406 Expert Report of Professor Hugo Tremblay, 76 (CER-003).
407 Expert Report of Professor Hugo Tremblay, 60, 63, 68, 77 (CER-003).
408 Memorial, 10 April 2015, para. 221.
409 Counter-Memorial, 24 July 2015, paras 412, 434.
410 RER-002-Gagné, 72.
318. In his Expert Report, Professor Tremblay explained that the limited prerogative of *abusus* conferred on an exploration permit holder grants that holder "limited power to extract and dispose of oil and gas during a trial period for the purpose of assessing the potential of a deposit."[^411] Professor Tremblay further concluded that an exploration lease confers upon its holder the right to obtain a production lease and exploit a resource as per the prerogative of *fructus*. He concluded that if an applicant seeking to exploit resources under a permit has satisfied the conditions proscribed by the *Mining Act* and paid the necessary rent, "the issuance of the production lease by the Ministry for Natural Resources is mandatory."[^412]

319. Therefore, the Claimant was in possession of a valid right that had vested. It is incorrect in law that, as Canada alleges, the Enterprise's interest under Article 1139(h) is not capable of expropriation because it was not a vested right.

(3) Horizontal drilling across contiguous licences is permitted

320. Finally, Canada argues that the Claimant's rights could not have vested because the Gagné Report stated that horizontal drilling across permit boundaries was not permitted.[^413] This conclusion is also incorrect in law.

321. The Claimant will not set out the entirety of why the Gagné Report's conclusion was erroneous when it stated that the Claimant could not have drilled horizontally from one permit to another. Professor Tremblay's Expert Report engages in a thorough analysis of

[^411]: Expert Report of Professor Hugo Tremblay, 55.2 (CER-003), relying on s. 174 of the *Mining Act*, (C-004).

[^412]: Expert Report of Professor Hugo Tremblay, 55.4 (CER-003).

[^413]: Counter-Memorial, 24 July 2015, para 440.
the relevant laws and regulations that govern the operational aspects, including drilling, of oil and gas exploration and exploitation activities.

322. Instead, the Claimant will point to Professor Tremblay's conclusion that the provisions in the Mining Act and Regulations relied upon in the Gagné Report are unrelated to questions about drilling operations under the surface. Professor Tremblay concludes, "The Mining Act, including section 208, does not subject drilling operation to spatial constraints." 414 Furthermore, Professor Tremblay concludes that the drilling requirements in section 22 of the Regulations "apply exclusively to the surface of the land, and do not prohibit nor preclude drilling underneath the surface of the land across the perimeter bounded a territory covered by an exploration licence or a production lease." 415

323. Therefore, there is nothing in the Mining Act or Regulations that would have made it impermissible for the Enterprise to realize its River Permit Rights.

324. Professor Tremblay's legal analysis is also supported by how the industry understood the regulations, especially in a case of contiguous permits held by the same entity.

325. In response to Canada's argument, Junex CEO Jean-Yves Lavoie stated that "in all my years in the Quebec oil and gas industry, I have never before heard such a view expressed by the QMNR or anyone else in the oil and gas industry." 416 He goes on to call it "illogical

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414 Expert Report of Professor Hugo Tremblay, 87 (CER-003).
415 Expert Report of Professor Hugo Tremblay, 88 (CER-003).
to try and argue that a permit holder who holds two contiguous permits cannot drill from one permit to the other."\textsuperscript{417}

326. Mr. Dorrins expressed the same sentiment in his statement. "In my view, it is reasonable to assume that if the parties are the same, there would be no reason to avoid crossing the permit line underground."\textsuperscript{418}

\textit{h) The rights under the River Permit are rights under international law capable of being expropriated}

327. The conclusion that the River Permit Rights are rights capable of expropriation is also consistent with the findings of other international tribunals. In \textit{Accession Mezzanine Capital v Hungary}, the tribunal held that property rights capable of alienation or assignment "may be capable of giving rise to a claim of expropriation but only if it gives rise to an asset owned by the claimant to which a monetary value may be ascribed."\textsuperscript{419} This existence of an asset, borne of the right, is dispositive to whether or not expropriation is possible. The \textit{Ennis v. Hungary} tribunal clarified that the asset must be "capable of ownership, valuation and alienation."\textsuperscript{420}

328. Property rights in the form of intangible interests are rights capable of expropriation. NAFTA tribunals in \textit{S.D. Myers, Mondev v. United States}, and \textit{Merrill & Ring} have all

\begin{itemize}
\item[\textsuperscript{417}] J-Y. Lavoie Reply Witness Statement, para. 30 (CWS-009).
\item[\textsuperscript{418}] P. Dorrins Reply Witness Statement, para. 39 (CWS-009).
\item[\textsuperscript{419}] \textit{Accession Mezzanine Capital LP and Danubius Kereskedelmi Vagyonkezelo v Hungary}, ICSID Case No. ARB/12/2, Award, 17 April 2015, para. 154, 155, citations omitted (CLA-075). See also \textit{Ennis et al. v. Hungary} (Affaire CIRDI n° ARB/12/2) Award, 16 avril 2014, 169 (RLA-052), and \textit{Szez, Societad General de Agnes de Barcelona S.A. and Vivendi Universal S.A. v. Argentina} (Affaire CIRDI n° ARB-03/19) Decision on Liability, 30 juillet 2010, 151 (RLA-085), relying on \textit{Norwegian Shipowners' Claims (Norway v. USA)}, Award (13 October 1922), 1 RIAA 307 (CLA-050).
\item[\textsuperscript{420}] \textit{Ennis et al. v. Hungary} (Affaire CIRDI n° ARB/12/2) Award, 16 avril 2014, 192 (RLA-052).
\end{itemize}
held that intangible interests, including "enjoyment of rights under a license," are investments that can be subject to expropriation.\footnote{Khan Resources Inc. v Mongolia, the tribunal accepted that rights under licences and contracts to exploit natural resources were intangible property and therefore capable of expropriation.\footnote{Crystalex v Venezuela, the tribunal held "contractual rights are generally capable of being expropriated."\footnote{Tribunals have also concluded that transfers of rights from one party to another grant the recipient a right capable of expropriation. In Occidental v Ecuador, the tribunal examined the text of the agreement in question, a Joint Operating Agreement, and concluded that "the parties intended that AEC acquire such ownership as a result of a transfer of such rights and interests."}}

329. Tribunals have also concluded that transfers of rights from one party to another grant the recipient a right capable of expropriation. In \textit{Occidental v Ecuador}, the tribunal examined the text of the agreement in question, a Joint Operating Agreement, and concluded that "the parties intended that AEC acquire such ownership as a result of a transfer of such rights and interests."\footnote{Occidental Petroleum Corporation and Occidental Exploration and Production Company v The Republic of Ecuador, ICSID Case No. ARB/06/11, Award, 5 October 2012, para. 32 (CLA-051).}

330. The case law Canada relied on to suggest the Enterprise’s River Permit Rights were not capable of being expropriated under international law do not support Canada’s conclusions. Important factual distinctions exist between the present dispute and those cases.

331. Two cases that Canada relied on, \textit{Thunderbird v. Mexico} and \textit{Merrill & Ring}, concern situations where the claimants did not actually possess the rights subject to the expropriation claim. In \textit{Thunderbird}, the claimant lacked a permit or licence, a dispositive
fact in finding that no expropriation occurred.\textsuperscript{425} In \textit{Merrill \& Ring}, the right in question was "a potential interest that may or may not materialize under contract the Investor might enter into with its foreign customers."\textsuperscript{426}

332. That is not the case in the present matter. As evidenced by the River Permit Agreement, and demonstrated by Professor Tremblay's Report, the Enterprise was in possession of a right; it was a real right that was not speculative or subject to some future occurrence or possibility.\textsuperscript{427} The \textit{Merrill \& Ring} tribunal, while dismissing the claimant's expropriation argument, did uphold the fact that "rights under a license" could be expropriated.\textsuperscript{428}

333. Canada also relies on \textit{Feldman v. Mexico}. In \textit{Feldman}, the tribunal's finding centered not on the lack of a vested right, but instead on the fact that the claimant was free to continue exporting products other than cigarettes, meaning there was no "taking" to qualify the measure as expropriation.\textsuperscript{429} All the tribunal noted concerning the existence of a right, was a statement confirming that a claimant must possess a right that has been taken.\textsuperscript{430} In the present matter, the Claimant did possess a right that was taken.


\textsuperscript{426} \textit{Merrill \& Ring Forestry L.P. v. Canada}, ICSID Administered Case, Award (31 March 2010), para. 140 (CLA-043).

\textsuperscript{427} Expert Report of Professor Hugo Tremblay, 13.2 (CER-003).

\textsuperscript{428} \textit{Merrill \& Ring Forestry L.P. v. Canada}, ICSID Administered Case, Award (31 March 2010), 215 (CLA-043).

\textsuperscript{429} \textit{Marvin Roy Feldman Karpa v United Mexican States} (ICSID Case No ARB(AF)/99/1) Award, 16 December 2002 at para 152 (CLA-042).

\textsuperscript{430} \textit{Marvin Roy Feldman Karpa v United Mexican States} (ICSID Case No ARB(AF)/99/1) Award, 16 December 2002 at para 152 (CLA-042).
3. The expropriated investment

334. The Claimant's Article 1110 claim is that Bill 18 expropriated its rights in the River Permit. Those rights constituted investments under Articles 1139(g) and (h). This has been the Claimant's position from the beginning, and is set out under the heading "The Expropriation of the River Permit" in the Notice of Arbitration.\(^431\)

335. Throughout the Memorial, the Claimant contended that Bill 18 had the effect of expropriating the intangible property rights held by the Claimant's Enterprise in the River Permit.\(^432\) In addition, as Canada acknowledged,\(^433\) the expert reports filed by the Claimant (and, as a result, the related arguments in the Memorial) calculated damages solely for the loss of the rights in the River Permit\(^434\) – a fact confirmed by the Glossary in the FTI Expert Report on Damages, which stated that the River Permit, River Permit Rights, and River Permit Area only relate to those areas covered by the River Permit.\(^435\)

336. The Claimant's Memorial defined the term "River Permit Rights" as the 100% working interest earned by the Enterprise in the Original and River Permits.\(^436\) It was also clear from the Claimant's legal arguments on jurisdiction, expropriation, and damages that the investment that is the subject of this dispute is the Claimant's rights in the River Permit.

\(^{431}\) Notice of Arbitration, September 6, 2013, section 10 "The Expropriation of the River Permit".

\(^{432}\) Memorial, 10 April 2015, paras. 170, 221, and footnote 268.


\(^{435}\) FTI Report, Glossary, "River Permit, River Permit Area, River Permit Rights".

\(^{436}\) Memorial, 10 April 2015, Glossary and para. 85(d).
Hence, the Claimant's expert reports only estimated the gas potential of the Claimant's rights in the River Permit, and damages related to the loss of this working interest. The expert reports did not quantify either the gas or money damages associated with the Original Permits (or "Land Permits" as described by Canada).

337. Canada's Counter-Memorial suggests that the analysis of whether or not Bill 18 substantially deprived the Claimant of its "investment" must be made in light of other investments made by the Claimant, namely the Original Permits. Using selected definitions in the Memorial, Canada tries to make a "gotcha" argument – that the parties are in "agreement" on this point, and that the agreement should be "determinative" and the indirect expropriation claim based on substantial deprivation be dismissed.437

338. First, Canada's position of course has no bearing on whether or not Bill 18 directly expropriated the River Permit Rights. Moreover, the Claimant does not agree with Canada's position, or Canada's characterization of the Claimant's position. In order to ensure that no further confusion ensues, the glossary included in this Reply confirms that the investment was in the River Permit Rights which relate exclusively to the 100% working interest of the River Permit and have no connection to the Original Permits.

339. Canada goes further, however, and suggests that independent of the parties' pleadings on this issue, the expropriation analysis must consider the five permits that make up the

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437 Counter-Memorial, 24 July 2015, paras. 451-452.
Bécancour/Champlain Block as the relevant investment. Canada offers three reasons for its argument:

(a) accessing the gas under the river requires drilling wells from positions onshore, as offshore drilling (i.e., from positions within the river) would not make commercial sense;

(b) the River Permit Agreement was tied to the Farmout Agreement; and

(c) when reporting to the Quebec government, Junex produced a consolidated report on work completed on its lands with Lone Pine.

However, none of these facts leads to the conclusion that Canada proposes.

(1) The facts in the present dispute support the Claimant's position that the River Permit and River Permit Rights constitute the investment

340. From the time earliest stages of Forest Oil's entry into Quebec, it took steps to acquire the River Permit so that it could exploit the shale gas contained under the bed of the St. Lawrence River.\(^{438}\) The River Permit was specifically targeted because of the high value the Enterprise placed on it.\(^{439}\)

341. Notwithstanding the fact that the Enterprise had other ongoing operations, it always viewed the River Permit as the focus; it was the "sweet spot".\(^{440}\)

\(^{438}\) R. Wiggin Reply Witness Statement at para 16 (CWS-007).

\(^{439}\) D. Axani Reply Witness Statement, para 8 (CWS-006).

\(^{440}\) D. Axani Reply Witness Statement, para 8 (CWS-006).
342. Numerous cases support the Claimant's legal and factual arguments that the River Permit Rights constitute the investment in their own right, independent of the Original Permits. In addition, the six cases that Canada relies to challenge this point are all clearly distinguishable.

343. Since the filing of the Claimant's Memorial, the tribunal in *Ampal-American Israel Corporation v. Egypt* addressed whether the revocation of a licence in the context of an entire natural gas pipeline project could constitute expropriation, even though the revocation of that permit did not destroy the pipeline project in its entirety. The tribunal concluded that the revocation did amount to expropriation:

"... since the license was an investment in its own right, its revocation constituted a direct and total taking of a discrete investment protected by the Treaty." 441

344. The *Ampal* tribunal relied on the conclusion from the *GAMI v. Mexico* tribunal that, "the taking of 50 acres of a farm is equally expropriatory whether that is the whole farm or just a fraction." 442 In confirming its position, the *GAMI* tribunal reasoned that the central

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441 *Ampal-American Israel Corporation and Others v. Arab Republic of Egypt*, para. 179, 180 (CLA-076).

442 *GAMI Investments Inc. v. The Government of the United Mexican States*, UNCITRAL, Final Award (15 November 2004), para. 126 (CLA-086).
premise in determining whether or not an expropriation has occurred must be that "the affected property must be impaired to such an extent that it must be seen as taken."\textsuperscript{443}

345. The conclusions in \textit{Ampal} and \textit{GAMI} support the contention that analysis of whether or not a measure expropriated an investment can only be made in the context of the facts of a particular dispute. The necessity of coming to a conclusion only after a fact-specific approach was emphasized by the tribunal in \textit{Philip Morris v. Uruguay}.\textsuperscript{444}

346. The Claimant will now distinguish the six awards relied upon by Canada, demonstrating how their divergent facts are not analogous to the present dispute, and therefore, any conclusions they offer about the characterization of an investment for the purposes of an expropriation analysis does not support Canada's arguments.

\textit{(a) Burlington Resources v. Ecuador}

347. In this case, the claimant alleged that Ecuador's imposition of a 50\%, and then a 99\%, tax on profits in excess of a certain level made under production sharing contracts (PSCs) with the Ecuador constituted an expropriation. The tribunal did not find the 50\% or 99\% tax on such excess profits amounted to indirect expropriation in part because "the investment preserved its capacity to generate a commercial return."\textsuperscript{445}

\textsuperscript{443} \textit{GAMI Investments Inc. v. The Government of the United Mexican States}, UNCITRAL, Final Award (15 November 2004), para. 126 (CLA-086).

\textsuperscript{444} \textit{Philip Morris Brands SARL, Philip Morris Products S.A. and Abal Hermanos S.A. v. Oriental Republic of Uruguay}, ICSID Case No. ARB/10/7, Award (8 July 2016), 280 (CLA-097).

\textsuperscript{445} \textit{Burlington Resources Inc. v. Republic of Ecuador}, ICSID Case No. ARB/08/5, Decision on Liability (14 December 2012), 456 (CLA-081).
348. In Burlington, the tribunal opted to assess the investment as all of Burlington's operations in the four blocs over which it held permits, including,

"its shares in Burlington Oriente, the infrastructure and equipment employed to exploit oil reserves, any other tangible property related to the project, the monetary and asset contributions made to carry out its operations, and the physical possession of the Blocks."\textsuperscript{446}

349. The present situation is not akin to Burlington. Burlington concerned expropriation by taxation. The tax applied to all "windfall" profits above and beyond what was agreed in the PSCs.\textsuperscript{447} The tribunal explained how a tax on windfall profits did not affect the ability of the underlying investment to operate:

By definition, such a tax would appear not to have an impact upon the investment as a whole, but only on a portion of the profits. On the assumption that its effects are in line with its name, a windfall profits tax is thus unlikely to result in the expropriation of an investment.\textsuperscript{448}

Thus, the tax on Burlington's windfall profits did not stop the operation of the underlying investment that generated the revenue leading to the profits. Its impact was limited to reducing the profitability of the business to a certain level related to the terms of the parties' agreement. In those circumstances, it is understandable why the tribunal, in its analysis of whether the windfall profits tax amounted to a substantial deprivation constituting an

\textsuperscript{446} Burlington Resources Inc. v. Republic of Ecuador, ICSID Case No. ARB/08/5, Decision on Liability (14 December 2012), 260 (CLA-081).

\textsuperscript{447} Burlington Resources Inc. v. Republic of Ecuador, ICSID Case No. ARB/08/5, Decision on Liability (14 December 2012), 404 (CLA-081).

\textsuperscript{448} Burlington Resources Inc. v. Republic of Ecuador, ICSID Case No. ARB/08/5, Decision on Liability (14 December 2012), 404 (CLA-081).
expropriation of an investment, assessed the impact of the measure against Burlington's investment as a whole (and its ability to continue to generate revenue).

350. Furthermore, the tax measure in Burlington affected the business operations of all oil producers in Ecuador who signed PSCs with the government. Bill 18, even apart from not being a tax measure on profits, was not a measure that applied widely or equally across all oil and gas companies in Quebec. Far from applying to all oil and gas producers, Bill 18 was a measure devised and implemented with the specific objective of revoking an identifiable number of permits and sets of rights to explore for natural gas in lands located under the St. Lawrence River, and targeting only specific holdings that fit those limited and precise criteria of a subset of oil and gas producers in Quebec.

351. Bill 18 illustrates exactly why the NAFTA contains protections from expropriation in the first place. If Burlington were applied as Canada advocates, it would leave investors without recourse in the face of government measures that specifically targeted a business's ability to operate and revoked and nullified their rights, solely because the investor may have other business activities and separate investments beyond those targeted. It may make sense to take a more holistic view of what constitutes an investment in situations where a claim concerns a measure of general application that does not prohibit the underlying investment from being able to operate, as in Burlington. However, when a government's measure is expressly directed to wholly take only specific investments, as is the case here, a NAFTA tribunal must ensure that those investments are not deprived of the NAFTA's protections.
The *Electrabel* dispute was heard under the *Energy Charter Treaty*.\(^{449}\) It provides similar protection from expropriation as the NAFTA. *Electrabel* concerned Hungary's termination of a Power Purchase Agreement (PPA) with the Dunamenti power plant, which was owned by Electrabel. The tribunal accepted that the PPA qualified as a separate investment for the purposes of jurisdiction, but it chose to assess whether or not expropriation occurred by defining the investment in question to include Electrabel's "aggregate collection of interests in Dunamenti."\(^{450}\) The tribunal relied on the evidence that notwithstanding the cancelation of the PPA, Electrabel's investment in the Dunamenti power plant was left whole and operational, and the power plant continued to bid on other projects in Hungary.\(^{451}\)

The Claimant's case is unlike *Electrabel* for two primary reasons.

First, and by analogy to *Electrabel*, Bill 18 did not expropriate an agreement to sell the shale gas or some component of it, which would be analogous to the PPA in *Electrabel*; Bill 18 revoked the River Permit which is more akin to losing the Dunamenti power plant.

That is, this claim is not a situation in which a state breached its contract with an investor, but left whole the primary investment and the means for generating revenue. Bill 18 took, through revocation of the River Permit Rights, the engine of the investment. There was no opportunity for the Enterprise to realize the potential of the River Permit (as Electrabel

\(^{449}\) *Energy Charter Treaty*, article 13, provide text of Article 13 (CLA-065).


could continue to do with the Dunamenti plant) because the River Permit ceased to exist and, along with it, all substantive property rights that were vested in the Enterprise in the territory covered by the River Permit.

356. In fact, the finding in Electrabel supports the Claimant's position. In the context of its discussion on indirect expropriation, the tribunal reasoned that investments must be taken as they are and cannot be characterized arbitrarily to suit the interests of a party. It stated:

"If it were possible so easily to parse an investment into several constituent parts each forming a separate investment (as Electrabel here contends), it would render meaningless that tribunal's approach to indirect expropriation based on 'radical deprivation' and 'deprivation of any real substance' as being similar in effect to a direct expropriation or nationalisation. It would also mean, absurdly, that an investor could always meet the test for indirect expropriation by slicing its investment as finely as the particular circumstances required, without that investment as a whole ever meeting that same test." 452

In this extract, the tribunal is warning against what might ensue where an act of government takes away a discrete part of an investment. That is not the case here.

357. In the present case, the Claimant is not "slicing its investment as finely" as possible to advance its argument. The investor was in possession of an investment as defined by the NAFTA. That investment was the River Permit Rights. Bill 18 expropriated the Claimant's River Permit Rights. Canada's argument runs contrary to the Electrabel ruling, and by narrowing the concept of an investment, Canada tries to minimize the NAFTA's protection against expropriation. Under Canada's approach, a state could always rely on the existence

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of multiple investments held by an investor in order to avoid any liability for acts that would otherwise be expropriatory. This would 'render meaningless' the protection against expropriation in the NAFTA.

(c) Vanessa Ventures v. Venezuela

358. Canada relies on Vanessa Ventures to support its argument that "[t]he way in which the claimant's investment was structured is relevant."\(^{453}\) In Vanessa Ventures, the claimant brought claims of expropriation of gold and copper mining rights. The project in question began as a gold mine. However, extracting the gold first required copper extraction. The tribunal noted, "the recovery of copper was an integral part of the commercial plan for, and the commercial viability of, the recovery of the gold."\(^{454}\) The tribunal decided to combine both claims into one saying,

"The Tribunal considers that the rights in respect of gold and the rights in respect of copper were so closely interrelated and interdependent that they can be considered together..."\(^{455}\)

359. The tribunal went on to note that the royalty scheme and contractual elements related to both sets of rights were similar.\(^{456}\)

360. Again, Canada's reliance on this case demonstrates its disregard for factual differences that make its application to the present dispute inappropriate. Canada's argument is that because

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\(^{453}\) Counter-Memorial, 24 July 2015, para 455.

\(^{454}\) Vanessa Ventures Ltd. v. Venezuela (Affaire CIRDI n° ARB(AF)/04/6) Award, 16 janvier 2013, para. 61 (RLA-086).

\(^{455}\) Vanessa Ventures Ltd. v. Venezuela (Affaire CIRDI n° ARB(AF)/04/6) Award, 16 janvier 2013, para. 188 (RLA-086).

\(^{456}\) Vanessa Ventures Ltd. v. Venezuela (Affaire CIRDI n° ARB(AF)/04/6) Award, 16 janvier 2013, para. 190 (RLA-086).
the River Permit Agreement was subject to the same terms as the Farmout Agreement, they should be considered the same.

361. However, in *Vanessa Ventures*, there were two discrete projects (on the same territory), which required the investor to bring two discrete claims. Since the facts permitted it to do so, the tribunal combined both claims into one for the purposes of rendering its decision. The tribunal did not make any findings about the nature of the investment for the purposes of the expropriation claims; it did not merge the gold and copper mines into one investment, only into one claim for the purposes of its analysis.

362. *Vanessa Ventures* does not stand for the proposition that separate investments are to be combined. Instead, it merely states that when two claims are born of identical facts, in the interests of expediency, a tribunal may consider them jointly.

(d) *Merrill & Ring v. Canada*

e) *Feldman v. Mexico*

363. Both *Merrill & Ring* and *Feldman* are irrelevant to the present situation for the same reason: both cases addressed instances where operational and profitable businesses claimed that the measure in question adversely impacted and limited their business. In this respect, like *Burlington*, they are not analogous to a situation where the measure in question took the entirety of the investment. In *Merrill & Ring*, the claimant argued that the export regime for logs reduced its profitability. The tribunal characterized its claim as being:

"...whether it could have obtained better profits in exporting logs to the international market, and whether its inability to achieve this profit level
because of Notice 102 results in some form of taking of the proceeds of its sales."^{457}

364. In *Feldman*, the claimant's claim for expropriation revolved around a prohibition on his export of cigarettes from Mexico. Despite this prohibition, however, he was able to continue exporting several other products that also formed part of his business.^{458}

365. These two cases are inapplicable to the present dispute. This is not a case of a measure that resulted in reduced profitability for a continuing business. Bill 18 did not impose a requirement on the Enterprise's realization of the River Permit Rights that reduced its profit. Bill 18 revoked the River Permit Rights. Similarly, Bill 18 did not prohibit the Enterprise from realizing one aspect of the River Permit Rights while realization of other aspects of the River Permit Rights remained unaffected. Bill 18 destroyed the entirety of the River Permit Rights; there was nothing left with which to continue.

366. It is also important to note that the *Merrill & Ring* tribunal understood that different cases with different facts will necessarily lead to divergent conclusions about framing an investment. It therefore included a caveat that stated:

"It could well happen that a certain aspect is so fundamental to the business concerned that interference with it might result in a kind of compensable expropriation."^{459}

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^{457} *Merrill & Ring Forestry L.P. v. Canada*, ICSID Administered Case, Award (31 March 2010), 148 (CLA-043).

^{458} *Marvin Feldman v. United Mexican States*, ICSID Case No. ARB(AF)/99/1, Award (16 December 2002), 111 (CLA-042).

^{459} *Merrill & Ring Forestry L.P. v. Canada*, ICSID Administered Case, Award (31 March 2010), 144 (CLA-043).
367. Therefore, despite the distinguishing factual differences between the present dispute and *Merrill & Ring*, the decision itself is not definitive. It directs tribunals to decide, based on the specific facts of the case, how an investment is to be framed.

(f) *Telenor v. Hungary*

368. Any party relying on the claimant's expropriation analysis and claim from *Telenor* must be cautious in light of that Tribunal's as a result of the tribunal's criticism over how Telenor advanced its expropriation claim.\(^{460}\) Still, Canada's reliance on the case is again misplaced. The claimant defined the investment as being the investment as a whole, not merely its specific concessions for a radiotelephone network that was lost. The parties and the Tribunal agreed to this.\(^{461}\)

369. Therefore, if *Telenor* stands for anything, it is the proposition that a claimant is best positioned to identify the precise investment that has been expropriated.

370. The conclusion that the claimant is best positioned to characterize the investment is supported by tribunals in *Tecmed v. Mexico* and *Middle East Cement Shipping and Handling v. Egypt*. Both tribunals affirmed that the claimant is best poised to determine


"destruction of economic value" and whether or not continued operation of an investment after an expropriatory measure is "feasible".462

371. In sum, the cases put forward by Canada all concern situations where the facts and context were such that they demanded the investment in dispute to be broadly constructed. This is not one of those situations. This is not the situation in Burlington where an investor has been targeted by an industry-wide measure of general application applicable to all facets of the investor's business. Nor is it a situation like in Electrabel, where a discrete aspect of the investor's overall investment was taken from it. The Claimant is also not putting forward two expropriation claims related to two distinct investments like in Vanessa Ventures. Unlike Merrill & Ring and Feldman, the impugned measure took, via revocation, the entire investment and did not merely affect a portion of its business, reducing its profitability. Last, unlike Telenor, the Claimant is not dependent on combining investments into one in order to demonstrate the nature or magnitude of the expropriation: Bill 18 took the whole of its investment in the River Permit and River Permit Rights.

372. What all of Canada's cases do support is the idea that facts and context matter. In the present situation, the facts and context confirm that the River Permit and River Permit Rights constituted the expropriated investment.

462 Teneceas Medicambientes Tecned S.A v. United Mexican States, ICSID Case No. ARB(AF)00/2, Award (29 May 2003), 117 (CLA-061), and Middle East Cement Shipping and Handling Co. S.A.I. v. Arab Republic of Egypt, ICSID Case No. ARB/99/6, Award (12 April 2002), 168 (CLA-093).
4. Bill 18 lacks a public purpose and is not a valid exercise of Canada's police powers

373. The Claimant maintains its position, set out in the Memorial, that Bill 18's targeting and revocation of permits is "without a legitimate purpose or rational explanation."463

374. In response to this argument, Canada raised a defence that "the measure results from a valid exercise of Quebec's police powers and, accordingly, does not constitute an expropriation within the meaning of NAFTA Article 1110."464 In advancing this defence, Canada suggests two different legal standards for what does and does not constitute a valid act of police powers. At the beginning of its arguments, after reviewing several legal authorities, Canada states that "to be recognized as falling within the category of police powers, the measure must (a) be non-discriminatory and (b) designed and applied to protect legitimate public welfare objectives."465 Yet Canada concludes its argument by greatly elevating the scope of police powers, without any supporting authority. Canada claims that a measure can only be excluded from the scope of a state's police powers if it is "manifestly incoherent or constitute[s] a disguised form of protectionism."466 Canada offers no explanation or justification for how it has equated the phrase "designed and applied to protect legitimate public welfare objectives" with the phrase "manifestly incoherent".

463 Memorial, 10 April 2015, para. 256.
464 Counter-Memorial, 24 July 2015, para. 491.
466 Counter-Memorial, 24 July 2015, para. 524.
375. The principle of state police powers provides that states will not incur responsibility for the legitimate and *bona fide* exercise of sovereign police powers subject to specific commitments or an analysis of proportionality and reasonableness.\textsuperscript{467} The doctrine protects a state's ability to act for the protection of human health and the environment.\textsuperscript{468}

376. Police powers do not provide states with a *carte blanche*. Protections in the NAFTA do not disappear each time a state chooses to take regulatory action. The tribunal in *Pope and Talbot* warned, for example, that regulations can be exercised in a manner that would constitute creeping expropriation, justifying vigilance on the part of a tribunal assessing the validity of the police powers claim.\textsuperscript{469}

377. Tribunals have identified two criteria to determine if a state's reliance on police powers is justified. First, the state's interest must be "*bona fide,*"\textsuperscript{470} or "genuine."\textsuperscript{471} Second, the action must be non-discriminatory.\textsuperscript{472} There is no support in Canada's legal authorities for its heightened standard that a measure must be manifestly incoherent to not be *bona fide* or genuine.


\textsuperscript{469} *Pope & Talbot Inc. v. Canada*, Interim Award (26 June 2000), para. 99 (C-053).

\textsuperscript{470} *Firemen's Fund Insurance Company v. United Mexican States*, ICSID Case No. ARB(AF)/02/01, Award (17 July 2006) at para 176(j) (CLA-038).

\textsuperscript{471} *ADC Affiliate Limited and ADC & ADMC Management Limited v. Republic of Hungary*, ICSID Case No. ARB/03/16, Award of the Tribunal (2 October 2006), 452 (CLA-020).

\textsuperscript{472} *Methanex Corporation v. United States of America*, Final Award of the Tribunal on Jurisdiction and Merits (3 August 2005) (CLA-045).
378. Determining if the exercise of police powers meets these criteria must be fact-specific. The tribunal in Feldman acknowledged there is no "fully satisfactory means of drawing this line." Each tribunal must assess claims in the context in which the measure in question was enacted.  

    a) The revocation of permits through Bill 18 was not a bona fide exercise of state power to protect the environment

379. International law and the NAFTA do not protect investors against every regulatory action that adversely affects an investment. Regulations can and do change, and there will always be some inherent risk when making a commercial investment. Absent a stabilization clause in an agreement, investors recognize the need to be prepared for such change.

380. In the section that follows, the Claimant will demonstrate that Quebec's interest in expropriating the permits through Bill 18 was not a bona fide exercise of regulatory power. As such, the actions of Quebec do not meet the test to be a valid exercise of police powers.

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475 S.D. Myers, Inc. v. Canada, Partial Award (13 November 2000), 282 (CLA-058); see also, Teекника Medicambientala Teemed S.A v. United Mexican States, ICSID Case No. ARB(AF)/00/2, Award (29 May 2003), 119 (CLA-061); Burlington Resources Inc. v. Republic of Ecuador, ICSID Case No. ARB/08/5, Decision on Liability (14 December 2012), 384, 254, 501 (CLA-081).

476 Marvin Feldman v. United Mexican States, ICSID Case No. ARB(AF)/99/1, Award (16 December 2002), 112 (CLA-042); Waste Management, Inc. v. United Mexican States, ICSID Case No. ARB(AF)/00/3, Award (30 April 2004), 177 (CLA-064).

b) Minister Normandeau's decision to extend the moratorium contradicted her own ministry's position and was lacking any basis in scientific or environmental evidence

381. Minister Normandeau's decisions undermine Canada's argument that the revocation of permits by Bill 18 can be defended as a valid exercise of police powers. The provision to revoke exploration permits in section 2 of Bill 18 was made possible only because Minister Normandeau disregarded the facts and evidence that were available to her.

382. Minister Normandeau's disregard of the facts and evidence available to her served as the basis for her decisions that:

(a) Extended a prohibition on hydrocarbon exploration into a territory (the river, and up its banks), that had not been scientifically studied;

(b) Extended a prohibition on exploration activities intended for marine environments to territory hundreds of meters below the surface; and

(c) Ultimately transformed that prohibition into an expropriation of exploration permits located in the area that had not been studied in the territory that was never the intended focus of the original prohibition.

383. Minister Normandeau's disregard of facts and evidence was central to Bill 18's revocation of permits in the following ways:

(a) The revocation of permits required Minister Normandeau to disregard the position of her own officials at QMNR, and that advanced by environmental advocates, who
supported any measure affecting permits in the St. Lawrence River as a temporary
hold until scientific certainty was available to properly inform policymaking.

(b) The revocation of permits required Minister Normandieu to disregard the fact that
QMNR officials failed to provide any scientific or environmental justification for
revoking permits by extension of the moratorium to areas not studied by SEA-1.

(c) Purporting to justify the revocation of permits by virtue of the conclusions in the
SEA-1 and BAPE 273 reports misapplies and disregards the mandates and findings
of those reports to suit the government's political objective.

(a) The revocation of permits required Minister Normandieu to disregard the position of her own
officials at QMNR, and that advanced for by environmental advocates, who supported any
measure affecting permits in the St. Lawrence
River as a temporary hold until scientific certainty
was available to properly inform policymaking

384. Minister Normandieu's decision to include the revocation of permits in Bill 18 must be
understood in the context in which it deviated from Quebec's position on shale gas
exploration. An internal QMNR document from August 2010, a "Shale Gas Q&A", stated,
"Government considers that there is no need to put into place a moratorium on the
exploration and exploitation of shale gas in Quebec."478 A further document from August

478 Gaz de Schiste Questions – Réponses (August 2010) (C-107)
2010 affirms that the government was directing its efforts of shale gas.\textsuperscript{479}

385. The reason why the government held this position, was explained by Mr. Sauvé in his witness statement: "the exploration and exploitation of shale hydrocarbon resources through horizontal drilling and hydraulic fracturing could be done safely."\textsuperscript{480} This position served as the basis for why, when environmental groups pressed Minister Normandeau for a moratorium, she "continue [sic] to say no."\textsuperscript{481}

386. QMNR officials were reluctant to take any definitive steps in contravention of its position on shale gas exploration before the government was better informed. Alain Lefebvre of the QMNR Hydrocarbon Bureau wrote on 24 September 2010, three days before Minister Normandeau’s announcement of a moratorium on the Estuary and northwest portion of the Gulf, that the SEA process and studies constituted the "heart of the framework" to establish an "adequate environmental framework."\textsuperscript{482}

387. Yet, despite the government’s stated commitment to the SEA process, as Minister Normandeau announced the prohibition on 27 September, she also cancelled the public hearing portion of the SEA-1.\textsuperscript{483}

\textsuperscript{479} Développement Durable des Gaz de Schiste au Quebec (August 2010), p. 12 (C-108).

\textsuperscript{480} RWS-005-Sauvé, 31.

\textsuperscript{481} RWS-004-Normandeau, 37, 39.

\textsuperscript{482} Programme d'EES - Rapport préliminaire de l'EESI - Bassin de l'estuaire maritime et du nord-ouest du golfe du Saint-Laurent (24 September 2010) (C-109).

\textsuperscript{483} RWS-004-Normandeau, 29.
388. When Minister Normandeau announced an extension of the moratorium in November, she did so notwithstanding the government's position that stated horizontal drilling was safe. Any changes to that position, the government had stated, would wait until after the SEA.

389. Minister Normandeau's November announcement also went beyond what was called for by the province's environmental groups, who understood that policy needed to be grounded in evidence. In submissions to the BAPE, the Strategies Saint-Laurent and Regroupement des comités de zones d'intervention prioritaire urged a "cautionary approach in the development of the shale gas industry" and recommended the government conduct a SEA on the river portion of the St. Lawrence to formulate its position.\(^{484}\)

390. In a press release issued on 8 November 2010, environmental groups adopted the same position.\(^{485}\) The environmental groups did not ask Minister Normandeau to permanently revoke permits; instead, they advocated a suspension of hydrocarbon activities while an SEA, specifically focused on the river portion of the St. Lawrence, was undertaken.\(^{486}\) With the necessary evidence gathered, the government would be equipped to formulate its policy.

391. All of the positions advocated by environmental groups are confirmed in a memorandum prepared on 9 November by Alain Lefebvre, the Director General of the QMNR

\(^{484}\) Développement Durable de l'Industrie des gaz de Schiste au Québec (November 2010) (732) (4501) (C-113).


\(^{486}\) RWS-005-Sauvé, 24.
Hydrocarbon Bureau. Mr. Lefebvre’s memorandum confirmed that the findings of the SEA-1 provided the basis for the request to engage in further study. Mr. Lefebvre also clarified that the environmental groups requested that Minister Normandeau "freeze" projects, and not permanently revoke them.

392. Documents demonstrate that QMNR officials viewed the moratorium’s extension in the same manner as advocated by environmental groups: a placeholder pending conclusions of further study and development of a hydrocarbon framework that would be based upon scientific and environmental evidence. A Hydrocarbon Bureau note prepared after the conclusion of SEA-1 by Sébastien Desrochers affirmed that a moratorium

This understanding among QMNR officials continued, and in a memorandum from 9 November 2010 it was stated, "we understand this "moratorium" is limited in time and that it cannot, therefore, last longer than the time needed for the government to put in place an adequate environmental framework." 490

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487 Moratoire sur les activités d'exploration et d'exploitation d'hydrocarbures dans le fleuve du Saint-Laurent (partie fluviale) pour les permis de recherche localisés entre la pointe Est de l'île d'Orléans et la frontière provinciale Québec/Ontario (9 November 2010) (8300) (C-114).

488 Moratoire sur les activités d'exploration et d'exploitation d'hydrocarbures dans le fleuve du Saint-Laurent (partie fluviale) pour les permis de recherche localisés entre la pointe Est de l'île d'Orléans et la frontière provinciale Québec/Ontario (9 November 2010) (8300) (C-114).


490 État de situation (20101109-40) - Proposition de deux scénarios visant à interdire de façon permanente toutes activités d'exploration et d'exploitation pétrolière et gazière dans l’estuaire du Saint-Laurent (11 November 2010) (C-115).
393. A 27 January 2011 QMNR Information Note further evidenced the government's position that proper environmental and scientific study would yield the development of a comprehensive framework to regulate shale gas, obviating any need for a moratorium that permanently revoked permits.\(^{491}\) The Information Note concluded:

The objective of the government is to do even better in modernizing this framework and getting the industry to adopt exemplary practices.

... The legislative and regulatory framework will be the object of reassessment and revision.

As such, the safety of the public and the protection of the environment will be assured by the application of an adequate legislative and regulatory framework and by systematically supervising industry activities.

In this context, the government of Quebec rejects the idea of imposing a moratorium.\(^{492}\)

394. The positions and beliefs expressed above can be explained by the fact that QMNR officials understood the SEA process not as a means to secure political objectives, but one that through comprehensive study would lead to the implementation of an evidence-based framework to facilitate hydrocarbon exploration.

395. Deviation from this process carried risk, as highlighted by officials in the above 2011 note.\(^{493}\) The note linked the claim

\(^{491}\) Exploration pétrolière et gazière - Conséquences d'un moratoire (27 January 2011) (C-121).

\(^{492}\) Exploration pétrolière et gazière - Conséquences d'un moratoire (27 January 2011) (C-121).

\(^{493}\) Exploration pétrolière et gazière - Conséquences d'un moratoire (27 January 2011) (C-121).
for lost revenue to QMNR figures supporting the proposition that natural gas production.

The note further added that imposition of an unwarranted moratorium would.

396. The Government of Quebec has not provided evidence that undermines these internal deliberations. It has also not presented evidence it relied on to reverse itself in these positions and demonstrate that in November 2010 the policymakers at QMNR believed the extension of the moratorium was warranted.

(b) The revocation of permits required Minister Normandeau to disregard the fact that QMNR officials failed to provide any scientific or environmental justification for revoking permits by extension of the moratorium to areas not studied by SEA-1.

397. Without any basis in a SEA or other scientific or environmental study, from the outset, QMNR officials struggled to find justification for the what would become Bill 18. On 9 November 2010, the day Minister Normandeau announced the prohibition's extension into the river, a QMNR memorandum, "State of the Situation" noted that a permanent ban, implemented via law, was beneficial only insofar as it "would confirm the government's commitment to fulfilling its obligations in this area." It added that such an act "would

491 Exploration pétrolière et gazière - Conséquences d'un moratoire (27 January 2011) (C-121).

495 Exploration pétrolière et gazière - Conséquences d'un moratoire (27 January 2011) (C-121).

have a clear and official character in the eyes of the population," but provided no scientific, environmental, or other evidentiary basis for the ban.\textsuperscript{497} In fact, the memorandum cautioned against implementing a permanent ban because continued technological developments could "permit realization in an environmentally safe manner of hydrocarbons in the maritime environment."\textsuperscript{498}

398. The latest Information Note from the QMNR Energy Sector before Minister Normandeau presented Bill 18 to the Quebec Executive Council is dated 9 May 2011. The absence of scientific or environmental justification for extending the moratorium, read in

\textsuperscript{497} État de situation (20101109-40) - Proposition de deux scénarios visant à interdire de façon permanente toutes activités d'exploration et d'exploitation pétrolière et gazière dans l'estuaire du Saint-Laurent (11 November 2010) (C-115).

\textsuperscript{498} État de situation (20101109-40) - Proposition de deux scénarios visant à interdire de façon permanente toutes activités d'exploration et d'exploitation pétrolière et gazière dans l'estuaire du Saint-Laurent (11 November 2010) (C-115).

\textsuperscript{499} Ministère des Ressources naturelles, Direction du bureau des hydrocarbures, Interdiction des activités d'exploration et d'exploitation pétrolières et gazières dans le fleuve et l'estuaire du Saint-Laurent, Note d'information (20101123-l/20101109-40/20110106-3), 28 février 2011(R-044).

\textsuperscript{500} Ministère des Ressources naturelles, Direction du bureau des hydrocarbures, Interdiction des activités d'exploitation pétrolières et gazières dans le fleuve et l'estuaire du Saint-Laurent, Note d'information (20101123-l/20101109-40/20110106-3), 28 février 2011(R-044).
400. When Bill 18 became law, Quebec still lacked any scientific or environmental justification for extending the moratorium to the River. One week before Minister Normandéau presented the bill to Quebec’s Executive Council, Mr. Lefebvre wrote critically of the moratorium to Mario Gosselin, the Assistant Deputy Minister for Energy at QMNR. Basing his concerns on the lack of a real justification for the moratorium, he wrote:

If a total moratorium is applied in the St. Lawrence River (i.e. no horizontal drilling either), why does the same logic not apply as well to the Richelieu Valley? It for this reason that the approach we recommended is more moderate. It avoids creating precedents that will be difficult to follow with.  

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401. In disregard for the lack of a scientific or environmental basis for extending the moratorium in Bill 18, when Minister Normandéau presented the bill to Quebec’s Executive Council on 4 May 2011, she justified the extension on the basis that  


502 Email from A. Lefebvre (DGHB) to M. Gosselin (BSMA – Energie) re: “Projet de loi spéciale sur le fleuve Saint-Laurent - État de situation” (27 April 2011) (C-126).
This justification is problematic for several reasons.

402. This statement illustrates how Minister Normandeau put forth Bill 18 without any basis in scientific or environmental study on the River. Minister Normandeau's actions lacked a basis for extending the moratorium to the St. Lawrence River. There was also then an insufficient basis for revoking the permits. Last, there was certainly no basis for doing urgently. Instead, Minister Normandeau believed that 'in all logic' she could apply the conclusions of one study elsewhere. Her statement betrays the government's lack of studying the pertinent issues. It is ad-hoc policy development.

403. A second problem with the Minister's statement is that her reference to "the maritime path" - meaning surface activities, like shipping - highlights Bill 18's focus on protecting the marine environment and not subsurface activities. Minister Normandeau did not question or change the position adopted by QMNR officials that companies were

Yet, in practice, Bill 18 made doing that impossible through its revocation of permits.

404. This raises a third problem with the Minister's statement. If the objective of Bill 18 was to protect "the maritime path," its effect was far deeper.

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503 Memoire au Conseil des Ministres De Madame Nathalie Normandeau, Ministre des Ressources naturelles et de la Faune - "Projet de loi limitant les activities pétrolières et gazières et modifiant la Loi sur les mines" (4 May 2011) (C-132). This justification was also relied upon in Can doc 1499, Information Note from Energy Division, Hydrocarbon Bureau, May 11, 2011.

504 Ministère des Ressources naturelles, Direction du bureau des hydrocarbures, Interdiction des activities d'exploration et d'exploitation pétrolières et gazières dans le fleuve et l'estuaire du Saint-Laurent, Note d'information (20101123-1/20101109-40; 20101016-3), 28 février 2011 (R-044).
If horizontal drilling under the riverbed posed too great an environmental risk, or threatened to undermine the Minister's objective in enacting Bill 18, Minister Normandeau does not offer any explanation of why, 'in all logic', the protection of the marine environment of the St. Lawrence River necessitated a prohibition on subsurface activities.

Despite these justification gaps, the government continued to rely on the "logic" referenced by Minister Normandeau to advance Bill 18. A further Information Note prepared by the QMNR on 11 May 2011 reiterated the same flawed justification for Bill 18 as when Minister Normandeau presented it to the Executive Council.

In contrast to all other decisions that were fact-based, the government admits that Minister Normandeau's decision was made in the absence of specific facts, and instead "in light of" the conclusion of a study, SEA-1, that did not examine the affected area.

The Minister's reliance on the SEA-1 in a geographic area that it did not study cannot be supported given the specific emphasis placed throughout the SEA process on geographic specificity.

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506 Email from N. Klein (BSMA – Energie) to P. Perron (DGHi) re: "TR: Fiche - Projet loi limitant les activités pétrolières et gazières" and attachment (11 May 2011) (C-139). "The Minister has declared that this ban extends towards the west until the border of Quebec in Montréal given that, logically, the conclusions [of SEA-1] apply equally to the river and its islands, notably taking into account of the geography and the activities that happen in the maritime sea route."

507 Counter-Memorial, 24 July 2015, para 127.
Quebec split its SEA process into two in recognition of geographic differences between the studied areas. Minister Normandeau herself emphasized "the major territorial expanse" between the separately studied zones of SEA-1 and SEA-2.\footnote{RWS-004-Normandeau, 24.}

The geographic scope of SEA-1 and SEA-2 provided a basis for the government's decision in September 2010 to limit a moratorium to the area studied under SEA-1.\footnote{Email from F. Boulanger to V. Raymond re: "URGENT – 20100927-20 – TR : Évaluation environnementale stratégique (EESI) – Conférence de presse (2010-07-27) / SUITES (lettres)" (27 September 2010) (C-111), Plan de notes d'allocation pour la vice-première ministre, ministre des Ressources naturelles et de la Faune, ministre responsable du Plan Nord et ministre responsable de la région de la Gaspésie-Iles-de-la-Madeleine - À l'occasion d'une conférence de presse pour annoncer la décision de ne pas procéder à l'exploration et à l'exploitation des hydrocarbures en environnement marin (Le 27 septembre à XXX) (C-110), Ligne de presse interministérielle – Titre: Mise en valeur de la filière gazière (gaz de schale) (11 November 2010) (C-117). For example, at p. 3 of C-111, Minister Normandeau confirms that her September announcement is tied to the SEA-1 Report, and any further action would be tied to the SEA-2, which is studying a different area than that studied by SEA-1.}

Limiting any moratorium to the area studied in SEA-1 was consistent with the study's findings and the overall design of the SEA process that separately examined the two geographic areas. The report noted that the study served "to provide a picture of the environment in the zone under study."\footnote{AECOM Tecsol Inc., Évaluation environnementale stratégique de la mise en valeur des hydrocarbures dans le bassin de l'estuaire maritime et du nord-ouest du golfe du Saint-Laurent, Rapport préliminaire en appui aux consultations, juillet 2010, 800 page 2 (R-021). Original: "Établir un portrait de l'environnement de la zone étudiée".}

It confirmed that the report's mandate was limited to a "sectorial SEA relating to the development of hydrocarbons in the basin of the maritime estuary and the north-west of the Gulf of Saint-Lawrence."\footnote{AECOM Tecsol Inc., Évaluation environnementale stratégique de la mise en valeur des hydrocarbures dans le bassin de l'estuaire maritime et du nord-ouest du golfe du Saint-Laurent, Rapport préliminaire en appui aux consultations, juillet 2010, 800 page 3-1 (R-021). Original: Le mandat consiste à réaliser une EES sectorielle portant sur la mise en valeur des hydrocarbures dans le bassin de l'estuaire maritime et du nord-ouest du golfe du Saint-Laurent (...)".}

The SEA-2 also emphasized its limited-geographic scope, setting out that its studied zone was limited to "the administrative regions of the Cote-Nord and the Gaspesie-Iles-de-la-Madeleine. It covers the eastern portion of the St. Lawrence Gulf as well as the Bay des Chaleurs [and the three
basins]. More specifically, the report clarified that one of its objectives was to "better understand the environmental, social, and economic contexts that characterize the basins of the Anticosti, Madeline, and the Bay des Chaleurs."

410. Given both reports' emphasis on their unique geographic coverage, the government's decision not to study the river portion of the St. Lawrence, but proceed 'in light of' SEA-1, is not a decision that can be made 'in all logic'. It is not a decision that conformed to the evidence-based approach that Quebec relied upon in making all other decisions related to hydrocarbon development in Quebec. That approach would achieve what it had been aiming to do since 2006, which was to engage in a comprehensive environmental study process that ultimately saw Quebec conduct three BAPE studies and five SEAs. Going beyond what was studied departed from the standard the government set for itself. The haphazard manner in which the government departed from its commitment to proper study is more reflective of a government devoid of resources and decision-making capacity that Minister Normandeau was attempting to improve.

\[c\] Purporting to justify the revocation of permits by virtue of the conclusions in the SEA-1 and BAPE 273 reports misapplies and disregards the mandates

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512 GENIVAR, Évaluation environnementale stratégique sur la mise en valeur des hydrocarbures dans les bassins d'Anticosti, de Madeleine et de la baie des Chaleurs, Rapport d'étude, septembre 2013, 802 p. 6 (R-23).

513 GENIVAR, Évaluation environnementale stratégique sur la mise en valeur des hydrocarbures dans les bassins d'Anticosti, de Madeleine et de la baie des Chaleurs, Rapport d'étude, septembre 2013, 802 p. 10 (R-23).

514 RWS-004-Normandeau, 19.
and findings of those reports to suit the government’s political objective

411. Canada attempts to imbue the decision to revoke licenses with a public purpose or within the police powers doctrine by contending that it followed the findings of SEA-1 and BAPE 273. Canada’s reliance on the SEA-1 and BAPE 273 reports as justifying the moratorium is problematic for several reasons.

412. First the purpose of the SFA-1 Report was to "enable informed decision making". Applying the SEA-1’s findings to an entirely different geographic location is the opposite of this.

413. Second, and as already stated, the SEA-1 focused on studying offshore drilling and distinguished between hydrocarbon resources contained in marine environments from those contained in land. It is disingenuous to argue that an 800-page report that addressed horizontal drilling just three times provided a basis to prohibit onshore horizontal drilling in a region not studied by that report.

414. The instances where horizontal drilling is mentioned also do not support reliance on the SFA-1 to prohibit that type of drilling activity. At one point, the SFA-1 stated that the

515 Counter-Memorial, 24 July 2015, para 521.


future framework for hydrocarbon exploration and exploitation in the Gulf and Estuary would include horizontal drilling."\textsuperscript{518}

415. At another point, to preserve the quality of the coastal countryside, the SEA-1 did not recommend prohibiting horizontal drilling, instead it merely suggested permanent drilling installations be limited when in proximity to tourist sites.\textsuperscript{519} In the end, the report recommended to "limit permanent drilling installations in the maritime environment in proximity to coasts and in areas near (less than 24km) tourist sites."\textsuperscript{520}

416. Even risks with potentially dramatic consequences, such as the risk of eruptions causing explosions and fires, were risks that the SEA-1 did not think warranted the draconian step of a complete prohibition. Instead, the report recommended that such risks could be considered at the environmental assessment stage for each project.\textsuperscript{521}

417. The ability of companies and regulators to manage and mitigate risks is why the report included a section titled "Suggested Mitigation Measures".\textsuperscript{522} This section illustrates several available mitigation measures on activities like seismic surveys, drilling programs,

\begin{footnotesize}
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\item \textsuperscript{518} AECOM Tecsys Inc., Évaluation environnementale stratégique de la mise en valeur des hydrocarbures dans le bassin de l'estuaire maritime et du nord-ouest du golfe du Saint-Laurent, Rapport préliminaire en appui aux consultations, juillet 2010, 800 p., 6-9 (R-021).
\item \textsuperscript{519} AECOM Tecsys Inc., Évaluation environnementale stratégique de la mise en valeur des hydrocarbures dans le bassin de l'estuaire maritime et du nord-ouest du golfe du Saint-Laurent, Rapport préliminaire en appui aux consultations, juillet 2010, 800 p., 5-66 (R-021).
\item \textsuperscript{520} AECOM Tecsys Inc., Évaluation environnementale stratégique de la mise en valeur des hydrocarbures dans le bassin de l'estuaire maritime et du nord-ouest du golfe du Saint-Laurent, Rapport préliminaire en appui aux consultations, juillet 2010, 800 p., 13-9 (R-021).
\item \textsuperscript{521} AECOM Tecsys Inc., Évaluation environnementale stratégique de la mise en valeur des hydrocarbures dans le bassin de l'estuaire maritime et du nord-ouest du golfe du Saint-Laurent, Rapport préliminaire en appui aux consultations, juillet 2010, 800 p., 9-70 (R-021).
\item \textsuperscript{522} AECOM Tecsys Inc., Évaluation environnementale stratégique de la mise en valeur des hydrocarbures dans le bassin de l'estuaire maritime et du nord-ouest du golfe du Saint-Laurent, Rapport préliminaire en appui aux consultations, juillet 2010, 800 p., Section 13.5 (R-021).
\end{itemize}
\end{footnotesize}
and accidental events. The report does not state that the risks encompassed by these activities required prohibiting shale gas exploration and exploitation activities, let alone revoking permits, let alone revoking permits.

418. Jean-Yves Lavoie closely followed the SEA-1 process as the CEO of Junex. He noted how the discrepancies between what was examined in SEA-1 and the Enterprise's plans for horizontal drilling underneath the River Permit make it "implausible" as justification for the government's actions in the St. Lawrence River. For the same reasons as Mr. Lavoie, Mr. Dorrins expresses a similar sentiment: "I do not understand why or how the findings of the SEA-1 apply to the St. Lawrence Lowlands."

419. The BAPE 273 also does not support the government's position. Minister Normandeau calls the BAPE 273 report "a watershed moment." Canada relies upon it as justifying the revocation of permits. Yet, Canada's own witness, Mr. Dupont, acknowledged in his statement that it made only general conclusions, which merited further specific study. He recounts that the report noted how shale gas activities "may" not have been compatible with "certain parts" of Quebec.

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525  P. Dorrins Reply Witness Statement, para. 40 (CWS-008).
526  Counter-Memorial, 24 July 2015, para 146.
527  Counter-Memorial, 24 July 2015, para 521.
528  RWS-002-Dupont, 83.
420. As with the SEA-1 Report, the BAPE report does not justify in any way the revocation of permits in Bill 18.

421. Minister Normandeau states that the BAPE 273, together with the SEA-1, led her to conclude that "we could in all likelihood not rule out, in the foreseeable future, the risks of shale gas leveraging activities beneath the St. Lawrence River..." Yet Minister Normandeau does not explain how she arrived at her conclusion on the basis of a report that referred to shale gas under the river only once. Minister Normandeau also does not state how her conclusion could be supported by a report that did not examine accessing shale gas through hydraulic fracturing as an activity in and of itself. Mr. Lavoie noted how the report "says very little about horizontal drilling." His colleague at the time Mr. Dorrins stated, "I did not see anything in the Report that made me think drilling from positions onshore under the river was a problem, or that permits were at risk."

422. Minister Normandeau's reliance on the BAPE 273 to attempt to justify her actions fails to account for the instances where the report addressed horizontal drilling, such when it noted that horizontal drilling minimizes surface impacts and that it allows for a flexible approach to site selection. Nor does Minister Normandeau explain how she relied upon a report

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529 RWS-004-Normandeau, 49.

530 BAPE 273 Report Développement dumble de l'industrie des gaz de schiste au Québec, Rapport d'enquête et d'audience publique, février 2011, 336 p. 23 (R-024).


532 P. Dorrins Reply Witness Statement, para. 39 (CWS-008).

that noted a lack of conclusive evidence on the effects of hydraulic fracturing to prohibit that very activity under the river.534

423. Just as with the SEA-1 Report, the BAPE 273 report provides several instance of mitigation measures to address potential risks of shale gas exploration and exploitation activities, even suggesting that the presence of "buffer zones" would be sufficient to ensure drilling activities did not threaten "protected areas".535

424. The report concluded not by recommending the prohibition of oil and gas development in Quebec, but by stressing the need for continued efforts at regulating it:

The opinions and directions contained in this report are aimed at improving methods to ensure, specifically, a legal and regulatory framework concerning the safe development of the shale gas industry. Some suggested measures require time in order to be effective. Other propositions do not require legislative or regulatory modifications and can be realized in the short-term [...]536

425. Following BAPE 273's general conclusions, the Quebec government should have moved forward logically with its efforts to obtain specific information to further its evidence-based


535 BAPE 273 Report Développement durable de l'industrie des gaz de schiste au Québec, Rapport d'enquête et d'audience publique, février 2011, 336 p. 174 (R-024). For further examples of mitigation measures, see pages 140 and 163.

536 Original: "Les avis et les orientations formulés dans le rapport visent à améliorer les façons de faire pour assurer notamment un encadrement légal et réglementaire concernant le développement sécuritaire de l'industrie de gaz de schiste. Certains mesures avancées peuvent requérir un certain temps pour être effectives. D'autres propositions ne requièrent pas de modification législatives ou réglementaires et peuvent être réalisées à court terme (…). "BAPE 273 Report Développement durable de l'industrie des gaz de schiste au Québec, Rapport d'enquête et d'audience publique, février 2011, 336, Conclusion, page 246 (R-024)."
approach to hydrocarbon development. This is why it instituted the SEA-SG in May 2011.\textsuperscript{537}

426. However, the government did not only focus on the SEA-SG. It also proceeded with Bill 18 and revoked permits, an act that had nothing to do with the BAPE 273's conclusion.

\textit{c) Bill 18 did not conform to the standard Quebec set for itself vis-à-vis developing a regulatory framework for hydrocarbon activities}

427. In November 2010, when Minister Normandeau set in motion the process that would culminate in Bill 18's revocation of permits, the Government of Quebec was undertaking a lengthy scientific and environmental study process related to oil and gas exploration and development, with specific attention paid to marine environments and shale gas. It was a comprehensive effort by the bureaucracies in the natural resources and environment ministries to study and propose hydrocarbon development regulated by evidence-based policies. These included the SEA-1 and SEA-2 studies, the BAPE 273 study, and three ministerial working groups jointly composed by the Ministry of Environment and QMNR. The overall objective of this exercise was to support the government's efforts, set out in the 2006 Quebec Strategy, to realize the province's energy potential.\textsuperscript{538} It was an evidence-based approach that proceeded in stages as the government gained further understanding, supported by scientific evidence, in order to eventually overhaul and update its legal and regulatory framework for hydrocarbon development.

\textsuperscript{537} RWS-002-Dupont, 85.

428. While the evidence-based approach continued to unfold, the Quebec government continued to ensure that the existing regulatory framework was fully applicable to ongoing hydrocarbon exploration. In March 2011, Quebec's Ministry of Environment began working on a regulatory modification to require hydraulic fracturing activities to obtain an environmental authorization certificate under section 22 of the Environment Quality Act. These measures were announced on 5 May 2011, and came into force on 10 June 2011.

429. It was in tandem with the evolution of the evidence-based approach to understanding and regulating hydrocarbons - actively studying the issue and Quebec's Ministry of the Environment devising interim regulations to monitor the expansion of hydrocarbon exploration - that Minister Normandeau "decided" that oil and gas activities in the river portion of the St. Lawrence were to be permanently prohibited. She 'decided' despite the fact that she lacked the scientific evidentiary basis to support her decision, and that her own bureaucrats had communicated in numerous instances - in Information Notes and the various drafts of the memorandum to Cabinet - that companies were...
430. The passage of Bill 18 was, in a sense, incidental to Quebec's studying of hydrocarbons and its attempts to introduce new regulations over the industry. The Facts section in this Reply sets out the full effect of Quebec's efforts to study and regulate hydrocarbon development. In order to contrast the inadequacy through which the revocation of permits came to be included in Bill 18, the Claimant here emphasizes that while Bill 18 came into force on 13 June 2011, this was by no means the conclusion of Quebec's attempts to develop a regulatory framework for hydrocarbon development based on scientific evidence:

(a) On the same day that Bill 18 was voted on by the National Assembly, the Ministry of Environment's new regulations on hydraulic fracturing came into force.

(b) Following the recommendations of the SEA-SG, two further SEAs were conducted on hydrocarbon development beginning in May 2014 as part of Quebec's proposed "vision" for hydrocarbon development.\[543\]

(c) On 30 July 2014 new oil and gas exploration guidelines were put out by the Ministry of Environment.\[544\]

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(d) In November of that year, a further BAPE study, tasked to "revisit issues associated with the exploration and development of shale gas in the St. Lawrence Lowlands," which was "largely based on the SEA-SG studies," was announced. 545

This continued work helped Quebec devise its 2030 Energy Policy, which includes hydrocarbon development. 546 The 2030 Energy Policy, and the evidence-based conclusions of the multiple studies that led to its creation, was enshrined into law on 10 December 2016 when the National Assembly adopted Bill 106, An Act to implement the 2030 energy policy. 547

431. Following the conclusions first articulated by QMNR bureaucrats in December 2010, that hydraulic fracturing could be done safely, Bill 106 permits hydraulic fracturing in Quebec. While the bill was moving through the National Assembly, the first authorization certificate for hydraulic fracturing was issued under section 22 of the Environment Quality Act. 548

432. This narrative, culminating with Bill 106, is an articulation of Quebec's bona fide public purpose to protect the environment while permitting hydrocarbon development. It is the manifestation of the state's police powers.

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433. But Bill 18, and its automatic inclusion in Bill 106, cannot be situated within this narrative. Bill 18 deviated from the scientific and evidence-based approach. It made definitive conclusions that were not motivated by the government's *bona fide* interest in protecting the environment and that contradicted the stated position of Quebec's own civil servants. Permanently revoking permits prior to the conclusion of ongoing studies and assessments whose purpose was to provide comprehensive knowledge to make informed policy decisions, and misleadingly linking that decision to a scientific and environmental basis, goes beyond what police powers provide. In contravention of Article 1110(1)(a), the revocation of permits reveals how Bill 18 lacked a real public purpose.

434. The only remaining explanation for why Quebec adopted Bill 18

434. Bill 18 cannot be a valid exercise of Quebec's police powers because, after each purported justification given has been discredited, the only one that remains is not protected by the police powers doctrine.

435. Minister Normandeau introduced, and the Government of Quebec adopted, Bill 18 because it was politically expedient. Regardless of the consequences, which were known and documented, Minister Normandeau moved ahead. In her testimony before Bill 18's passage she made no secret of why the government favoured passing a bill that revoked valid permits without providing any compensation. Testifying on Bill 18 and its contents before

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549 Section 14 of the *Petroleum Resources Act*, which is brought into force by Bill 106, affirms the prohibition and permit revocation from Bill 18.
the National Assembly's Committee on Agriculture, Fisheries, Energy and Natural Resources on 31 May 2011 Minister Normandeau proclaimed:

"...it is a political decision for which we assume complete responsibility." 550

436. In response to arguments that permit holders were at least entitled to compensation, Minister Normandeau once again that politics was at the root of the government's motivation:

[...] I do not think that the citizen would have appreciated us compensating gas companies in the extremely highly emotional context that has occupied us in recent months. That said, Mr. Chairman, I recognize the validity of your arguments from a legal perspective. But from a political perspective, the government has communicated a very different message. 551

437. Arguing that Bill 18 was motivated by political considerations is supported by Canada's and Quebec's refusal to comply with this Tribunal's Orders to produce documents that are clearly of a political nature. The refusal to produce government or 'Communication Plans', and the redactions throughout the evolution of Minister Normandeau's memorandum, only heightens the argument that both governments are hiding Quebec's political considerations. This is why the Claimant has requested the adverse inferences to be drawn.

550 Translation of Quebec, National Assembly, Committee on Agriculture, Fisheries, Energy and Natural Resources, Journal des débats, 2nd Sess, 39th Leg, Vol. 42 No. 12 (31 May 2011) (Minister Normandeau) at 16 (C-066).

551 Translation of Quebec, National Assembly, Committee on Agriculture, Fisheries, Energy and Natural Resources, Journal des débats, 2nd Sess, 39th Leg, Vol. 42 No. 12 (31 May 2011) (Minister Normandeau) at 12 (C-066).
438. Unless Canada can prove otherwise, the Minister's own words speak for themselves.

5. Finding Bill 18 was not in furtherance of police powers does not undermine a state's right to regulate to protect the environment

439. Canada argues that, "[s]tates require a certain amount of flexibility to take measure in response to their degree of sensitivity to the risks identified by the scientific community." But the previous section has illustrated why, despite its making this argument, the officials of the Government of Quebec did not adhere to it. If Quebec's interest in enacting Bill 18 was a "bona fide" interest in protecting the environment, it would have restricted its decisions to those 'identified by the scientific community'.

440. The Annex of Canada's Model Foreign Investment and Protection Agreement supports the conclusion that Bill 18 was not a valid exercise of police powers. The Annex provides:

(c) except in rare circumstances, such as when a measure or a series of measures is so severe in the light of its purpose that it cannot be reasonably viewed as having been adopted and applied in good faith, a non-discriminatory measure of a Party that is designed and applied to protect legitimate public welfare objectives, such as health, safety and the environment, does not constitute indirect expropriation.[553] [Emphasis added]

441. Bill 18, then, must be assessed in light of its stated purpose, which Canada states as environmental protection.[554] In light of this purpose, and assessed in the context of Quebec's ongoing evidence-based approach to studying and regulating oil and gas

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552 Counter-Memorial, 24 July 2015, para. 527.
553 Counter-Memorial, 24 July 2015, FN 678.
554 Counter-Memorial, 24 July 2015, para. 516.
exploration, the decision to revoke permits absent a basis for doing so cannot get any more severe.

442. The Claimant's argument also does not require the Tribunal, or the Government of Quebec, to disregard scientific and environmental facts. The Claimant's submits, and the evidence confirms, that Quebec displayed a disregard for established scientific and environmental facts by adopting Bill 18 and permanently revoking permits.

443. The evidence establishes that, in the midst of an ongoing evidence-based approach to building a comprehensive understanding to the potential issues and effects of oil and gas exploration and development which would have properly equipped the government to make an informed decision on environmental protection, the Government of Quebec deviated from that approach and its own understanding of the scientific and environmental realities of hydrocarbon exploration, for a purely political purpose unconnected with an objective assessment of the relevant facts and science.

444. The result of this deviation was the revocation of permits in Bill 18 and the illegal expropriation of the Enterprise's rights in the River Permit.

V. **ARTICLE 1105**

445. Quebec's adoption of Bill 18 did not adhere to the NAFTA's requirement to provide investors with a minimum standard of treatment, codified in Article 1105. The process leading to the drafting of the Act and its contents and omissions constituted a violation of the protection afforded by Article 1105.

446. Canada's disagreement with the Claimant's argument is premised on three assertions:
(a) Canada argues that the Claimant has not met its evidentiary burden to prove the minimum standard of treatment in customary international law. Canada also takes the position that the protections under Article 1105 are only "equivalent to the minimal standard of treatment of aliens under customary international law";

(b) Canada argues that the Claimant has not proven that Article 1105 in fact protects investors from the type of treatment alleged; and

(c) Canada argues that the Claimant's allegations are not supported by the facts.\(^{555}\)

447. It is submitted that Canada's positions are without merit. In the sections that follow the Claimant will demonstrate that:

(a) Arbitral decisions are an appropriate source for descriptions of customary international law. Canada's narrow reading of Article 1105 is inconsistent with interpretations of Article 1105 itself and does not follow established means for ascertaining the existence and content of customary international law.

(b) The protections under the minimum standard of treatment relied upon by the Claimant fall within Article 1105's parameters, a position that is consistent with the findings in other arbitral awards;

(c) The facts and evidence support the Claimant's claim that the acts of Quebec and its officials violated the minimum standard of treatment as protected by Article 1105.

\(^{555}\) Counter-Memorial, 24 July 2015, para. 337.
A. The Claimant's interpretation of Article 1105 is correct

448. The Claimant and Canada agree that Article 1105 must be interpreted consistently with the 2001 FTC Note of Interpretation. The interpretation of Article 1105 and articulation of the content of the protection it affords put forward by the Claimant adheres to this requirement.

449. Canada argues that the Claimant has not discharged its burden of proving the content protected by Article 1105. Canada's assertion is wrong. The protection afforded by Article 1105 and asserted by the Claimant is based on the correct standard — "that which is required by the customary international law minimum standard of treatment of aliens." It is rooted in the "evolution of customary international law" and in the fact that "the [fair and equitable treatment] standard has evolved" in tandem. By contrast, Canada has adopted an overly narrow and restrictive position that fails to accept the evolutionary understanding of what the minimum standard entails.

450. The legal standard for Article 1105 as advanced by the Claimant is correct in law for the following principal reasons:

(a) The legal standard was accurately described by the tribunal in Waste Management, a decision that Canada itself has submitted as articulating the proper standard for

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557 See, for example, Counter-Memorial, 24 July 2015, para. 346.


FET and that has been considered by subsequent tribunals under the NAFTA and other treaties;

(b) Arbitral awards provide important descriptions of the content of the minimum standard of fair and equitable treatment, even if they do not prove the existence of custom *per se*;

(c) There is a growing convergence between the customary and autonomous standards of FET; and

(d) The Claimant's approach to FET is consistent with the requirement that customary international law be evidenced by consistent state practice and *opinio juris*.

451. Canada also argues that the Claimant advocates a standard of FET that does not show sufficient deference to a measure enacted by an elected legislature. Canada is incorrect. This Tribunal is empowered to review the Claimant's submissions on the creation and passage of Bill 18 as well as the factual circumstances, policy rationale and evidentiary basis for the rational relied upon by Quebec to determine whether Quebec's conduct has violated NAFTA Article 1105.

452. Canada's reliance on "deference" cannot prevent this Tribunal from performing the task required by the NAFTA. Every tribunal is required to apply a standard of review, and within that standard a government may be afforded a certain level of deference where the case warrants it. Canada has in this case argued that no standard of review applies in the present context. The democratic character of the Quebec government and the use of a
legislative process does not mean that Article 1105 is of no force and effect or automatically means Article 1105 has not been violated.

1. The legal standard under Article 1105

453. The Tribunal in Waste Management II described the content of the minimum standard of treatment. The Waste Management tribunal identified conduct that was arbitrary, grossly unfair, unjust or idiosyncratic, discriminatory, or involving a lack of due process as infringing the minimum standard of treatment.

454. In its Counter-Memorial, Canada contests the Waste Management description of fair and equitable treatment under Article 1105 and ignores the position of the Waste Management award as a leading decision in this regard. Instead, Canada suggests a different standard that is not cited to any authority. It argues that a measure cannot violate Article 1105 unless it is "devoid of any basis or rational connection with the intended goal."

455. Canada's attempt to impart a new standard for the content of Article 1105 disregards its own reliance on the standard set out in Waste Management. In Windstream v. Canada, Canada acknowledged:

The tribunal in Waste Management v. Mexico summarized the minimum standard of treatment under customary international law as described by previous NAFTA Chapter 11 tribunals in S.D. Myers v. Canada, Mondev v. Canada, ADF v. United States and Loewen v. United States and concluded

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560 Memorial, 10 April 2015, para 297.

561 Waste Management, Inc. v. United Mexican States, ICSID Case No. ARB(AF)/00/3, Award (30 April 2004), 98 (CLA-064).

562 Counter-Memorial, 24 July 2015, para 346.

563 Counter-Memorial, 24 July 2015, para 350.
that in order for there to be a breach of Article 1105, the impugned conduct must have been "arbitrary, grossly unfair, unjust or idiosyncratic"… 564

456. Canada's reliance on the articulation of the minimum standard from Waste Management is in accordance with the fact that the standard in Waste Management has been consistently relied upon in NAFTA awards:

(a) The Tribunal in Glamis v. Mexico relied the scope of FET described in Waste Management and acknowledged that it conducted "probably the most comprehensive review… in which it attempted a survey of the holdings to date in NAFTA jurisprudence." 565

(b) The Cargill Tribunal also relied on Waste Management, noting it "concluded that a general interpretation was emerging from NAFTA awards." 566

(c) In GAMI v. Mexico, the Tribunal found Waste Management "instructive." 567

457. The Waste Management standard has also been relied upon outside the NAFTA context. In Philip Morris v. Ecuador, the Tribunal referred to the decision in Waste Management


565 Glamis Gold, Ltd. v. United States of America, Final Award (8 June 2009), 98 (CLA-039).

566 Cargill, Inc. v. United Mexican States, ICSID Case No. ARB(AF)/05/2, Award (18 September 2009), 283, 285 (CLA-027).

567 GAMI Investments Inc. v. The Government of the United Mexican States, UNCTIDRAL, Final Award (15 November 2004), 100 (CLA-086).
and then declared that the conduct it referenced was "indicative of a breach of the FET standard." 568

458. In an award released on 7 February 2017, the tribunal in Burlington Resources v. Ecuador concluded that an expropriation "was not carried out in accordance with the principle of fair and equitable treatment." 569 In examining the content of FET, that tribunal also looked to how the Waste Management tribunal "defined the minimum standard of treatment under customary international law." 570

459. Canada's refusal to acknowledge how the Waste Management tribunal identified the components that comprise the minimum standard of treatment conflicts with its treatment by NAFTA and non-NAFTA tribunals, and the Government of Canada itself. Canada argues in the Counter-Memorial that arbitral awards "may sometimes be relevant when the tribunals rendering them have validly identified a rule of customary international law." 571

Looking at all the tribunal decisions that have sought to apply the standard of Article 1105, as captured by the Waste Management tribunal, signals that that award is 'relevant' for the present dispute.


569 Burlington Resources Inc. v Republic of Ecuador, ICSID Case No. ARB/08/5, Decision on Reconsideration and Award (7 February 2017), para. 167 (CLA-082).

570 Burlington Resources Inc. v Republic of Ecuador, ICSID Case No. ARB/08/5, Decision on Reconsideration and Award (7 February 2017), para. 168 (CLA-082).

571 Counter-Memorial, 24 July 2015, para 346.
2. The role of tribunal decisions

460. Canada contends that the Claimant has only cited international tribunal decisions to demonstrate the legal standard under Article 1105, particularly the award in *Waste Management*. Canada argues that tribunal decisions do not constitute state practice and cannot create or prove the existence of customary international law.

461. Canada's position devalues the important role tribunals have played in illuminating the evolution of the doctrine. Despite the absence of the principle of *stare decisis* in international law, tribunals play an important role in the development of a coherent body of international law from which principles can be drawn and identified. This point was recently addressed in the *Mesa v. Canada* decision:

The Tribunal is not bound by the decisions of other arbitral tribunals. At the same time however, the Tribunal does believe that it should pay due respect to such decisions. Unless there are reasons to the contrary, the Tribunal will adopt the approaches established in a series of consistent cases comparable to the case at hand, subject, of course, to the specifics of the NAFTA and to the circumstances of the actual case. By doing so, the Tribunal believes it will meet its duty to contribute to the harmonious development of investment law and thereby to meet the legitimate expectations of the community of States and investors towards legal certainty and the rule of law.

462. In *RDC v. Guatemala*, the tribunal confirmed that arbitral awards are "an efficient manner for a party in a judicial process to show what it believes to be the law." In this respect,

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572 Counter-Memorial, 24 July 2015, para 346.

573 At para. 346 of the Counter-Memorial Canada downplays the role tribunal decisions play in evidencing the standard protected by 1105.


575 *Railroad Development Corporation v Republic of Guatemala* ICSID Case No ARB-07-23, Award (29 June 2012), 217 (CLA-098).
decisions of arbitral tribunals become important indicators of the existence of a rule under customary international law, without creating the rule itself.

463. Similarly, the tribunal in *ADF v. United States* relied on arbitral decisions to demonstrate the existence of customary international law. The NAFTA tribunal, upholding the position in *Mondev v. United States*, confirmed "judicial or arbitral caselaw" as an appropriate source when ascertaining the content of Article 1105. 576

464. In the present matter, proving state practice of FET in the manner argued by Canada would require the Claimant to prove a negative, by demonstrating ways that states do not behave as a means of proving they agree to an obligation or standard of conduct under customary international law. The NAFTA tribunal in *Cargill v. Mexico* addressed the challenge of identifying such a rule of customary international law through state practice:

> The Tribunal acknowledges, however, that surveys of State practice are difficult to undertake and particularly difficult in the case of norms such as "fair and equitable treatment" where developed examples of State practice may not be many or readily accessible. 577

465. Against this backdrop, arbitral awards are important reflections of customary international law and should not be discounted. 578 As the *Cargill* Tribunal cautioned, states are often respondents to arbitral proceedings and put forward their stated interpretations or

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576 *ADF Group Inc. v. United States of America*, ICSID Case No. ARB(AF)/00/1, Award (9 January 2003), 184 (emphasis added) (CLA-021).

577 *Cargill, Inc. v. United Mexican States*, ICSID Case No. ARB(AF)/05/2, Award (18 September 2009), 274 (CLA-027).

578 *Cargill, Inc. v. United Mexican States*, ICSID Case No. ARB(AF)/05/2, Award (18 September 2009), 277 (CLA-027), *Windstream v. Canada* (20 January 2015), 351 (CLA-105).
expressions of the content of international legal obligations interest in the form of pleadings or Article 1128 submissions. The self-interest of avoiding incurring responsibility and liability under international law that drives these expressions reinforces the weight of arbitral decisions as impartial commentary of the state of the law.\footnote{Cargill, Inc. v. United Mexican States, ICSID Case No. ARB(AF)/05/2, Award (18 September 2009), 275 (CLA-027).}

466. Canada's objection to the \textit{Waste Management} standard ultimately misses the point. Tribunals do not rely on \textit{Waste Management} over customary international law; instead, they acknowledge customary international law as the standard and view \textit{Waste Management} as articulating that standard.\footnote{Clayton/Bilcon v. Canada, Award on Jurisdiction and Liability (17 March 2015), PCA No. 2009-04, 441 (CLA-031) and Mesa Power Group LLC v. Government of Canada, PCA Case No. 2012-17 Award (24 March 2016), 501 (CLA-091).} An examination of how two different tribunals, \textit{Bilcon} and \textit{Mesa}, applied the \textit{Waste Management} award to the facts of their disputes illustrates this point and reveals the self-interest behind Canada's position.

467. The \textit{Bilcon} Tribunal noted a "high threshold" for Article 1105 to apply and affirmed that it "drew guidance from earlier NAFTA Chapter Eleven decisions."\footnote{Clayton/Bilcon v. Canada, Award on Jurisdiction and Liability (17 March 2015), PCA No. 2009-04, 441 (CLA-031).} It held that \textit{Waste Management} formulated an "influential" standard for Article 1105.\footnote{Clayton/Bilcon v. Canada, Award on Jurisdiction and Liability (17 March 2015), PCA No. 2009-04, 442 (CLA-031).} In \textit{Mesa} v. \textit{Canada}, the Tribunal noted how "the decision in \textit{Waste Management II} correctly identified the content of the customary international law minimum standard of treatment found in Article 1105."\footnote{Mesa Power Group LLC v. Government of Canada, PCA Case No. 2012-17 Award (24 March 2016), 501 (CLA-091).}
468. The difference between the decisions was not in their articulation of the standard but in the result of applying that standard to the different facts of each case. The *Mesa* tribunal applied the customary international law standard as articulated *Waste Management* to the facts and found that Canada did not breach the standard.\(^584\) In *Bilcon*, the result was the opposite – there was a breach of Article 1105.\(^585\) It is noteworthy that both *Bilcon* and *Mesa* contained dissenting opinions as to whether or not there were breaches of Article 1105. However, both dissenting opinions based their decisions on the customary international law standard as articulated in *Waste Management*.\(^586\)

469. Canada's real concern is simple: it is defending a case and is concerned that an award may be issued against it. That is, it is worried about any tribunal's application of customary international law that may lead to liability for breach of Canada's obligations. As the *Cargill* tribunal noted, a state's proclamations are often made in the context of the state as respondent, and are thus inherently motivated by the objective of avoiding any finding of liability.

470. Canada's rejection of reliance on arbitral awards, including *Waste Management*, is transparently opportunistic because of its overriding concern that the standards articulated by those awards may be used to find it in breach of its NAFTA obligations. If each time the *Waste Management* award was relied upon against Canada a tribunal concluded that

\(^{584}\) *Mesa Power Group LLC v. Government of Canada*, PCA Case No. 2012-17 Award (24 March 2016), 706 (CLA-091)

\(^{585}\) *Bilcon v. Canada*, Award on Jurisdiction and Liability (17 March 2015), PCA No. 2009-04, 742 (CLA-031).

Canada was not in breach, just as the Mesa tribunal did, Canada would not be raising the arguments it had raised in this case.

3. The growing convergence between the customary and autonomous standards of FET

471. Canada's position is also premised on the existence of differences between the standard of protection under NAFTA Article 1105 and what has traditionally been referred to as an "autonomous" standard, where the text does not directly tie it to customary international law. This distinction is in fact largely illusory. It ignores the fact, acknowledged by several tribunals that the customary and autonomous standards offer the same substantive protection.

472. As noted above, the Waste Management tribunal identified the types of treatment as capable of violating the FET protected within Article 1105. The tribunal described the conduct that may infringe Article 1105 as arbitrary, grossly unfair, unjust or idiosyncratic, discriminatory, or involving a lack of due process. It went on to add that a state's representations to an investor may also be evaluated as evidence of a breach.

473. This same conduct is prohibited by the autonomous standard and several tribunals have stressed the fact that the two standards have converged to offer the same level of protection to an investor. The Mesa Tribunal, acknowledging that the standards have evolved, noted that "these two approaches have much in common." In Saluka v. Czech Republic the

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587 Waste Management, Inc. v. United Mexican States, ICSID Case No. ARB(AF)/00/3, Award (30 April 2004), 98 (CLA-064).
588 Waste Management, Inc. v. United Mexican States, ICSID Case No. ARB(AF)/00/3, Award (30 April 2004), 98 (CLA-064).
Tribunal called the difference between the customary and autonomous standards "more apparent than real," saying "different formulations" of them "could be explained by the contextual and factual differences of the cases to which the standards have been applied." 590

474. The *Murphy v. Ecuador* Tribunal called the differences "more theoretical than substantial" and noted how the protections afforded amount to essentially the same:

It is clear from the repeated reference to "fair and equitable" treatment in investment treaties and arbitral awards that the FET treaty standard is now generally accepted as reflecting recognizable components, such as: transparency, consistency, stability, predictability, conduct in good faith and the fulfilment of an investor's legitimate expectations. The precise application of these components, and the stringency of the standard applicable, may vary from case to case depending on the terms of the clause and the specific circumstances of the case. Notwithstanding, the function of the FET clause in investment treaties is broadly the same: it ensures the stability and predictability of the legal and business framework in the State party subject to any qualifications otherwise established by the treaty and under international law. 591

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591 *Murphy Exploration & Exploration Company International v The Republic of Ecuador*, UNCITRAL, PCA Case No 2012-16, Partial Final Award (6 May 2016), 206 (notes omitted) (CLA-095).
475. This conclusion has been adopted by tribunals in *CMS Gas v. Argentina*,\(^{592}\) *Azurix v. Argentina*,\(^{593}\) *Duke Energy v. Ecuador*,\(^{594}\) *Biwater Gauff v. Tanzania*,\(^{595}\) *Occidental v. Ecuador*,\(^{596}\) and *Electrabel v. Hungary*.\(^{597}\)

476. Professor Rudolf Dolzer has also argued against strict separation between autonomous and customary standards of FET. In his Expert Opinion to the *Windstream* Tribunal, he examined the widespread proliferation of FET provisions in BITs. Professor Dolzer noted that 92 per cent of BITs concluded as of August 2014 contain FET provisions, constituting 147 states. He argued that this constitutes state practice evidencing that affording FET has become a rule under customary international law.\(^{598}\) Justifying his reliance on BITs, he stated:

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592 *CMS Transmission Company v. Argentine Republic* (2005), ICSID Case No ARB-01-8, Award, 284 (CLA-083), "the Treaty standard of fair and equitable treatment and its connection with the required stability and predictability of the business environment, founded on solemn legal and contractual commitments, is not different from the international law minimum standard and its evolution under customary law."

593 *Azurix Corp. v. Argentine Republic*, ICSID Case No. ARB/01/12, Award (14 July 2006), 361 (CLA-025), "...the minimum requirement to satisfy this standard has evolved and the Tribunal considers that its content is substantially similar whether the terms are interpreted in their ordinary meaning, as required by the Vienna Convention, or in accordance with customary international law."

594 *Duke Energy Electroquzl Partners & Electroquzl S.A. v Republic of Ecuador*, ICSID Case No. ARB/04/19, Award (18 August 2008), 337 (CLA 085), "The Tribunal concurs with this statement [Azurix v. Argentina, para. 361 (CLA 025)] and with the conclusion that the standards are essentially the same."

595 *Biwater Gauff (Tanzania) Ltd v United Republic of Tanzania*, ICSID Case No. ARB-05-22, Award (24 July 2008), 592 (CLA-080), "The Arbitral Tribunal also accepts, as found by a number of previous arbitral tribunals and commentators, that the actual content of the treaty standard of fair and equitable treatment is not materially different from the content of the minimum standard of treatment in customary international law."

596 *Occidental Exploration and Production Company v The Republic of Ecuador*, LCIA Case No. UN 3467, Final Award (1 July 2004), 190 (CLA-096), "To this extent the Treaty standard can be equated with that under international law as evidenced by the opinions of the various tribunals cited above."

597 *Electrabel S.A. v. The Republic of Hungary (Affaire CIRDH if ARB/07/19) Decision on Jurisdiction, Applicable Law and Liability*, 30 novembre 2012, VII 7.158 (RLA-050), "In regard to the development of investment protection in treaty law and customary international law, the Tribunal considers that the content of this standard is, at the present time, similar to the other standards expressly mentioned in Article 10(1) ECT, which also exist as standards of protection in customary international law."

The proliferation of BITs over the past several decades provides sufficient evidence these agreements are "the real building blocks of a multilateral international legal regime on the protection of investment. Now that thousands of BITs are in place, along with "systematization of the incorporation of provisions for investor-State arbitration", there is a mutually reinforcing web of substantive rules for the protection of foreign capital. 599

477. Professor Dolzer concluded that "there is no functional difference" between the autonomous and customary standard of FET, and argued that entering into BITs where states afford FET to aliens also demonstrates evidence of opinio juris. As he observed, "[s]tates are acting out of a sense of obligation under customary international law."600

478. These conclusions support the interpretation of the protections afforded by Article 1105 as identified by the Tribunal in Waste Management, and relied upon by the Claimant, as the correct and permissible standard against which the Tribunal must assess the actions of Canada and the measure in question. Canada's overreliance on adverbs601 does little to advance a meaning for the minimum standard of treatment different from what the Claimant is advancing. Both positions acknowledge that the threshold is high.602 Whether


601 See, for example, Counter-Memorial, 24 July 2015, para 345.

602 Counter-Memorial, 24 July 2015, para. 345.
or not facts meet that threshold, is a context-specific exercise. The standard "must be applied in light of the facts in each particular case."

4. The difficulty of precisely ascertaining custom requires a flexible approach

479. Pinpointing the continuous evolution of customary international law is not always an exact science. This does not mean it cannot be done, only that a decision maker tasked with identifying the content of custom must maintain flexibility to do so.

480. Professor Stefan Talmon has noted how the International Court of Justice has, at times, had to deduce the existence of a rule of customary international law. He has outlined the following four instances:

(a) State practice is non-existent because the question under examination is too new;

(b) State practice is conflicting or too disparate and thus inconclusive;

(c) The opinio juris of states cannot be established; or

(d) There is a discrepancy between state practice and opinio juris.

481. The second and fourth examples show that demonstrating uniformity in state practice cannot be a necessary indicator of custom in every circumstance. Instead, one must be

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mindful of context. Non-uniform practice can disprove the existence of customary international law just as easily as it might prove that certain states are not adhering to customary international law. If non-adherence to a rule of customary international law by a bloc of states were sufficient to undermine a claim to the existence of custom, the normative weight of customary international law would be compromised. Professor Talmon has noted that in the Nicaragua Case, the ICJ had to contend with the reality that was the practice of numerous states to intervene in the affairs of others, notwithstanding opinio juris supporting a principle of non-intervention.606 Professor Talmon observed that inconsistent state practice can be interpreted "as a breach of an existing custom, the beginning of a new custom or no custom at all."607

482. While its Counter-Memorial rejected the Claimant's definition of the content and scope of Article 1105, Canada also failed to advance its own definition; it merely suggests that the Claimant has failed to demonstrate a rule under customary international law to support its position. However, as the Tribunal confirmed in Windstream v. Canada, "it is for each Party to support its position as to the content of the rule with appropriate legal authorities in evidence."608 Canada has not discharged its burden.


B. Bill 18's revocation of permits is not an instance that warrants unlimited deference to domestic decision makers

483. Canada has adopted the position that this Tribunal is not empowered to assess whether or not Bill 18 comports with the guarantee of the minimum standard of treatment in Article 1105. In the Counter-Memorial, Canada states that "[t]he claimant's argument amounts to challenging the democratic system."\textsuperscript{609} Canada's position is that this Tribunal must defer to the decision taken by the Government of Quebec.\textsuperscript{610} In furtherance of its argument that Bill 18's legality vis-à-vis the NAFTA cannot be challenged, and that it is a legitimate exercise of governmental authority, Canada argues that the NAFTA does not amount to an "insurance policy" against regulatory changes or for stability of a legal regime.\textsuperscript{611}

484. This submission is a vast overstatement and attacks a straw man. It also undermines Canada's commitment to the NAFTA and does not accurately reflect the essence of the Claimant's 1105 argument. The Claimant does not assert that NAFTA is an insurance policy against regulatory change.

485. The investor protections set out in NAFTA Chapter 11 and that Canada has agreed to be bound by exist precisely to establish a framework for governmental action in their dealings with investors, either directly or through laws and regulations. No state has an unlimited ability to act as it sees fit, whether in their administrative or legislative capacity. Their

\textsuperscript{609} Counter-Memorial, 24 July 2015, para. 350.

\textsuperscript{610} Counter-Memorial, 24 July 2015, para. 350.

\textsuperscript{611} Counter-Memorial, 24 July 2015, para 356.
actions must accord with the law. The NAFTA contains applicable legal standards that cannot be ignored.

486. In light of Bill 18's violations of Article 1105, deference to the government's democratic system does not assist Canada's position. The exercise of governmental powers and authority is circumscribed by domestic and international law. It is the role of domestic courts and international tribunals to ensure that actions of governments do hide from responsibility for illegal acts behind a veil of undue deference. There is nothing novel or unusual in this proposition, which also parallels the commitment of states to respect their own constitutional laws.

487. The Claimant is not challenging Quebec's democratic process. The Claimant is challenging Quebec's decision to revoke valid exploration permits without a valid basis. The fact that the Government of Quebec revoked valid permits through an act of the legislature as opposed to administrative fiat does not mean that an investor is denied recourse to the NAFTA's protections. A legislature is required to observe international obligations just as are officials and government institutions.

488. The argument that Bill 18 violated the minimum standard of treatment is also not premised upon the argument that Bill 18 constituted a regulatory change that adversely affected the River Permit, which does not automatically result in a NAFTA violation. If Bill 18 advanced regulatory change to protect the environment in a manner that was not arbitrary, grossly unfair or unjust, or idiosyncratic, the Claimant would not be advancing this claim.
The argument that Bill 18 violated Article 1105 is not because the Government of Quebec did something, but rather, what it did and how it did that.

489. In arguing that Bill 18's revocation of permits violates the minimum standard of treatment, the Claimant is not suggesting that Quebec was precluded from taking steps, even novel steps, to protect the environment; that would have been within the government's purview. As the majority in Philip Morris v Uruguay stated concerning FEI, it "does not preclude governments from enacting novel rules... [It] does not guarantee that nothing should be done by the host State for the first time." 612

490. Bill 18's immediate and permanent revocation of permits, however, does not advance a novel, stringent regulatory requirement (as the Uruguayan government did) in response to definitive scientific conclusions that presented dire consequences if action was not taken. Instead, and more egregiously, Bill 18 irrevocably extinguished permits in the absence of any scientific or other evidence supporting that action. In the context of ongoing regulatory reform and geography-specific scientific studies, article 2 of Bill 18 cannot be supported.

491. Professor McRae, in his dissenting opinion in Bilcon, stated:

NAFTA places no inherent limits on how demanding the standards of a domestic statute may be. The concepts of promoting both economic development and environmental integrity are integrated into the Preamble's endorsement of the principle of sustainable development. 613

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The Claimant's argument that Quebec's revocation of the River Permit violates Article 1105 is in keeping with Professor McRae's statement. This is not a challenge over a demanding domestic regulatory framework. Instead, the Claimant's argument is that Quebec purported to justify Bill 18 with an environmental and scientific basis that does not exist.

492. The Claimant's argument is also based on Quebec's total disregard for its own evidence-based approach to develop a coherent and comprehensive approach to hydrocarbon development that was otherwise unfolding and the draconian measure that resulted from that disregard. The adoption of Bill 18 was a marked departure from that approach based on political considerations. In the present circumstance, the act of revoking permits without a justification for doing so cannot be defended as being a demanding domestic standard. It is no standard at all.

493. Bill 18 was a departure from the standard under Article 1105, and a standard of decision-making that Quebec set for itself. By deviating from these standards, through the immediate and permanent revocation of exploration permits through Bill 18, Quebec acted in a manner that was arbitrary, grossly unfair and unjust, and idiosyncratic. Quebec's actions violated Article 1105 of the NAFTA.

C. **Canada's conduct violated Article 1105**

494. The Claimant submits that the revocation of exploration permits in the St. Lawrence River under Bill 18 was arbitrary, grossly unfair and unjust, and idiosyncratic. The actions of the Government of Quebec constitute a violation of Article 1105, both on the *Waste*
Management standard and on Canada's proposed standard that Quebec's actions must lack "any basis or rational connection" to their objective.\textsuperscript{614}

1. Bill 18 was arbitrary

495. The Quebec government's immediate and permanent revocation of exploration permits in the St. Lawrence River was arbitrary. The decision to revoke the permits lacked any factual, scientific or even logical basis, and in fact contradicted the government's own internal position that horizontal drilling under the river could be done safely.

496. The St. Lawrence River was never studied as part of Quebec's ongoing environmental study process, which formed the basis for reforms to the province's hydrocarbon exploration framework. Quebec lacked any basis upon which it could base an immediate and permanent revocation of exploration permits. The objective of protecting the marine environment of the St. Lawrence River was understood by all stakeholders, including government decision makers, to mean that a moratorium would affect marine-based activities such as drilling in the St. Lawrence River.

497. Quebec's decision to revoke the permits under the river was not at all connected to the objective of marine safety or protection of the marine environment. In the language of Canada's proposed legal standard, there was no rational connection between the stated purpose of Bill 18 and its effect. The immediate and permanent revocation of exploration

\textsuperscript{614} Counter-Memorial, 24 July 2015, para 350.
permits was not a measure that corresponded to the objective of protecting the St. Lawrence River, which Canada claims as Bill 18's objective.\(^{615}\)

498. An analysis of why Bill 18 was arbitrary begins with the question of what was, up until Bill 18 was adopted, the position of the Government of Quebec concerning horizontal drilling underneath the river from land before the bill was adopted. This backdrop provides the necessary context against which it is possible to judge whether or not any change in position and policy can be supported by evidence, whether it is rationally connected to the government's objective.

499. As has been stated, through the fall of 2010 and up until 4 May 2011 when it was removed from Minister Normandeau's memorandum to Cabinet, the position of the government was that such horizontal drilling was safe.

500. Bill 18 revoked exploration permits and prohibited an activity that the government believed to be safe. In order to take such a decision, there must have been a valid reason. There must be a rational connection for why the government on 13 June 2011 enacted a bill that

\(^{615}\) Counter-Memorial, 24 July 2015, para 358.

\(^{616}\) Mémoire au conseil des ministres - De: Madame Nathalie Normandeau, Ministre des Ressources naturelles et de la Faune - Objet: Projet de loi qui interdit les activités d'exploration et d'exploitation pétrolière et gazière dans le fleuve, l'estuaire et la partie nord-ouest du golfe du Saint-Laurent (3 February 2011) (C-122).
outlawed a safe activity that did not pose a risk to the environment. Otherwise, that decision is arbitrary.

501. In summary, the Claimant relies on the following points, which it expands in the sections that follow, to demonstrate how the revocation of exploration permits in Bill 18 that prohibited horizontal drilling from onshore location under the riverbed, was arbitrary:

(a) Despite its commitment to study areas before taking regulatory action, Quebec did not take any steps before Bill 18 to study the area of the St. Lawrence River affected by the revocation of permits in Bill 18.

(b) Canada's evidence and the internal Quebec government documents in 2010-2011 include no scientific or other factual support for a revocation of permits. Environmental groups requested Minister Normandeau to suspend activities in the St. Lawrence River and for a study of the river in November 2010, but even they did not ask that that permits be revoked nor that land-based drilling be restricted.

(c) Canada argues that "Minister Normandeau explicitly based the decision to implement [Bill 18] on the findings of the SEA-1."\(^{617}\) Canada also argues that Bill 18 was based on the BAPE 273 report.\(^{618}\) But neither the SEA-1 Report nor the BAPE 273 report support any such argument. Neither one contains any basis for, or even a mention of:

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\(^{617}\) Counter-Memorial, 24 July 2015, para 520, citing only a press release on 27 September 2010 over 7 months before Bill 18 was introduced.

\(^{618}\) See e.g. Counter-Memorial, 24 July 2015, para 521.
(i) a revocation of permits in the St. Lawrence River;

(ii) a prohibition (or even restrictions) on non-marine, land-based drilling; or

(iii) even an extension of any moratorium up the St. Lawrence River.

(d) Canada's submissions, its witnesses, [REDACTED] to extend the moratorium on drilling activities in the marine areas covered by the SEA-1 Report to the geographic waters upstream in the St. Lawrence River, right up to the border with Ontario. But there is no such logical connection between a moratorium on marine drilling in the area studied by the SEA-1 Report on one hand, and, on the other hand, the effective prohibition of land-based drilling through the revocation of permits, including the River Permit, under Bill 18. To the contrary, there is no logic at all.

502. Each of these four points builds upon one another to underscore the fact that the Government of Quebec made a decision that contradicted its current position and knowledge without conducting the requisite inquiries to know if its new position had the same basis in fact as the one being discarded. Despite the government's purported objective of environmental protection, there is no evidentiary foundation or analysis upon which it based its decision and reversed its established position that it was safe to develop the River Permit in the manner planned by the Enterprise.

503. In short, there is no plausible basis in logic, fact or science for revoking the River Permit. Canada's arguments about Quebec's objective of environmental protection and the need to
preserve the integrity of the marine environment of the St. Lawrence River are an attempt to deflect any critical inquiry into what Bill 18 actually did. In order to supposedly protect the environment, the Government of Quebec devised and adopted a law that revoked permits including the River Permit without a reason, prohibited exploration activities in a geography that had not been subject to any scientific study, prohibited an activity (horizontal drilling) that it itself admitted was safe, and did so by extending a moratorium on surface activities to subsurface activities without providing a reason or in reliance on any study. This is arbitrary.

504. The Claimant submits that the real reason(s) for revoking the permits were political. As the Claimant noted in its Memorial, the Minister admitted so in May 2011 before the National Assembly, Committee on Agriculture, Fisheries, Energy and Natural Resources: "it is a political decision for which we assume complete responsibility." 619

505. There is additional evidence of this motivation, but other evidence may have been redacted from the record by the combined decision of the governments of Canada and Quebec when they decided not to produce certain documents and redacted others, in violation of this Tribunal's Order of 24 February 2017.

506. The Claimant turns now to a review of the facts to demonstrate the arbitrary nature of the revocation of permits in Bill 18.

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619 Translation of Quebec, National Assembly, Committee on Agriculture, Fisheries, Energy and Natural Resources, Journal des débats, 2nd Sess, 39th Leg, Vol. 42 No. 12 (31 May 2011) (Minister Normandeau) at 16 (C-066).
a) Lack of any study of the St. Lawrence River

507. Upon the publication of Quebec's 2006 Energy Strategy, the province embarked on a comprehensive environmental and scientific study process to reform the province's hydrocarbon framework. This process was accelerated once Minister Normand became QMNR's minister. The objective of the process was to modernize the regulatory framework for hydrocarbon development to permit that development in tandem with environmental protection. This required objective understanding of how hydrocarbon exploration and exploitation was conducted, specifically for new technological processes like shale gas extraction. It also required understanding of environmental risks those activities might pose. At no point from the time Minister Normand announced the extension of the moratorium in November 2010 until Bill 18 became law on 13 June 2011 did Quebec engage in any study that related to the exploration and exploitation of shale gas through onshore horizontal drilling.

508. The government's main action related to hydraulic fracturing for shale gas leading up to Bill 18 was not to study the process, but to further regulate it through its existing powers. This was done first on 3 October 2010 when the Ministry of Environment's issued an instructional memo confirming stimulation of wells through hydraulic fracturing required an authorization certificate under section 22 of the EQA. The next time the government took any action was in the spring of 2011 when it announced the Ministry of Environment was devising new section 22 guidelines that would apply to hydraulic fracturing. These

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620 Ministère de l'Environnement, Note d'instructions 10-07, Assujettissement des travaux de complétion des puits gaziers à un certificat d'autorisation en vertu de l'article 22 de la Loi sur la qualité de l'environnement, 3 octobre 2010 (R-050).

621 RWS-002-Dupont, 124.
new guidelines took effect on 10 June 2011, the same day that Bill 18 was adopted in the National Assembly.

509. It was only in March 2011 when, in response to the BAPE 273 report, that the government began a SEA-SG to better understand shale gas development. The report would be issued nearly three years later, two and a half years after Bill 18 revoked the River Permit and the Government’s actions summarily prevented any further actions to confirm its own conclusion that drilling from land under the river bed was safe.

b) Internal Quebec documents provide no evidence justifying Bill 18’s prohibition of horizontal drilling from onshore locations

510. The lack of any study on issues related to shale gas extraction through hydraulic fracturing before Bill 18 was adopted means that Quebec officials did not offer any evidence to justify the revocation of permits. The Claimant has been unable to locate any internal Quebec government document produced by Canada that supports the revocation of permits using scientific or other factual evidence related to the geographic area of the river that was covered by the permits or on the basis of hydraulic fracturing plans from onshore locations. The reason for this is that the Government of Quebec did not have any evidence.

511. Canada has also produced no evidence provided for why a marine-based moratorium on in-water drilling in the Estuary and northwest portion of the Gulf of the St. Lawrence was
extended to include activities on the land and under the riverbed in the river portion. Indeed, Quebec's internal government documents do not even seek to justify the extension of the moratorium up the river, as announced by the Minister to the Montreal Gazette on 8 November, on any scientific or evidentiary basis. Again, absent studying the issues, Quebec did not have evidence to support what it was doing.

512. This lack of evidence to justify a new policy direction is why environmental groups requested a suspension of drilling into the fluvial part of the river while the government conducted a SEA to gather the necessary evidence to make an informed decision on regulating hydrocarbon activity in that part of the river. For reasons not elucidated, Mr. Sauvé's witness statement advises that the government summarily dismissed this request as "unnecessary" without offering any justification or evidentiary basis.

513. The same recommendation was made by the Stratégies Saint-Laurent and Regroupement des comités de zones d'intervention prioritaire in their submission to the BAPE in November 2010, when they advocated for a SEA on the river portion of the St. Lawrence in order to develop a policy for the region.

514. On November 26, 2010 Quebec's "Interministerial Press Line on shale gas development" acknowledged that the prohibition announced by Minister Normandieau was in place over


626 RWS-005-Sauvé, 24.

627 Développement Durable de L'Industrie des gaz de Schiste au Québec (November 2010) (C-113).
the area studied by SEA-1, and on account of the report's conclusions over studied area. It did not even mention that on 8 November, Minister Normandeau extended the moratorium over an entirely different area that had not been studied nor did it pretend to offer any evidence for doing so.

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No internal analysis or other government document is cited to support the Minister's decision, let alone any study or scientific evidence. No government note advanced any other alleged basis for extending the moratorium area over the river. These notes reveal a government advancing blindly and indifferently in the absence of evidence.

516. Furthermore, the moratorium, as originally envisioned, was never intended to affect non-marine activities. The moratorium Minister Normandeau announced in September 2010 and extended in November had the objective of protecting the marine environment of the St. Lawrence and related to surface activities. The Quebec government confirmed the moratorium's limit to marine activities shortly after it was announced. In an industry public
relations document dated 23 December 2010 it was clarified that, "The Ministry of Natural Resources has proposed that the moratorium only applies to the surface and that subsurface exploration and exploitation can take place." None of the Information Notes or government documents offer evidence for why the moratorium to surface activities should be extended to include areas hundreds of meters below the surface.

517. At the January 12, 2011 meeting with QMNR officials in Quebec City, Enterprise and Junex attendees left with the understanding that the moratorium did not affect subsurface rights and activities.

518. Limiting the moratorium to surface rights is consistent with the government's use of the word "in" when describing the moratorium's scope as it concerned the river. In February 2011, Réjean Malouin wrote to his QMNR colleague Pascal Perron at the Hydrocarbon Bureau asking about "the nature, scope, and extent of the moratorium on hydrocarbons in the river estuary, and the Gulf of St. Lawrence?" In his April 29 memo to Mario Gosselin, Alain Lefebvre, the Director General of the QMNR Hydrocarbon Bureau asked about a moratorium "in the St. Lawrence River."

519. This interpretation of the moratorium restricted to the marine environment comports with the alleged justification Minister Normandseau presented to the Executive Council on 4

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630 Quebec — Public Relations Issues (23 December 2010) (C-1.9).
631 Email from R. Welch to G. Howe re: "Quebec Major Development" and attachments (19 May 2011) (C-141).
632 Email from M. Rousseau (DARSOEMT) to P. Perron (DGHB) re: "Plan d'affectation du territoire public" (7 February 2011) (Emphasis added) (C-123).
633 Email from A. Lefebvre (DGHB) to M. Gosselin (BSMA — Energie) re: "Projet de loi spéciale sur le fleuve Saint-Laurent - État de situation" (27 April 2011) (Emphasis added) (C-126).
May, when she noted the moratorium's extension to the river was a result of [REDACTED]

This same justification was included in the Information Note prepared by the Energy Division of QMNR's Hydrocarbon Bureau one week later on 11 May 2011.

\( c \) The SEA-1 and BAPE 273 reports do not support revoking the River Permit

520. The absence of any evidence in QMNR documents for either extending the moratorium into the river or from the surface to subsurface has led Canada to argue that Quebec's actions can be justified through the conclusions of the SEA-1 and BAPE 273 reports. The Claimant has already noted how Mr. Lavoie and Mr. Dorrins do not see how either the SEA-1 or BAPE 273 reports support the government's claim. This argument cannot be supported for two reasons. First, Quebec's commitment to acquiring area and sector specific evidence throughout the SEA and BAPE processes is at odds with the subsequent use of that evidence by Canada in an attempt to apply uncritically the conclusions of specific studies to areas that were not subject to the study. Second, the contents of the reports do not support Canada's position.

521. The Quebec government stressed the importance of area-specific study as a source for its decision making. At the same time that the government was extending the moratorium into

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the river, which had not been studied, it refused to extend the moratorium into other regions that were being studied.

It made no mention of prematurely imposing moratoriums or implementing moratoriums on areas that have not been subjected to scientific study.

522. In her testimony, Minister Normandeau herself advised that it would have been arbitrary to automatically apply the conclusions of one study to an area that was not the subject of that study. Minister Normandeau admitted that different studies yield potentially different conclusions, cautioning against the application of findings from one study beyond its intended target:

Furthermore, it would have been premature to extend the prohibition against the exploration and exploitation... past the zone studied by SEA1... Furthermore, nothing suggested that the observations to be drawn from SEA2, which was in progress at that time, would be as negative as those of SEA1 regarding the compatibility of the environment being studied with the hydrocarbon resource levering activities.\textsuperscript{640}

\textsuperscript{638} Document De Travail – Confidentiel - Notes Préliminaires - Projet de loi no 18 et limite est du moratoire Réflexions de travail (6 June 2011) (C-146).

\textsuperscript{639} Document De Travail – Confidentiel - Notes Préliminaires - Projet de loi no 18 et limite est du moratoire Réflexions de travail (6 June 2011) (C-146).

\textsuperscript{640} RWS-004-Normandeau, 52.
Canada supports this position in the Counter-Memorial, and with reference to the ongoing SEA-2, states that extension of any moratorium to that area "would have rendered the follow-up study useless for all intents and purposes." Yet the Minister and Canada apparently see no difficulty, nor any inconsistency, in applying SEA-1's conclusions to a new geographic area that is plainly different from the marine environment studied by the SEA-1.

Even if it were possible to justify relying on the SEA-1 Report in a different territory, the substance of the report does not assist Canada's argument. The SEA-1 Report did not provide any support for the immediate and permanent revocation of exploration permits in the river.

First, the SEA-1 Report itself specified that its findings were limited by the study's geographic scope: the report was meant "to provide a picture of the environment in the studied zone." Its mandate was limited to provide "sectorial SEA relating to the development of hydrocarbons in the basin of the maritime estuary and the north-west of the Gulf of Saint-Lawrence." Therefore, the government's attempts to rely on it to justify actions taken outside of the studied zone contradict the study's purpose and objective.

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641 Counter-Memorial, 24 July 2015, para 368.


526. Second, as had been previously illustrated, the SEA-1 does not support a prohibition on onshore drilling under the surface of the riverbed.

527. When the SEA-1 Report addressed horizontal drilling it noted "[i]ts primary advantage is to avoid all contact with the maritime environment." It added that a future framework for hydrocarbon development in the Gulf and Estuary — regions being studied by the SEA process — "would include horizontal drilling." Thus, it is disingenuous for the Government of Canada or Quebec to try and argue that the SEA-1 Report supports its attempt to justify prohibiting horizontal drilling under the riverbed when the report itself disclaims any views on the issue, and even more so in an area that the report did not study.

528. Canada's argument completely ignores not only how the report treated horizontal drilling, but also the numerous instances where it addressed mitigation measures to deal with possible risks to marine environments.

529. Canada's and Quebec's misguided reliance on the SEA-1 Report can be summarized as follows:

(a) they have taken a report that (i) studied one region and focused on surface activities, (ii) did not rule out the possibility of horizontal drilling in the studied region or

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underneath the surface, and (iii) proposed mitigation measures as a means to address possible environmental risks in the studied marine environments,

and relied on that report to:

(b) devise a new policy (i) that applied to a non-studied region and the subsurface territory, (ii) prohibited horizontal drilling in that region and underneath the riverbed, and (iii) ignored the report's emphasis on mitigation measures as a means to satisfy risks that were identified once the territory was properly studied.

Stretching the SEA-1 Report in this manner cannot be justified.

530. Similarly, Canada and Quebec cannot justify their decisions by relying on the BAPE 273 report. As has been shown, the BAPE 273 report cannot be characterized as a "watershed moment," as Minister Normandeau has asserted. The closest thing to a 'watershed moment' that the BAPE 273 could have provided the minister was the fact that, in line with its mandate, it was possible for Quebec to implement a "framework for the development and exploration of shale gas in order to promote harmonious cohabitation with the population, the environment, and other industries already present."

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641 Counter-Memorial, 24 July 2015, para 146. The Claimant notes that Canada translated the French version of Minister Normandeau's statement, "d'un moment charnière" at para. 42 of her Witness Statement, to read as a "pivotal moment" in the Unofficial Translation of her witness statement, whereas in the Counter-Memorial it is referred to as a "watershed moment". The Claimant relies on the translation in the Counter-Memorial, though notes the similar sentiment expressed by both.

531. It is disingenuous for the Minister to try and justify revoking permits in Bill 18 by relying on a second report that also did not specifically study or address shale gas resources under the St. Lawrence River or accessing them through hydraulic fracturing.

532. As with the SEA-1, the Minister, Quebec, and now the Government of Canada have all misrepresented the BAPE 273 report. The report does not justify prohibiting hydraulic fracturing hundreds of meter beneath the surface of the river. The report noted the absence of conclusive evidence on the effects of hydraulic fracturing, and recommended continued drilling activity to facilitate further study of potential impacts: "In order to evaluate some of the potential environmental impacts and find possible solutions to problems, it is necessary to drill, including by way of hydraulic fracturing."

533. The characterization Canada gives to the BAPE 273 report also ignores the opinion cited in the report from the Order of Geologists of Quebec where it noted there was a sufficient level of knowledge about new drilling techniques, like horizontal fracturing, that enabled a proper understanding of "the risks as well as the control measures."

534. Furthermore, when the BAPE 273 report noted certain protected zones might not be amenable to shale gas development because of environmental risks, it did not recommend...
an outright prohibition, but instead suggested buffer zones could adequately protect those areas that were, for example, prone to landslides.\textsuperscript{652}

535. Minister Normandeau has not offered any explanation for how the contents of the BAPE 273 report justified her decision to revoke permits.

\textit{d) Absent any other justification, Quebec tried to rely on}\textsuperscript{653}

536. In the absence of any proper study of the St. Lawrence River, scientific evidence that horizontal drilling hundreds of meters below the riverbed posed an inmitigable environmental risk, and any conclusions or recommendations in the SEA-1 and BAPE 273 reports to justify Bill 18's extension of the moratorium and revocation of permits into the river, all Quebec was able to rely was logic that, for the reasons articulated above, was in fact, illogical.

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(a) \textsuperscript{654} and

\textsuperscript{652} BAPE 273 Report, Développement durable de l'industrie des gaz de schiste au Québec, Rapport d'enquête et d'audience publique, février 2011, 336 p. 173-174 (R-024).


\textsuperscript{654} Ministère des Ressources naturelles, Direction du bureau des hydrocarbures, Interdiction des activités d'exploration et d'exploitation pétrolières et gazières dans le fleuve et l'estuaire du Saint-Laurent, Note d'information (20101123-1/20101109-40), 7 décembre 2010
539. When Minister Normandeau and her officials prepared Bill 18 in late April and early May 2011, they prepared supporting materials that relied on the same purported "logic" to apply the conclusions of the SEA-1 Report to include the river. Before Minister Normandeau's 4 May presentation to the Executive Council, Bill 18 was sent with commentary to the


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Mémoire au conseil des ministres - De Madame Nathalie Normandeau, Ministre des Ressources naturelles et de la Faune - Objet: Projet de loi qui interdit les activités d'exploration et d'exploitation pétrolière et gazière dans le fleuve, l'estuaire et la partie nord-ouest du golfe du Saint-Laurent (3 February 2011), p. 3 (C-122).
members of the Executive Council on May 3. The following day, when Minister Normandeau presented the Bill,

540. An Information Note prepared by the Energy Division of QMNR's Hydrocarbon Bureau on 11 May, reiterated this conclusion.

541. The problem with Minister Normandeau's reliance on logic is that logic takes one from proven premises to logical conclusions. It cannot merely be asserted. The premises (scientific evidence in this case) must be proven. In the present case, the very scientific reports that Canada and Quebec rely upon expressly disclaim any views on the very issues at stake.

657 Email from: D. Blasi to: P. Reid re: "CONSEIL DES MINISTRES (2011-05-04) - Projet de loi limitant les activités pétrolières et gazières et modifiant la Loi sur les mines" (3 May 2011) (C-130).


660 Email from N. Klein (BSMA – Energie) to P. Perron (DGHE) re : "TR: Fiche - Projet loi limitant les activités pétrolières et gazières" and attachment (11 May 2011) (C-139).
e) Quebec’s position was that horizontal drilling was safe

542. Summarily reversing the government’s position that horizontal drilling was safe, without any evidence, during the drafting of Bill 18 and proceeding to revoke permits in Bill 18 can only be explained as arbitrary.  

543. Mr. Sauvé’s testimony affirms that this was the government’s understanding up until at least March 2011. However, he too has not provided any evidence for why this position changed despite insinuating that the government’s position on horizontal drilling changed in March 2011. This statement in and of itself is untrue as confirmation of horizontal drilling being safe was communicated in draft memoranda in April and May 2011.

544. It may be that the purported change in policy is now linked to the BAPE 273 report that was issued on February 28, 2011 and released on March 8, 2011. But as already stated, the BAPE 273 Report does not offer the evidence necessary to undermine and reverse the government’s position on this issue.

661 RWS-005-Sauvé, 31.
662 Counter-Memorial, 24 July 2015, para. 362.
545. In his witness statement, Mr. Dupont noted that the report's conclusion was that "certain parts of the Quebec territory may not be compatible with shale gas leveraging activities."\(^663\) This is not definitive and comports with the report's emphasis that further study is required to comprehensively understand potential effects hydraulic fracturing could have on water.\(^664\)

546. Ultimately, all that has been offered as justification for why permits ended up being revoked is that Minister Normandeau "decided" against permitting hydrocarbon activity in the river and that her decision formed the basis for proceeding to revoke the permits.\(^665\) The claim that Minister Normandeau and her colleagues may justify the bill on account of the fact that they "[took] the pulse of the population,"\(^666\) is also contradicted by the facts. As demonstrated above, the pulse of the population advocated for continued scientific study as a means to inform further policy development. However, this is not what transpired. Instead, Minister Normandeau "decided" [t]he matter for reasons unknown or not disclosed and the legislature obliged. Democratic systems do not operate on account of a minister's baseless "decision" to reverse a government's established position. The rule of law, including the NAFTA, requires more. The lack of evidence to support the actions of Quebec officials for the reasons Canada has provided does not add up and cannot be shielded from scrutiny by invoking blind deference to a democratically-elected legislature.

\(^663\) RWS-002-Dupont, 83.
\(^664\) RWS-002-Dupont, 81.
\(^665\) RWS-005-Sauvé, 41, 42.
\(^666\) Counter-Memorial, 24 July 2015, para 217.
547. There is no rational connection between the purported objective of the Act, the evidence cited as justifying the Act, and the effects of the Act itself. It is, as the *Philip Morris* majority stated the test, "entirely lacking in justification."\(^667\)

548. Recalling Judge Schwebel's statement included in the Claimant's Memorial, Minister Normandeau's decision "to do something" does not mean she is protected and empowered under the minimum standard of treatment to do *anything*.\(^668\) Here, the revocation of the River Permit was arbitrary and entirely lacking in justification.

2. **Bill 18's revocation of permits is grossly unfair and unjust**

549. The arbitrariness of the immediate and permanent revocation of permits in Bill 18 constituted an unnecessary deprivation of rights, making it grossly unfair and unjust for two reasons:

(a) Bill 18 was not devised and implemented in a context of thorough study aimed at regulatory reform founded upon scientific fact. Bill 18 proceeded to immediately and permanently revoke exploration permits without any rational basis amid a reform process otherwise aimed as advancing evidence-based decision.

(b) Bill 18's immediate and permanent revocation of permits also took place while Quebec continued to rely on existing provisions in the *Environment Quality Act* to

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\(^{668}\) Memorial, 10 April 2015, para. 300.
ensure that hydrocarbon exploration activities conformed to the province's environmental safety standards.

550. First, Bill 18's revocation of permits took place in the middle of a lengthy scientific and environmental study whose ultimate objective was to lead to a revision of Quebec's regulatory framework for hydrocarbon development. This was not a context that supported the implementation of an irrevocable measure like that in Bill 18.

551. Documents and statements by government officials confirm that Quebec's commitment to regulatory reform was tied to a parallel commitment to comprehensive study. Only then would it have the necessary information to implement a new framework for hydrocarbon exploration. The contrast of this commitment to comprehensive study and informed policy making with the uninformed and arbitrary manner in which Bill 18 was devised and implemented demonstrates why Bill 18 constituted an arbitrary and unfair measure in contravention of Article 1105.

552. Underscoring the importance of policy development through study and reasoned assessment, Alain Lefebvre, the Director General of the Hydrocarbon Bureau, wrote that the SEA process was the "heart of the framework" for establishing an "adequate environmental framework" in Quebec.\(^{669}\) The witness statement of Jacques Dupont describes how regulators were working within the context of preparing for regulatory reform. Mr. Dupont notes how the objective of an October 29, 2010 working group on the

environment meeting between officials from QMNR and the Ministry of the Environment was to formulate "opinions on measures to be set out in the hydrocarbon draft law in order to account for the environmental stake surrounding the exploration and exploitation of gas resources in Quebec."

This is why when environmental groups made presentations to the BAPE or released their press release in November 2010, they did not call for immediate and permanent revocation of exploration permits, instead, they called for a SEA in the river portion of the St. Lawrence. Mr. Lefebvre relayed this request for a SEA in the river in a November 9, 2010 memorandum: "...requested a freeze from Minister Normandeau of all projects...until the QMNR and Ministry of Environment are able to realize a strategic environmental study."

The government's working groups continued to operate on the understanding that Quebec's objective was to thoroughly study the various aspects of hydrocarbon development and propose effective policy reform. According to Mr. Dupont, the objective of a government working group on industry meeting was to formulate "opinions and recommendations on measures to be set out in the draft law specific to hydrocarbons in order to update the framing of leveraging activities for Quebec's gas resources."

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670 RWS-002-Dupont, 104.


672 Moratoire sur les activités d'exploration et d'exploitation d'hydrocarbures dans le fleuve du Saint-Laurent (partie fluviale) pour les permis de recherche localisés entre la pointe Est de l'île d'Orléans et la frontière provinciale Québec/Ontario (9 November 2010) (C-114).

673 RWS-002-Dupont, 105.
554. When Quebec first set out to give effect to Minister Normandeau's November announcement that the September moratorium was extended into the river, its officials also understood the extension as temporary, pending the completion of a proper study and the implementation of appropriate regulations. "We understand that this "moratorium" is limited in time and that it cannot, by consequence, have a duration that surpasses the time necessary for the government to put in place an adequate environmental framework."674

555. An Information Note prepared by QMNR in 2011 titled, "Oil and Gas Exploration: Consequences of Moratorium" rejects the idea that the moratorium should be permanent because it would run counter to the government's objective of regulatory reform: "The objective of the government is to do even better in modernizing this framework and getting the industry to adopt exemplary practices."675

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674 État de situation (20101109-40) - Proposition de deux scénarios visant à interdire de façon permanente toutes activités d'exploration et d'exploitation pétrolière et gazière dans l'estuaire du Saint-Laurent (11 November 2010) (C-115).

675 Exploration pétrolière et gazière - Consequences d'un moratoire (27 January 2011) (C-121).

676 Document De Travail - Confidentiel - Notes Préliminaires - Projet de loi no 18 et limite est du moratoire Réflexions de travail (6 June 2011) (C-146).

677 Document De Travail - Confidentiel - Notes Préliminaires - Projet de loi no 18 et limite est du moratoire Réflexions de travail (6 June 2011) (C-146).
556. Rejecting the permanence of the moratorium in the river was also consistent with the approach Quebec adopted for the existing state reserve moratorium, implemented in 1998 from the Bay of Chaleurs to the Estuary and the Gulf, which was only in place pending proper study.

557. In June 2011, as Bill 18 was being introduced in the National Assembly, and an immediate and permanent revocation of permits was being enacted absent scientific study, the QMNR Hydrocarbon Bureau continued to acknowledge that the state reserve...
No mention is made of the inconsistency in approaches between the state reserve, the government's public commitment to scientific study as a means of informing policy, and the manner in which Bill 18 was devised and implemented.

The permanent revocation of permits in Bill 18 before the completion of scientific studies on either the area affected by the Act or the industry generating concern is unjust. The unjustness of the revocation is heightened by the context in which it occurred: a nascent industry that was "still in a very early stage of its development" where the government was, as a result, conducting a robust evidence-based approach to studying its development. This was to compensate for the fact that, as Minister Normandeau acknowledges, Quebeckers "did not have the necessary information" to understand hydrocarbons. It was in this context that Minister Normandeau felt empowered to "decide" that the immediate and permanent revocation of permits was justified and reasonable.

Quebec's decision to adopt the recommendation in DAPE 273 and conduct a specialized SEA on shale gas is further proof that at the time of drafting and passing Bill 18, Quebec lacked the proper factual foundation it alleged to have based the decision to permanently revoke permits.

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681 RWS-001-Asselin, 13.

682 RWS-004-Normandeau, 10, see para. 19 on QMNR lacking information to base its decisions upon.
Second, from the outset of Quebec’s efforts to improve hydrocarbon regulation, it relied on
existing provisions of the Environment Quality Act (EQA) to serve as a bridge until a new
regulatory framework could be put in place. These provisions, the government felt, were
sufficient to ensure that any interim development activities conformed to the province’s
environmental standards. In February 2010, Ministry of Environment regional director Luc
St-Martin was asked if the government was considering a moratorium on shale gas
development. While sidestepping the question of the moratorium, Mr. St-Martin relies
on provisions of the EQA, especially the certificate regime under section 22, and the
ministry’s inspection program, to assure the journalist that the government had the
necessary means to supervise shale gas development while the new framework was being
devised.

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683 Email from C. Deshaies to D. Lapointe and L. Courtemanche re: “Demande de journaliste – sujet délicat – demande de moratoire et
exploration des shales gazifères” (23 February 2010) (C-103).

(C-104), ANNEXE: Suivi de la rencontre avec l’APGQ du 15 juillet 2010 (C-105), ANNEXE: Suivi de la rencontre avec l’APGQ du
15 juillet 2010 (C-106).
protection.” In October 2010 the Ministry of Environment published an instructional memorandum that confirmed "completion work for gas wells, in particular including the stimulation of the wells by hydraulic fracturing" required a ministerial certificate pursuant to section 22 of the EQA. Mr. Gosselin notes in his witness statement that the ministry’s inspection program was expanded to include all well simulation projects authorized by QMNR and those used in fracking.

While the hydrocarbon framework was still in development, the Ministry of Environment relied even more heavily on section 22 certificates and in the spring of 2011 issued further guidelines related to the certificates until the completion of the SEA-SG could be completed and further progress made on devising new policy. It was announced that all drilling work would be subject to obtaining a section 22 authorization certificate. This

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685 Gaz de Schiste Questions – Réponses (August 2010) (C-107)


687 RWS-003-Gosselin, 43.


689 RWS-002-Dupont, 124.

690 RWS-001-Asselin, 17.
new policy was formally announced on May 5, one day after Minister Normandeau introduced Bill 18 to the Executive Council.

564. The new guidelines to regulate the shale industry pending the outcome of the SEA-SG were accepted by the Cabinet Executive Council on June 8, 2011 and entered into force on June 10.\textsuperscript{691} The new guidelines had three primary effects:

(i) All drilling to prospect or develop shale gas was subject to an authorization certification from the Ministry of Environment;

(ii) Any fracking that included drilling in hydrous environments or wetlands required an authorization certificate; and

(iii) The requirements to obtain certificates were made more stringent.\textsuperscript{692}

565. On the same day, June 10, that the new guidelines regulating all shale gas exploration activities throughout the province of Quebec, the National Assembly adopted Bill 18, and provided for the immediate and permanent revocation of permits for whom it was decided, could not be regulated and circumscribed by the same stringent regulations as all other shale gas exploration operations province wide.

566. This context in which Bill 18 came into force illustrates why its immediate and permanent revocation of permits is grossly unfair and unjust. Amidst a period of ongoing regulatory reform, that expressly referenced the importance of scientific study and relied on

\textsuperscript{691} Gazette Officielle du Québec, Lois et réglements, 143e année, no 23B, 10 juin 2011 (R-033).

\textsuperscript{692} Gazette Officielle du Québec, Lois et réglements, 143e année, no 23B, 10 juin 2011 (R-033), RWS-002-Dupont, 133-138.
strengthened existing regulation to provide interim supervision, it was decided absent any scientific basis that a small subset of exploration permits would be treated differently – they would be immediately and permanently revoked. No evidence has been provided to refute Minister Normandea".u's own words about the efficacy of Quebec's existing powers to regulate hydrocarbon development while the policy reform process was underway:

"[there is a whole series of provisions that already protect waterways in the Environment Quality Act, the requirement of an authorization certificate.]"693

567. The existence of environmental protection and supervisory mechanisms at the disposal of Quebec's regulators means that the revocation of permits in article 1 of Bill 18 cannot be seen as a measure genuinely adopted in order to increase environmental protection. Instead, Bill 18 was an effort, despite the existence of regulatory means to protect the environment, to enact a political objective lacking scientific or evidentiary basis.

3. **The boundaries of the permit revocations are idiosyncratic**

568. The geographic boundaries of Bill 18 cannot be supported in the face of the government's admissions that they were not based upon environmental considerations, and the fact that in respect of all other instances of studying and regulating hydrocarbon development, the government maintained a commitment to area and sector specific studies.

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569. The Memorial details why the eastern boundaries of the permit revocation lack coherence, making them idiosyncratic.\textsuperscript{694} This is aptly summarized by Minister Normandeau's declaration, "that we cut it where we cut it."\textsuperscript{695}

570. For a bill whose consequence was to permanently revoke existing government permits and deny any compensation to permit holders, more is required from a government. Cutting it where one cuts it does not cut it. This evidences a "manifest lack of rational relationship between the measure and its objective."\textsuperscript{696} If a government is enacting a measure to protect the environment, it requires an ecological and environmental basis for applying to a specific area, not a longitudinal one as was the case with Bill 18.\textsuperscript{697}

571. Canada has acknowledged that Bill 18's eastern boundary was impacted by an "inter-governmental agreement between the governments of Canada and Quebec concerning the joint management of petroleum resources in the Gulf of St-Lawrence."\textsuperscript{698}

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\textsuperscript{694} Memorial, 10 April 2015 paras. 307-311.

\textsuperscript{695} Quebec, National Assembly, Committee on Agriculture, Fisheries, Energy and Natural Resources, \textit{Journal des débats}, 2nd Sess., 39th Leg, Vol. 42 No. 11 (26 May 2011) (C-065).

\textsuperscript{696} \textit{Philip Morris Brands SARL, Philip Morris Products S.A. and Abul Hermanos S.A. v. Oriental Republic of Uruguay, ISCID Case No. ARB/10/7, Award} (8 July 2016), 353 (CLA-097).

\textsuperscript{697} Memorial, 10 April 2017 para. 307.

\textsuperscript{698} Letter from Canada to Claimant's Counsel, to AL, April 21, 2017 (C-150).

\textsuperscript{699} Document De Travail – Confidentiel - Notes Préliminaires - Projet de loi no 18 et limite est du moratoire Réflexions de travail (6 June 2011) (C-146), Projet de loi 18 – Loi limitant les activités pétrolières et gazières – Article 1 Amendement (Papillon) (undated) (C-147).
572. Furthermore, the government's own admissions concerning the importance of obtaining geography-specific evidence undermines any claim that the territorial scope of Bill 18 can be justified. Minister Normandeau notes "the major territorial expanse" as justification for separate SEA studies, and that application of conclusions from SEA-1 to the area studied by SEA-2 and the extension of the prohibition to that area before SEA-2's conclusion would have been "premature." These facts make Minister Normandeau's statement that properly studying the entire area covered by Bill 18 unnecessary because it would "inevitably reach the same conclusion" all the more egregious. The facts affirm that Bill 18's geographical scope cannot be rooted in logic.

VI. DAMAGES

A. The claimant is entitled to damages

573. When Quebec revoked the River Permit, it destroyed the economic potential of the Enterprise's intangible property and rights to access the gas resources within the River Permit Area. It therefore suffered a loss and is entitled to damages as compensation.

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700 RWS-004-Normandeau, 24.
701 RWS-004-Normandeau, 33.
574. Canada claims that the Enterprise has not lost anything because its project was too speculative and at too early a stage to have any value. In coming to these conclusions, Canada asks the Tribunal to disregard (i) the experience of the Enterprise and the Forest Oil staff who oversaw the Enterprise's activities in Quebec, (ii) the Claimant's access to capital, (iii) its business strategies, (iv) the work already completed by the Enterprise, (v) the scientific and technological information about the resource at issue that resulted from the Enterprise's work as well as the work of its competitors, and (vi) its development plans.

575. As discussed in more detail below, the Claimant has provided evidence about all of these factors in the form of contemporaneous documentation as well as witness statements from both employees and former employees of not only the Enterprise, but also Junex and Forest Oil.

576. Furthermore, both of the experts retained by the Claimant to provide independent assessments of the resources contained in the River Permit Area and the fair market value of the Enterprise's loss have provided objective, well-reasoned, and balanced reports to assist the Tribunal in its assessment of damages. GLJ attributed [REDACTED] of gas to the Enterprise's rights in the River Permit\(^{702}\) and forecast cash flow models that resulted in a [REDACTED].\(^{703}\) Using an income approach and the discounted cash flow ("DCF") methodology, FTI's Reply Report assesses the total

\(^{702}\) Note that 153,874 MMcf (million cf) is equivalent to 153.9 Bcf (billion cf). GLJ Reply Report, p. 37, 50, 63 (CER-004).

\(^{703}\) GLJ Reply Report, p. 64 (CER-004).
damages owed to the Claimant, including interest, as $103.6 million, a sum which represents the fair market value ("FMV") of the River Permit Rights.\textsuperscript{704}

1. Results of the GLJ's Reply Report

In its Reply Report, the Claimant's resource expert, GLJ, did not revise its estimate of the total natural gas marketable resources attributable to the Enterprise's rights in the River Permit, \textsuperscript{705} It did revise its cash flow model conclusions to present three possible scenarios: (i) reflecting only the Enterprise's 100% working interest; \textsuperscript{706}.

GLJ identifies three types of differences of opinion between it and Deloitte.

(a) The first are differences in opinion which do not have a material impact on the conclusions of its analysis.\textsuperscript{707}

(b) The second are "differences in professional judgement [that] are within a reasonable range of expected values".\textsuperscript{708} The differences in capital costs forecast

\textsuperscript{704} FTI Reply Report, para. 4.2 (CER-005).

\textsuperscript{705} GLJ Reply Report, p. 37, 50, 63 (CER-004).

\textsuperscript{706} GLJ Reply Report, p. 32-74 (CER-004).

\textsuperscript{707} GLJ Reply Report, para. 83 (CER-004).

\textsuperscript{708} GLJ Reply Report, para. 83 (CER-004).
by GLJ [REDACTED] and Deloitte [REDACTED] are an example of this type of disagreement.\textsuperscript{709}

(c) The third category of differences, however, are methodological errors or omissions on the part of Deloitte. As discussed in more detail below, these errors include:\textsuperscript{710}

(i) Using geologically improbable contouring, resulting in a significant reduction of its gross rock volume estimates, and impacts on its projected well count;

(ii) Excluding favourable pressure tests taken from the immediate vicinity of the River Permit without explanation;

(iii) Using incorrect rock density to calculate adsorbed gas in place;

(iv) Using inflated operating costs as a result of its choice of the Dry Montney Shale as a comparator; and

(v) Alleging that stimulating wells through hydraulic fracturing increases the risk that no shale gas will be discovered, despite the established use of hydraulic fracturing.

\textsuperscript{709} GLJ Reply Report, paras. 64, 83 (CER-004).

\textsuperscript{710} GLJ has summarized these errors in the GLJ Reply Report, Table 3, p. 33 (CER-004).
2. Results of the FTI Reply Report

579. FTI, the Claimant's damages expert, has also updated its conclusions to assist the Tribunal. The following chart summarizes FTI's updated conclusions for each of the three alternative scenarios. 711

Figure 2 Summary of FTI Updated Conclusions (USD 000's)

<table>
<thead>
<tr>
<th>Description</th>
<th>100% interest (after-tax)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMV of Prospective Resources in River Permit Area</td>
<td>$86,900</td>
</tr>
<tr>
<td>Pre-Award Interest</td>
<td>$13,700</td>
</tr>
<tr>
<td>Total Damages</td>
<td>$103,600</td>
</tr>
</tbody>
</table>

(6) Income tax gross-up would be required to account for any taxes that would need to be paid by the Claimant upon the receipt of an award.

580. FTI's updated conclusions provide the Tribunal with the damages suffered by the Claimant on an after-tax basis. After factoring in certain points raised by Deloitte, 712 FTI concluded that the Claimant's total damages are US$103.6 million, based on the Claimant's 100% working interest in the River Permit, including interest paid after the valuation date.

581. FTI did not agree that it was appropriate to discount the Claimant's damages. However, to assist the Tribunal, FTI provided two alternative total damages calculations. The first accounted for . The second accounted for .

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711 FTI Reply Report, Figure 2, p. 12 (CER-005).

712 While FTI disagreed with many comments made in Deloitte's Damages Report, FTI also recognized that a number of comments had merit. FTI therefore made adjustments or asked GLJ to adjust its cash flow model, for certain issues identified in the Deloitte Damages Report.
582. FTI also provided comments on Deloitte's Damages Report. FTI concluded that Deloitte's view on damages of $nil to $1.5 million was "unreasonable and unsupported by the available evidence". With respect to Deloitte's conclusion on overall damages, FTI also observed:

   It is not plausible that the Claimant would have simply given away its interest in the 33,460 acres that made up the River Permit for $nil, as is implied by the lower end of Deloitte's damages conclusion. Transactions carried out in less promising areas of the Utica, for undeveloped land without any exploration or drilling activity, carried out from one to three years prior to the Valuation Date sold for amounts substantially greater than $nil.713

583. FTI identified a number of subjective and unsupported conclusions, methodological problems, and mathematical errors made by Deloitte in its Damages Report. These errors relate not only to Deloitte's own calculations, but also their critique of FTI's conclusions. For example, one mathematical error caused a $25.8 million overstatement of one of Deloitte's critiques of the FTI Report.714

584. For all of these reasons, the Tribunal's assessment of damages cannot be based on the data and methodologies presented by Canada's experts.

3. Critique of Canada's argument

585. Canada's Counter-Memorial contains two central arguments regarding damages:

713  FTI Reply Report, para. 11.48 (CER-005).
714  FTI Reply Report, para.10.75 (CER-005).
(a) First, Canada contends that the allegedly speculative nature of the project disentitles the Claimant to an award of damages.\footnote{Counter-Memorial, 24 July 2015, paras. 535-574.}

(b) Second, Canada contends that even if the Claimant is entitled to damages, the Claimant's estimate of the appropriate quantum is exaggerated\footnote{Counter-Memorial, 24 July 2015, paras. 574-624. Canada also argues that the method chosen by FTI to corroborate its estimate of the fair market value of the River Permit Rights is inappropriate (Counter-Memorial, paras. 625-633) and that the Claimant's estimate of its sunk costs is also exaggerated (Counter-Memorial, paras. 634-643). Finally, Canada argues that the Claimant has not discharged its burden of proof to demonstrate that the facts of the case justify awarding interest in addition to damages (Counter-Memorial, paras. 644-653).} because the quantum was calculated using an inappropriate methodology (the DCF method),\footnote{Counter-Memorial, 24 July 2015, paras. 578-592.} and in applying the DCF method, the Claimant over-estimates the exploitable gas reserves,\footnote{Counter-Memorial, 24 July 2015, paras. 596-601.} exaggerates the project's income potential,\footnote{Counter-Memorial, 24 July 2015, paras. 602-604.} underestimates its costs,\footnote{Counter-Memorial, 24 July 2015, paras. 605-615.} and applies an inappropriate discount rate.\footnote{Counter-Memorial, 24 July 2015, paras. 616-624.}

586. Canada's submissions are mistaken in both respects.

587. First, Canada is incorrect that the early stage of the Claimant's project disentitles it to damages. The loss of access to gas resources is still a loss. Natural gas \textit{in situ} has value, even before a given well reaches the stage of commercial production. In the present case,
the tests conducted by the Enterprise and its competitors in the region establish the existence of a very promising resource.

588. Furthermore, the Claimant's activities to bring the River Permit Rights to fruition were not speculative. As discussed in greater detail below, the Enterprise had rights pursuant to a permit to explore.\textsuperscript{722}

(a) The regulatory regime in force in Quebec prior to the permit revocation only required the holder of an exploration permit to show that it had a commercially viable resource in order to be granted a production lease.\textsuperscript{723}

(b) The Enterprise had access to capital and experienced staff who were capable of bringing the project into development, and had contemporaneous business plans that demonstrate that it would have done so, absent the permit revocation and climate of uncertainty that was fostered by the government of Quebec's statements and actions in 2010-2011.\textsuperscript{724}

(c) The scientific and geological information available to the Enterprise, both directly and via the results of its competitors, confirmed that there was an economically

\textsuperscript{722} Overview of Original and River Permits (C-016); Assignment Agreement between Forest Oil and the Enterprise re Farmout Agreement between Forest Oil and Junex (8 April 2009) (C-032); Assignment Agreement between the Enterprise and Junex re: assignment of working interest in the River Permit (28 January 2010) (C-035).

\textsuperscript{723} P. Dorrins Reply Witness Statement, paras. 4-7 (CSW-008); Counter-Memorial, 24 July 2015, para. 434.

\textsuperscript{724} D. Axani Reply Witness Statement, paras. 8-12, 53-54, 56-63(CWS-001); Lone Pine Initial Public Offering News Releases (C-098).
viable and very promising play, of which the development of the River Permit was the heart.\textsuperscript{725}

(d) As Mr. Axani describes, "by 2011 we knew a considerable amount about the resources and we were comfortable that it was economically viable and would be successful. [...] The next step was to proceed to pilot pad drilling a few more wells with [a] refined completion recipe then tie in one or more wells and start producing and selling gas."\textsuperscript{726}

589. In short, the Claimant was on the verge of taking the next step toward production when Quebec extinguished its investment.

590. So long as the Claimant establishes the fact of loss, then the early stage of the project and any possibility that it might not have proceeded exactly as the Claimant planned are a matter of risk. Those factors are accounted for when calculating the quantum of compensation. The facts that Canada points to as alleged indicia of the "speculative" nature of the project do not negate the existence of the loss.

591. There is no question that the intended and actual legal effect of Bill 18 was to revoke permits.\textsuperscript{727} Canada's argument implies that exploration permits and the resources to which

\textsuperscript{725} Forest Oil, December 2010 "In the Zone" Presentation, pgs. 3-4, 38-85, 96-104 (C-153); D. Axani Witness Statement, paras.17-19, 49-51 (CWS-001).

\textsuperscript{726} D. Axani Witness Statements, para. 24 (CWS-006).

\textsuperscript{727} Quebec, Bill 18, \textit{An Act to limit oil and gas activities}, 2nd Sess, 39th Leg (2011) (entered into force 13 June 2011) at s. 2 (C-063).
they relate have no value themselves, and that an investor's loss of property is only compensable if it is at an advanced stage of development.

592. Canada's arguments fundamentally miss the essence of the concept of value in the context of natural resources, specifically the oil and gas industry, and particularly when valuing unconventional shale gas resources.

593. The fair market value of an asset is, as Canada and its expert agree, "the highest price at which property would change hands between a hypothetical willing and able buyer and a hypothetical willing and able seller, acting at arm's length in an open and unrestricted market, when neither is under any compulsion to buy or sell and when both have reasonable knowledge of the relevant facts." It is common practice for businesses in the oil and gas industry to use methodologies such as discounted cash flow to assess and plan their business activities, and assign value to resources. Commentators have noted that this is an established practice in the industry: "[v]aluing future income streams from the production of oil and gas is a well-developed discipline within the industry and among sophisticated investors."

594. Likewise, in recent international investment jurisprudence dealing with hydrocarbon resources, parties have accepted the DCF method as the appropriate method of calculation.

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728 Counter-Memorial, footnote 741; Deloitte Damages Report, Glossary of Terms and para. 53 (RER-001B).

without argument. Importantly, the DCF method requires appropriate discounting for risk and therefore enables a reasonable assessment of future value.

595. Canada has not proposed any methodology to use when valuing the loss at issue. This does not assist the Tribunal. Despite its exper.'s use of the DCF methodology, Canada neither concedes that fair market value is the appropriate standard of compensation to use, nor does it offer the Tribunal any alternative.

596. Canada has filed two expert reports to support its view of the appropriate quantum of damages, both by Deloitte LLP ("Deloitte"). Both Deloitte's resource estimate (the "Resource Report") and valuation (the "Damages Report") contain flaws that undermine the reliability of their conclusions, as summarized above and discussed in more detail below.

B. The Enterprise has suffered loss

1. The state's obligation to compensate

597. As noted in the Claimant's Memorial, Article 36 of the ILC Draft Articles on State Responsibility codifies the customary international law requirement that when states breach their international obligations, they are required to compensate for the damage

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Anatoliy Stats, Gabriel Stats, Ascom Group SA and Terra RafTrans Trading Ltd v Kazakhstan, SCC Case No. V(116/2010) Award (19 December 2013) at para. 1617 (CLA-107): "The Parties agree that the DCF methodology is an appropriate method of calculation. The Tribunal agrees as well, as this method has been used in many comparable cases and decisions of other Tribunals."
caused by their breach.⁷³¹ Importantly, this obligation to compensate "includes the loss of future profits insofar as it is established".⁷³²

598. Canada has not taken issue with the existence of this obligation. Instead, it argues that "LPRC has [not] suffered damage that may become the object of a claim" due to "the speculative nature of the River License project and the fact that they were still in the early stages".⁷³³

599. Canada refers to "damage that may become the object of a claim" possibly implying a distinction between damages that may become the object of a claim and other non-compensable losses. Canada does not offer any discussion or legal authority for the proposition that only certain damage is compensable, and so the Claimant understands it to be common ground between the parties that if the Claimant can establish the fact of loss as a result of Canada's breach, then Canada's obligation to compensate is engaged.

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⁷³¹ Article 36 states:
"1. The State responsible for an internationally wrongful act is under an obligation to compensate for the damage caused thereby, insofar as such damage is not made good by restitution.
2. The compensation shall cover any financially assessable damage including loss of profits insofar as it is established."


⁷³³ Counter-Memorial, 24 July 2015, para. 534.
2. The fact of loss

600. The Claimant bears the burden of proving that it has experienced loss as a result of Canada's wrongful actions. To this end, the Claimant’s Memorial articulated the causal link between Canada's actions and its loss, and provided expert evidence to quantify that loss.

601. Canada's Counter-Memorial did not raise any arguments with respect to causation. Instead, Canada's response to the fact of the Enterprise's loss is that the investment in the River Permit was too speculative and at too early a stage to give rise to damages. The Claimant, in Canada's view, did not demonstrate with "the required level of certainty" that its Enterprise suffered loss. Canada further argued that the Claimant's assessment of quantum was exaggerated.

602. As a preliminary matter, the Claimant observes that the fact of loss and the quantum of loss are separate matters that are subject to a different standard of proof. The standard required to prove the fact of loss is, in keeping with the standard of proof for the merits, the balance of probabilities. This standard is satisfied if the loss "would have been probable in light of the circumstances." By contrast, quantum need not be proved with the same degree

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734 Memorial, 10 April 2015, para. 405.

735 The GIJ Report estimated the resources contained within the River Permit Area and the cash flow anticipated when developing these resources (CER-001). The FTI Report presented a valuation of the fair market value of the River Permit, based on GIJ's resource estimates and resulting economic model (CER-002).

736 Counter-Memorial, 24 July 2015, para. 579.

737 Gold Reserve Inc. v. Bolivarian Republic of Venezuela, ICSID Case No. ARB(AF)/09/1, Award (22 September 2014) at para. 685 (CLA-088); Cristallex International Corporation v. Bolivarian Republic of Venezuela, ICSID Case No. ARB(AF)/11/2, Award (4 April 2016) at para. 867 (CLA-084); see also Case concerning the Factory at Chorzów (Germany v. Poland), Judgment (13 September 1928), PCJ (Series A) No. 17., at p. 47 (CLA-029); "reparation must, as far as possible, wipe out all the consequences of the illegal act and reestablish the situation which would, in all probability, have existed if that act had not been committed" [Emphasis added].

738 Sergey Ripinsky and Kevin Williams, "Chapter 5: Cross-cutting Issues", Damages in International Investment Law (London: British Institute of International and Comparative law, 2008), p. 164 (CLA-017); "international law has followed the lead of most legal systems,
of certainty. As described by the tribunal in *Crystallex v. Venezuela*, "[t]his is because any future damage is inherently difficult to prove". 739

603. These standards preclude damages that are "speculative or merely 'possible". 740 This, however, only underscores the importance of the tribunal determining what is speculative in the context of the business at issue.

604. For expropriation claims, the need to prove the fact of loss does not normally arise at the damages stage. The fact of loss is itself an issue for the merits since "a finding of expropriation cannot be made without a finding of 'injury' to the investor (due to the deprivation of its investment) and of 'causation' between the respondent's conduct and such injury." 741 Here, these elements have been demonstrated or are not contested (in the case of causation). The Claimant alleges that Canada has not only expropriated the River Permit Rights in violation of Article 1110, but also that Canada's permit revocation violated Article 1105. In both cases, the damage to the Claimant is the same: it is the loss of the River Permit Rights. Accordingly, the Claimant's first submission is that if the Tribunal finds that Canada has breached the NAFTA as alleged, the fact of the Claimant's loss will have been established.

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which relax the standards of proof and are satisfied if the profits would have been *probable* in light of the circumstances* (footnotes omitted).

739 *Crystallex International Corporation v. Bolivarian Republic of Venezuela*, ICSID Case No. ARB(AF)/11/2, Award (4 April 2016) at paras. 867-868 (CLA-084).

740 *Gold Reserve Inc. v. Bolivarian Republic of Venezuela*, ICSID Case No. ARB(AF)/09/1, Award (22 September 2014) at para. 685 (CLA-CLA-088).

605. The loss of the River Permit Rights includes the loss of the right to explore and ultimately develop the River Permit Area. Quebec's revocation of the River Permit meant that the Enterprise lost the ability to derive any future economic benefit from its rights to the shale gas resources within the River Permit Area.

606. International investment tribunals have addressed the question of how claimants can demonstrate with "sufficient certainty" that they have suffered a loss of future profits.

(a) For example, in *Crystalllex v Venezuela*, the tribunal found that Venezuela expropriated Crystalllex's investments related to the Las Cristinas gold deposits in a situation where the claimant had never started operating the mine. The fact that the claimant had not begun operating the mine was not a bar to assessing the fact of loss; instead the tribunal required that the claimant establish that "if it had been allowed to operate, it would have engaged in a profitmaking activity and that such activity would have been profitable."\(^{742}\)

(b) Expressed another way, "in order to be allowable, prospective profits must not be too speculative, contingent, uncertain, and the like. There must be proof that they were reasonably anticipated; and that the profits anticipated were probable and not merely possible."\(^{743}\)

\(^{742}\) *Crystalllex International Corporation v. Bolivarian Republic of Venezuela*, ICSID Case No. ARB(AF)/11/2, Award (4 April 2016) at para. 877 (CLA-084).

\(^{743}\) Whiteman, *Damages in International Law*, 1943, vol. III at 1837 (CLA-072); see also *Archer Daniels Midland Company and Tate & Lyle Ingredients Americas Inc. v. United Mexican States*, ICSID Case No. ARB(AF)/04/05, Award (21 November 2007) at para. 285 (CLA-024).
3. The Enterprise's project to develop the River Permit Area was sufficiently certain and not speculative

607. Canada's Counter-Memorial articulates four factual arguments to support its view that the Enterprise's project to develop the resources in the River Permit Area was speculative. Canada alleges that:

(a) The existence of exploitable gas resources was not established in the River Permit Area and the St. Lawrence Lowlands;\textsuperscript{744}

(b) No commercial development activity has taken place in the St. Lawrence Lowlands;\textsuperscript{745}

(c) It is "far from certain" that LPRC could have carried out its project, because:

(i) It would have had to obtain many licenses and authorization;\textsuperscript{746}

(ii) The legislative and regulatory framework applicable to the shale gas industry was tightening;\textsuperscript{747}

(iii) Gas prices were volatile.\textsuperscript{748}

\textsuperscript{744} Counter-Memorial, 24 July 2015, paras. 535-544.

\textsuperscript{745} Counter-Memorial, 24 July 2015, paras. 535, 545-546.

\textsuperscript{746} Counter-Memorial, 24 July 2015, para. 535.

\textsuperscript{747} Counter-Memorial, 24 July 2015, para. 535.

\textsuperscript{748} Counter-Memorial, 24 July 2015, para. 535.
608. Canada's arguments betray a lack of understanding of common practice in the oil and gas industry, particularly as these relate to the development of unconventional deposits. They also ignore the actual state of information available to the Enterprise, and the scientific and business judgement exercised by sophisticated industry players.

\[ a) \quad \text{The presence of exploitable gas} \]

609. It is not correct to say that the presence of exploitable gas was not established. Test results were available from wells in the Bécancour/Champlain Block as well as other acreages within the Quebec Utica shale.\(^{750}\) Contemporaneous documentary evidence indicates that the Enterprise had a high degree of confidence in the shale gas potential of formations within the Utica.\(^{751}\) More specifically, very favourable test results were available from wells belonging to competitors, which showed commercially viable rates of production from wells in the St. Lawrence Lowlands that were stimulated through hydraulic fracturing.\(^{752}\)

610. An internal Forest Oil presentation slide deck from December 2010 demonstrates the kind of scientific, geological and commercial information that the Enterprise had collected, and presents a contemporaneous account of what the Enterprise knew or believed at the time.
about the presence of exploitable gas. As described by Mr. Axani, the oil and gas industry follows an iterative process of learning about and refining their approach to developing a resource.

Canada cites cautionary statements in public filings that the Claimant made in connection with its initial public offering to substantiate its argument that the project was speculative. Statements of this nature are targeted to non-specialized investors and generally required by securities laws as a matter of prudence. They are not conclusory of a company's view of a particular project or the likelihood that it will recover commercially exploitable gas.

Canada's argument is also inconsistent with its damages expert's market approach to valuation. Deloitte identified five transactions involving junior resources companies with early stage projects in the Utica Basin in Quebec and Ontario. Three of these were asset transactions for the purchase of interest in exploration licences or acreage. The existence of those transactions demonstrates that early stage projects can have value.

b) Lack of commercial development activity

The fact that "commercial development activity", i.e. commercial production, had not yet begun is not a relevant consideration when determining if the Enterprise experienced a loss.

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753 Forest Oil, December 2010 "In the Zone" Presentation (C-151).
754 D. Axani Witness Statement at para. 12, 14 and 20-31 (CWS-001).
755 Counter-Memorial, 24 July 2015, para. 541.
in fact. The loss of access to gas resources is still a loss, even gas production had not yet commenced. Gas resources have value before they reach the stage of commercial production. Both Canada's and the Claimant's respective damages experts address this issue in their assessments of risk and quantum of damages.

614. Furthermore, Canada's arguments regarding the lack of commercial development "currently"\textsuperscript{758} are an impermissible attempt to convince the Tribunal to use hindsight information in assessing the Claimant's damages.

615. Canada states that "no exploration license holder has performed significant exploration work in the St. Lawrence River" and that "[t]herefore, no drilling has taken place in the area covered by the exploration licenses revoked by the Act" [Emphasis added].\textsuperscript{759} Assuming that other permit holders were, like Junex and the Enterprise, planning to develop the resources under the river in the safest and most economical way, there is no reason why they would conduct work "in" the river. Instead, as Forest Oil maintained from the time of its application to the QMNR in July 2006, the resources under the river should be accessed and developed from positions onshore.\textsuperscript{760}

\textit{c) The need to obtain licences and authorizations}

616. Canada alleges that the need to obtain licences and authorizations makes the fact of the Claimant's loss uncertain. All oil and gas development in Canada requires licences and

\begin{footnotes}
\item \textsuperscript{758} Counter-Memorial, 24 July 2015, para. 545.
\item \textsuperscript{759} Counter-Memorial, 24 July 2015, para. 546.
\item \textsuperscript{760} Letter Application from the Enterprise to QMNR, dated 28 July 2006 (C-018).
\end{footnotes}
authorizations. This does not inherently make all oil and gas projects uncertain. More fundamentally, however, this is an issue to be considered at the quantum phase of the damages analysis, as both Canada's and the Claimant's experts have done. For that reason, the Claimant addresses Canada's submissions on this point in its submissions on quantum.

d) **Tightening of the legislative and regulatory framework**

617. As with Canada's submissions on the need to obtain licences and authorizations, the potential tightening of the legislative and regulatory framework and resulting uncertainty for the project is a question of future risk that is relevant to the calculation of quantum, not the fact of loss. The Claimant addresses Canada's allegations on this point in its submissions on quantum.

e) **Gas prices**

618. Canada alleges that gas prices were volatile and that the Enterprise's ability to proceed with the project would be jeopardized as a result. It is unclear whether Canada is alleging particular volatility during the period leading up to the Valuation Date or afterwards, and if these arguments are based on hindsight information that could not have been known as at the valuation date.\footnote{See e.g., Counter-Memorial, 24 July 2015, paras. 562-563.}

619. Regardless, Canada again conflates a quantum issue with fact of loss. Both Canada and the Claimant's experts have factored in the natural gas price forecasts into their economic models based on the information available as at the Valuation Date.
620. Like many commodities, natural gas pricing is cyclical. When prices are low, it does not mean that a company stops exploring, only that it will focus its capital spend on its best, most prospective projects in light of the competition for capital within the company.\textsuperscript{762}

621. Indeed, the River Permit Area would be particularly attractive when gas prices are low given its ready access to infrastructure, local customers, and proximity to a larger Quebec and American markets.\textsuperscript{763} There was already a pipeline-gathering system in place both regionally on both sides of the St. Lawrence River and into the nearest industrial park, where TransCanada has a cogeneration facility.\textsuperscript{764} Because they were located so closely, the pipeline infrastructure and cogeneration facility meant that the additional infrastructure which would be needed to get the gas to market would be less expensive and faster to build.\textsuperscript{765} The presence of this industrial park and the nearby industrial park of Trois Rivières also meant that the Enterprise would have a concentrated local pool of potential customers, rather than needing to compete in other markets.\textsuperscript{766} In addition, Quebec gas offers premium pricing compared to Western Canadian gas, so there is no reason to believe that Quebec would not have been an attractive market for investment in a "but for" scenario.\textsuperscript{767}

\textsuperscript{764} D. Axani Reply Witness Statement, para. 39 (CWS-006).


\textsuperscript{764} Gaz Métro, Map, "Natural Gas Transport and Supply System in Quebec" (C-043); TransCanada Pipelines Limited, "Béacancour Cogeneration Plant", online: <http://www.transcanada.com/docs/Our_Businesses/becancour_eng.pdf> (C-042).

\textsuperscript{765} D. Axani Reply Witness Statement, para. 35 (CWS-006).

\textsuperscript{766} Irene Haas, "Utica Shale Play in Quebec – Forest Oil Announced New Trend", Canaccord Adams (8 April 2008) at 3-4 (C-025).

\textsuperscript{767} D. Axani Witness Statement, para. 59 (CWS-001).
622. Canada alleges that the Enterprise's development plan is "simplistic and unrealistic." This is incorrect, and betrays a lack of appreciation for the iterative nature of developing unconventional shale gas resources.

623. Furthermore, Canada's assertion that the successful exploitation of the River Permit would not have been possible because of certain purported risk factors is based on mere speculation.

624. Development plans are a shared understanding between the various individuals working on a given resource about how they are exploring and developing the resource. As described by Mr. Axani, companies on the scale of the Enterprise will normally envision their activities on a five year time horizon. This does not mean, as Mr. Axani states, that they would "expect the project to be completely developed or have run the course of its life in 5 years."

625. Contemporaneous documentation from December 2010 provides a snapshot of the Enterprise's business and development plan for the development of the Utica shale lands, including the River Permit.

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709 D. Axani Reply Witness Statement, para. 16 (CWS-006).
710 Forest Oil, December 2010, "In the Zone" Presentation (December 2010) (C-153).
626. Canada misstates the Claimant’s evidence when it states that the Enterprise had not drilled in the St. Lawrence Lowlands since 2008.\footnote{Counter-Memorial, 24 July 2015, para. 565.} Mr. Axani’s witness statement describes his work with respect to the St. Denis well, which was drilled in 2010 and was poised for completion in 2011.\footnote{D. Axani Witness Statement, para. 58 (CWS-001); see also D. Roney Witness Statement, para. 8 (CWS-005).} In any event, the reasons that companies began to hold off on continuing to invest capital in Quebec in 2010/2011 have far more to do with the uncertainty that the Quebec government was injecting in the market, as industry representations to government at the time confirm.\footnote{D. Axani Reply Witness Statement, paras. 72-73 (CWS-006). P. Dorrians Reply Witness Statement, paras. 13-19 (CWS-008); Meeting with MRNF April 7 2011 in Quebec City - CFOL representatives - Virginie Lavoie, Dana Roney - MRNF representatives —Jean-Yves Laliberte, Robert Theriault, Isabelle Leclerc, Sebastien Desrochers; Meeting with MDEP April 8 2011 in Montreal - CFOL representatives - Virginie Lavoie, Dana Roney - MDEP representatives —Sylvie Laurence, Julien Paquetie, Paul Benoit, Daniel Savoie (13 April 2011) (14745) (C-125).}

627. The fact that the SEA-SG’s report was so significantly delayed is not something that the Enterprise could have known or factored into its development plans. When the SEA-SG was announced, its timeframe for completion was 18 to 30 months. As contemporaneous documentation suggests, the Enterprise planned to ramp up to a five rig drilling program by 2014, which, given the advanced stage of the Enterprise’s exploration activity in the St. Lawrence Lowlands, would involve having tied in a well and beginning commercial production.

628. Other alleged risks or omissions raised by Canada about the Enterprise’s development plan are not based on facts:
(a) There is no basis for the argument that Talisman would have been unwilling to allow the Enterprise to use its land in order to produce gas. This assertion fails to take into account (i) the good relations between the companies, (ii) the fact that use of this kind is common practice in other provinces and (iii) that Talisman would likely be very interested in the data that the Enterprise could gather on Talisman’s acreages, data which would be given in exchange for the right to drill.774

(b) There is also no reason to believe that concerns relating to the Gentilly nuclear plant would have prevented the Enterprise from exploiting the River Permit, whether in whole or in part. Canada has adduced no evidence to show that a binding law, decree or ordinance of any kind would have had the effect of barring the Enterprise from conducting horizontal drilling under the bed of the St. Lawrence River.

(c) The alleged absence of skilled labour is also speculative. The Bécancour region of Quebec is not cordoned off from the rest of the province or the country. Nothing would have prevented the Enterprise from bringing in skilled labour from elsewhere. Furthermore, there is no reason to believe that skilled oil and gas workers from Quebec, who were working in Alberta or the Northwest Territories at the time, would not have decided to return to their home province in order to help develop a local project.775

774 D. Axani Reply Witness Statement, para. 57 (CWS-006).

775 D. Axani Reply Witness Statement, para. 59 (CWS-006).
629. The Claimant has demonstrated that Bill 18 deprived it of its investment, which had value. Contemporaneous documentation establishes that the Enterprise was poised to transition from exploration to production. As the quantifications by the Claimant's resource and valuation experts demonstrate, the value of the River Permit Rights was significant, it was measurable, and, in the Claimant's submission, it deserves compensation.

C. **Quantum – methodology**

630. Once the Claimant can demonstrate, on a balance of probabilities, that it has experienced loss, the analysis shifts to consider the appropriate quantum of those losses. Both the Claimant and Canada have adduced expert evidence on the quantum of the Enterprise's loss.

631. FTI and Deloitte agree broadly on the following high level issues: 776

   (a) That generally, damages represent the fair market value of the asset allegedly expropriated prior to the date of expropriation;

   (b) The primary approach to determine the FMV of the River Permit is under a discounted cash flow ("DCF") methodology;

   (c) The appropriate Valuation Date is 12 June 2011, the date immediately preceding 13 June 2011, the Expropriation Date;

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776 FTI Reply Report, para.5.1 (CER-005).
Absent the wrongful acts of Quebec, the Enterprise would have earned revenues from the River Permit commencing in 2013;

Certain points of methodology. 777

Both FTI and Deloitte's analysis of quantum depend on the resource estimates on which they respectively relied. A further discussion of the GLJ and the Deloitte Resource Report follows below.

1. Standard of compensation

Canada has not raised any legal arguments with respect to the appropriate standard of compensation for a breach of the NAFTA under international law.

The Claimant argued in its Memorial that the principle of full reparation applies 778 and that the standard of compensation is, at a minimum, the full market value of the Claimant's investment. 779

In its Counter-Memorial, Canada chose to only raise factual arguments that appear to suggest that the state of the project's development prima facie disentitles the Claimant to any damages, i.e. that "the Claimant has not demonstrated that LPRC has suffered damage that may become the object of a claim given the speculative...

777 Specifically, that forecasted cash flows are discounted using a WACC developed under a CAPM approach; and that valuation conclusions under the primary DCF method can be assessed for reasonableness using market based data. FTI Reply Report, section 5.1 (CER-005).

778 Memorial, 10 April 2015, paras. 362-392.

779 Memorial, 10 April 2015, paras. 368-383.
nature of the River License project and the fact that they were still in the early stages.\textsuperscript{780}

634. Accordingly, Canada has not offered an alternative to using the fair market value standard of compensation, whether the Tribunal determines that Canada has breached NAFTA Article 1110 or 1105.

635. Pursuant to NAFTA Article 1110(4) in the case of expropriation, and more generally at international law, the relevant standard for compensation is the fair market value of the asset.\textsuperscript{781} The World Bank Guidelines on the Treatment of Foreign Direct Investment offer one definition of fair market value that makes clear that fair market value is defined in light of what is known about the investment, including if it is in the early stage of development:

the fair market value will be acceptable if determined by the State according to reasonable criteria related to the market value of the investment, i.e., in an amount that a willing buyer would normally pay to a willing seller after taking into account the nature of the investment, the circumstances in which it would operate in the future and its specific characteristics, including the period in which it has been in existence, the proportion of tangible assets in the total investment and other relevant factors pertinent to the specific circumstances of each case.\textsuperscript{782}

\textsuperscript{780} Counter-Memorial, 24 July 2015, para. 534.


636. It is common ground between FTI and Deloitte that the DCF method is the appropriate methodology to establish the fair market value of the River Permit Rights.

2. **The DCF method is appropriate**

637. DCF method is widely accepted, both in international investment arbitration, and in business. Canada asserts that the DCF method cannot be used to value the River Permit Rights because the Enterprise did not have a history of profits with respect to this project. Canada suggests that the use of the DCF method would be speculative in this case.

638. Canada has not led any evidence to establish that the DCF method is an inappropriate methodology from a valuation perspective. According to Canada's own expert, the issue that remains in dispute is purely a legal question, since Deloitte agrees that from a valuation perspective, the River Permit Rights are properly valued using a DCF methodology:

> Generally speaking, when a company considers making an acquisition, a financial model in some form is developed to determine a value for the asset/company. [...] The purchaser would look at the free cash flow it would receive annually, while the seller would consider the cash flow that it would receive from the sale, **both of which are represented by the present value of the annual cash flows.**

 [...] we have selected an income approach to determine the FMV of the River Permit Interests and have made use of the DCF methodology. [...] The question as to whether it is appropriate to value the interest in the River Permit using the DCF method is both a question for the valuator and a legal question. We understand that the legal question is addressed by the Government of Canada in its Counter-Memorial.

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784 Deloitte Damages Report, para. 93 (RER-001B).

785 Deloitte Damages Report, paras. 121 (RER-001B).
639. The DCF methodology is not the only possible method that, in theory, could be used to determine the fair market value of the loss. The fact that neither Canada nor its independent expert offers the Tribunal an alternative method suggests, reasoning *a contrario*, that no reasonable alternative presented itself in their deliberations, and that the DCF method is plainly the most appropriate option for establishing the quantum of the loss.

640. If, as noted by its expert, Canada's positions about the appropriateness of the DCF method are legal arguments rather than valuation arguments. Canada begins its legal arguments by invoking the tribunal decision in *Vivendi II*, where the tribunal acknowledged that "fair market value may be determined with reference to future lost profits in an appropriate case."\(^786\) The tribunal in *Vivendi II* goes on to discuss what a claimant should demonstrate in order for a tribunal to determine that lost profits should be awarded:

The Tribunal also recognises that in an appropriate case, a claimant might be able to establish the likelihood of lost profits with sufficient certainty **even in the absence of a genuine going concern**. For example, a claimant might be able to establish clearly that an investment, such as a concession would have been profitable by presenting sufficient evidence of its expertise and proven record of profitability it (or indeed others) had operated in similar circumstances. [Emphasis added]\(^787\)

\(^786\) *Compañía de Aguas del Aconquija S.A. and Vivendi Universal S.A. v. Argentine Republic*, ICSID Case No. ARB/97/3, Award (20 August 2007) at para. 8.3.3 (CLA-032).

\(^787\) *Compañía de Aguas del Aconquija S.A. and Vivendi Universal S.A. v. Argentine Republic*, ICSID Case No. ARB/97/3, Award (20 August 2007) at para. 8.3.4 (CLA-032).
641. The tribunal then goes on to describe the evidence that a claimant could adduce to meet this threshold:

A claimant which cannot rely on a record of demonstrated profitability requires to present a thoroughly prepared record of its (or others) successes, based on first hand experience (its own or that of its qualified expert) or corporate records which establish on the balance of probabilities it would have produced profits from the concession in question in the face of the particular risks involved, other than those of Treaty violation.\textsuperscript{788}

642. Unlike in \textit{Vivendi II}, this is precisely the evidence that the Claimant has adduced.

(a) The Tribunal has on the record before it, ample evidence of the Claimant's experience in both conventional and unconventional oil and gas development during the relevant time period, including through statements made in public security filings for the Claimant's 2011 IPO. These are corporate statements that are held to a high standard of accuracy as a matter of law and personal liability for their authors.\textsuperscript{789} Its operational history and expertise can be demonstrated by its other projects in Canada and the experience of the personnel involved.

(b) The Claimant's independent expert, GLJ, [Redacted]

\textsuperscript{788} \textit{Compañía de Aguas del Aconquija S.A. and Vivendi Universal S.A. v. Argentine Republic}, ICSID Case No. ARB/97/3, Award (20 August 2007) at para. 8.3.10 (CLA-672).

\textsuperscript{789} Lone Pine Resources In. Supplemented Prep Prospectus, May 25, 2011 (CER-002A); D. Axani Witness Statement, paras. 7-11 (CWS-001); D. Ronay Witness Statement, paras. 7-9 (CWS-005); R. Wiggins Witness Statement, paras. 8-9 (CWS-002).
(c) Contemporaneous documentary evidence of the business and development plans for the project demonstrate that the scientific and geological evidence available from tests conducted by the Enterprise and its competitors was ______.

(d) As at the Valuation Date, the Enterprise had access to sufficient financing and significant capital budgets.792

(e) The Enterprise informed the Quebec government at the time of the chilling effect that the climate of uncertainty created by government statements and its delays in passing hydrocarbon regulations was having on the ability of companies to proceed with their investments in Quebec.793 This remains the state of affairs until today, however today's uncertainty is also a by-product of the same events that gave rise to Canada's breach of the NAFTA,794 and accordingly cannot be a risk factored into a valuation of the loss at issue.

790 GIJ Reply Report, Appendices 1-3 (CER-004).

791 Forest Oil, December 2010 "In the Zone" Presentation, pgs. 3-4, 38-85, 96-104 (C-153); D. Axani Witness Statement, paras. 17-19, 49-51 (CWS-001).

792 D. Axani Witness Statement, paras. 53-54 (CWS-001); D. Axani Reply Witness Statement, paras. 56-63 (CWS-006).

793 Meeting with MRNF April 7 2011 in Quebec City - CFOL representatives - Virginie Lavoie, Dana Roney - MRNF representatives — Jean-Yves Laliberte, Robert Theriault, Isabelle Leclerc, Sebastien Desrochers; Meeting with MDEP April 8 2011 in Montreal - CFOL representatives - Virginie Lavoie, Dana Roney - MDEP representatives — Sylvie Laurence, Julien Paquette, Paul Benoit, Daniel Savoie (13 April 2011) (14745) (C-125).

643. Furthermore, the DCF analysis is particularly suited to the context of the oil and gas industry. Canada argues that that tribunals have refused to apply the DCF method to speculative projects, or where there is no operational history or performance record. But tribunals recognize, however, that not all industries are the same. The industry at stake matters not only so that the tribunal's award is coherent with respect to the loss that it attempts to value, but also so that industry norms and practices may provide a context to make sense of the risk that is inherent in any valuation.

644. For example, in Gold Reserve v. Venezuela, the tribunal determined that the DCF methodology could be applied to a mine that was not yet operational "because of the commodity nature of the product and detailed mining cashflow analysis previously performed."\(^796\)

645. In Mohammad Ammar Al-Bahloul v Tajikistan, the tribunal acknowledged that lost profits are compensable and the DCF method is appropriate even where an investment project, especially an oil and gas project, is not yet a going-concern.\(^797\)

646. Canada has attempted to distinguish this point in Al-Bahloul by emphasizing the speculative nature of the claimant's project in that case.\(^798\) In doing so, Canada has only highlighted the differences between the projects in Al-Bahloul and the Claimant's in

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\(^795\) Counter-Memorial, 24 July 2015, para. 578.

\(^796\) Gold Reserve Inc. v. Bolivarian Republic of Venezuela, ICSID Case No. ARB(AF)/09/1, Award (22 September 2014) at para. 830 (CLA-088).

\(^797\) Memorial, 10 April 2015, para. 376; Mohammad Ammar Al-Bahloul v. Republic of Tajikistan, SCC Case No. V064/2008, Final Award (8 June 2010) at para. 75 (CLA-048).

\(^798\) Counter-Memorial. 24 July 25, paras. 585-589.
Quebec. In the Claimant's submission, its project is exactly of the kind the tribunal in *Al-Bahloul* had in mind when it affirmed that the DCF method can be used for hydrocarbon projects that are not yet a going concern.

647. The *Al-Bahloul* tribunal discussed the factual indicia which evidence that a project has progressed beyond the stage of being speculative, and would therefore make quantifying its value possible using the DCF method. The table below outlines these indicia and compares the Claimant's project to that of the claimant in *Al-Bahloul*. The contrast shows that, far from being speculative, the Claimant's project reflects each of the indicia and should be valued using the DCF method accordingly.

<table>
<thead>
<tr>
<th><strong>Indicia</strong></th>
<th><strong>Al-Bahloul (the &quot;claimant&quot;)</strong></th>
<th><strong>The Enterprise (&quot;LP&quot;)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Existence of exploration and exploitation licences from responsible governmental authorities.</td>
<td>The Respondent Tajikistan had not issued the claimant any licences.</td>
<td>Through the farmin with Junex, LP had access to the necessary permits.</td>
</tr>
<tr>
<td>Existence of hydrocarbon resources.</td>
<td>No oil or gas had been found in the alleged licence areas.</td>
<td>LP has numerous drill results and studies, both internally and form other companies, that evidence the existence of commercially viable natural gas.</td>
</tr>
</tbody>
</table>


800 Overview of Original and River Permits (C-016); Letter from QMNR to Junex re: approval of exploration permits 2009PG490 to 2009PG492 (26 March 2009) (C-031); Letter from QMNR to Junex re: confirming receipt of application for assignment of rights to the Enterprise (21 April 2010) (C-036); Letter from QMNR to Junex re: confirming assignment of rights to the Enterprise (27 May 2010) (C-038).

801 *Mohammad Ammar Al-Bahloul v. The Republic of Tajikistan*, SCC Case No. V(064/2008), Final Award (8 June 2010), at paras. 73, 76 (CLA-048).

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</tr>
</thead>
<tbody>
<tr>
<td>Exploration and exploitation work conducted.</td>
<td>The claimant had not pursued any exploration or exploitation activity in any of the alleged licence areas.</td>
<td>LP conducted drilling and prospecting activities in the permit areas.</td>
</tr>
<tr>
<td>Adequacy of project financing.</td>
<td>The claimant did not have its own financial resources. The claimant relied on letters and emails from financial institutions to evidence that it could have secured loans. According to Tribunal, this evidence did not go beyond a &quot;mere expression of interest&quot; for financing.</td>
<td>LP has the necessary financial resources to explore, exploit, and move its project to commercial production.</td>
</tr>
<tr>
<td>Likelihood of finding commercially viable resources.</td>
<td>The claimant’s expert assigned probability of success percentages to each of the four licence areas at issue. These were, 13%, 19%, 16% and 51%. The Tribunal found that only one, the East Soupetau licence, had a reasonable likelihood of success at 51%.</td>
<td>GLJ’s Reply Report says the River Permit has an 81% chance of success.</td>
</tr>
<tr>
<td>Industry experience.</td>
<td>The claimant had no experience exploring.</td>
<td>LP has significant industry experience and expertise. It has</td>
</tr>
</tbody>
</table>

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805 *Mohammad Ammar Al-Bahloul v. The Republic of Tajikistan*, SCC Case No. V(064/2008), Final Award (8 June 2010), at paras. 79, 82, 91-93 (CLA-048).

806 D. Axani Witness Statement, paras. 53-54 (CWS-001); D. Axani Reply Witness Statement, paras. 56-63 (CSW-006).


<table>
<thead>
<tr>
<th>Indicia</th>
<th>\textit{Al-Bahloul} (the &quot;claimant&quot;)</th>
<th>The Enterprise (&quot;LP&quot;)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>exploiting, or developing commercially viable hydrocarbon resources. The claimant’s only previous joint venture was a failure. The Tribunal found no evidence the claimant ever successfully operated an oil/gas field in Tajikistan, or elsewhere.\footnote{Mohammad Ammar \textit{Al-Bahloul} v. \textit{The Republic of Tajikistan}, SCC Case No. V(064/2008), Final Award (8 June 2010) at para. 94 (CLA-048).}</td>
<td>developed and continues to develop both conventional and unconventional oil and gas plays, including by using similar techniques as proposed in Quebec.\footnote{Memorial, 10 April 2015, paras. 19, 25, and 76; D. Axani Witness Statement, paras. 7-11 (CWS-001); R. Wiggins Witness Statement, paras. 8-9 (CWS-002).}</td>
</tr>
</tbody>
</table>

648. In light of the above, it is clear that while the development of the River Permit Rights may have been in an early stage relative to the lifespan of the project, this does not follow that the FMV project cannot be assessed through the DCF methodology.

D. Deloitte’s Resource Report contains serious errors

649. Deloitte’s Resource Report contains errors in its risk evaluation and its resource evaluation methodology. As noted by GLJ, Deloitte’s Report exhibits several failures to account for facts that ought to have been factored into Deloitte’s conclusions. In particular:

(a) \textit{Contouring and Gross Rock Volume}: Deloitte based its estimate of gross rock volume on geologically improbable contouring. As GLJ noted, the contouring depicted in Deloitte’s isopach map at Figure 7 of its Report does not bear any resemblance to the depositional environment that is geologically probable for the
shale deposit in this area. GLJ describes it as more akin to what one would expect to see from a high energy depositional environment like how sand is moved by waves at a beach. By contrast, the Utica formation has a "quiet, low energy depositional environment", which makes Deloitte's contouring, with rapid changes over the course of the River Permit Area, highly unlikely. 811 Deloitte's improbable contouring resulted in a significant reduction in its gross rock volume estimates and decreasing the projected well count. 811 While a reduced well count lowers overall project costs, it also significantly reduces the estimate of total original gas-in-place ("OGIP"). 812

(b)  

Pressure Tests: Deloitte excluded, without explanation, pressure test results from wells in the immediate vicinity of the River Permit. This resulted in a low psi, which also impacted the total gas in place. 813 Deloitte explained its choice of data by stating that it used pressure tests "found in the data provided by the Government of Canada on wells", all of which were located in Corridor Two of the Quebec Utica shale fairway. 814

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811 GLJ Reply Report, paras. 13-22, see also Table 1, pgs. 5-7 (CER-004).
812 GLJ Reply Report, para. 22, see also Table 1 at pgs. 5-7 (CER-004).
813 GLJ Reply Report, paras. 23-30, see also Table 1 at pgs. 5-7 (CER-004).
814 Deloitte Resource Report, para. 51 (RER-001A).
(c) **Rock Density and OGIP:** Deloitte used an incorrect rock density to calculate adsorbed gas in place, resulting in a 42% differential between its estimates and GLJ's (all other variables being held equal). Deloitte used the density of mature organic carbon, whereas the more appropriate method, which that was used by GLJ, is to calculate an average reservoir total organic carbon. As GLJ explains, "[r]ock density used in [the] equation […] should be representative of the average total rock density, rather than the organic components alone." The difference in rock density resulted in, all else being held equal, a 42% difference in Deloitte’s calculations of adsorbed OGIP (original gas-in-place).

(d) **Operating Costs:** Deloitte used operating costs from the Dry Montney shale, a play that is more remote and at a much lower depth, and which accordingly, is not a good comparator for the River Permit Area. This resulted in significantly higher operating expenses, with a corresponding impact on the cash flow models.

(e) **Risk of Discovery:** Deloitte overstated the risk of discovery on the grounds that the reservoir rock requires hydraulic fracture stimulation. In fact, hydraulic fracturing

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815 GLJ Reply Report, para. 26 (CER-004).
816 GLJ Reply Report, para. 38, see also Table 1 at pgs. 5-7 (CER-004).
817 GLJ Reply Report, para. 37, see also Table 1 at pgs. 5-7 (CER-004).
818 GLJ Reply Report, paras. 53-64, see also Table 1 at pgs. 5-7 (CER-004).
819 GLJ Reply Report, paras. 53-64, see also Table 1 at pgs. 5-7 (CER-004).
is a well-established technique that has been used for shale basins across North America.  

650. Canada's Counter-Memorial states that Deloitte identified "several factors that may have led GLJ to overestimate the resources present." The single example that Canada gives is that GLJ takes into account a more extensive surface area; the Counter-Memorial notes that "Deloitte has taken into account the fact that certain portions of the area are not deep enough to permit the exploitation of the resource". Canada omits mentioning that GLJ has also excluded portions of the River Permit Area for this same reason. Deloitte used a minimum reservoir thickness of [REDACTED], whereas GLJ applied a minimum reservoir thickness of [REDACTED], meaning that GLJ was actually more conservative. The reason that Deloitte nonetheless ended up with a smaller surface area is because of its use of geologically improbably contouring, as discussed above.

651. The serious flaws in Deloitte's methodology undermine the ability of the Tribunal to rely on Deloitte's conclusions in assessing the Claimant's damages.

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820 GLJ Reply Report, para 81, see also Table 1 at pgs. 5-7 (CER-004). D. Axani Witness Statement, paras 38, 45(e)-(d) (CWS-006).

821 Counter-Memorial, 24 July 2015, para. 601.

822 Counter-Memorial, 24 July 2015, para. 601.
E. Deloitte's Damages Report contains errors of approach and methodology

1. FTI considers Deloitte critiques and adjusts where reasonable

FTI responded to the Deloitte Damages Report by identifying points of agreement, points that had merit and points of disagreement. FTI also identified a number of errors made by Deloitte.

As noted above, FTI's Reply Report observes that FTI and Deloitte agree broadly on the FMV standard of compensation, the use of the DCF method and income approach, the appropriate Valuation Date (12 June 2011), and certain other methodological points.  

FTI found that certain other observations made by Deloitte had merit. FTI updated its report to account for Deloitte's points to the extent it determined these critiques were reasonable, sometimes in full and other times in part. FTI's adjustments, due to both Deloitte's observations and FTI's own review, are summarized in Figure 3 of FTI's Reply Report and concerned the following:

(a) A downward adjustment in damages to better account for the early stage project risk using GLJ's realistic 81% chance of success (rather than the weighted average cost of capital ("WACC") asset specific risk premium approach used by Deloitte).  

823 Specifically, that forecasted cash flows are discounted using a WACC developed under a capital asset pricing model ("CAPM") approach; and that valuation conclusions under the primary DCF method can be assessed for reasonableness using market-based data. FTI Reply Report, para. 5.1 (CER-005).

824 FTI Reply Report, Section 6 (CER-005).
(b) Correcting the unit conversion factors used for forecasted natural gas prices;\textsuperscript{825}

(c) Including certain well abandonment costs;\textsuperscript{826}

(d) Calculating after-tax damages, albeit with appropriate consideration for tax pools;\textsuperscript{827}

(e) Assessing crown royalties on a well-by-well basis.\textsuperscript{828}

655. These factors caused both reductions and increases in damages, leading to an overall net reduction in FTI's damages calculation.

**Figure 3** Summary of Adjustments to FTI Damages Analysis (USD 000's)\textsuperscript{829}

<table>
<thead>
<tr>
<th>#</th>
<th>Nature of Adjustment</th>
<th>Original NPV per FTI Report</th>
<th>NPV after adjustment, all else being equal, rounded</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Geological risk</td>
<td>$109,800</td>
<td>88,900</td>
<td>(20,900)</td>
</tr>
<tr>
<td>2</td>
<td>Forecasts natural gas price:</td>
<td>$109,800</td>
<td>105,700</td>
<td>(4,100)</td>
</tr>
<tr>
<td></td>
<td>Unit conversion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unit conversion and inflation increases to premium and transportation adjustment</td>
<td>$109,800</td>
<td>111,400</td>
<td>1,600</td>
</tr>
<tr>
<td>3</td>
<td>Abandonment costs</td>
<td>$109,800</td>
<td>109,100</td>
<td>(700)</td>
</tr>
<tr>
<td>4</td>
<td>Statement deselected</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Income taxes</td>
<td>$109,800</td>
<td>102,400</td>
<td>(7,400)</td>
</tr>
<tr>
<td>6</td>
<td>Crown royalty</td>
<td>$109,800</td>
<td>119,400</td>
<td>9,600</td>
</tr>
</tbody>
</table>

\textsuperscript{825} FTI Reply Report, Section 7 (CER-005).

\textsuperscript{826} FTI Reply Report, para. 4.11 (CER-005).

\textsuperscript{827} FTI Reply Report, Section 9 (CER-005).

\textsuperscript{828} FTI Reply Report, paras. 4.20-4.22 (CER-005).

\textsuperscript{829} FTI Reply Report, p. 17 (CER-005).
The change to an after-tax damages calculation merits particular mention. FTI calculated damages on an after-tax basis in its Reply Report. FTI noted that Deloitte failed to mention the need to “gross-up” its overall conclusions to account for any income taxes paid on an award in order to avoid double taxation. FTI concluded that if damages are calculated on an after-tax basis, they need to be ‘grossed-up’ in order to account for any income taxes that would have to be paid on the award.

2. Problems in Deloitte’s approach and methodology

Notwithstanding FTI’s efforts to address Deloitte’s critiques where reasonable, FTI disagreed with Deloitte on a number of issues. As noted above, FTI identified a number of unsupported conclusions, errors, methodological problems, mathematical errors, and subjective assessments done by Deloitte in its Report.

One important disagreement is related to the WACC, and specifically Deloitte’s inclusion of an "asset specific premium" in its WACC. As is discussed in more detail below, after considering each of the factors that Deloitte suggests support its methodology, FTI concluded that "Deloitte’s ad hoc addition of an asset specific premium of 8.0% to 9.0% to account for unsystematic risks is unsupported, overstated and inconsistent with CAPM theory."

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FTI Reply Report, para 4.15 (CER-005).

FTI Reply Report, para 9.4 (CER-005).

FTI Reply Report, paras. 10.24 (unsupported conclusion), 10.35 (subjective and unsupported); 10.93 (methodological problems) (CER-005).

FTI Reply Report, para. 10.107 (CER-005).
659. The first FTI Report applied a pre-tax WACC of 11%, which included a 2% premium to account for the risk associated with investing in a small company or small-sized project.\textsuperscript{834} In adjusting its conclusions to provide an after-tax calculation in its Reply Report, FTI applied an after-tax WACC of 10.4%.\textsuperscript{835}

660. Deloitte applied a WACC of 18.3% to 19.9%, which included an "asset specific premium" of 8.0% to 9.0% to account for "unsystematic risk factors".\textsuperscript{836} This had a major downward effect on Deloitte's damages calculation.

661. FTI concluded that Deloitte's asset specific premium was unsupported and overstated.\textsuperscript{837}

(a) Deloitte did not provide any support for how it arrived at an asset specific risk factor of 8.0% to 9.0%, and not, for example, 4.0% to 5.0%, or 14.0% to 15.0%.

(b) Deloitte's approach is methodologically unsound as it results in double counting.

(i) Several of the allegedly "unsystematic" and "asset-specific" risks are in fact industry risks that would be faced by other oil and gas companies and are therefore already accounted for by the industry beta that FTI and Deloitte respectively applied in using the CAPM theory.\textsuperscript{838}

\textsuperscript{834} FTI Report, para. 6.41 and Schedule 3 (CER-002).

\textsuperscript{835} FTI Reply Report, para. 10.95 and Schedule 3.

\textsuperscript{836} Deloitte Damages Report, paras. 142-143 (RER-001B).

\textsuperscript{837} FTI Reply Report, para 10.69 (CER-005).

\textsuperscript{838} FTI Reply Report, para. 10.69(i) and (ii) (CER-005).
(ii) In addition, "many of the risk factors raised by Deloitte are already fully or partially factored directly into the cash flows."839

662. Interestingly, however, an asset specific risk factor of approximately 8.5% is the exact amount that would be needed to reduce Deloitte’s conclusions under its DCF analysis to Snil. Deloitte's damages calculation, given this element and its importance, cannot not be relied upon.

663. Of the nine asset-specific risk factors used by Deloitte, only two warranted an adjustment in FTI’s approach through its adjustment for geological risk by discounting the net present value by the chance of success, discussed in more detail below.

Figure 4  Deloitte's Asset-Specific Risk Factors

<table>
<thead>
<tr>
<th>Risk</th>
<th>Treatment By FTI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2P Reserves vs. Undiscovered Petroleum Initially-in-Place (&quot;UPIPP&quot;)</td>
<td>Reflected in chance of success %</td>
</tr>
<tr>
<td>Country Risk</td>
<td>Unsupported</td>
</tr>
<tr>
<td>Economic and Commercial Risk</td>
<td>Reflected in chance of success %</td>
</tr>
<tr>
<td></td>
<td>Reflected in WACC</td>
</tr>
<tr>
<td>Social, Environmental and Political Risk</td>
<td>Reflected in WACC (industry beta)</td>
</tr>
<tr>
<td></td>
<td>Methodologically unsound</td>
</tr>
<tr>
<td>Risk of Delay</td>
<td>Reflected in WACC (industry beta)</td>
</tr>
<tr>
<td></td>
<td>Facts do not support</td>
</tr>
</tbody>
</table>

839  FTI Reply Report, para. 10.69(iii) (CER-005).
<table>
<thead>
<tr>
<th>Risk</th>
<th>Treatment By FTI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk of Gentilly Nuclear Generating Station</td>
<td>Methodologically unsound</td>
</tr>
<tr>
<td>Risk of Labour Shortage</td>
<td>Minimal impact due to facts</td>
</tr>
<tr>
<td>Risk of Cost Overruns</td>
<td>Reflected in WACC (industry beta)</td>
</tr>
<tr>
<td>Risk of Cost Overruns</td>
<td>Facts do not support</td>
</tr>
<tr>
<td>Risk of Cost Overruns</td>
<td>Methodologically unsound</td>
</tr>
<tr>
<td>Risk of Cost Overruns</td>
<td>Reflected in WACC (industry beta)</td>
</tr>
<tr>
<td>Geographic Diversification Risk</td>
<td>Methodologically unsound</td>
</tr>
<tr>
<td>Geographic Diversification Risk</td>
<td>Reflected in WACC (industry beta)</td>
</tr>
<tr>
<td>Geographic Diversification Risk</td>
<td>Countervailing facts not accounted for by Deloitte</td>
</tr>
</tbody>
</table>

664. FTI determined that rather than a valuator assigning a subjective percentage to quantify these several risks, a more methodologically sound approach would be to adjust for "the risk relating to whether with additional drilling and testing the Prospective Resources identified in the GLJ Report would be found to be of sufficient quantity and quality to justify proceeding to production."\(^{860}\)

665. Furthermore, rather than adjusting the WACC, FTI determined that it is more appropriate to adjust the net present value of the River Permit Rights.

Since this is a risk that relates to the physical properties of the River Permit project and the technologies available to measure and extract the resources in our view it is preferable to calculate the NPV of the River Permit with a risk adjusted rate of return that reflects industry and wider economic risk factors, and then adjust the NPV amount directly for quantifiable technical,

\(^{860}\) FTI Reply Report, para. 6.11 (CER-005).
project-specific factors. In our view this is preferable to making an ad hoc adjustment to the discount rate as has been done in the Deloitte Report through the application of an ‘asset specific’ premium of 8.0%-9.0% in its discount rate.\textsuperscript{841}

666. As noted above, GLJ determined these "quantifiable technical, project-specific factors" to result in a chance of success of 81% based on an industry formula that is interpreted specifically to reflect unconventional deposits such as the shale rock in the River Permit Area.\textsuperscript{842}

667. Overall, Deloitte’s approach and methodology is flawed and unreasonably pessimistic. As FTI observed with respect to Deloitte’s inclusion of asset specific risk in its WACC:

Deloitte has not established that the risk factors it lists are in fact unsystematic or that they are all entirely unique to the River Permit project and does not consider that the companies included in the beta factor used in the FTI Report, as well as the beta factor used in the Deloitte Report also have its own unique company specific risk factors. These other risk factors may cause these companies to be riskier than the River Permit in certain respects (but they may also be less risky in other respects). By only focusing on issues that may make the River Permit relatively riskier than the companies included in the beta factor of its WACC calculation, Deloitte’s analysis is not balanced and this results in its DCF analysis understating the FMV of the River Permit project.\textsuperscript{843}

\textsuperscript{841} FTI Reply Report, para. 6.12 (CER-005).
\textsuperscript{842} GLJ Report, paras. 76-82 (CER-004).
\textsuperscript{843} FTI Reply Report, para. 10.15 (CER-005).
3. Canada's misplaced risk factors

668. Several of the risk factors that Deloitte includes in its asset-specific risk component of the WACC were argued by Canada as evidence that the Claimant's project is so speculative and early stage that it cannot constitute a "loss". As noted above, these risks are more appropriately considered issues for an analysis of quantum, as is confirmed by the fact that Deloitte attempts to include (and even double count, as FTI points out) these risks in its DCF analysis. However, the factual inferences and assumptions that underpin these purported risks are incorrect, and warrant reply.

a) The lack of commercial development activity

669. Canada mischaracterizes the lack of commercial development activity in the St. Lawrence Lowlands. Peter Dorrins, former CEO of Junex explained, there are several reasons for this phenomenon, which was caused by the government itself. Chief among them is the fact that Quebec, through its actions and prolonged inactions, has injected uncertainty into the market and created an environment that has a chilling effect on activity. As Mr. Dorrins describes:

\[\text{[I]n the face of the uncertainty that the government has injected into the marketplace, it is unreasonable to expect that companies will continue to expend millions of dollars to explore. Permits were revoked, the SEA on shale gas was underway, the government stopped communicating directly with industry, and until 2016, no new hydrocarbon law was announced. Regulations for this new hydrocarbon law have not yet been made public. No one wants to be the guinea pig in a climate of uncertainty; instead, companies will reallocate funds to pursue other projects. This does not mean, however, that companies are not interested in pursuing the play or that the permits have no value.}\]

\[844\] P. Dorrins Reply Witness Statement, para. 16 (CWS-008).
670. The Quebec government was aware of the chilling effect that regulatory uncertainty would have on industry's ability to spend to develop these resources.\textsuperscript{845} It is disingenuous for Canada to now suggest that any lack of activity on the part of industry is due to disinterest or a belief that the Utica shale is no longer a promising resource.

\textit{b) The need to obtain licences and authorizations}

671. The Enterprise had rights pursuant to a permit to explore. While Canada attempts to divorce the Enterprise's rights under an exploration permit from the right to enter commercial production, the fact remains that under the regulatory regime in force at the time, the grant of production lease followed the grant of a production lease directly, so long as the geological and scientific data for well tests supported it.\textsuperscript{846} In fact, as the Claimant notes in its Memorial, the Mining Act requires that if the Minister's assessment confirms that an economically workable deposit exists, the licensee must apply for a production lease within six months.\textsuperscript{847} Companies that engaged in exploration activity had very reasonable expectations that if they found a commercially viable resource, it would be theirs to produce so long as they did so in a manner that complied with the requirements set by the government.

\textsuperscript{845} Meeting with MRNF April 7 2011 in Quebec City - CFOL representatives - Virginie Lavoie, Dana Roney - MRNF representatives — Jean-Yves Laliberté, Robert Theriault, Isabelle Leclerc, Sébastien Desrochers; Meeting with MDEP April 8 2011 in Montreal - CFOL representatives - Virginie Lavoie, Dana Roney - MDEP representatives — Sylvie Laurence, Julien Paquette, Paul Benoit, Daniel Savoie (13 April 2011) (14745) (C-125).

\textsuperscript{846} P. Dorrins Reply Witness Statement, paras. 4-7 (CWS-008); Expert Report of Professor Hugo Tremblay, para. 55.1 (CER-003)

\textsuperscript{847} Memorial, 10 April 2015, para. 70; Mining Act (2011) at s. 176 (C-004).
672. Prior to the expropriation, the Enterprise and Junex received all required permits and authorizations to conduct their activities, including a certificate of authorization from the Ministry of the Environment for the Bécancour #8 well due to its proximity to wetlands and a permit to use industrial land for well sites from the Commission de Protection du Territoire Agricole du Québec.

673. Mr. Dorrins, an experienced member of the oil and gas industry in Quebec, suggested that he is "not aware of any legal limitation that the government communicated to industry that would explain why it would be difficult to obtain authorizations to conduct lawful development activity on a permit area covered by a valid exploration permit." 

674. The alleged "tightening" of the legislative and regulatory framework relied upon by Canada is itself speculative. The Quebec government began its discussions with industry in 2009, and has been indicating that it would be releasing a new law on hydrocarbons since that time. Nonetheless, permits have been issued and industry had, until 2011, continued to operate.

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848 Pursuant to the terms of the Farmout Agreement, Junex was responsible for drilling and coring the Bécancour #8 well, with costs shared by both Junex and Forest Oil. Letter Agreement between Forest Oil and Junex, dated 5 June 2006 (C-017).

849 D. Axani Witness Statement, para. 46 (CWS-006).


852 P. Dorrins Reply Witness Statement at para. 6 (CWS-008).

853 P. Dorrins Reply Witness Statement, paras. 9-12 (CWS-008).
675. The one change that Quebec made in the months prior to the passage of Bill 18 was to remove the exemption for oil and gas activities from the Ministry of Environment certificate of authorization regime, thus demonstrating that it is entirely possible to regulate oil and gas activities for environmental reasons without resorting to expropriation. 854

676. Bill 18 came into force on 13 June 2011. At the time, the SEA-SG was underway, and it was not expected that there would be further changes to the law before that concluded. The SEA on hydrocarbons was not announced until May 2014, almost 3 years later, and Quebec did not end up introducing the new Hydrocarbon Act until June 2016, a full 5 years after Bill 18.

4. The Claimant's damages should not be discounted by

677. Contrary to Canada's claims,855 the Farmout Agreement should not be deducted from the calculation of FMV.

678. Canada provides no legal authority for the proposition that this should be deducted from the calculation of the FMV. In fact, previous international decisions have come to the opposite conclusion.

679. It is well recognized in international law that contractual liabilities for which a party is liable should not be excluded from its compensable damages. This principle has been

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854 J. Dupont Witness Statement, paras. 118-119 (RWS-002); Ministère de l'Environnement, Note d'instructions 10-07, Assujettissement des travaux de complétion des puits gaziers à un certificat d'autorisation en vertu de l'article 12 de la Loi sur la qualité de l'environnement, 3 octobre 2010 (R-030); Gazette Officielle du Québec, Lois et règlements, 143e année, n°23B, 10 juin 2011 (R-033).

855 Canada argued that Jumex's GORR must be included because no notional purchaser would take this into account. According to Deloitte, factoring in Jumex's GORR decreases income from the River Permit Rights by US$22.8 million to US$27.7 million. Counter-Memorial, 24 July 2015, para.604; Deloitte Damages Report, paras. 87-88 (RER-001B).
recognized at least since the *Chorzow Factory* case, in which the Permanent Court of International Justice refused to discount damages suffered by the claimants on account of a contract that provided a third party with significant rights and benefits. The Court noted that it is a principle of international law that obligations for which an injured party is responsible should not be excluded from damages. The court outlined the principle and its effect on the damages calculation in the following seminal paragraph:

On approaching this question, it should first be observed that, in estimating the damage caused by an unlawful act, only the value of property, rights and interests which have been affected and the owner of which is the person on whose behalf compensation is claimed, or the damage done to whom is to serve as a means of gauging the reparation claimed, must be taken into account. **This principle, which is accepted in the jurisprudence of arbitral tribunals, has the effect, on the one hand, of excluding from the damage to be estimated, injury resulting for third parties from the unlawful act and, on the other hand, of not excluding from the damage the amount of debts and other obligations for which the injured party is responsible.** The damage suffered by the Oberschlesische in respect of the Chorzów undertaking is therefore equivalent to the total value—but to that total only—of the property, rights and interests of this Company in that undertaking, **without deducting liabilities.** [Emphasis added] 856

680. This principle was applied by the tribunal in *Occidental v Ecuador* in the context of hydrocarbon exploration and exploitation agreements, and specifically when determining the status of rights pursuant to a farmout agreement in the calculation of a damages award.

681. In *Occidental*, the Occidental Exploration and Production Company ("OEPC") entered into a participation agreement with the Republic of Ecuador, via the state enterprise

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856 *Case concerning the Factory at Chorzów (Germany v. Poland)*, Judgment (13 September 1928), PCIJ (Series A) No. 17, p. 31 (CLA-029).
Petroecuador, for the exploration and exploitation of hydrocarbons in a section of the Ecuadorian Amazon designated Block 15.\textsuperscript{857}

682. In order to further finance expansion and diversify its risk in Block 15, OEPC entered into a farmout agreement and joint operating agreement with the Alberta Energy Corporation ("AEC"), through its international entity AEC International.\textsuperscript{858} Under the agreements, AEC would acquire a 40\% economic interest in the participation agreement rights after contributing approximately US$180 million toward exploration and development.\textsuperscript{859} OEPC agreed to transfer legal ownership to 40\% of the participation agreement subject to receiving the required governmental approvals.

683. The tribunal identified two distinct features of the farmout agreement: first, that it purported to transfer ownership rights, and second, that with such rights came a right to share in the oil production, and therefore the revenues, of Block 15.

684. The tribunal ultimately held that the transfer of ownership was not valid under the local law, which left OEPC with 100\% of the interest in the participation agreement. However, the tribunal also determined that invalidity of the transfer of ownership did not invalidate the farmout agreement as a whole. This meant that notwithstanding the invalid transfer of ownership, the farmout agreement gave AEC a contractual right to, among other things,

\textsuperscript{857} Occidental Petroleum Corporation, et al. v. Ecuador, ICSID Case No. ARB/06/11, Award (5 October 2012) at paras. 114-115 (CLA-051).

\textsuperscript{858} Occidental Petroleum Corporation, et al. v. Ecuador, ICSID Case No. ARB/06/11, Award (5 October 2012) at paras. 127 (CLA-051).

\textsuperscript{859} Occidental Petroleum Corporation, et al. v. Ecuador, ICSID Case No. ARB/06/11, Award (5 October 2012) at paras. 128-138 (CLA-051).
share in a percentage of revenue. The tribunal framed this right to a share in the revenue generated by a hydrocarbon development project as a liability to a third party that, as a matter of international law, should not be used to discount the quantum of damages.

685. Drawing on Chorzow Factory the tribunal held, "Ecuador cannot discount OPEC's claim by reference to liability that may be owed to third parties such as AEC. This principle is clearly recognised in the Chorzow Factory dictum [...]."

686. Canada, like Ecuador before it, has mistakenly argued that the contractual royalty right held by Junex can diminish the damages owed by Canada to the Enterprise. Under international law it cannot. Junex has retained a non-ownership contractual right to revenue of the kind that Occidental recognizes does not detract from an assessment of damages.

687. In addition, there is no reason to assume that Junex would have or would have immediately switched to [REDACTED] after Project Payout was achieved. As described by GLJ,
688. For this reason, Canada's argument that 'Junex would likely choose the second scenario, which would allow it to maximize income' is overly simplistic. Deloitte's assumptions that [REDACTED] would provide Junex "with the greatest financial benefit" and would be "the most economically beneficial for Junex" do not consider that the benefits of conversion (including financial or economic benefits) depend on Junex's cash position, business plan and strategic interests at the time.

5. **Use of the market approach to corroborate FMV results**

689. Both FTI and Deloitte analyzed certain transactions to check the reasonableness of their respective fair market value conclusions using the DCF method. FTI reviewed the transactions identified as supposedly comparable by Deloitte. FTI concluded that the five transactions presented by Deloitte do not prove a reliable measure of the FMV of the River Permit because:

(a) The Enterprise had brought the River Permit to a more advanced stage than the comparators chosen by Deloitte; and

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864 GLJ Reply Report, para. 74 (CER-004).
865 Counter-Memorial, 24 July 2015, para. 604.
866 Deloitte Damages Report, para. 88 (RER-001B).
867 Deloitte Resource Report, para. 87 (CER-001A).
(b) A number of these transactions pre-dated significant exploration events and announcements of results in the Quebec Utica.867

690. Despite acknowledging these differences in its Damages Report, Deloitte did not attempt to adjust its analysis and reconcile for these differences.868 In addition, Deloitte's market approach analysis contained several technical errors that served to misstate value and limit the reliability and relevance of Deloitte's analysis.869 In one notable example, Deloitte failed to recognize that there was an amendment in the terms of one of the transactions that it chose. Deloitte omits from its analysis the fact that the purchaser agreed to pay an additional $6.25 million as consideration for the transaction after favourable results were reported from Forest Oil's tests in the Quebec Utica.870

691. Deloitte also engaged in a guideline public company analysis. In addition to its views on why share price may be an unreliable approximation of FMV, FTI identifies numerous flaws in Deloitte's application of this method, most particularly that Deloitte's analysis was both selective and incomplete.871

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867 FTI Reply Report, para 11.34 (CER-005)
868 Deloitte concludes that its market approach only supports the lower end of its DCF analysis, i.e., Snif Deloitte Damages Report, para. 154 (RER-001B).
869 FTI Reply Report, para 5.2(iv)(d) and 11.48 (CER-005).
870 “As a result of this positive development in the region announced in April of 2008, Questerre and Terrenex amended the terms of their agreement whereby Questerre agreed to pay an additional $6.25 million as consideration for this transaction. Questerre initially valued Terrenex’s Quebec assets at $3.43 million at the transaction announcement date. Therefore by agreeing to pay an additional $6.25 million as a result of the Forest Oil announcement in April of 2008, they have effectively implied that Terrenex’s Quebec assets had nearly tripled in value to $9.68 million due to the recent discoveries announced in the region.” FTI Reply Report, para. 11.46 (CER-005).
871 FTI Reply Report, para. 11.73 (CER-005).
692. Because FTI and Deloitte disagree about the comparability of transactions and companies that they each selected, FTI reviewed additional market evidence as at the Valuation Date. Considering contemporaneously prepared valuations by analysts, FTI concluded that the River Permit Rights would be valued at between $65.8 and $79.8 million, absent Canada's wrongdoing. 872 This valuation is far closer to the results of FTI's DCF analysis than it is to Deloitte's and confirms the reasonableness of FTI's conclusions in contrast to Deloitte's.

F. The Claimant's assessment of sunk costs is justified

693. FTI determined that as of the Valuation Date, the Enterprise had incurred $11.6 million of costs relating to the River Permit. 873 While the Claimant made an alternative submission for damages on this basis, FTI concluded that the "historical costs incurred" in engaging in exploration and prospecting activities related to the River Permit Area "are not reflective of FMV and an award based on costs would not serve to provide full reparations to the Claimant." 874

694. By contrast, Deloitte concluded that because the information obtained from these activities "provide information that could be used for the development of all five permits", it would be inappropriate to award these costs incurred as damage to the Claimant. 875

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872 FTI Reply Report, paras. 5.2(iv)(e), 11.19, and 11.25 (CER-002).
873 FTI Report, paragraphs 5.22 to 5.25 (CER-002).
874 FTI Reply Report, para. 5.2(v)(a) (CER-005).
875 Deloitte Damages Report, para. 106 (RER-001B).
Canada's Counter-Memorial argues that the Claimant's assessment of these "sunk costs" is exaggerated. Canada's primary argument in this respect is that "[b]ecause all of this work was performed within the area of certain Land Licences, the claimant cannot reasonably claim that they are entirely attributable to exploration in the River Licence area."\(^{876}\)

Again, Canada persists in pursuing an impossible vision of how the River Permit could be developed. At no point did Forest Oil, the Claimant, or its Enterprise, contemplate developing the resources in the River Permit Area from positions within the River.\(^{877}\) Accordingly, the only possible locations from which the Enterprise could conduct its activities to prove up the resource that it was interested in was from locations onshore.

The costs included in the $11.6 million calculated by the Claimant are only those amounts that are relevant to the River Permit. These do not include other costs spent in Quebec, or even all of the costs associated with the Enterprise's activities on the Original Permits that were contiguous to the River Permit.\(^{878}\)

Deloitte proposes that the $11.6 million spent be divided as a percentage of gross acreage. This approach cannot approximate the FMV of the River Permit Rights, for the following reasons:

(a) First, if this approach were to be used, (and without prejudice to the Claimant's position that this approach is incorrect), it is not logical to pro rate only costs that

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\(^{876}\) Counter-Memorial, 24 July 2015, para. 637.

\(^{877}\) See e.g., R. Wiggin Reply Witness Statement, paras. 15-16 (CWS-007);

\(^{878}\) FTI Report, para. 5.25 (CER-002).
are relevant to the River Permit Area across the entirety of the Bécancour/Champlain Block. Just as the costs to build the St. Grégoire well pad were not included in FTI's calculation of sunk costs because those costs were not relevant to proving up the River Permit, so too will there be parts of the Bécancour/Champlain Block that are, applying Canada's logic, too remote from the sites where these expenditures were made for the costs to be deemed relevant.

(b) Second, both GLJ and Deloitte acknowledge that there are areas of the River Permit Area that are not prospective and have been excluded from the resource estimate. The value of the River Permit Area lies in the subsurface gas, which is not a reflection of its surface acreage. Deloitte's simple allocation method of dividing the amounts spent on the River Permit Area across the gross surface acreage of the Bécancour/Champlain Block does not even purport to value the essential asset, i.e. the gas.

699. Canada's Counter-Memorial states that these amounts should be discounted to exclude costs incurred prior to the QMNR issuing the River Permit on 17 March 2009. The QMNR did not explain why it delayed over two years in granting the River Permit together with the other licences Junex applied for at the same time, but Forest Oil was successful with its first application for this area in 2006 within a matter of months. Given the discussions between Forest Oil and QMNR officials, and the fact that the QMNR had granted and all but issued a permit for the River Permit Area to Forest Oil previously, there is no reason

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879 FTI Report, para. 5.25 (CER-002).
to suggest that the company viewed the issuing of the permit as uncertain.\textsuperscript{880} Furthermore, as Professor Tremblay observes, the \textit{Mining Act} did not leave any discretion in this regard: so long as the applicant met the requirements, the legislation requires that a permit shall be issued.\textsuperscript{881}

700. Finally, Canada's suggestion that LPRC did not spend this money is wholly speculative and is contradicted by the contemporaneous documentation that is on the record.\textsuperscript{882}

G. The Tribunal should award interest

701. As a result of Canada's breaches of NAFTA Chapter Eleven, the Enterprise suffered loss. This loss crystallized on 13 June 2011, six years before this case will proceed to a hearing. If the Tribunal recognizes the Enterprise's loss as a result of Canada's breach(es) of the NAFTA and awards damages, interest should be payable on any award.

1. The NAFTA requires the payment of interest

702. NAFTA Article 1110 requires the Tribunal to award interest at a commercially reasonable rate. To the extent the Tribunal has found that Canada breached its obligations under Article 1110, the Enterprise is entitled to interest.

\textsuperscript{880} Letter Application from the Enterprise to QMNR, dated 28 July 2006 (C-018); Email from L. Levesque (QMNR) to R. Wiggin (Forest Oil) re: application for exploration permit (25 September 2006) (C-019); Email from R. Wiggin (Forest Oil) to L. Levesque (QMNR) re: application for exploration permit (26 September 2006) (C-020); R. Wiggin Witness Statement at paras. 15 and 18 (CWS-002); Covering Letter from the Enterprise to the QMNR re: payment of first year rental (13 October 2006) (C-421).

\textsuperscript{881} Expert Report of Professor Hugo Tremblay, para. 55.1 (CER-003).

703. NAFTA Article 1105 is silent on the payment of interest. But Article 1135 says that where a Tribunal makes a final award against a party, it may award (i) monetary damages and interest or (ii) monetary damages and interest in lieu of restitution of property, and (iii) costs. As the Tribunal in Metalclad found, "...NAFTA clearly contemplates the inclusion of interest in an award."[^883] In the present case, because the result of Canada's breaches was the nullification of the Enterprise's intangible property and rights under the River Permit, even if the Tribunal only finds a breach of Article 1105, the Claimant should still be entitled to interest.

2. The appropriate rate of interest

704. FTI concluded that the pre-award interest rate applied in the Deloitte Reply Report was "unsupported, stated in the wrong currency, and [did] not reflect a commercially reasonable rate." It was therefore "not appropriate to use" in the damages analysis.[^884]

705. The Claimant maintains that the appropriate rate of interest is one that reflects the standard set out in NAFTA Article 1110(4):

> If payment is made in a G7 currency, compensation shall include interest at a **commercially reasonable rate** for that currency from the date of expropriation until the date of actual payment. [Emphasis added]

706. Canada's proposal of the rate for Canadian treasury bills is not a commercially reasonable rate. It is a risk-free rate, which a business in the position of the Enterprise or the Claimant

[^883]: Metalclad Corporation v United Mexican States, ICSID Case No. ARB(AF)/97/1, Award (30 August 2000) at para. 128 (CLA-044).

[^884]: FTI Reply Report, para.13.8 (CER-002).
would not be able to access. According to the Deloitte Damages Report, this rate ranges from 0.6% to 1.0% between the Valuation Date and the date of the Deloitte Report, while the pre-tax cost of debt to the Claimant according to Deloitte was 6.0%. Moreover, as both sets of experts have rendered damages conclusions expressed in US dollars, it is inconsistent to use an interest rate denominated in Canadian currency.

707. By contrast, FTI proposes to base the pre-award interest rate on the US 6-month Treasury Bill, to which it then added a 2% premium to be consistent with the cost of debt of the Claimant according to its projections. This results in a pre-award interest rate ranging from 2.05% to 2.14% between the Valuation Date and the date of the FTI Report.

3. The Claimant is entitled to compound interest from the Valuation Date

708. The Claimant's losses are measured at the date the state's international obligations are engaged, in this case at the date of expropriation.

709. Interest is necessary to compensate for the loss of the investment during the period from expropriation to the date of the award. In fact, the vast majority of international investment tribunals have included both pre- and post-award interest.

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885 Deloitte Damages Report, para. 146 (RER-001B).
886 Deloitte Damages Report, para. 146 (RER-001B).
887 FTI Report, para. 6.68 (CER-002).
888 FTI Report, Schedule 8 (CER-002).
889 Metalkal Corporation v United Mexican States, ICSID Case No. ARB(AF)/97/1, Award (30 August 2000) at para. 128 (CLA-044).
710. To fully compensate the Claimant and provide full reparation, compound interest is required. Contrary to Canada's submission, \textsuperscript{891} simple interest would not compensate for the Claimant's loss. Instead, as the tribunal in \textit{Siemens v Argentina} noted, "compound interest is a closer measure to the actual value lost by an investor." \textsuperscript{892} Compound interest recognizes the economic reality that almost all modern financing and investment vehicles involve compound, as opposed to simple, interest. \textsuperscript{893} As Professor Gotanda has commented, "[i]f the claimant could have received compound interest merely by placing its money in a readily available and commonly used investment vehicle, it is neither logical nor equitable to award the claimant only simple interest." \textsuperscript{894}

711. Likewise, recent international investment and NAFTA tribunals have found that compound interest is more appropriate than simple interest. \textsuperscript{895} An award of interest fulfills the tribunal's responsibility to ensure the claimant receives the full present value of the compensation it should have received at the time of taking, and prevents the state from being unjustly enriched due to its delay in paying.

712. and nevertheless made a conscious decision in section 4 of Bill

\textsuperscript{891} Counter-Memorial, 24 July 2015, para.651.

\textsuperscript{892} \textit{Siemens A.G. v. Argentine Republic}, ICSID Case No. ARB/02/8, Award (6 February 2007) at para. 399 (CLA-059).


18 not to provide compensation. In such circumstances, the Claimant is entitled to an award of interest in order to fully compensate it for the wrongs committed by Canada.

VII. COSTS

713. The Claimant requests that it be awarded all of its legal fees, disbursements and costs associated with this arbitration, as well as the fees and disbursements of the Tribunal and the Administrative Authority. The Claimant requests an opportunity to make submissions on costs after the hearing or as directed by the Tribunal.

VIII. RELIEF

714. As a result of Canada's breaches of Chapter Eleven of NAFTA described above, the Enterprise has suffered significant loss and damage for which the Claimant requests the following relief pursuant to NAFTA Article 1117:

(a) A declaration that Canada has breached its obligations under Article 1110(1) and Article 1105(1) of NAFTA and is liable to the Claimant therefore;

(b) An award of compensatory damages in an amount to be proven at the hearing but which the Claimant currently estimates to be US$103,600,000 inclusive of pre-award interest;

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806 See e.g., Exploration pétrolière et gazière - Consequences d'un moratoire (27 January 2011) (1331) (8928) (C-121); Bill 18, s. 4 (C-063).

807 See NAFTA Article 1135 and UNICTRAL Arbitration Rules Rules 40-42.
(c) An award of the full costs associated with this arbitration, including professional and legal fees and disbursements, as well as the fees and disbursements of the Tribunal and the Administrative Authority;

(d) An award of pre-award (as included in compensatory damages) and post-award interest at a rate to be fixed by the Tribunal;

(e) An award of compensation equal to any tax consequences of the award, in order to maintain the award’s integrity; and

(f) An award of any such further relief that the Tribunal may deem just and appropriate.

Date: 22 May 2017

Respectfully submitted,

BENNETT JONES LLP

[Original signed]

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Counsel for Claimant, Lone Pine Resources Inc.
## IX. GLOSSARY OF DEFINED TERMS

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011 BAPE Report</td>
<td>The final BAPE report on the sustainable development of Quebec's shale gas industry, submitted to the Minister of Sustainable Development on 28 February 2011</td>
</tr>
<tr>
<td>Act</td>
<td><em>An Act to limit oil and gas activities</em>, SQ 2011, c. 13</td>
</tr>
<tr>
<td>BAPE</td>
<td>The <em>Bureau d’audiences publiques sur l’environnement</em>, an independent provincial agency that reports to the Minister of Sustainable Development. The BAPE's function is to inquire into any question relating to the quality of the environment submitted to it by the Minister</td>
</tr>
<tr>
<td>Bcf</td>
<td>Billion cubic feet</td>
</tr>
<tr>
<td>Bécancour/Champlain Block</td>
<td>The area covered by the four Original Permits on four blocks of land in the St. Lawrence Lowlands</td>
</tr>
<tr>
<td>Bill 18</td>
<td><em>Bill 18</em> was enacted as <em>An Act to limit oil and gas activities</em>, 2nd Sess, 39th Leg (2011), which entered into force on June 13, 2011</td>
</tr>
<tr>
<td>btu</td>
<td>British thermal unit</td>
</tr>
<tr>
<td>Canada</td>
<td>Government of Canada</td>
</tr>
<tr>
<td>CCAA</td>
<td><em>Companies’ Creditors Arrangement Act</em>, RSC 1985, c. C-36</td>
</tr>
<tr>
<td>Commitment Period</td>
<td>The 18-month period under the Farmout Agreement within which Forest Oil exercised its option to earn a 100% interest in the Contract Area</td>
</tr>
<tr>
<td>Contract Area</td>
<td>The Original Permit and the River Permit areas, from the surface to a depth of 743 meters. Forest Oil earned 100% of the working interest in the Contract Area</td>
</tr>
<tr>
<td>cores</td>
<td>Whole rock samples used to estimate the total natural gas capacity of shale rock</td>
</tr>
<tr>
<td>ECHR</td>
<td>The European Convention for the Protection of Human Rights and Fundamental Freedoms</td>
</tr>
<tr>
<td>ECtHR</td>
<td>The European Court of Human Rights</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td>Election Period</td>
<td>Under the Farmout Agreement, the six-month period within which Forest Oil could elect to exercise an option to earn a 100% interest in the Contract Area. The Election Period was triggered by receipt of a core analysis from Junex</td>
</tr>
<tr>
<td>Enterprise</td>
<td>Canadian Forest Oil Ltd., a company incorporated under the laws of Alberta. Originally Forest Oil's Canadian subsidiary, but transferred to Lone Pine in May 2011 and renamed Lone Pine Resources Canada Ltd.</td>
</tr>
<tr>
<td>exploration permit</td>
<td>Petroleum and natural gas exploratory licence granted for a given territory. Under Quebec's Mining Act, any person seeking to explore for oil or gas must obtain a exploration permit from the QMNR</td>
</tr>
<tr>
<td>farmout / farmin agreements</td>
<td>Common to the oil and gas industry, &quot;farmout&quot; or &quot;farmin&quot; agreements allow permit holders to transfer rights to an investing companies interested in resource exploration and development. The term used depends on the contract author: &quot;farmout&quot; agreements are drafted by the permit holder who is &quot;farming-out&quot; its rights to another. &quot;Farmin&quot; agreements are drafted by the company seeking to invest, because the investing company is &quot;farming-in&quot; to the permit rights by investing capital pursuant to the agreement</td>
</tr>
<tr>
<td>Farmout Agreement</td>
<td>5 June 2006 letter agreement between Forest Oil and Junex by which Forest Oil obtained an option to earn 100% of the working interest in the Original Permits</td>
</tr>
<tr>
<td>Forest Oil</td>
<td>Forest Oil Corporation, a company incorporated under the laws of Delaware Predecessor and former parent company of Lone Pine</td>
</tr>
<tr>
<td>FTC</td>
<td>Free Trade Commission</td>
</tr>
<tr>
<td>FTI</td>
<td>FTI Consulting Canada ULC</td>
</tr>
<tr>
<td>GLJ</td>
<td>GLJ Petroleum Consultants Ltd.</td>
</tr>
<tr>
<td>hydraulic fracturing / &quot;fracking&quot;</td>
<td>A process used to access and extract shale gas involving a combination of water, sand, and chemicals being pumped into a wellbore at sufficient pressure to widen naturally-occurring fissures in shale rock, enabling back-flow into the well for extraction</td>
</tr>
<tr>
<td>ILC Draft Articles</td>
<td>The International Law Commission's Draft Articles on the Responsibility of States for Internationally Wrongful Acts</td>
</tr>
<tr>
<td>Industrial Park</td>
<td>The Bécancour Waterfront Industrial Park, industrial-zoned land located on the banks of the St. Lawrence River in the St. Lawrence Lowlands</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td>IPO</td>
<td>Initial public offering</td>
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<tr>
<td>Junex</td>
<td>Junex Inc., a company incorporated under the laws of Quebec and a Canadian junior oil and gas company</td>
</tr>
<tr>
<td>LNG</td>
<td>Liquefied natural gas</td>
</tr>
<tr>
<td>Lone Pine</td>
<td>Lone Pine Resources Inc., a company incorporated under the laws of Delaware. Originally named Forest Oil Operating Company, but renamed Lone Pine Resources Inc. on 7 December 2010</td>
</tr>
<tr>
<td>Mcf</td>
<td>Million cubic feet</td>
</tr>
<tr>
<td>Mining Act</td>
<td><em>Mining Act</em>, RSQ c. M-13.1</td>
</tr>
<tr>
<td>Mining Registry</td>
<td>Quebec's public register of real and immovable mining rights, created under the <em>Mining Act</em></td>
</tr>
<tr>
<td>Minister of Sustainable Development</td>
<td>Quebec's Minister of Sustainable Development, Environment and the Fight Against Climate Change</td>
</tr>
<tr>
<td>NAFTA</td>
<td>North American Free Trade Agreement</td>
</tr>
<tr>
<td>Notice of Intent</td>
<td>Notice of Intent to Submit a Claim to Arbitration under Chapter 11 of the NAFTA submitted by Lone Pine on 8 November 2012</td>
</tr>
<tr>
<td>Original Permits</td>
<td>Permits 2006RS184 (formerly 1996PG950), 2009RS285 (formerly 2002PG597), 2009RS284 (formerly 2002PG596), and 2009RS286 (formerly 2004PG769), being exploration permits for areas within the Bécancour/Champlain Block</td>
</tr>
<tr>
<td>Note: Canada refers to these permits as the &quot;Land Licences&quot; throughout its Counter-Memorial.</td>
<td></td>
</tr>
<tr>
<td>PCIJ</td>
<td>The Permanent Court of International Justice</td>
</tr>
<tr>
<td>Proved developed reserves</td>
<td>Reserves that have been assessed and determined to be capable of commercial production</td>
</tr>
<tr>
<td>QMNR</td>
<td>Quebec Ministry of Natural Resources and Wildlife (as it was known on 13 June 2011)</td>
</tr>
<tr>
<td>QOGA</td>
<td>Quebec Oil and Gas Association</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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</tr>
<tr>
<td>Regulation</td>
<td><em>Regulation respecting petroleum, natural gas and underground reservoirs</em>, RSQ, c. M-13.1, r. 1. The Regulation sets minimum spending and reporting requirements that must be met to retain a valid exploration permit</td>
</tr>
<tr>
<td>Restructuring Proceedings</td>
<td>The restructuring of Lone Pine and its subsidiaries under the CCAA and Chapter 15 of the United States Bankruptcy Code, commenced in late 2013</td>
</tr>
<tr>
<td>River Permit</td>
<td>Permit P2009PG490, an exploration permit for an area within the St. Lawrence River in the St. Lawrence Lowlands. The River Permit is located in the Bécancour/Champlain Block</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> Canada refers to this permit as the &quot;River Licence&quot; throughout its Counter-Memorial.</td>
</tr>
<tr>
<td>River Permit Agreement</td>
<td>Agreement between Forest Oil and Junex pursuant to which Forest Oil withdrew its application for an exploration permit for the River Permit Area in favour of Junex applying for the River Permit</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> Canada refers to this agreement at the &quot;River Licence Agreement&quot; throughout its Counter-Memorial.</td>
</tr>
<tr>
<td>River Permit Area</td>
<td>Area within the Bécancour/Champlain Block that is the subject of the River Permit. The River Permit Area is located within the St. Lawrence River</td>
</tr>
<tr>
<td>River Permit Rights</td>
<td>100% of the working interest in the River Permit Area. Under the Farmout Agreement, Junex assigned the River Permit Rights to Forest Oil upon Forest Oil spending <strong>US$8 million</strong> on drilling and other work during the Commitment Period</td>
</tr>
<tr>
<td>scf</td>
<td>Standard cubic foot</td>
</tr>
<tr>
<td>SEA</td>
<td>Strategic Environmental Assessment</td>
</tr>
<tr>
<td>SEA-1</td>
<td>An SEA on the maritime Estuary and northwestern part of the Gulf of St. Lawrence. SEA-1 began in June 2009 and its preliminary report was published in July 2010</td>
</tr>
<tr>
<td>SEA-2</td>
<td>An SEA on the three eastern zones of the Gulf of St. Lawrence. SEA-2 began in February 2010 and was published in September 2013</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td>SEA-SG</td>
<td>An SEA on shale gas in Quebec. The SEA-SG began in May 2011 and its final report was published in February 2014</td>
</tr>
<tr>
<td>seismic survey</td>
<td>Seismic surveys in the marine environment are conducted to understand the structure and movement of the earth's crust and to detect and delineate potential commercial quantities of sub-sea oil and gas resources</td>
</tr>
<tr>
<td>shale gas</td>
<td>Natural gas produced from shale rock formations</td>
</tr>
<tr>
<td>shale rock</td>
<td>Sedimentary deposit that generally combines clay, silica, carbonate and organic material. Shale rock contains tiny pores in which natural gas or oil is deposited over time</td>
</tr>
<tr>
<td>St. Lawrence Lowlands</td>
<td>The St. Lawrence Lowlands is a region of Quebec which begins at Quebec's southern border and extends northwards. The St. Lawrence Lowlands includes a 400 kilometer section of the freshwater St. Lawrence River</td>
</tr>
<tr>
<td>St. Lawrence River</td>
<td>The St. Lawrence River begins at the outflow of the Great Lakes, near the Quebec-US border. 550 kilometers downstream from the border, the River widens significantly and becomes the maritime St. Lawrence Estuary, which opens into the northwestern part of the Gulf of St. Lawrence</td>
</tr>
<tr>
<td>unconventional resources</td>
<td>Shale gas and oil are classified as unconventional resources because shale rock does not permit gas and oil to flow through it readily, whereas &quot;conventional&quot; gas and oil gather in pools. The term &quot;unconventional&quot; refers to the underlying resource base rather than techniques of exploration or production</td>
</tr>
<tr>
<td>Utica Shale</td>
<td>The Utica Shale is a shale rock basin underlying southeastern Quebec and the northeastern United States</td>
</tr>
<tr>
<td>Vienna Convention</td>
<td>The Vienna Convention on the Law of Treaties, 27 January 1980, 1155 UNTS 331, 8 ILM 679</td>
</tr>
<tr>
<td>Wiser companies</td>
<td>Wiser Oil and Wiser Delaware, collectively</td>
</tr>
<tr>
<td>Wiser Delaware</td>
<td>Wiser Delaware LLC, a subsidiary of Lone Pine. Wiser Delaware was formed under the laws of Delaware, and dissolved and cancelled on 24 January 2014 in connection with the Restructuring Proceedings</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td>Wiser Oil</td>
<td>Wiser Oil Delaware, LLC, a subsidiary of Lone Pine. Wiser Oil was dissolved and cancelled on 24 January 2014 in connection with the Restructuring Proceedings</td>
</tr>
<tr>
<td>working interest</td>
<td>In oil and gas deals, &quot;working interest&quot; is the concept whereby each party is responsible for a share of costs and risks proportionate to its ownership</td>
</tr>
</tbody>
</table>