Appendix A: The Claimant's Alleged Incremental Expenditures

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
Alternative Subsea Protection Systems for Ice Scour Regions	Hibernia	This expenditure is related to R&D that was conducted to study alternative concepts to help protect subsea assets. ² The Claimant alleges that this expenditure is compensable because the Hibernia project already has a system that protects its subsea equipment from ice scour. ³ The documents, however, show that Phase 1 of this project is highly beneficial to the Claimant because it
		Canadian taxpayers should not be required to compensate the Claimant for the full extent of this value-added R&D. The Claimant has a long-standing commitment in the Hibernia

¹ This column includes the total amounts spent or incurred by the Hibernia project, the Terra Nova project, or both projects during the time periods at issue in this arbitration, as alleged in Appendix A to the Claimant's Memorial. The quantification of Claimant's share of such expenditures and other factors are set out in Section VII.B of Claimant's Memorial.

² **CW-3**, Sampath Statement I, \P 44.

³ **CW-3**, Sampath Statement I, ¶ 45.

⁴ **R-96**, Letter from , PRNL to Rod Hutchings, HMDC with attachments (Feb. 27, 2015), Attachment B, p. 22 (p. MICI 0004889).

⁵ **R-97**, Alternate Subsea Protection Strategies for Ice Scour Regions – Phase 1 Report (Dec. 3, 2014), pp. 7-11, 18 (pp. MICI 0005166-5170, MICI 0005177).

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		Benefits Plan to undertake and support "research to develop effective countermeasuresto minimize oil spills from ALPs and subsea components due to iceberg impact." ⁶ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Arctic Offshore and Pipeline Engineering Course	Both	This expenditure relates to the development of a professional development course aimed at engineers assigned to work on Arctic projects. The Claimant alleges that this expenditure is compensable because companies have more targeted ways of training their employees, and that the attendees could only apply the knowledge acquired from this course to new projects and not Terra Nova or Hibernia. ⁷ The documents state, however, that the incentive for this expenditure is that it will "[f]acilitate knowledge transfer from the more experienced generation of Arctic engineers to the newer generation". ⁸ Further, the documents confirm that Thus, this supports training for future projects in the Arctic, which as the Claimant has noted on several occasions, is the 'new frontier' in offshore petroleum exploration. ¹⁰ Canadian taxpayers should not be required to pay for the full extent of this value-added R&D. The Claimant has a long-standing commitment in the Terra Nova Benefits Plan to "support education and training generally in the Province, beyond simply

⁶ C-37, Hibernia Decision 86.01, p. 83 (endorsing the recommendation of the Hibernia Environmental Panel). See *ibid*, p. 95.

⁷ **CW-3**, Sampath Statement I, ¶¶ 128-129.

⁸ **R-98**, EMC R&D Screening Committee Presentation (Sep. 28, 2012), slide 8 (p. MICI 0004702).

⁹ Ibid.

¹⁰ **R-99**, PRAC, Ice Management Program SME Workshop Report (Aug. 17, 2011), p. MICI 0003215.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		using local organizations and facilities to deliver the training needs of the [Terra Nova] Development". ¹¹ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
	Hibernia	This expenditure is related to R&D that was conducted to execute a multi-phase project for the development and testing of the which allows for the inspection of offshore structures and systems to detect issues requiring remediation or repair. ¹² The Claimant argues that this expenditure is compensable because "other proven inspection methods that are not used in the [Hibernia] field, including visual inspection, are generally considered effective and satisfactory." ¹³ However, the documents state that the R&D project is being undertaken because The documents also state that the project will have "value added" because it Canadian taxpayers should not be required to pay the Claimant for the full

¹¹ **C-41**, Terra Nova Decision 97.01, p. 23.

¹² **CW-3**, Sampath Statement I, ¶¶ 49, 50.

¹³ **CW-3**, Sampath Statement I, \P 49.

¹⁴ **R-100**, EMC R&D Screening Committee Presentation (Sep. 3, 2013), slide 7 (p. MICI 0004747).

¹⁵ Ibid.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		extent of this value-added R&D. The Claimant has a long-standing commitment in the Terra Nova Benefits Plan to continue "funding basic research". ¹⁶ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Bioindicators	Both	This expenditure relates to a project aimed at developing a set of biochemical diagnostic tools and methods that can be applied as part of offshore petroleum environmental effects assessments including to oil spills. Claimant alleges that this expenditure is compensable because there is already a similar program in place at Hibernia, and this research would primarily be of interest to academic researchers. ¹⁷ The documents, however, indicate that Specifically, the documents list several benefits that the project would have to the Newfoundland offshore environment, such as:

¹⁶ **C-41**, Terra Nova Decision 97.01, p. 23.

 ¹⁷ CW-8, Dunphy Statement I, ¶¶ 19-20.
 ¹⁸ R-101, Petroleum Research Newfoundland & Labrador Presentation, Bioindicators – A Diagnostic Tool for Effects Assessment (Undated), p. MICI 0002099.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		Further, the Claimant notes that the bioindicators research Canadian taxpayers should not be required to compensate Claimant for research that would clearly be beneficial to the Claimant in managing its liabilities in the event of an oil spill, and which is in line with recommendations made by independent international agencies. The Claimant has a long-standing commitment in the Hibernia Benefits Plan to "[c]ontinue to support local research institutions and promote further research and development in Canada to solve problems unique to the Canadian offshore environment" ²¹ and a long-standing commitment in the Terra Nova Benefits Plan to continue "funding basic research". ²² The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

¹⁹ C-322, Letter from **19** C-32, L

²¹ **C-37**, Hibernia Decision 86.01, p. 25.

²² **C-41**, Terra Nova Decision 97.01, p. 23.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
CAE Helicopter Training Facility (\$7,500,000)	Hibernia	This expenditure concerns the construction and operation of a pilot training center in the St. John's area. ²³ The Claimant alleges that this expenditure is compensable because "the CAE training facility is an uneconomic venture that made sense only in the context of us having to meet the R&D spending requirement set under the Guidelines." ²⁴ The documents, however, state that it was HMDC's idea to establish a helicopter flight simulator in Newfoundland in order to "25 The documents suggest that CAE may have intended As Jamie Long, president of HMDC, stated publicly: "[T]he centre and helicopter simulator system will contribute to the continuous improvement of our offshore safety, which is really the primary objective"; ²⁷ and that "[h]aving this facility in the region will increase

²³ **CW-3**, Sampath Statement I, \P 67.

²⁴ **CW-3**, Sampath Statement I, \P 69.

²⁵ **R-109**, Hibernia Executive Committee Meeting Presentation (Jan. 16, 2013), slide 6 (p. MICI 0004821). See also, **R-110**, Letter from Mike Baker, CNLOPB to K. Sampath, HMDC (Jul. 25, 2014).

²⁶ **R-109**, Hibernia Executive Committee Meeting Presentation (Jan. 16, 2013), slide 6 (p. MICI 0004821).

²⁷ **R-111**, The Telegram News Article, "Oil Company commits \$13 million for helicopter training facility" (May 29, 2015). Available at: <u>http://www.thetelegram.com/News/Local/2015-05-</u>29/article-4163537/Oil-company-commits-\$13-million-for-helicopter-training-facility/1.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		the level of research related to helicopter operations, which we believe will contribute to improved operations and flight safety." ²⁸ The benefits to HMDC include
		In addition, HMDC has targeted the increase of goodwill in the local community for making the contribution. In fact, HMDC added to the contribution agreement that it
Canadian Access to Centrifuge Centre	Hibernia	This expenditure relates to funding that was provided to C-Core for the Canadian access program which allows Canadian academics and researchers to access a geotechnical centrifuge centre. ³¹ The Claimant alleges that it should be compensated for making this contribution to C-Core because it was not made in the "ordinary course" of business. ³² The

²⁸ **R-112**, Newfoundland & Labrador News Release, "Hibernia Project and RDC Investing in New CAE Helicopter Training and R&D Centre" (May 29, 2015). Available at: <u>http://www.releases.gov.nl.ca/releases/2015/btcrd/0529n05.aspx</u>.

²⁹ **R-113**, Letter of Agreement between CAE and HMDC for Helicopter Training in Newfoundland Project (Dec. 5, 2014), p. MICI 0002113.

³⁰ *Ibid*, p. MICI 0002103.

³¹ **CW-3**, Sampath Statement I, \P 110.

³² **CW-3**, Sampath Statement I, ¶ 109, 112.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		documents, however, state that .
		. Canadian taxpayers should not be required to pay the Claimant for this expenditure when it accrues such

³³ C-282, Letter from K. Sampath, HMDC to J. Bugden, CNLOPB attaching C-Core Geotechnical Centrifuge Support R&D Work Expenditure Application Form (Jan. 30, 2014), p. MOB0005223.

³⁴ *Ibid*, p. MOB0005233.

³⁵ *Ibid*, p. MOB0005225.

- ³⁶ *Ibid*, p. MOB0005229.
- ³⁷ *Ibid*, p. MOB0005236.
- ³⁸ *Ibid*, p. MOB0005223.
- ³⁹ *Ibid*, pp. MOB0005225, MOB0005228.

⁴⁰ **R-114**, Letter of Agreement between C-Core and HMDC for Geotechnical Centrifuge Centre (Jul. 9, 2014), p. MICI 0002116.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		benefits. The Claimant has a long-standing commitment in the Hibernia Benefits Plan to "[c]ontinue to support local research institutions and promote further research and development in Canada to solve problems unique to the Canadian offshore environment." ⁴¹ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Center for Arctic Research and Development Annual Contributions	Both	This project relates to a five-year R&D expansion to C-CORE's activities. The Claimant alleges that this expenditure is compensable because "it is not necessarily applicable to the specific needs of Hibernia or Terra Nova." ⁴² However, the documents state that The documents distinguish the Center for Arctic Resource Development ("CARD") from C-CORE, noting that C-CORE is , whereas CARD will be "well-positioned to generate long-term, mutually beneficial incentives with the local community." ⁴⁴ Further, in 2003, the Atlantic Energy Roundtable recommended the formation of a strategic petroleum-related R&D plan for Atlantic Canada. ⁴⁵ Canadian taxpayers should not be required to compensate

⁴¹ C-37, Hibernia Decision 86.01, p. 25.

⁴⁵ *Ibid*, p. MOB0005332.

⁴² **CW-3**, Sampath Statement I, ¶ 118.

⁴³ R-115, HMDC Appendix C: Proposed Hibernia E&T/R&D Capacity Projects, Hibernia Executive Committee Meeting (Mar. 24, 2010), slide 3 (p. MICI 0004788).

⁴⁴ C-286, Letter from , HMDC to J. Bugden, CNLOPB attaching Hibernia Centre for Arctic Resources Development R&D Work Expenditure Application Form (Aug. 2, 2010), p. MOB0005339.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		the Claimant for an expenditure that will be highly relevant and useful for the Claimant in its future exploration activities. The Claimant has a long-standing commitment in the Hibernia Benefits Plan to "[c]ontinue to support local research institutions and promote further research and development in Canada to solve problems unique to the Canadian offshore environment" ⁴⁶ and a long-standing commitment in the Terra Nova Benefits Plan to continue "funding basic research". ⁴⁷ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
CARD subject matter expert report	Hibernia	The Claimant alleges that it should be compensated for providing subject matter expertise to the Centre for Arctic Resource Development ("CARD") in Newfoundland because they would not have made the contribution in the absence of the 2004 Guidelines. ⁴⁸ The documents, however, show that the expenditure is for It is thus not the Claimant that incurs the expense, but the who then passes on the expense to HMDC. This is consistent with the Claimant's acknowledgement that CARD is, among other things, "a critical mass of

⁴⁹ **R-116**, Emails between

, ExxonMobil Canada and Multiple Recipients (Apr. 23-30, 2013), p. 1 (p. MICI 0002119).

⁴⁶ **C-37**, Hibernia Decision 86.01, p. 25.

⁴⁷ **C-41**, Terra Nova Decision 97.01, p. 23.

⁴⁸ **CW-3**, Sampath Statement I, \P 122.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		world-class experts in artic engineering" that "conduct[s] applied R&D to improve economics of oil and gas development in high latitudes and other ice/iceberg prone regions." ⁵⁰ Canadian taxpayers should not be required to pay for expenses incurred by the Second Second . In any event, the Claimant has a long-standing commitment in the Hibernia Benefits Plan to "[c]ontinue to support local research institutions and promote further research and development in Canada to solve problems unique to the Canadian offshore environment" ⁵¹ and a long-standing commitment in the Terra Nova Benefits Plan to continue "funding basic research". ⁵² The Claimant has failed to prove with reasonable certainty that the full extent of this expenditure is compensable.
Choices for Youth - Train for Trades Program (\$2,100,000)	Hibernia	The Claimant alleges that this expenditure is compensable because it is a "community contribution" that was only undertaken as a result of the 2004 Guidelines. ⁵³

⁵⁰ **R-115**, HMDC Appendix C: Proposed Hibernia E&T/R&D Capacity Projects, Hibernia Executive Committee Meeting (Mar. 24, 2010), slide 3 (p. MICI 0004788).

⁵¹ **C-37**, Hibernia Decision 86.01, p. 25.

⁵² **C-41**, Terra Nova Decision 97.01, p. 23.

⁵⁴ **R-117**, EMC R&D Screening Committee Presentation (May 3, 2012), slide 11 (p. MICI 0004687).

⁵⁵ **R-118**, Letter from **1**, HMDC to Jeff Bugden, CNLOPB attaching Choices for Youth – Train for Trades – Transition to Self-Sustaining Program R&D/E&T Work Expenditure Application Form (Nov. 6, 2012), p. MICI 0002124.

⁵³ **CW-3**, Sampath Statement I, \P 149.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		the contribution. Canadian taxpayers should not be required to compensate the Claimant for contributing to the local community and taking credit for it. The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Cold Climate Oil Spill Response Research Facility	Both	This expenditure relates to a joint-industry project for an Arctic and Cold Climate Oil Spill Response Research Facility. The Claimant alleges that this expenditure is compensable because it would have largely duplicated the existing oil-spill response facility in New Jersey. ⁵⁷ The project description, however, notes that it would create . The documents further state that . Canadian taxpayers should not be required to compensate the Claimant for an innovative research facility which is, by the Claimant's own admission, highly relevant to . ⁶⁰ The Claimant has a long-standing commitment in the

⁵⁶ **R-119**, Letter of Agreement between Choices for Youth and HMDC for Train for Trades Program (Nov. 29, 2012), p. MICI 0002127.

⁵⁷ **CW-3**, Sampath Statement I, \P 76.

⁵⁸ **R-120**, Presentation: Arctic and Cold Climate Oil Spill Research Facility (Undated), p. MICI 0002143.

⁵⁹ **C-262**, Letter from **Constant of**, HMDC to J. Bugden, CNLOPB attaching Arctic and Cold Climate Oil Spill Response Research Facility R&D Work Expenditure Application Form (Nov. 19, 2010), p. A-1 (p. MOB0005010).

⁶⁰ Ibid.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		Hibernia Benefits Plan to "[c]ontinue to support local research institutions and promote further research and development in Canada to solve problems unique to the Canadian offshore environment" ⁶¹ and to undertake and support "research to develop effective countermeasuresto minimize oil spills from ALPs and subsea components due to iceberg impact", ⁶² and a long-standing commitment in the Terra Nova Benefits Plan to continue "funding basic research". ⁶³ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Development of Ice Ridge Keel Strengths Enhancement Project (\$586,000)	Hibernia	This expenditure is related to R&D that was conducted to investigate the risks to subsea infrastructure associated with gouging by ice ridge keels. ⁶⁴ The Claimant alleges that this expenditure is compensable because "[n]either the core DIRKS project not the enhancement component has any immediate application to Hibernia. ⁶⁵ The documents, however, state that the incentive of the project is to develo

⁶¹ C-37, Hibernia Decision 86.01, p. 25.
⁶² C-37, Hibernia Decision 86.01, p. 83 (endorsing the recommendation of the Hibernia Environmental Panel). See *ibid*, p. 95.

⁶³ C-41, Terra Nova Decision 97.01, p. 23.

⁶⁴ **CW-3**, Sampath Statement I, \P 130.

⁶⁵ **CW-3**, Sampath Statement I, ¶ 131.

⁶⁶ **R-121**, EMC R&D Screening Committee Presentation (Nov. 16, 2012), slide 10 (p. MICI 0004719).

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		with the seabed and this project is designed to help reduce damage as a result of "gouging" from keels. ⁶⁷ The research will thus be valuable to the Claimant at its other projects, especially in the offshore area. Canadian taxpayers should not be required to compensate the Claimant for funding research that will allow it to improve its offshore operations. The Claimant has a long-standing commitment in the Hibernia Benefits Plan to undertake and support "research to develop effective countermeasures…to minimize oil spills from ALPs and subsea components due to iceberg impact." ⁶⁸ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Drift and Divergence of Ice Floes Project (\$763,518)	Hibernia	This expenditure relates to the collection of data in the Labrador Marginal Ice Zone regarding ice floe dynamics to be used to study ice field convergences affecting pack ice pressures. ⁶⁹ The Claimant alleges that this expenditure is compensable because "[b]asic studies on ice floes are not the kind of research that are needed to support Hibernia project operations." ⁷⁰ The Claimant's documents state, however, that The documents also state that the data collected

⁶⁷ CW-3, Sampath Statement I, ¶ 130.
⁶⁸ C-37, Hibernia Decision 86.01, p. 83 (endorsing the recommendation of the Hibernia Environmental Panel). See *ibid*, p. 95.

⁶⁹ **CW-3**, Sampath Statement I, \P 125.

⁷⁰ **CW-3**, Sampath Statement I, \P 126.

⁷¹ C-291, Letter from K. Sampath, HMDC to C. Dyer, CNLOPB attaching Drift and Divergence of Ice Floes R&D Work Expenditure Application Form (Oct. 30, 2014), p. MOB0005427.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		are ideal They even state that 'Canadian Canadian taxpayers should not be required to compensate the Claimant for its own R&D, which is of direct value to the Claimant or other entities within ExxonMobil. The Claimant has a long-standing commitment in the Hibernia Benefits Plan for "research and development to improve the ability to detect and manage ice under adverse weather conditions [to] be undertaken". ⁷⁴ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Dual Polarized Radar	Both	This expenditure relates to a project intended to build and test an advanced "dual polarized" radar system to distinguish between The Claimant alleges that this expenditure is compensable because operators would generally seek an off-the-shelf solution if upgrades were needed rather than join with their competitors, and there was no need for the program at Hibernia or Terra Nova. ⁷⁵ However, documents show that enhancements are necessary for In fact,

⁷² Ibid.

⁷³ *Ibid*, p. MOB0005425.

⁷⁴ **C-37**, Hibernia Decision 86.01, p. 82.

⁷⁵ **CW-3**, Sampath Statement I, \P 27.

⁷⁶ **R-122**, C-CORE, Strategy and Vision for Ice Management Program, Draft Report (Sep. 2010), p. MICI 0002763.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		Further, documents state that ⁷⁸ and lists
		Canadian taxpayers should not be required to compensate the Claimant for the acquisition of such knowledge that it can apply to its future arctic offshore operations, which by its own admission, is ⁸⁰ If this R&D would have been conducted in Houston, at most only any increased cost of undertaking this expenditure in Newfoundland can be claimed. The Claimant has a long-standing commitment in the Hibernia Benefits Plan for "research and development to improve the ability to detect and manage ice under adverse weather conditions [to] be undertaken", ⁸¹ and a long-standing commitment in the Terra Nova Benefits Plan to undertake "a continuous program of observation and research that leads to the improvement of radar and other remote sensing devices that will make possible the early detection of low-lying masses of floating ice." ⁸² The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

⁷⁷ C-229, PRNL, Contribution Agreement for "Dual Polarized Ice Detection and Navigation Radar Research and Development (Mar. 1, 2012), p. MOB0004444.

⁸¹ **C-37**, Hibernia Decision 86.01, p. 82.

⁸² **C-41**, Terra Nova Decision 97.01, p. 47.

⁷⁸ **R-122**, C-CORE, Strategy and Vision for Ice Management Program, Draft Report (Sep. 2010), p. MICI 0002722.

⁷⁹ **R-122**, C-CORE, Strategy and Vision for Ice Management Program, Draft Report (Sep. 2010), p. MICI 0002723.

⁸⁰ **R-99**, PRAC, Ice Management Program SME Workshop Report (Aug. 17, 2011), p. MICI 0003215.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
Dynamic Monitoring of Shallow-Water Wells	Hibernia	This expenditure relates to research in support of drilling shallow water wells. The Claimant alleges this expenditure is compensable because it "is not needed by the Hibernia project for maintaining safe operations." ⁸³ The documents, however, confirm that and that the research is important to ExxonMobil's worldwide operations. The Claimant's witness admits that . ⁸⁵ ExxonMobil values this research because . Documents confirm this research is necessary because Further, the research also . ⁸⁸ Canadian

⁸³ CW-3, Sampath Statement I, ¶ 78. See also, R-123, Letter from Mike Baker, CNLOPB to K. Sampath, HMDC (Nov. 5, 2014).

⁸⁶ Ibid.

⁸⁷ Ibid.

⁸⁸ *Ibid*, p. MICI 0002196.

⁸⁴ **CW-3**, Sampath Statement I, \P 77-78.

⁸⁵ **R-124**, Letter from K. Sampath, HMDC to Colin Dyer, CNLOPB attaching Dynamic Monitoring of Shallow Water Wells Project R&D/E&T Work Expenditure Application Form (Oct. 14, 2014), p. MICI 0002197.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		taxpayers should not be required to compensate the Claimant for its value-added R&D. The Claimant has a long-standing commitment in the Hibernia Benefits Plan to "[c]ontinue to support local research institutions and promote further research and development in Canada to solve problems unique to the Canadian offshore environment." ⁸⁹ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Dynamic Positioning in Ice	Both	This expenditure relates to a project aimed at improving the safety and efficiency of oil and gas operations in ice environments through the enhancement of dynamic positioning system technologies for ship operations. The Claimant alleges that this expenditure is compensable because there was no need for the program at Hibernia or Terra Nova. ⁹⁰ However, the documents state that this research is relevant to There has been a

 ⁸⁹ C-37, Hibernia Decision 86.01, p. 25.
 ⁹⁰ CW-3, Sampath Statement I, ¶ 39.

⁹¹ **R-122**, C-CORE, Strategy and Vision for Ice Management Program, Draft Report (Sep. 2010), p. MICI 0002780.

⁹² *Ibid*, p. MICI 0002782.

⁹³ *Ibid*, C-CORE, Strategy and Vision for Ice Management Program, Draft Report (Sep. 2010), p. MICI 0002723.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		⁹⁴ Project drivers for this research are
		⁹⁵ Specifically, it will develop Canadian taxpayers should not be required to pay the Claimant for its value-added research toward future operations. The Claimant has a long-standing commitment in the Hibernia Benefits Plan to undertake "research and development to improve the ability to detect and manage ice under adverse weather conditions", ⁹⁷ and a long-standing commitment in the Terra Nova Benefits Plan to undertake "a continuous program of observation and research that leads to the improvement of radar and other remote sensing devices that will make possible the early detection of low-lying masses of floating ice." ⁹⁸ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
	Hibernia	This expenditure relates to a study evaluating the prospects of using and to to train offshore workers in emergency response. The Claimant alleges that this expenditure is compensable because HMDC would not ordinarily fund research into training alternatives but

⁹⁴ Ibid.

 ⁹⁵ R-125, Letter from , HMDC to Jeff Bugden, CNLOPB attaching Ice Management Program R&D Work Expenditure Application Form (Dec. 15, 2010), p. MICI 0003012.
 ⁹⁶ Ibid.

⁹⁷ **C-37**, Hibernia Decision 86.01, p. 82.

⁹⁸ **C-41**, Terra Nova Decision 97.01, p. 47.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		rather the provider of training services would be expected to perform such research on its own account. ⁹⁹ The documents, however, show that it was necessary for HMDC to determine whether . The Claimant has thus failed to prove with reasonable certainty that this expenditure is compensable.
Enhanced Field School Program (\$420,000)	Hibernia	This expenditure relates to a contribution to Memorial University's Department of Earth Sciences in support of field training of students. The Claimant alleges that this expenditure is compensable because HMDC would not have made this community contribution in the absence of the Guidelines. ¹⁰¹ The documents, however, show that this expenditure was motivated by the fact that it would for the fact that it would for Hibernia employees to participate in the field school trips with Memorial students. ¹⁰³ HMDC valued receipt of positive recognition for this contribution and Interval. HMDC then

⁹⁹ **CW-7**, Durdle Statement I, ¶ 37.

¹⁰⁰ **R-96**, Letter from , PRNL to Rod Hutchings, HMDC with attachments (Feb. 27, 2015), Attachment B, p. 23 (p. MICI 0004890).

¹⁰¹ **CW-3**, Sampath Statement I, $\P 81$.

¹⁰² **R-117**, EMC R&D Screening Committee Presentation (May 3, 2012), slide 13 (p. MICI 0004689).

¹⁰³ **R-126**, Hibernia News Release, "Hibernia enhancing geosciences field school program at Memorial University" (May 16, 2013). Available at: <u>http://www.hibernia.ca/news/geosciences_hibernia.pdf</u>.

¹⁰⁴ **R-127**, Letter of Agreement between HMDC and Memorial University of Newfoundland for The Hibernia Project Geosciences Field School Support Fund (Oct. 9, 2012), p. MICI 0002264.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		went further and released a press release and received press coverage and public gratitude from the University President for this expenditure. ¹⁰⁵ Canadian taxpayers should not be required to compensate the Claimant for contributing to the local community and taking credit for it. The Claimant has failed to prove with reasonable certainty that the full extent of this expenditure is compensable.
Enhanced Iceberg and Sea Ice Shift Forecasting	Both	This expenditure relates to a joint-industry project to determine if enhancements in existing iceberg and sea ice forecasting models can have a real impact on operational decision-making and resource-planning. The Claimant alleges that this expenditure is compensable because if such forecasting models were needed, the operators would have gotten them long before and there was no need for the program at Hibernia or Terra Nova. ¹⁰⁶ The documents, however, state that "[f]orecasting iceberg and sea ice movements is critical input in any ice management system", and

¹⁰⁵ **R-126**, Hibernia News Release, "Hibernia enhancing geosciences field school program at Memorial University" (May 16, 2013). Available at: <u>http://www.hibernia.ca/news/geosciences_hibernia.pdf</u>; **R-128**, Gazette News Article, "Hibernia enhancing geosciences field school program" (Jun. 5, 2013). Available at: https://www.mun.ca/gazette/issues/vol4515 Gazette June5-online.pdf.

¹⁰⁶ **CW-3**, Sampath Statement I, ¶ 33.

¹⁰⁷ C-233, PRNL, Contribution Agreement for "Enhanced Iceberg and Sea Ice Drift Forecasting" (Mar. 2, 2012), p. B-1 (p. MOB0004508).

¹⁰⁸ **R-122**, C-CORE, Strategy and Vision for Ice Management Program, Draft Report (Sep. 2010), p. MICI 0002766.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		drivers for this research include Specifically, it will To Canadian taxpayers should not be required to pay the Claimant for research which, by its own admission, is essential for it to make informed and well-based decisions in its operations. The Claimant has a long-standing commitment in the Hibernia Benefits Plan for "research and development to improve the ability to detect and manage ice under adverse weather conditions [to] be undertaken" and for "research and development into ice detection sensors, iceberg towing and ice forecasting [continuing] to be supported", ¹¹¹ and a long-standing commitment in the Terra Nova Benefits Plan to continue "funding basic research" and undertake "a continuous program of observation and research that leads to the improvement of radar and other remote sensing devices that will make possible the early detection of even low-lying masses of floating ice." ¹¹² The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Enhanced Satellite Radar	Both	This expenditure relates to a multi-year research program to enhance the use of satellite radar for sea ice and iceberg monitoring and integrate satellite-derived data into existing operations.

¹⁰⁹ **R-125**, Letter from **109 R-125**, Letter from **109 R-126**, HMDC to Jeff Bugden, CNLOPB attaching Ice Management Program R&D Work Expenditure Application Form (Dec. 15, 2010), p. MICI 0003012. ¹¹⁰ **R-129**, Presentation, Development of Improved Ice Management Capabilities for Operations in Ice Environments (Dec. 15, 2010), p. MICI 0003133.

¹¹¹ **C-37**, Hibernia Decision 86.01, p. 82.

¹¹² **C-41**, Terra Nova Decision 97.01, pp. 23, 47.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		The Claimant alleges that this expenditure is compensable because the platforms and vessels
		that serve the projects are already equipped with iceberg/sea ice detection technologies. ¹¹³
		The documents, however, state that
		; and lists
		. Further, there is a gap in existing technology as
		The research is necessary for
		relevant to
		. Canadian taxpayers should not be required to
		compensate the Claimant for the acquisition of knowledge that Claimant can apply to its
		future arctic offshore operations, which by its own admission is
		. ¹¹⁹ The Claimant has a long-standing commitment in the Hibernia

¹¹³ **CW-3**, Sampath Statement I, \P 33.

¹¹⁴ **R-122**, C-CORE, Strategy and Vision for Ice Management Program, Draft Report (Sep. 2010), p. MICI 0002723.

¹¹⁵ Ibid.

¹¹⁶ **R-96**, Letter from **PRNL** to Rod Hutchings, HMDC with attachments (Feb. 27, 2015), p. MICI 0004870.

¹¹⁷ **R-122**, C-CORE, Strategy and Vision for Ice Management Program, Draft Report (Sep. 2010), p. MICI 0002763.

¹¹⁸ **R-129**, Presentation, Development of Improved Ice Management Capabilities for Operations in Ice Environments (Dec. 15, 2010), p. MICI 0003131.

¹¹⁹ **R-99**, PRAC, Ice Management Program SME Workshop Report (Aug. 17, 2011), p. MICI 0003215.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		Benefits Plan for "research and development to improve the ability to detect and manage ice under adverse weather conditions [to] be undertaken", ¹²⁰ and a long-standing commitment in the Terra Nova Benefits Plan to continue "funding basic research" and undertake "a continuous program of observation and research that leads to the improvement of radar and other remote sensing devices that will make possible the early detection of even low-lying masses of floating ice.". ¹²¹ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Enhancing the Operability of Offshore Personnel Transfer	Both	This expenditure relates to a multi-phase project intended to improve the performance, efficiency, and safety of personnel transfer processes between marine transport systems and offshore structures. The Claimant alleges that this expenditure is compensable because there already existed satisfactory means of transferring personnel to the platforms. ¹²² The documents, however, state that the

¹²⁰ **C-37**, Hibernia Decision 86.01, p. 82.

¹²¹ **C-41**, Terra Nova Decision 97.01, pp. 23, 47.

¹²² **CW-7**, Durdle Statement I, \P 19.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		. Canadian taxpayers should not be required to pay the Claimant for an operation that clearly enhances the existing transfer system, particularly in light of The Claimant has a long-standing commitment in the Hibernia Benefits Plan to "[c]ontinue to support local research institutions and promote further research and development in Canada to solve problems unique to the Canadian offshore environment", ¹²⁴ and a long-standing commitment in the Terra Nova Benefits Plan to continue "funding basic research". ¹²⁵ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Environmental Genomics	Hibernia	This expenditure relates to the development of a center for environmental genomics that will be a hub for environmental assessment studies. The Claimant alleges this expenditure is compensable because Hibernia already uses conventional techniques to assess marine life and would not have spent funds to set up a centre to research genomics-based methods to do so. ¹²⁶ The documents, however, show that and that the research is important to ExxonMobil's worldwide operations. In fact, prior to the expenditure application to the Board,

¹²³ **R-130**, Presentation: Offshore Marine Transportation and Transfer Optimization (Undated), p. MICI 0002271.

¹²⁴ **C-37**, Hibernia Decision 86.01, p. 25.

¹²⁵ **C-41**, Terra Nova Decision 97.01, p. 23.

¹²⁶ **CW-3**, Sampath Statement I, \P 80.

¹²⁷ C-265, Letter from K. Sampath, HMDC to C. Dyer, CNLOPB attaching Centre for Environmental Genomics – Phase 1 R&D Work Expenditure Application Form (May 14, 2014), p. 3 (p. MOB0005033).

Expenditure	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
Description & Gross Expenditures ¹		
Expenditures		
		and this project is described by ExxonMobil as area of
		¹²⁸ The establishment of the center was to
		The project deliverable confirms that data was to be generated for
		It is also It is also
		Documents also
		confirm that the "Project Driver" was an
		¹³³ and that the
		Canadian taxpayers should not be required to pay the

¹²⁸ **R-131**, Presentation, Newfoundland and Labrador R&D, Offshore & Environment Function Environmental Technology Section: Opportunities and Initial Impressions (Feb. 7, 2014), p. 2 (p. MICI 0004755).

¹³⁰ *Ibid*, p. 2 (p. MOB0005032).

¹³¹ **R-132**, ExxonMobil Presentation, Center for Environmental Genomics – Detailed Proposal (Undated), slide 7.

¹³² *Ibid*, slide 3.

¹³³ **R-131**, Presentation, Newfoundland and Labrador R&D, Offshore & Environment Function Environmental Technology Section: Opportunities and Initial Impressions (Feb. 7, 2014), slide 5 (p. MICI 0004758).

¹³⁴ **R-133**, Description of Project – A center for environmental genomics (Undated), p. 1 (p. MICI 0005183).

¹²⁹ **C-0265**, Letter from K. Sampath, HMDC to C. Dyer, CNLOPB attaching Centre for Environmental Genomics – Phase 1 R&D Work Expenditure Application Form (May 14, 2014), pp. 1-2 (p. MOB0005031-5032).

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		Clamant for this value-added R&D. The Claimant has a long-standing commitment in the Hibernia Benefits Plan to "[c]ontinue to support local research institutions and promote further research and development in Canada to solve problems unique to the Canadian offshore environment." ¹³⁵ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Environmental Impact of Seismic Activity on Shrimp Behavior	Both	This expenditure relates to a study intended to determine whether seismic noise can scare shrimp, if so at what distance, and how long it takes to return to the pre-exposure condition. The Claimant alleges that this expenditure is compensable because the project owners have nothing to gain from it and that the study was not required by any regulator, and the shrimping activities occur more than 100 miles away from Hibernia and Terra Nova. ¹³⁶ The documents, however, note that the study was not required to compensate the Claimant for research intended to generate data and and mitigate its corporate liabilities. The Claimant has a long-standing commitment in the Hibernia Benefits Plan to

¹³⁵ **C-37**, Hibernia Decision 86.01, p. 25.

¹³⁶ **CW-8**, Dunphy Statement I, \P 16.

¹³⁷ **C-319**, PRNL Presentation "Seismic Effects on Shrimp and Cod" (Undated), p. MOB0005727.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		"[c]ontinue to support local research institutions and promote further research and development in Canada to solve problems unique to the Canadian offshore environment", ¹³⁸ and a long-standing commitment in the Terra Nova Benefits Plan to continue "funding basic research". ¹³⁹ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Escape-Evacuation- Rescue in Ice JIP	Both	This expenditure relates to a multi-phase project aimed at developing a commercially available, next-generation Escape-Evacuation-Rescue (EER) system for ice-covered regions. The Claimant alleges that this expenditure is compensable because it was "unnecessary to operations at Hibernia." ¹⁴⁰ The documents, however, state that this study would develop an EER system

¹³⁸ **C-37**, Hibernia Decision 86.01, p. 25.

¹⁴¹ C-209,

¹⁴² **R-134**, Letter from

, Next Generation EER System for Ice Covered Regions (Jun. 17, 2009), p. 2 (p. MOB0003575).

, PRNL to Rod Hutchings, HMDC with attachments (Mar. 4, 2013), p. MICI 0004833.

¹³⁹ **C-41**, Terra Nova Decision 97.01, p. 23.

¹⁴⁰ **CW-7**, Durdle Statement I, ¶ 20.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		to improve the ability to detect and manage ice under adverse weather conditions be undertaken", ¹⁴³ and a long-standing commitment in the Terra Nova Benefits Plan to continue "funding basic research". ¹⁴⁴ The Claimant has failed to prove with reasonable certainty that it should be compensated for the full extent of this expenditure.
ESTEEM Girls (\$100,000)	Hibernia	The Claimant alleges that this expenditure is compensable because HMDC would not have made this "community contribution" in the absence of the Guidelines. ¹⁴⁵ The documents, however, show that HMDC valued receipt of positive recognition for this contribution and and that "HMDC is proud to be associated with ESTEEM Women". Canadian taxpayers should not be required to compensate the Claimant for contributing to the local community and taking credit for it. The Claimant has failed to prove with reasonable certainty that it should be compensated for the full extent of this expenditure.
Fortune Head Interpretation Centre	Hibernia	The Claimant alleges that this expenditure is compensable because HMDC would not have made this "community contribution" in the absence of the Guidelines. ¹⁴⁸ The documents,

¹⁴³ **C-37**, Hibernia Decision 86.01, p. 82.

 ¹⁴⁴ C-41, Terra Nova Decision 97.01, p. 23.
 ¹⁴⁵ CW-3, Sampath Statement I, ¶ 133.

¹⁴⁶ **R-135**, Letter of Agreement between HMDC and ESTEEM Women for ESTEEM GO SETT Program (Feb. 28, 2014), p. MICI 0002584.

¹⁴⁷ Ibid.

¹⁴⁸ **CW-3**, Sampath Statement I, ¶ 133.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
Improvements (\$852,000)		however, show that HMDC valued receipt of positive recognition for this contribution . ¹⁵ Further, Fortune Head states: HMDC then went further and released a press release and received press coverage and public gratitude from the Centre for this
		expenditure. ¹⁵² Canadian taxpayers should not be required to compensate the Claimant for

¹⁴⁹ **R-136**, Letter of Agreement between HMDC and Fortune Head ECO Friends Inc. for Improvements to the Fortune Head Interpretation Centre and Ecological Reserve (Nov. 6, 2013), p. MICI 0002588.

¹⁵⁰ *Ibid*, p. MICI 0002589.

¹⁵¹ C-309, Letter from K. Sampath, HMDC, to J. Bugden, CNLOPB, attaching Fortune Head Interpretation Centre and Ecological Reserve Support (Sep. 26, 2013), p. MOB0005651.

¹⁵² **R-137**, Hibernia News Release, "Hibernia funding supports upgrades to Fortune Head Interpretation Centre" (Jun. 9, 2014). Available at:

http://www.hibernia.ca/news/2014/FortuneHead.pdf; R-138, Fortune Head Geology Centre website excerpt, "About" (Undated). Available at: http://www.fortunehead.com/#!about/cee5; R-139, The Telegram News Article, "Community Heroes: \$800K from Hibernia supports Fortune Head Interpretation Centre" (Jun. 9, 2014). Available at:

http://www.thetelegram.com/Community/2014-06-09/article-3755753/Community-Heroes%3A-\$800K-from-Hibernia-supports-Fortune-Head-Interpretation-Centre/1; R-140, The Southern

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		contributing to the local community and taking credit for it. The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Gas Utilization Study (WAG Pilot)	Hibernia	The Gas Utilization Study (WAG Pilot) aims at investigating alternative uses of gas to enhance oil recovery at the Hibernia field. If successful, the Claimant estimates that the project will recover barrels of oil. ¹⁵³ . The Claimant seeks approximately in compensation from Canada for its expenses relating to this expenditure between 2012-2015. It is the largest R&D expenditure for which the Claimant seeks compensation in this arbitration. In support of its claim, the Claimant filed only two exhibits with its Memorial, both from the year 2010, ¹⁵⁵ which is prior to the 2012-2015 period over which the Claimant seeks damages. On March 29, 2016, Canada requested documents from the Claimant concerning this expenditure pursuant to the document production process. On April 12, 2016, the Claimant refused to produce any documents concerning its claim. On May 18, 2016, the Tribunal issued Procedural Order #4 and denied Canada's request for documents concerning this

Gazette website excerpt, "Community Heroes" (Undated). Available at: <u>http://www.southerngazette.ca/Community/Community/Heroes-1033/content/1</u>; **R-141**, Cape Breton Post website excerpt, "Community Heroes" (Undated). Available at: <u>http://www.capebretonpost.com/Community/Heroes-1033/content/1</u>.

¹⁵³ C-330, Hibernia R&D Project Abstract: Hibernia Gas Utilization R&D Study (Oct. 2010), p. 2 (p. MOB0006005).

¹⁵⁴ **R-91**, John J. Lawrence et al, Optimization of Gas Utilization to Improve Recovery at Hibernia (SPE 165240) (July 2, 2013), p. MICI 0002617.

¹⁵⁵ **C-162**, HMDC, Hibernia R&D Work Plan to Meet CNLOPB R&D Guidelines (Mar. 31, 2010); **C-330**, Hibernia R&D Project Abstract: Hibernia Gas Utilization R&D Study (Oct. 2010). The Claimant's witness, Mr. Noseworthy, also cites C-206, C-212, C-192, C-251, and C-216, which are the annual R&D reports submitted by HMDC to the Board. None of these documents contain any details concerning the Gas Utilization Study.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		expenditure. With respect, the Tribunal's decision imposes a serious prejudice on Canada who otherwise has no basis on which to assess the credibility of the Claimant's claim for in damages. Despite the Tribunal's ruling, the Claimant nonetheless produced to Canada a limited number of documents concerning the Gas Utilization Study. These limited documents alone raise serious questions concerning the narrative spun by the Claimant to support its claim that it should be compensated for this clearly significant effort to enhance oil recovery from the Hibernia oil field.
		First, the Claimant's witness, Mr. Noseworthy, opines without any documentary support that the Claimant would not likely engage EOR at Hibernia The documents, however, contradict Mr. Noseworthy's opinion. For example, the documents state:

¹⁵⁶ **CW-5**, Noseworthy Statement I, ¶ 25.

¹⁵⁷ C-330, Hibernia R&D Project Abstract: Hibernia Gas Utilization R&D Study (Oct. 2010), p. 1 (p. MOB0006004) (emphasis added).

¹⁵⁸ *Ibid*, p. 3 (p. MOB0006006).

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		•
		•
		These quotes are a mere few examples from the limited number of documents provided by the Claimant. It is manifestly unfair that Canada should be deprived of full document production concerning the Claimant's claim for set of the claimant over this R&D expenditure. It is also unfair for the Claimant to seek full compensation in this arbitration for its efforts to enhance oil

¹⁵⁹ **R-91**, John J. Lawrence et al, Optimization of Gas Utilization to Improve Recovery at Hibernia (SPE 165240) (July 2, 2013), p. MICI 0002617.

¹⁶¹ **R-92**, John J. Lawrence (ExxonMobil), Presentation: SPE 165240 Optimization of Gas Utilization to Improve Recovery at Hibernia (July 2, 2013), p. MICI 0005020.
 ¹⁶² *Ibid*, p. MICI 0005028.

¹⁶⁰ *Ibid*, p. MICI 0002622.

¹⁶³ **R-90**, Letter from **164**, HMDC to Hibernia Executive Committee Members attaching Authority for Expenditure for Gas Utilization Study R&D Project (Mar. 24, 2011), p. MICI 0005090. See also, **R-142**, HMDC Presentation, Gas Utilization R&D Study CNLOPB Review (Oct. 14, 2010); **R-143**, URC Proposal, Hibernia WAG Pilot ICD Study (Draft) (Undated); **R-144**, ExxonMobil Upstream Research Company, Research Application Work Proposal for Hibernia Gas Utilization Study URC Report (2011); **R-145**, HMDC Presentation, Gas Utilization Study R&D Project, MUN EOR Lab Kick-Off Meeting (Mar. 30, 2012); **R-146**, ExxonMobil Production Presentation, Hibernia WAG Pilot – Overview (Apr. 2013).

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		recovery from the Hibernia reservoirs.
		Second, Mr. Noseworthy opines that it is only as a result of the 2004 Guidelines that the Gas Utilization Study is being engaged. ¹⁶⁴ The documents, however, state that
		65
		The documents thus confirm that the 2004 Guidelines are only the final reason for engaging the expenditure and were not its driving force.
		Third, Mr. Noseworthy opines that the Claimant should be compensated for this expenditure because it involved the construction of an EOR laboratory at Memorial University ("MUN") in the Province and absent the 2004 Guidelines he is "certain that neither HMDC nor ExxonMobil would have paid to have the MUN EOR laboratory built and equipped." ¹⁶⁶

¹⁶⁴ **CW-5**, Noseworthy Statement I, \P 23.

¹⁶⁵ **R-91**, John J. Lawrence et al, Optimization of Gas Utilization to Improve Recovery at Hibernia (SPE 165240) (July 2, 2013), p. MICI 0002618; **R-92**, John J. Lawrence (ExxonMobil), Presentation: SPE 165240 Optimization of Gas Utilization to Improve Recovery at Hibernia (July 2, 2013), p. MICI 0005021.

¹⁶⁶ **CW-5**, Noseworthy Statement I, ¶ 23.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		However, the Claimant already claimed and received compensation for this aspect of the Gas Utilization Study in the Mobil/Murphy arbitration. ¹⁶⁷ Mr. Noseworthy merely copied and pasted this aspect from the statement he filed in the Mobil/Murphy arbitration without acknowledging the difference in the types of expenditures related to this project.
		Fourth, Mr. Noseworthy alleges that the EOR laboratory at MUN will merely "duplicate" the research done by the Claimant's Upstream Research Facility ("URC") in Houston. ¹⁶⁸ Again, he provides no documentary support for this statement, which conflicts with the limited documents that Canada has obtained. For example, one document states:
		and Figure 5 shows how each entity is engaged in <i>different</i> rather than duplicative work.
		Fifth, while Mr. Noseworthy confesses that the Claimant may have engaged the Gas Utilization Study in the "ordinary course of business" in the future, ¹⁷¹ he argues that they

¹⁶⁷ **C-2**, Mobil/Murphy – Award, ¶¶ 58-63. ¹⁶⁸ **CW-5**, Noseworthy Statement I, ¶ 23.

¹⁷⁰ *Ibid*, p. MICI 0002626.

¹⁶⁹ **R-91**, John J. Lawrence et al, Optimization of Gas Utilization to Improve Recovery at Hibernia (SPE 165240) (July 2, 2013), p. MICI 0002618.

¹⁷¹ R-147, Mobil Investments Canada Inc. and Murphy Oil Corporation v. Government of Canada (ICSID Case No. ARB(AF)/07/4) Witness Statement of Ryan Noseworthy dated November 30, 2012, ¶ 31.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		would not have considered engaging the expenditure at this stage of operations. ¹⁷² However, the documents state that the study has specifically been They also state that
		Thus, again, the 2004 Guidelines are only one reason for engaging the project now and not its driving force as Mr. Noseworhty opines.
		Lastly, the documents show that the Claimant intends to use the results of the Gas Utilization Study at its projects in ¹⁷⁵ Mr. Noseworthy's understanding that the technique is "infrequently employ[ed]" by the Claimant in its worldwide operations is thus wrong. ¹⁷⁶
		Canadian taxpayers should not be required to pay the Claimant for its significant efforts to enhance oil production from the Hibernia oil field. The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Geophysics Support	Hibernia	This expenditure relates to a donation to Memorial University in support of geophysics degree programs. The Claimant alleges that this expenditure is compensable because HMDC does

¹⁷² **CW-5**, Noseworthy Statement I, \P 24.

¹⁷⁶ **CW-5**, Noseworthy Statement I, \P 20.

¹⁷³ **R-91**, John J. Lawrence et al, Optimization of Gas Utilization to Improve Recovery at Hibernia (SPE 165240) (July 2, 2013), p. MICI 0002618.

¹⁷⁴ **R-148**, ExxonMobil Upstream Research Presentation: Potential Value in Flood Management Tools (Oct. 17, 2012), slide 10 (p. MICI 0005106).

¹⁷⁵ **R-149**, ExxonMobil Upstream Research Presentation: Review of Hibernia Flood Management Tool Proposal (Sep. 7, 2012), slide 3 (p. MICI 0005119).

ExpenditureIDescription & GrossExpenditures1	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
(\$1,980,000)		not own the equipment purchased with the funding or set the academic priorities for the Geophysics program. ¹⁷⁷ The documents, however, show that HMDC valued receipt of positive recognition for this contribution and . HMDC issues a press release and received press coverage and public gratitude from the University Vice-President for this expenditure. ¹⁷⁹ Further, HMDC made this expenditure in the interest of its future employees. As stated by Jamie Long, HMDC's President: "HMDC's contribution reflects our ongoing strong support for Memorial University's geoscience teaching and research program. The university is educating some of our future employees, and collaboration between industry and academia is enhancing the province's geophysical expertise." ¹⁸⁰ Similarly, other documents produced by the Claimant note that "MUN [Memorial University] has provided much of the east coast industry's human capital in this area of expertise." ¹⁸¹ and that

¹⁷⁷ **CW-3**, Sampath Statement I, ¶¶ 81, 88.

¹⁷⁸ **R-150**, Letter of Agreement between MUN and HMDC for the Hibernia Project Geophysics Support Fund (Sep. 23, 2013), p. MICI 0002629.

¹⁷⁹ **R-151**, Hibernia News Release, "Hibernia support to bolster geophysics program at Memorial University" (Jan. 31, 2014). Available at: <u>http://www.hibernia.ca/news/2014/geo.pdf</u>; **R-152**, CBC News Article, "\$1.98M Hibernia fund donated to Memorial University" (Feb. 2, 2014). Available at: <u>http://www.cbc.ca/news/canada/newfoundland-labrador/1-98m-hibernia-fund-donated-to-memorial-university-1.2519857</u>; **R-153**, The Telegram News Article, "Community Heroes: MUN Earth Sciences receives \$1.98M from HMDC" (Feb. 3, 2014). Available at: <u>http://www.thetelegram.com/Community/2014-02-03/article-3600973/Community-Heroes%3A-MUN-Earth-Sciences-receives-\$1.98M-from-HMDC/1</u>.

¹⁸⁰ **R-154**, Memorial University News Article, "Hibernia to bolster geophysics program at Memorial" (Jan. 31, 2014). Available at: <u>http://today.mun.ca/news.php?id=8809</u>.

¹⁸¹ C-267, Letter from 181 C-267, Letter from 182 C-267, Letter fr

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		. The research supported is also connected to other research supported by HMDC. Specifically, documents note that there is Canadian taxpayers should not be required to compensate the Claimant for contributing to the local community and taking credit for it. The Claimant has a long-standing commitment in the Hibernia Benefits Plan to "[c]ontinue to support local research institutions and promote further research and development in Canada to solve problems unique to the Canadian offshore environment." ¹⁸⁴ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Girl Quest Camp Fund	Hibernia	This expenditure relates to a donation to Memorial University to promote science and engineering through summer camps at which girls could engage in hands-on workshops, take industry tours and visits, and meet faculty and staff. The Claimant alleges this expenditure is compensable because HMDC would not make such "community contributions" in the absence of the Guidelines. ¹⁸⁵ The documents, however, show that HMDC valued receipt of positive recognition for this contribution and

¹⁸² **R-155**, EMC R&D Screening Committee Presentation (Mar. 4, 2013), slide 12 (p. MICI 0004733).

¹⁸³ Ibid.

¹⁸⁴ **C-37**, Hibernia Decision 86.01, p. 25.

¹⁸⁵ **CW-3**, Sampath Statement I, \P 81.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		Canadian taxpayers should not be required to compensate the Claimant for contributing to the local community and taking credit for it. The Claimant has failed to prove with reasonable certainty that the full extent of this expenditure is compensable.
	Hibernia	This expenditure relates to a that Hebron proposed be added to a to undertake real-time measurement of oceanic and meteorological conditions. The Claimant alleges this expenditure is compensable because the will be used exclusively by researchers to gather meteorological and oceanic data to improver forecasting methods. ¹⁸⁷ The documents, however, show that forecasting methods. ¹⁸⁷ The documents in relation to it are, it will be free to use it as it chooses. In fact, the expenditure application to the Board notes that the purpose of this additional was to

¹⁸⁸ **C-259**, Vision and Strategy for a Grand Banks

(Undated), p. 1 (p. MOB0004995).

¹⁸⁶ **R-156**, Letter of Agreement between HMDC and MUN for the Future SET Program (Nov. 28, 2011), p. MICI 0002639.

¹⁸⁷ **CW-3**, Sampath Statement I, \P 74.

¹⁸⁹ **C-260**, Installation of **R&D** Work Expenditure Application Form (Sep. 19, 2014).

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Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		¹⁹⁰ and this is an area of <u>Additionally</u> , it is unclear why the cost of this expenditure <u>192</u> , . Canadian taxpayers should not be required to compensate the Claimant for this value-added R&D. The Claimant has a long-standing commitment in the Hibernia Benefits Plan to "[c]ontinue to support local research institutions and promote further research and development in Canada to solve problems unique to the Canadian offshore environment." ¹⁹⁵ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
H ₂ S Corrosion and Materials Laboratory and Basic Research on H ₂ S Souring	Terra Nova	The H2S Project arises directly out of the specific operational needs of the Terra Nova Project. . This resulted in a marked decrease in oil
 ¹⁹⁰ C-259, Vision and Strategy for ¹⁹¹ <i>Ibid</i>, p. 7 (p. MOB0005001). ¹⁹² CW-3, Sampath Statement I, ¹⁹³ C-260, Installation of ¹⁹⁴ CW-3, Sampath Statement I, 	73.	(Undated), p. 3 (p. MOB0004997). R&D Work Expenditure Application Form (Sep. 19, 2014).

¹⁹⁵ C-37, Hibernia Decision 86.01, p. 25.
 ¹⁹⁶ R-71, Letter from J. Bugden, CNLOPB to subsection, Suncor Energy attaching R&D Work Expenditure Application Form and Terra Nova R&D Project Abstract: Reservoir Souring: Subsurface Control of H2S and Mitigation Techniques (Nov. 9, 2012), p. 1.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
(\$3,667,889)		production in 2001 and 2012 at Terra Nova. ¹⁹⁷ According to Suncor, this situation has
		necessitated
		. ¹⁹⁸ Suncor states that
		The Claimant seeks approximately \$0.697 million in damages from Canada for expenditures
		related to this project. The Claimant has, however, provided no witness from Suncor to
		provide testimony concerning this project, but relies solely on one of its employees, Mr.
		Sampath, to opine on what Suncor may or may not have done in the absence of the 2004
		Guidelines. In response to Canada's request for documents concerning this expenditure, the
		Claimant produced only a single document, which was already in Canada's possession
		because Canada filed it as an exhibit in the Mobil/Murphy arbitration. The Claimant has thus
		produced <u>no</u> internal documents from Suncor to support the Claimant's position that this
		expenditure is compensable. Moreover, the documents that Canada does possess concerning
		this expenditure contradict the opinion of Mr. Sampath and contemporaneous documents

¹⁹⁷ **R-157**, The Telegram News Article, "Suncor delays trip to dockyard" (May 4, 2011); **R-158**, The Telegram News Article, "Terra Nova shuts down in September" (Jul. 30, 2011); **R-159**, CBC News Article, "Terra Nova oil production down" (May 4, 2011); **R-160**, Government of Newfoundland website excerpt, "Oil Production Down 26.9% Through First 11 Months of 2012" (Jan. 17, 2013).

¹⁹⁹*Ibid*, p. 2.

¹⁹⁸ **R-71**, Letter from J. Bugden, CNLOPB to successful Subscription Sources attaching R&D Work Expenditure Application Form and Terra Nova R&D Project Abstract: Reservoir Souring: Subsurface Control of H2S and Mitigation Techniques (Nov. 9, 2012), p. 1:

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		carry far greater weight than opinion/hearsay evidence.
		First, Mr. Sampath opines that the construction of an H2S research facility by Suncor and Memorial University in Newfoundland ("MUN") "duplicates pre-existing facilities" located in Ohio and that MUN researchers lack "proven capabilities." ²⁰⁰ However, Suncor states in documents that
		Suitor also states.
		22
		In light of these statements made by Suncor, Mr. Sampath's opinion that the H2S facility at
		MUN is "duplicative" and that MUN researchers lack "proven capabilities" is wrong. Mr.

 $^{^{200}}$ **CW-3**, Sampath Statement I, ¶ 103.

 ²⁰¹ R-71, Letter from J. Bugden, CNLOPB to Suncer Energy attaching R&D Work Expenditure Application Form and Terra Nova R&D Project Abstract: Reservoir Souring: Subsurface Control of H2S and Mitigation Techniques (Nov. 9, 2012), p. 2.
 ²⁰² Ibid, p. 9.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		Sampath also opines that two specific investigations conducted at the H2S facility at MUN are compensable because they "constitute basic academic research and are not specific to the Terra Nova field or its souring issues." ²⁰³ However, the first investigation expressly states that its rationale is to ²⁰⁴ and the second investigation states: ²⁰⁴ Mr. Sampath's opinion concerning Suncor and these investigations thus conflicts with the documentary evidence and his opinion should be rejected. Canadian taxpayers should not be required to pay the Claimant for this R&D. Suncor also has a long-standing commitment in the Terra Nova Benefits Plan to continue "funding basic research". ²⁰⁶ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
	Hibernia	This expenditure relates to the cost of a . The Claimant alleges this expenditure is compensable because it

²⁰³ **CW-3**, Sampath Statement I, ¶ 104.

²⁰⁴ **C-275**, MUN, Statement of Work: NRB-SRB Interaction and System Optimization: Lab-Scale Investigation during Nitrate/Nitrite Injection for Offshore Reservoir Souring Control (Jun. 4, 2013), p. 5 (p. MOB0005109).

²⁰⁵ C-276, MUN, Statement of Work: Reservoir Souring Sulphur Chemistry in Reservoir (Dec. 6, 2013), p. 4 (p. MOB0005127).

²⁰⁶ **C-41**, Terra Nova Decision 97.01, p. 23.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		would not have been necessary to in the absence of the Guidelines. However, the Claimant has not provided any explanation or documentary breakdown supporting the amount claimed, and it is unclear if for a includes any responsibilities in relation to ordinary course R&D and E&T expenditures. The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Ice Gouge Study	Both	This expenditure relates to a large-scale test database to define and understand the parameters that affect sub-gouge displacements, in order to advance the state of design for buried submarine pipelines installed in cold regions. The Claimant alleges that this expenditure is compensable because if the study were relevant to the Hibernia and Terra Nova projects, it would have been conducted long ago. ²⁰⁸ The documents, however, confirm that the research is highly relevant not just to the Hibernia and Terra Nova projects, but to The research was necessary because

²⁰⁷ **CW-1**, Phelan Statement I, \P 35.

²⁰⁸ **CW-3**, Sampath Statement I, \P 42.

²⁰⁹ **C-243**, Letter from **C-243**, Letter from **C-243**, HMDC to J. Bugden, CNLOPB attaching Hibernia Proposal to Study the Magnitude and Parameters that affect Subgouge Displacements for the Design of Buried Submarine Pipelines in Cold Regions R&D Work Expenditure Application Form (May 12, 2011), p. 1 (p. MOB0004706).

²¹⁰ **C-243**, Letter from **C-243**, Letter from **C-243**, HMDC to J. Bugden, CNLOPB attaching Hibernia Proposal to Study the Magnitude and Parameters that affect Subgouge Displacements for the Design of Buried Submarine Pipelines in Cold Regions R&D Work Expenditure Application Form (May 12, 2011), p. 2 (p. MOB0004707).

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		Canadian taxpayers should not be required to compensate the Claimant for research which is clearly highly relevant to Claimant's operations at Hibernia and Terra Nova, and in the Arctic, which by its own admission is . The Claimant has a long-standing commitment in the Hibernia Benefits Plan to undertake and support "research to develop effective countermeasuresto minimize oil spills from ALPs and subsea components due to iceberg impact." ²¹² and a long-standing commitment in the Terra Nova Benefits Plan to continue "funding basic research". ²¹³ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Ice Loads on Floating Structures	Both	This expenditure relates to a project intended to improve understanding of global ice loads in order to meet the design requirements of floating structures. The Claimant alleges that this expenditure is compensable because there was no need for the program at Hibernia or Terra Nova. ²¹⁴ The documents, however, state that

²¹¹ **R-161**, EMC R&D Screening Committee Presentation (Mar. 17, 2011), slide 10 (p. MICI 0004595).

²¹² C-37, Hibernia Decision 86.01, p. 83, (endorsing the recommendation of the Hibernia Environmental Panel). See *ibid*, p. 95.

²¹³ **C-41**, Terra Nova Decision 97.01, p. 23.

²¹⁴ **CW-3**, Sampath Statement I, \P 35.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		The documents also state that would resolve the uncertainty on pack ice loads on floating structures, such as Terra Nova. Canadian taxpayers should not be required to compensate the Claimant for the acquisition of knowledge that it can apply to future arctic offshore operations, which by its own admission is an important area. ²¹⁷ The Claimant has a long-standing commitment in the Hibernia Benefits Plan for "research and development to improve the ability to detect and manage ice under adverse weather conditions [to] be undertaken" and "research and development into ice detection sensors, iceberg towing and ice forecasting [continuing] to be supported", ²¹⁸ and a long-standing commitment in the Terra Nova Benefits Plan to continue "funding basic research" and undertake "a continuous program of observation and research that leads to the improvement of radar and other remote sensing devices that will make possible the early detection of even low-lying masses of floating ice." ²¹⁹ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

 ²¹⁵ C-235, PRNL, Contribution Agreement for "Ice Loads on Floating Structures – Phase 1" (Nov. 9, 2012), p. A-1 (p. MOB0004560).
 ²¹⁶ R-121, EMC R&D Screening Committee Presentation (Nov. 16, 2012), p. MICI 0004715.

²¹⁷ **R-99**, PRAC, Ice Management Program SME Workshop Report (Aug. 17, 2011), p. MICI 0003215.

²¹⁸ **C-37**, Hibernia Decision 86.01, p. 82.

²¹⁹ **C-41**, Terra Nova Decision 97.01, pp. 23, 47.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
	Hibernia	This expenditure relates to studies undertaken to help assess in what ice conditions it is feasible to and to reduce uncertainty around The Claimant alleges this expenditure is compensable because Hibernia's project was already designed to withstand the, and furthermore, this was a JIP and in the ordinary course of business R&D work would not be coordinated with competitors. ²²⁰ However, the Claimant has engaged JIPS with its competitors in the "ordinary course" in the past. ²²¹ Moreover, the Claimant's witness admits that although this research may not be relevant to Hibernia at this stage, it can "support future decisions on when and how to" and assist in the development of in this way, the research is relevant to the development of the Claimant's other projects. Documents confirm that in this research and that the research is important to ExxonMobil's worldwide operations. In fact, it is also

 $^{^{220}}$ CW-5, Noseworthy Statement I, $\P\P$ 26-28.

R&D Work Expenditure Application

²²¹ **C-2**, Mobil/Murphy – Award, ¶¶ 106-109.

²²² **CW-3**, Sampath Statement I, ¶ 59.

²²³ C-253. Letter from K. Sampath, HMDC to J. Bugden, CNLOPB attaching

Form (Feb. 26, 2014), p. MOB0004923.

²²⁴ *Ibid*, p. MOB0004924.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		Additionally, documents note the
		" Documents also confirm that this research is necessary: Canadian
		taxpayers should not be required to pay for the Claimant's value-added R&D. The Claimant has a long-standing commitment in the Hibernia Benefits Plan to "promote further research and development in Canada to solve problems unique to the Canadian offshore environment" and for "research and development to improve the ability to detect and manage ice under adverse weather conditions [to] be undertaken". ²²⁸ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Ice Management JIP	Hibernia	This expenditure relates to a Joint Industry Program that was undertaken to improve safety,

²²⁵ *Ibid*, p. MOB0004925.

R&D Work Expenditure Application

²²⁶ Ibid.

²²⁷ **C-253**, Letter from K. Sampath, HMDC to J. Bugden, CNLOPB attaching Form (Feb. 26, 2014), p. MOB0004927.

²²⁸ **C-37**, Hibernia Decision 86.01, pp. 25, 82.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		efficiency and capacity for operations in Arctic frontier regions. The Claimant alleges this expenditure is compensable because Hibernia's project was already designed to withstand the impact of icebergs, and furthermore, this was a JIP and in the ordinary course of business R&D work would not be coordinated with competitors. ²²⁹ However, the Claimant has engaged JIPs with its competitors in the "ordinary course" in the past. ²³⁰ Moreover, the documents confirm that Additionally, documents show that even though the ice-related projects were JIPs, ExxonMobil . Specific projects in the field of ice management were selected with a view to making

 229 CW-5, Noseworthy Statement I, $\P\P$ 26-28.

²³⁰ C-2, Mobil/Murphy – Award, ¶¶ 106-109.

²³¹ C-234, C-CORE, Development of Improved Ice Management Capabilities for Operations in Ice Environments: Joint Industry Projects Overview (Undated), p. MOB0004520.

²³² Mr. Ringvee states in an email in relation to a suggested ice-related JIP (that is, a That JIP was to be excluded because

) that the

. R-162, E-mail from Andrew Ringvee, ExxonMobil to Ryan Noseworthy et al., ExxonMobil (Mar. 15, 2010), p. MICI 0003451.

²³³ **R-99**, PRAC, Ice Management Program SME Workshop Report (Aug. 17, 2011), p. MICI 0003234.

²³⁴ **R-122**, C-CORE, Strategy and Vision for Ice Management Program, Draft Report (Sep. 2010), p. MICI 0002723.

Public Version Canada's Counter-Memorial, Appendix A June 30, 2016

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		This research would Anticipated benefits include Canadian taxpayers should not be required to pay for the Claimant's value- added R&D. The Claimant has a long-standing commitment in the Hibernia Benefits Plan to "promote further research and development in Canada to solve problems unique to the Canadian offshore environment" and for "research and development to improve the ability to detect and manage ice under adverse weather conditions [to] be undertaken". ²³⁷ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Ice Ocean Sentinel System (\$300,000)	Terra Nova	The purpose of this project is to The project was initiated by Suncor, but the Claimant has not filed a witness statement from any employee of Suncor to provide testimony concerning this expenditure. Instead, the Claimant relies solely on the opinion evidence of its own employee, Mr. Sampath, who believes the Claimant should be compensated \$57,000 for this expenditure

 ²³⁵ C-234, C-CORE, Development of Improved Ice Management Capabilities for Operations in Ice Environments: Joint Industry Projects Overview (Undated), p. MOB0004520.
 ²³⁶ Ibid, pp. MOB0004535-4536.

²³⁷ C-37, Hibernia Decision 86.01, p. 25, 82.

²³⁸ **R-163**, MUN Faculty of Engineering and Applied Science Ice Ocean Sentinel System (IOSS) Project R&D Work Expenditure Application Form (Apr. 1, 2015), p. MICI 0001999.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		because "Suncor would not ordinarily apply project funds to a university-leg project that is otherwise funded by government." ²³⁹ The documents show, however,
		. In another part of his witness statement, Mr. Sampath testifies that at Hibernia Mr. Sampath does not explain why
		Once again, the contemporaneous documents tell a story different than the opinion/hearsay evidence proffered by the Claimant's witnesses. Canadian taxpayers should not be required to pay the Claimant for R&D that Suncor would have undertaken regardless of the 2004 Guidelines. Suncor has, in any event, a long-standing commitment in the Terra Nova Benefits Plan to continue "funding basic

²³⁹ **CW-3**, Sampath Statement I, ¶ 107.

²⁴⁰ **C-279**, MUN, IOSS, Invoice Number MRP-010-15, to Suncor Energy Inc. (Oct. 22, 2014).

²⁴¹ C-280, MUN, IOSS, Invoice Number RGCS-001-16, to Suncor Energy Inc. (Apr. 1, 2015).

²⁴² **R-164**, Letter from Mike Baker, CNLOPB to **Section**, Suncor (Jan. 18, 2016). Suncor submitted the expenditure to the Board for pre-approval on April 1, 2015 (**R-163**, MUN Faculty of Engineering and Applied Science Ice Ocean Sentinel System (IOSS) Project R&D Work Expenditure Application Form (Apr. 1, 2015), the same date that Suncor received an invoice for engaging the work (**C-280**, MUN, IOSS, Invoice Number RGCS-001-16, to Suncor Energy Inc. (Apr. 1, 2015)).

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		research" and to undertake "a continuous program of observation and research that leads to the improvement of radar and other remote sensing devices that will make possible the early detection of even low-lying masses of floating ice." ²⁴³ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Ice Radar Enhancement Project	Hibernia	This expenditure relates to improvement of the ice detection performance of The Claimant alleges that this expenditure is compensable because in the "ordinary course" Hibernia would not agree to an arrangement with a contractor that requires HMDC to fund research while the IP rights vest in the contractor. ²⁴⁴ However, there is no suggestion by any witness that the research and anticipated improvements are not necessary to and/or relevant to Hibernia. The Claimant has not deducted from its claimed damages the expenses that would have accrued to the Claimant under an allegedly "ordinary course" arrangement for similar R&D. Further, documents confirm that

²⁴³ C-41, Terra Nova Decision 97.01, pp. 23, 47. See also, R-165, Development of a Semi-Submersible Unmanned Surface Craft (2014).

²⁴⁴ **CW-3**, Sampath Statement I, ¶ 29.

 ²⁴⁵ C-231, Letter from K. Sampath, HMDC, to C. Dyer, CNLOPB, attaching Ice Radar Enhancement Project R&D Work Expenditure Application Form (Oct. 14, 2014), p. MOB0004453.
 ²⁴⁶ *Ibid*, p. MOB0004461.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		is also telling that field trials are to be undertaken by . Additionally, the goal is to deploy the research for other projects, specifically financially benefits ExxonMobil's worldwide operations because
		Canadian taxpayers should not be required to pay for the Claimant's value-added R&D. The Claimant has a long-standing commitment in the Hibernia Benefits Plan for "research and development to improve the ability to detect and manage ice under adverse weather conditions [to] be undertaken". ²⁵⁰ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
	Hibernia	This expenditure relates to development of technology to The Claimant alleges this expenditure is compensable because Hibernia's project was already designed to withstand the impact of icebergs. ²⁵¹ The documents, however, confirm that

²⁴⁷ *Ibid*, pp. MOB0004454, 4460.

²⁵⁰ **C-37**, Hibernia Decision 86.01, p. 82.

²⁴⁸ *Ibid*, p. MOB0004453.

²⁴⁹ *Ibid*, p. MOB0004457.

 $^{^{251}}$ **CW-5**, Noseworthy Statement I, ¶¶ 26-28.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		This research is follow-up work from a research project that
		Documents confirm that
		The Claimant's witness also admits that the benefit of such research if developed
		is the ability The research is not only relevant to

²⁵² R-166, Letter from K. Sampath, HMDC, to Jeff Bugden, CNLOPB attaching
 R&D Work Expenditure Application Form (Nov. 19, 2013), p. 1 of Project Abstract.
 ²⁵³ Ibid. p. 2 of Project Abstract.

²⁵³ *Ibid*, p. 2 of Project Abstract.

²⁵⁴ *Ibid*.

²⁵⁵ **CW-3**, Sampath Statement I, \P 41.

June 30, 2016

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		Documents also confirm that this research is necessary: "Safe, reliable, and continuous far field characterization of the dynamic sea ice environment Canadian taxpayers should not be required to pay for the Claimant's value- added R&D. The Claimant has a long-standing commitment in the Hibernia Benefits Plan to "promote further research and development in Canada to solve problems unique to the Canadian offshore environment" and for "research and development to improve the ability to detect and manage ice under adverse weather conditions [to] be undertaken". ²⁵⁸ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Improved Metocean Support for Offshore Operations	Hibernia	This expenditure relates to development of technology to enhance the reliability of forecasting of meteorological and oceanic conditions provided by The Claimant alleges this expenditure is

R&D Work Expenditure Application Form (Nov. 19, 2013), p. 1 of

²⁵⁷ C-242, PRNL, Contribution Agreement for

Phase 2a" (Oct. 24, 2014), p. A-1 (p. MOB0004685).

²⁵⁸ **C-37**, Hibernia Decision 86.01, pp. 25, 82.

²⁵⁶ **R-166**, Letter from K. Sampath, HMDC, to Jeff Bugden, CNLOPB, attaching Project Abstract.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		compensable because HMDC would not ordinarily fund product development by contractors that will ultimately benefit all players in a region, including competitors. ²⁵⁹ However, there is no suggestion by any witness that the research and anticipated improvements are not necessary to and/or relevant to Hibernia. The Claimant has not deducted from its claimed damages the expenses that would have accrued to the Claimant under an allegedly "ordinary course" arrangement for similar R&D. In fact, there is a substantial need for this research. According to AMEC, the entity conducting the research, "A Hibernia Management Development Company Ltd. (HMDC) sponsored Workshop on Metocean Monitoring and Forecasting for the Newfoundland & Labrador Offshore, held 22-24 September 2014, identified reduced visibility in fog as being the most significant metocean issue to affect operations in this harsh environment area Current techniques used to forecast fog are not well established or verified. There is a definite lack of good observations and predictive models have substantial need of improvement. Fog formation and dissipation mechanisms on the Grand Banks are not well understood with very few studies related to this topic since G.I. Taylor's 1913 seminal work." ²⁶⁰ There has also been academic recognition of Grand Banks Advection Fog and the limitations it places on helicopter landing on offshore platforms. ²⁶¹ More broadly,

 $^{^{259}}$ CW-3, Sampath Statement I, ¶ 55.

 ²⁶⁰ R-167, Amec website excerpt, "Improving Visibility Forecasts for the Grand Banks of Newfoundland and Labrador" (May 30, 2016). Available at: http://cmos.inltouch.org/client/relation_roster/clientRelationRosterDetails.html?clientRelationId=733256&clientRelationRosterId=113&no_header=true&bodyonly=true.
 ²⁶¹ R-168, Dalhousie University News Article, "Fog on the Grand Banks" (Aug. 13, 2015). Available at: <u>http://www.dal.ca/faculty/science/physics/news-events/events-seminars/2015/08/13/fog on the grand banks.html</u>.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		Canadian taxpayers should not be required to pay for the Claimant's value-added R&D. The Claimant has a long- standing commitment in the Hibernia Benefits Plan to "[c]ontinue to support local research institutions and promote further research and development in Canada to solve problems unique to the Canadian offshore environment." ²⁶³ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Improving Stability of Helicopters Following Ditching	Hibernia	This expenditure relates to experiments to improve stability of Sikorsky S-92A helicopters following ditching in the interest of avoiding capsizing. The Claimant alleges that this expenditure is compensable because the research to improve the Sikorsky aircraft used by the Claimant at Hibernia would normally be funded by Sikorsky itself. ²⁶⁴ However, documents show that the research was provide the research is on the research is on the sikorsky. The focus of the research is on the specifically in the "sea states [found in Newfoundland and Labrador where] it is most likely that the helicopter will overturn". ²⁶⁷

²⁶² **R-169**, Amec Foster Wheeler, HMDC Metocean R&D Program Workshop Summary (Feb. 20, 2015), p. 4 (p. MICI 0003466).

²⁶³ **C-37**, Hibernia Decision 86.01, p. 25.

²⁶⁴ **CW-7**, Durdle Statement I, \P 30.

²⁶⁵ **R-170**, PRNL Contribution Agreement for Improving Helicopter Stability in Waves Following Ditching – Phase I (Mar. 5, 2013), p. A-1 (p. MICI 0003614).

²⁶⁶ C-215, Letter from HMDC, to J. Bugden, CNLOPB, attaching R&D Expenditure Application for "Improving Helicopter Stability in Waves Following Ditching" (Apr. 15, 2012), p. MOB0004285.

²⁶⁷ C-213, Canada-Newfoundland and Labrador Offshore Helicopter Safety Inquiry (Phase I), Volume 1 Report and Recommendations (Oct. 2010), p. 208 (p. MOB0003879).

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		As admitted by the
		Claimant's witness, it was "the tragic ditching of Cougar Flight 491 and the Board's
		nighttime flying conditions [that] highlighted certain issues for safety-related research". ²⁷⁰
		The inquiry conducted by the Board after the fatal helicopter accident involving the Hibernia
		project did not focus on "matters involving the design or operation of the Sikorsky C-92A",
		but still observed that "the issues of interior design and equipment and safety within the
		helicopter cabin should be addressed and solutions sought". ²⁷¹ The Claimant confirmed in its
		expenditure application to the Board that the "the need to provide a side-floating capability
		[was] identified by the C-NLOPB [Board] as a possible means of preventing total inversion,
		and by extension, significantly increasing the odds that occupants can survive a capsize and
		escape from a ditched helicopter" and this research is in-line with that suggestion. ²⁷² Canadian
		taxpayers should not have to compensate the Claimant for commitments it made in the

²⁶⁸ C-215, Letter from , HMDC, to J. Bugden, CNLOPB, attaching R&D Expenditure Application for "Improving Helicopter Stability in Waves Following Ditching" (Apr. 15, 2012), p. MOB0004295.

, PRNL to Rod Hutchings, HMDC with attachments (Mar. 21, 2014), Attachment B, p. 17 (MICI 0004861).

²⁶⁹ **R-171**, Letter from

²⁷⁰ **CW-7**, Durdle Statement I, ¶ 29.

²⁷¹ C-213, Canada-Newfoundland and Labrador Offshore Helicopter Safety Inquiry (Phase I), Volume 1 Report and Recommendations (Oct. 2010), pp. 23, 203 (p. MOB0003694, 3874).

²⁷² **C-215**, Letter from , HMDC, to J. Bugden, CNLOPB, attaching R&D Expenditure Application for "Improving Helicopter Stability in Waves Following Ditching" (Apr. 15, 2012), p. MOB0004295.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		aftermath of the Hibernia helicopter crash to improve safety and preparedness of helicopters and offshore workers. The Claimant has in any event a long-standing commitment in the Hibernia Benefits Plan to "[c]ontinue to support local research institutions and promote further research and development in Canada to solve problems unique to the Canadian offshore environment." ²⁷³ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Industrial Chair in Petroleum Geosciences (\$500,000)	Hibernia	This expenditure relates to a contribution to Memorial University for a Chair position that will build on existing petroleum geoscience expertise and research capacity and develop a stronger collaboration between Memorial University and the oil and gas industry. The Claimant alleges this expenditure is compensable because HMDC would not make contributions of this magnitude in the absence of the Guidelines. ²⁷⁴ The documents, however, show that the Claimant made this expenditure in the interest of its future employees: "Recruiting impact – MUN is a large, strong geoscience departmentfrom which significant geoscience hires are made yearly Documents also show that HMDC valued receipt of positive recognition for this contribution and

²⁷³ **C-37**, Hibernia Decision 86.01, p. 25.

²⁷⁴ CW-3, Sampath Statement I, ¶ 81.
²⁷⁵ R-172, EMC R&D Screening Committee Presentation (Oct. 3, 2011), p. MICI 0004655.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		Hibernia attracted positive recognition and goodwill for this expenditure: and the Chair position is entitled "NSERC Hibernia Project Industrial Research Chair in Petroleum Geosciences". ²⁷⁸ The research supported by this contribution is itself highly relevant to Hibernia and ExxonMobil operations. The research supported . Funds were also used to This means that ordinary course research could also benefit from this

²⁷⁶ **R-173**, Letter of Agreement between HMDC and MUN for the Hibernia Project Chair in Petroleum Geosciences Fund (Dec. 10, 2012), p. MICI 0003632.

²⁸⁰ *Ibid*, p. MOB0005040.

²⁸¹ *Ibid*, p. MOB0005038.

²⁷⁷ C-266, Hibernia MUN-NSERC-Hibernia Project Industrial Chair in Petroleum Geosciences R&D Work Expenditure Application Form (Nov. 10, 2011), p. MOB0005042.

²⁷⁸ **R-173**, Letter of Agreement between HMDC and MUN for the Hibernia Project Chair in Petroleum Geosciences Fund (Dec. 10, 2012), p. MICI 0003634.

²⁷⁹ C-266, Hibernia MUN-NSERC-Hibernia Project Industrial Chair in Petroleum Geosciences R&D Work Expenditure Application Form (Nov. 10, 2011), p. MOB0005039.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		expenditure. Canadian taxpayers should not be required to pay the Claimant for this value- added initiative. The Claimant has a long-standing commitment in the Hibernia Benefits Plan to "[c]ontinue to support local research institutions and promote further research and development in Canada to solve problems unique to the Canadian offshore environment." ²⁸² The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Johnson GEO Centre Programming (\$660,000)	Hibernia	The Claimant alleges that this "community contribution" is compensable because it would not have been undertaken in the absence of the Guidelines. ²⁸³ The documents, however, show that HMDC valued receipt of positive recognition for this contribution and . HMDC then went further and released a press release that included the ownership structure of HMDC and the name "ExxonMobil Canada" and received press coverage. ²⁸⁵ Further, Jamie Long, president of

²⁸² **C-37**, Hibernia Decision 86.01, p. 25.

²⁸³ **CW-3**, Sampath Statement I, ¶ 133.

²⁸⁴ **R-174**, Letter of Agreement between HMDC and Johnson GEO Centre Foundation Inc. for Camps, Clubs and KIDZone Enhancement at the Johnson GEO Centre (May 17, 2012), pp. MICI 0003639-3640.

²⁸⁵ **R-175**, Hibernia News Release, "Science for youngsters in NL gets a boost from Hibernia project" (Apr. 24, 2012). Available at: <u>http://www.hibernia.ca/news/2012/HMDCGEOCENTRE.pdf</u>; **R-176**, Hibernia News Release, "Hibernia to support Johnson GEO CENTRE's science education programs" (Jun. 14, 2012).

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		Hibernia is quoted publicly as saying that "Hibernia is proud to support programs that will teach children and adults alike about resource development, particularly when they create excitement about the related science, technology, engineering and math". ²⁸⁶ A section of the Centre (kids' section) is now titled "Hibernia KidsPlace". Canadian taxpayers should not be required to compensate the Claimant for contributing to the local community and taking credit for it. The Claimant has failed to prove with reasonable certainty that it should be compensated for the full extent of this expenditure.
Large Scale Iceberg Impact Experiment	Both	This expenditure relates to collection of pressure-area data on the basis of of measured iceberg impact forces. The Claimant alleges that this expenditure is compensable because it is "unlikely" to assist the Hibernia and Terra Nova projects. ²⁸⁸ The documents, however, indicate the value of this particular project to Claimant's other operations, particularly in the Arctic. The documents state that the objective of the project is to

Available at: <u>http://www.hibernia.ca/geo.pdf;</u> **R-177**, The Telegram News Article, "Hibernia donates \$2.3 million to Geo Centre" (Apr. 27, 2012). Available at: <u>http://www.thetelegram.com/News/Local/2012-04-27/article-2965465/Hi</u>; **R-178**, Johnson Geo Centre website excerpt, "Hibernia KidsPlace" (Undated). Available at: <u>https://www.geocentre.ca/learn/hibernia-kidsplace/</u>.

²⁸⁶ **R-179**, Memorial University News Article, "GEO CENTRE's science education programs enhanced with \$2.3 million grant" (Apr. 27, 2012). Available at: <u>http://today.mun.ca/news.php?news_id=7261</u>.

²⁸⁷ **R-117**, EMC R&D Screening Committee (May 3, 2012), slide 14 (p. MICI 0004690).

²⁸⁸ **CW-3**, Sampath Statement I, \P 71.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		This contradicts Mr. Sampath's assertion that it is "unlikely" to assist Hibernia and Terra Nova, and in fact will be beneficial for all of the Claimant's cold water operations. Tangible potential outcomes of this research include
		Canadian taxpayers should not be required to compensate the Claimant for this value-added R&D. The Claimant has a long-standing commitment in the Hibernia Benefits Plan to undertake and support "research to develop effective countermeasuresto minimize oil spills from ALPs and subsea components due to iceberg impact" ²⁹³ and for "research and

 ²⁸⁹ **R-180**, C-CORE Presentation, Large-Scale Iceberg Impact Experiment – Phase 1 Kick-off Meeting (Jul. 9, 2014), p. MICI 0003667.
 ²⁹⁰ *Ibid*.

²⁹¹ **R-181**, C-CORE, Large Scale Iceberg Impact Experiment – Workshop Report (Revision 2.0) (Oct. 2014), p. MICI 0003707.

²⁹² **R-182**, PRNL, Contribution Agreement for LSIIE Phase 1 Concept Selection (Feb. 19, 2014), p. MICI 0003732.

²⁹³ C-37, Hibernia Decision 86.01, p. 83 (endorsing the recommendation of the Hibernia Environmental Panel). See *ibid*, p. 95.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		development to improve the ability to detect and manage ice under adverse weather conditions [to] be undertaken", ²⁹⁴ and a long-standing commitment in the Terra Nova Benefits Plan to continue "funding basic research". ²⁹⁵ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Manuels River Education Centre (\$2,840,000)	Hibernia	The Claimant alleges that this "community contribution" is compensable because it would not have been undertaken in the absence of the 2004 Guidelines. ²⁹⁶ The documents, however, show that HMDC valued receipt of positive recognition for this contribution and HMDC then went further and released a press release that included the ownership structure of HMDC and the name "ExxonMobil Canada" and received press coverage. ²⁹⁸ The Centre is now called the

²⁹⁴ C-37, Hibernia Decision 86.01, p. 82.

²⁹⁵ **C-41**, Terra Nova Decision 97.01, p. 23.

²⁹⁶ **CW-3**, Sampath Statement I, ¶ 133.

²⁹⁷ **R-183**, Letter of Agreement between HMDC and Manuels River Natural Heritage Society, Inc. for Manuels River Interpretation Centre (May 11, 2011), p. MICI 0003757.

²⁹⁸ **R-184**, Hibernia News Release, "Hibernia contributes \$840,000 to Manuels River for Educational Programming" (Mar. 4, 2014). Available at: <u>http://www.hibernia.ca/news/2014/HDMCManuelsRiver.pdf</u>; **R-185**, The Telegram News Article, "Manuels River interpretation centre opens Thursday" (Jul. 3, 2013). Available at: http://www.thetelegram.com/News/Local/2013-07-03/article-3300617/Manuels-River-interpretation-centre-opens-Thursday/1; R-186, Manuels River website excerpt, "Visit" (Undated). Available at: http://manuelsriver.com/centre/.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		"Manuels River Hibernia Interpretation Centre". Canadian taxpayers should not be required to compensate the Claimant for contributing to the local community and taking credit for it. The Claimant has failed to prove with reasonable certainty that it should be compensated for the full extent of this expenditure.
Marine Dredge Disposal	Both	This expenditure relates to a project aimed at proving the hypothesis that biological productivity at offshore dredge disposal sites is similar to or enhanced relative to the natural conditions of the surrounding environment, and to measure the speed and extent that a disposal site recovers after disposal activity. The Claimant alleges that this project is compensable because if it were needed it would have been undertaken long before 2012, and it "goes beyond what responsible operators like HMDC and Suncor do in the ordinary course of business". ²⁹⁹ However, according to the documents, environmental effects monitoring is an ongoing activity undertaken by projects with surveys "begin[ning] during the first full year of offshore development drilling, [and] becoming biennial [after the first two years of operations]". ³⁰⁰ Further, the documents indicate that this project

²⁹⁹ **CW-8**, Dunphy Statement I, \P 18.

³⁰⁰ C-321, CNLOPB, Environmental Effects Monitoring (EEM) – Background, p. 1.

³⁰¹ **C-320**, Letter from **Marine** Dredge Disposal – Measuring Recovery to Natural Conditions" (Jun. 4, 2012), p. 1 (p. MOB0005731).

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		This research pursuant to Fisheries Act obligations that require compensation for activities on fish habitats. ³⁰³ Canadian taxpayers should not be required to compensate the Claimant for a project that would clearly be beneficial for the Claimant in managing its liabilities. The Claimant also has a long-standing commitment in the Hibernia Benefits Plan to "[c]ontinue to support local research institutions and promote further research and development in Canada to solve problems unique to the Canadian offshore environment", ³⁰⁵ and a long-standing commitment in the Terra Nova Benefits Plan to continue "funding basic research". ³⁰⁶ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Nuclear Magnetic Resonance to Detect Oil in And Under Ice	Hibernia	This expenditure relates to development of technology to detect oil in and around ice in order to enhance ability to respond to oil spills. The Claimant alleges that this expenditure is compensable because it "is not needed for Hibernia operations" as "it is relatively uncommon

³⁰² *Ibid*, pp. 1-2 (pp. MOB0005731-5732).

 ³⁰³ R-187, PRNL, Presentation, Marine Dredge Disposal – Measuring Recovery to Natural Conditions (Undated), p. MICI 0003813.
 ³⁰⁴ R-188, PRNL, Contribution Agreement for Marine Dredge Disposal – Measuring Recovery to Natural Conditions (Jul. 31, 2012), p. MICI 0003851.

³⁰⁵ **C-37**, Hibernia Decision 86.01, p. 25.

³⁰⁶ **C-41**, Terra Nova Decision 97.01, p. 23.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		for solid ice to form on the surface of the waters above where Hibernia extracts and transports oil". ³⁰⁷ The documents, however, confirm that . With respect to NMR,
		This expenditure envisages this research continuing onwards. In fact, Documents also confirm that this research is necessary, in particular for future projects in the Arctic. The driver for this research is the NMR technology was chosen because it

³⁰⁷ CW-3, Sampath Statement I, ¶ 64. See also, R-190, Letter from Jeffrey Bugden, CNLOPB to K. Sampath, HMDC (Mar. 18, 2014).

- ³⁰⁹ Ibid.
- ³¹⁰ *Ibid*.
- ³¹¹ *Ibid*.
- ³¹² *Ibid*.

³⁰⁸ C-255, Letter from K. Sampath, HMDC, to J. Bugden, CNLOPB, attaching NMR to detect Oil in and under ICE R&D Work Expenditure Application Form (Jan. 30, 2014), p. 1 (p. MOB0004949).

Public Version Canada's Counter-Memorial, Appendix A June 30, 2016

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		³¹³ Canadian taxpayers should not be required to pay for this value-added R&D. The Claimant has a long-standing commitment in the Hibernia Benefits Plan to undertake and support "research to develop effective countermeasuresto minimize oil spills from ALPs and subsea components due to iceberg impact" ³¹⁴ and for "research and development to improve the ability to detect and manage ice under adverse weather conditions be undertaken". ³¹⁵ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Offshore Operations Simulation Centre (\$4,400,000)	Hibernia	This expenditure relates to a donation to Memorial University for development of a simulator to be used to train personnel in offshore operations. The Claimant alleges that this expenditure is compensable because ordinarily HMDC would expect its contractors to arrange for training and would not fund the purchase of equipment that would be made available to industry as a whole. ³¹⁶ However, there is no suggestion by any witness that the research and anticipated improvements are not necessary to and/or relevant to Hibernia, or the Claimant's other projects worldwide. The Claimant has not deducted from its claimed damages the expenses that would have accrued to Mobil under an "ordinary course" arrangement for similar R&D.

³¹³ *Ibid*.

³¹⁴ **C-37**, Hibernia Decision 86.01, p. 83, (endorsing the recommendation of the Hibernia Environmental Panel). See *ibid*, p. 95.

³¹⁵ **C-37**, Hibernia Decision 86.01, p. 82.

³¹⁶ **CW-3**, Sampath Statement I, \P 98.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		Further, Jamie Long, president of HMDC, notes that this expenditure was made in order to "better prepare [HMDC's] workforce for the conditions they encounter offshore, and ensure they have the ability to practice operations in a controlled environment." ³¹⁷ Documents confirm that this research was necessary. According to the expenditure application to the Board, Additionally, the documents show that HMDC made the contribution in the manner that it did because it valued receipt of positive recognition for this contribution and

³¹⁷ **R-190**, Hibernia News Release, "Hibernia Offshore Operations Simulator Facility under Construction at Marine Institute" (Jan. 16, 2014), p. 1. Available at: <u>http://www.hibernia.ca/news/2014/MarineInstitute.pdf.</u>

³¹⁸ **C-272**, Letter from **Control**, HMDC, to J. Bugden, CNLOPB, attaching Offshore Operations Simulation Centre R&D Work Expenditure Application Form (Apr. 12, 2013), p. 1 (p. MOB0005073). See also, **R-191**, Letter from Jeffrey Bugden, CNLOPB to **Control**, HMDC (Apr. 22, 2013). ³¹⁹ Ibid.

³²⁰ **R-192**, Letter of Agreement between HMDC and MUN for The Hibernia Offshore Operations Simulator Fund (Jul. 16, 2013), p. 21 (p. MICI 0003976).

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		HMDC then went further and released a press release and received press coverage. ³²² The Centre is now called the "Hibernia Offshore Operators Simulator". Canadian taxpayers should not be required to compensate the Claimant for this value-added R&D. The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
	Hibernia	This expenditure relates to a study that explores the development of an . The Claimant alleges this expenditure is compensable because ordinarily HMDC would not fund a scoping study to conceptualize a facility that it would not manage. ³²³ However, according to the documents, it is not clear who will manage, own and operate the centre, and a . Further, there is no suggestion by any witness that the research and anticipated improvements are not necessary to and/or relevant to Hibernia, or the Claimant's other projects worldwide. The Claimant has not deducted from its claimed damages the expenses that would have accrued to the Claimant under an "ordinary course" arrangement for similar R&D. Further, documents confirm that

³²¹ *Ibid*, p. 2 (p. MICI 0003948).

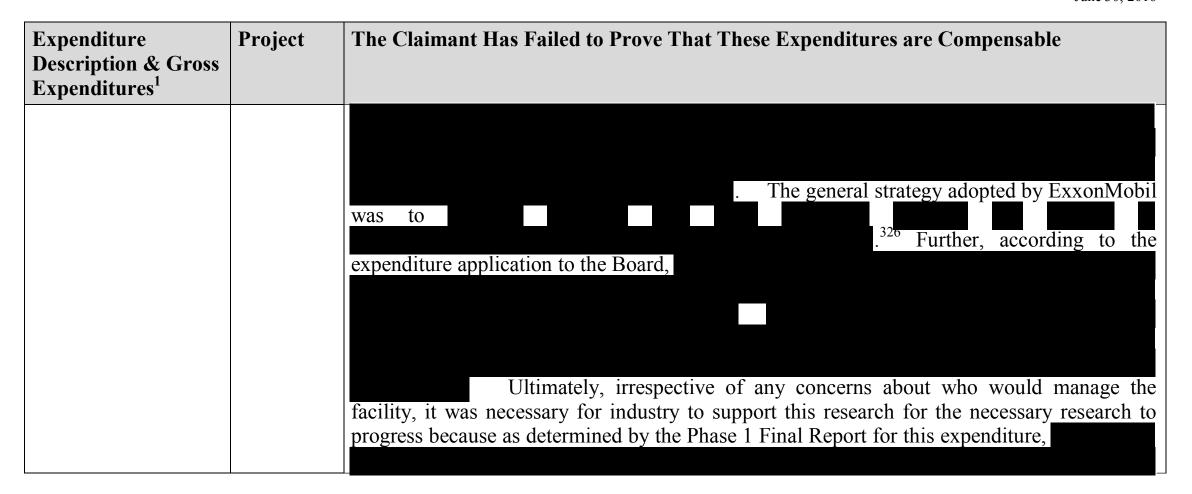
³²² **R-19**, Hibernia 2014 Benefits Report (2015), p. 11; **R-190**, Hibernia News Release, "Hibernia Offshore Operations Simulator Facility under Construction at Marine Institute" (Jan. 16, 2014); **R-193**, Marine Institute News Release, "Marine Institute Officially Opens Hibernia Offshore Operations Simulator" (Oct. 30, 2015). Available at: <u>https://www.mi.mun.ca/news/title_30020_en.php</u>; **R-194**, Memorial University Gazette News Article, "Hibernia Offshore Operations Simulator Facility officially open" (Nov. 4, 2015).

https://www.mi.mun.ca/news/title,30020,en.php; R-194, Memorial University Gazette News Article, "Hibernia Offshore Operations Simulator Facility officially open" (Nov Available at: https://issuu.com/memorialu/docs/mun_gazette_4_nov_2015__fa__issuu/1/.

³²³ **CW-3**, Sampath Statement I, \P 116.

³²⁴ **R-196**, C-CORE, Agenda, Minutes & Action Log-Final (Jul. 15, 2015), p. MICI 0004097.

R&D Work Expenditure Application Form (Oct. 29, 2014), p. 3 (p.



³²⁵ **R-131**, Presentation, Newfoundland and Labrador R&D, Offshore & Environment Function Environmental Technology Section: Opportunities and Initial Impressions (Feb. 7, 2014), slide 2 (p. MICI 0004755).

³²⁸ *Ibid*, p. 1 (p. MOB0005284).

³²⁶ *Ibid*.

³²⁷ **C-284**, Letter from K. Sampath, HMDC, to C. Dyer, CNLOPB, attaching MOB0005286).

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		" Oil spills are an ongoing concern with any oil and gas project, and even as recently as 2015 in Newfoundland, Hibernia faced charges for oil spills. ³³⁰ Canadian taxpayers should not be required to compensate the Claimant for this value-added R&D. The Claimant has a long-standing commitment in the Hibernia Benefits Plan to "[c]ontinue to support local research institutions and promote further research and development in Canada to solve problems unique to the Canadian offshore environment." ³³¹ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Personal Locator Beacon	Hibernia	This expenditure relates to the development of technology to improve the ability to track personnel. The Claimant alleges this expenditure is compensable because ordinarily HMDC would have put the design and development of the beacon out for bidding or obtained the technology "off the shelf" rather than fund a contractor's R&D. ³³² However, there is no suggestion by any witness that the research and anticipated improvements are not necessary to and/or relevant to Hibernia, or the Claimant's other projects worldwide. The Claimant has not deducted from its claimed damages the expenses that would have accrued to the Claimant

³²⁹ **R-196**, Arctic and Cold Oceans OSR Laboratory Facility – Phase 1 Final Report (Undated), p. 6.

³³⁰ **R-197**, CTV News Article, "Hibernia faces charges following oil leak from offshore N.L. platform" (May 22, 2015). Available at: <u>http://www.ctvnews.ca/business/hibernia-faces-charges-following-oil-leak-from-offshore-n-l-platform-1.2386504</u>; **R-198**, The Telegram News Article, "Courts begin to tackle Hibernia oil spill" (Jun. 9, 2015). Available at: <u>http://www.thetelegram.com/Business/2015-06-09/article-4175246/Courts-begin-to-tackle-Hibernia-oil-spill/1</u>.

³³¹ **C-37**, Hibernia Decision 86.01, p. 25.

 $^{^{332}}$ **CW-7**, Durdle Statement I, ¶ 35

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		under an "ordinary course" arrangement for similar R&D. According to documents, this research was relevant because Additionally, the documents show that HMDC made the contribution in the manner that it did because it valued receipt of positive recognition for this contribution and Canadian taxpayers should not be required to compensate the Claimant for this value-added R&D. The Claimant has a long-standing commitment in the Hibernia Benefits Plan to "[c]ontinue to support local research institutions and promote further research and development in Canada to solve problems unique to the Canadian offshore environment." ³³⁵ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
R&D Applications of Iceberg Profiling	Hibernia	This expenditure relates to the development of iceberg simulation models. The Claimant alleges this expenditure is compensable because this project is "essentially academic in nature" and if it had been of interest to HMDC it would have been undertaken "years ago". ³³⁶

³³³ C-220, Letter from K. Sampath, HMDC, to J. Bugden, CNLOPB, attaching R&D Expenditure Application for "Personal Locator Beacon Development Project" (Sep. 26, 2013), p. MOB0004322.

³³⁴ **R-199**, Letter of Agreement between HMDC and Canatec for Personal Locator Beacon Development Project (Nov. 18, 2013), p. 2 (p. MICI 0004180).

³³⁵ **C-37**, Hibernia Decision 86.01, p. 25.

 $^{^{336}}$ **CW-3**, Sampath Statement I, ¶ 114.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		However, documents confirm that
		·
		Documents also state that the
		Internal ExxonMobil documents similarly
		observe that the project is ³⁴¹ Canadian taxpayers should not
		be required to compensate the Claimant for this value-added R&D. The Claimant has a long-
		standing commitment in the Hibernia Benefits Plan for "research and development to improve the ability to detect and manage ice under adverse weather conditions be undertaken" and

³³⁷ **C-283**, Letter from K. Sampath, HMDC, to C. Dyer, CNLOPB, attaching R&D Applications of Iceberg Profiles R&D Work Expenditure Application Form (May 13, 2014), p. 2 (p. MOB0005242).

³³⁸ *Ibid*, p. 25 (p. MOB0005273).

³³⁹ *Ibid*, p. 5 (p. MOB0005253).

³⁴⁰ *Ibid*, p. 1 (p. MOB0005241).

³⁴¹ **R-200**, EMC R&D Screening Committee Presentation (Jul. 29, 2011), slide 8 (p. MICI 0004631).

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		"research and development into ice detection sensors, iceberg towing and ice forecasting [continuing] to be supported." ³⁴² The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Red Cross Centre (\$100,000)	Hibernia	The Claimant alleges that this "community contribution" is compensable because it would not have been undertaken in the absence of the 2004 Guidelines. ³⁴³ The documents, however, show that HMDC valued receipt of positive recognition for this contribution and
		The documents also indicate the benefits of the project: As Paul Leonard, President of HMDC has spoken publicly in support of this expenditure and taken credit for it on behalf of HMDC: "Safety is core to how we conduct our business at HiberniaSince this major initiative of the Canadian Red Cross is

³⁴² **C-37**, Hibernia Decision 86.01, p. 82.

³⁴³ **CW-3**, Sampath Statement I, ¶ 132, 147.

³⁴⁴ **R-201**, Letter of Agreement between HMDC and Canadian Red Cross for Emergency Response Preparations – Red Cross (Nov. 18, 2010), p. MICI 0004207.

³⁴⁵ C-310, Letter from , HMDC, to J. Bugden, CNLOPB, attaching Hibernia Red Cross Infrastructure Donation R&D Work Expenditure Application Form (Aug. 2, 2010), p. MOB0005681.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		ultimately about the safety of people throughout Newfoundland and Labrador, we are pleased to be able to offer this support." ³⁴⁶ Canadian taxpayers should not be required to compensate the Claimant for contributing to the local community and taking credit for it. The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Remote Underdeck Inspection System	Hibernia	This expenditure is related to a contribution to a Memorial University class design project for the development of the system concept, design and tools required to remotely conduct the underdeck inspections on the Hibernia platform. The Claimant alleges that this expenditure is compensable because the Hibernia owners would not have approved this contribution to MUN in the absence of the Guidelines. ³⁴⁷ The documents, however, clearly state that the success of the project will result in the following benefits:

³⁴⁶ **R-202**, The Packet News Article, "Red Cross unveils disaster preparedness campaign" (Feb. 8, 2011), p. 2. Available at: <u>http://www.thepacket.ca/Latest-news/2011-02-08/article-2208512/Red-Cross-unveils-disaster-preparedness-campaign--/1</u>.

³⁴⁷ **CW-3**, Sampath Statement I, \P 81.

³⁴⁸ **R-203**, Letter from **BARE**, HMDC to Jeff Bugden, CNLOPB attaching Remote Underdeck Inspection System R&D/E&T Work Expenditure Application Form (Jun. 6, 2012), p. 5.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		Claimant for this value-added R&D. The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Rovers Search and Rescue Infrastructure (\$109,000)	Hibernia	The Claimant alleges that this expenditure is compensable because it would not have been made in the absence of the 2004 Guidelines. ³⁴⁹ The documents, however, show that "The documents also show that HMDC valued receipt of positive recognition for this contribution and HMDC's president, Jamie Long, also made public statements about this expenditure and received press coverage stating that "Hibernia is proud to support and help the volunteers" and that they "understand the importance of having the right training to do the job[and] are impressed with the services

³⁴⁹ **CW-3**, Sampath Statement I, ¶¶ 144-145.

³⁵⁰ **R-204**, Letter from HMDC to Jeff Bugden, CNLOPB attaching Rovers Search and Rescue Infrastructure Donation R&D/E&T Work Expenditure Application Form (Sep. 12, 2011), p. MICI 0004217.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		they provide voluntarily to the region and are pleased to provide this financial support." ³⁵¹ ³⁵² Canadian taxpayers should not be required to compensate the Claimant for contributing to the local community and taking credit for it. The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Safety and Oversight Management System	Hibernia	This expenditure is related to research into the creation of an electronic web enabled database which would eliminate inefficiencies with current reporting processes in use at the CNLOPB and enable analysis of incidents to identify trends and risk areas requiring more safety focus. The Claimant alleges that this "safety-related" expenditure is compensable because it would not have been undertaken in the absence of the Guidelines given the standard health and safety practices followed at Hibernia and Terra Nova. ³⁵³ However, the documents state that

³⁵¹ **R-205**, The Telegram News Article, "Rovers to set up shop in Paradise" (May 14, 2012), p. 2. Available at: <u>http://www.thetelegram.com/News/Local/2012-05-14/article-2978590/Rovers-to-set-up-shop-in-Paradise/1</u>; **R-206**, Hibernia News Release, "Rovers Search and Rescue Team of Northeast Avalon improving volunteer training thanks to a \$600,000 contribution from Hibernia" (Jul. 9, 2012), p. 2. Available at: <u>http://www.hibernia.ca/news/2012/rovers.pdf</u>.

³⁵² **R-200**, EMC R&D Screening Committee Presentation (Jul. 29, 2011), slide 7 (p. MICI 0004630).

³⁵³ **CW-7**, Durdle Statement I, \P 16.

³⁵⁴ C-218, Hibernia R&D Project Abstract, Project – CNLOPB Incident Reporting / Analysis & Certification Database (Undated), p. MOB0004310.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		The "existing technology in use at the C-NLOPB does not allow for electronic transfer of information to record, monitor and access safety incidents". ³⁵⁶ Additionally, the documents show that HMDC made the contribution in the manner that it did because it valued receipt of positive recognition for this contribution and Canadian taxpayers should not be required to compensate the Claimant for this value-added safety-related expenditure. The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
SARA & Metal Analysis	Hibernia	This expenditure is related to the relocation of laboratory work which was previously executed in Alberta, as well as the funding of additional laboratory equipment and research studies. The Claimant alleges that this expenditure is compensable because although this is work that HMDC has long undertaken in the ordinary course of business, before the implementation of the 2004 Guidelines, it carried out this work with a laboratory contractor in

³⁵⁵ **R-207**, E-mail from Jamie Long, HMDC to **10**, K. Sampath and **10** (Dec. 4, 2013), p. MICI 0004251.

³⁵⁶ C-218, Hibernia R&D Project Abstract, Project – CNLOPB Incident Reporting / Analysis & Certification Database (Undated), p. MOB0004310.

³⁵⁷ **R-208**, Letter from K. Sampath, HMDC to M.I. Wager, MWCO and MWCO-NL attaching Letter of Agreement for the Certification and Safety Management Oversight System Development Project and Financial Proposal prepared by MWCO (Nov. 21, 2013), p. MICI 0004230.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		Alberta called Corelabs. Once the 2004 Guidelines were implemented, they decided to move the work to a laboratory in Newfoundland. ³⁵⁸ The Claimant fails, however, to admit the long-term benefits of this move, such as reducing wait times and costs as a result of having a local laboratory perform this work for them. As the documents show, the resulting contract will
		This is further supported by public documents which state that "[w]ith the continued advancement of petroleum developments, such as Hebron, White Rose expansion, Hibernia Souththere is an increased need for related services" and that this is "a crucial service that used to take six to eight months and cost much more, as companies had to ship offshore samples to Alberta, Houston or Norway now, the same process takes three to four weeks [in comparison to six to eight months]." ³⁶⁰ The project is thus of benefit to Hibernia as well as the Claimant's other projects in the offshore area. Canadian taxpayers should not have to compensate the Claimant for this value-added R&D. Moreover, the Claimant does not provide any breakdown of expenses to support its claim that it has purchased a "laboratory" to facilitate the work. ³⁶¹ The Claimant has, in any event, a long-standing commitment in the Hibernia Benefits Plan to "[c]ontinue to support local research institutions and promote

³⁵⁸ **CW-5**, Noseworthy Statement I, \P 29.

³⁵⁹ C-331, Hibernia R&D/E&T Project Abstract: HMDC 11-02 Local SARA & Metal Analysis Capacity-Capability (Petroforma), p. 2 (p. MOB0006016).

³⁶⁰ **R-209**, Government of Newfoundland and Labrador News Release, "Company Offers Strategic Technical Service to Oil Industry with Support from Province" (Sep. 15, 2009). Available at: <u>http://www.releases.gov.nl.ca/releases/2009/business/0915n05.htm</u>. **R-210**, The Telegram News Article, "We were all pretty much scared to death" (Mar. 31, 2012). Available at: <u>http://www.thetelegram.com/Business/2012-03-31/article-2944212/We-were-all-pretty-much-scared-to-death/1</u>.

³⁶¹ **CW-5**, Noseworthy Statement I, ¶31.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		further research and development in Canada to solve problems unique to the Canadian offshore environment." ³⁶² The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Seabird Activity and Aviation Operations Study (Noctural Migratory Bird Behaviour)	Hibernia	This expenditure is related to R&D that would be used to mitigate the risks to night transport operations by . The Claimant argues that this expenditure is compensable because it is only needed "if" operators wish to return to night flying and there are currently no normally scheduled passenger night flights and HMDC has decided to avoid nighttime flying. ³⁶⁴ This expenditure was, however, one of the eight recommendations listed in the Phase 1 Report and Recommendations arising out of the tragic Cougar Helicopters Flight 491 accident. ³⁶⁵ The documents also indicate that

³⁶² **C-37**, Hibernia Decision 86.01, p. 25.

³⁶³ C-217, Letter from , HMDC to Jeff Bugden, CNLOPB attaching Seabird Activity and Aviation Operations Study R&D Work Expenditure Application Form (Jun. 28, 2013), p. 1 (p. MOP0004207)

p. 1 (p. MOB0004307).

³⁶⁴ **CW-7**, Durdle Statement I, \P 32.

³⁶⁵ **CW-7**, Durdle Statement I, ¶ 31; See also, **C-213**, Canada-Newfoundland and Labrador Offshore Helicopter Safety Inquiry (Phase 1), Volume I Report and Recommendations (Oct. 2010), p. 208; **R-211**, Canada-Newfoundland and Labrador Offshore Helicopter Safety Inquiry, Report and Recommendations (Jul. 2011), pp. 183-190; **R-212**, Joint Panel Presentation by the Operators of Hibernia, Terra Nova and White Rose, Offshore Helicopter Safety Inquiry (Jan. 11, 2010), pp. 108-109; **R-213**, Joint Operator Submission Submitted to Offshore Helicopter Safety Inquiry (Jul. 30, 2010), p. vii.

R&D/E&T Work

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		Canadian taxpayers should not be required to compensate the Claimant for this value-added R&D. The Claimant has a long-standing commitment in the Hibernia Benefits Plan to "[c]ontinue to support local research institutions and promote further research and development in Canada to solve problems unique to the Canadian offshore environment." ³⁶⁷ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
	Hibernia	This expenditure is related to R&D to study the . The Claimant alleges that this expenditure is compensable because the data collected from the study will not benefit Hibernia since Hibernia is located off of the Newfoundland coast,

³⁶⁶ **R-214**, SMS Aviation Safety Inc. Report (Undated), p. 1 (p. MICI 0004281).

³⁶⁷ **C-37**, Hibernia Decision 86.01, p. 25.

³⁶⁸ **CW-3**, Sampath Statement I, ¶ 124.

³⁶⁹ C-290, Letter from K. Sampath, HMDC to Jeff Bugden, CNLOPB attaching

Expenditure Application Form (Mar. 10, 2014), p. 4 (p. MOB0005416).

³⁷⁰ *Ibid*, p. 8 (p. MOB0005420).

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		The project is thus of benefit to the Claimant's other projects in the offshore area. Additionally, the documents show that HMDC made the contribution because it valued receipt of positive recognition for this contribution and Canadian taxpayers should not be required to compensate the Claimant for this value-added R&D. The Claimant has a long- standing commitment in the Hibernia Benefits Plan for "research and development to improve the ability to detect and manage ice under adverse weather conditions be undertaken" and "research and development into ice detection sensors, iceberg towing and ice forecasting [continuing] to be supported." ³⁷⁵ The Claimant has failed to prove with reasonable certainty
		that this expenditure is compensable.

³⁷¹ *Ibid*, p. 4 (p. MOB0005416).

³⁷² *Ibid*, p. 1 (p. MOB0005413).

³⁷³ *Ibid*, slide 1 (p. MOB0005424).

³⁷⁴ **R-215**, Letter of Agreement between HMDC and C-Core for

(Jul. 9, 2014), p. MICI 0004312.

³⁷⁵ **C-37**, Hibernia Decision 86.01, p. 82.

(\$2,850,000) (\$2,850,000) contribution" that was only undertaken as a result of the 2004 Guidelines, and prior to the Guidelines, HMDC had never made a contribution to the Shad Valley Program. ³⁷⁶ Mi Sampath, however, acknowledges that expanding the local labor pool through these HMDC	Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
contribution because it valued receipt of positive recognition for this contribution and "HMDC"	5 6	Hibernia	The Claimant alleges that this expenditure is compensable because it is a "community contribution" that was only undertaken as a result of the 2004 Guidelines, and prior to the Guidelines, HMDC had never made a contribution to the Shad Valley Program. ³⁷⁶ Mr. Sampath, however, acknowledges that expanding the local labor pool through these HMDC-supported programs would be a benefit to all potential employers in the area, including Hibernia. ³⁷⁷ The documents indicate that the project's goals are to Additionally, the documents show that HMDC made the contribution because it valued receipt of positive recognition for this contribution and "HMDC's president, Jamie Long, also made public statements and received press coverage stating that

³⁷⁶ **CW-3**, Sampath Statement I, \P 96.

³⁷⁷ **CW-3**, Sampath Statement I, \P 82.

³⁷⁸ C-271, Letter from K. Sampath, HMDC to Jeff Bugden, CNLOPB attaching Shad Valley Project R&D/E&T Work Expenditure Application Form (Nov. 12, 2013), p. MOB0005069.

³⁷⁹ **R-216**, Letter of Agreement between HMDC and MUN for the The Hibernia Project SHAD Valley Fund (Dec. 17, 2013), p. MICI 0004316.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		"Hibernia is a strong supporter of science, technology, engineering and math educational initiatives." ³⁸⁰ The press release identifies ExxonMobil as an investor in HMDC. Canadian taxpayers should not be required to compensate the Claimant for contributing to the local community and taking credit for it. The Claimant has failed to prove with reasonable certainty that it should be compensated for the full amount of this expenditure.
Subsea Leak Detection	Hibernia	This expenditure is related to R&D that would be used " ³⁸¹ The Claimant alleges that this expenditure is compensable because such technology was not needed for Hibernia, and even if it was, they would have purchased the best available commercial technology at that time and not developed it on their own. ³⁸² The documents, however, indicate that The documents further indicate that the project's

³⁸⁰ R-217, Hibernia News Release "Hibernia Investment Grows Enrichment Programming at Memorial University" (Jul. 24, 2014). Available at: <u>http://www.hibernia.ca/news/2014/shad.pdf</u>; R-218, CBC News Article, "Shad Valley fund open to 250 of province's top high school students" (Oct. 6, 2014). Available at: <u>http://www.cbc.ca/news/canada/newfoundland-labrador/shad-valley-fund-open-to-250-of-province-s-top-high-school-students-1.2788848</u>; R-219, Memorial University News Article, "Hibernia investment grows enrichment programming" (Jul. 28, 2014). Available at: <u>http://www.mun.ca/publicengagement/news.php?id=3797</u>.

³⁸¹ C-247, Letter from **Control**, HMDC to Jeff Bugden, CNLOPB attaching Testing of Fiber Optic Cable Distributed Sensing Leak Detection System for Arctic and Cold Region Applications – Phase 1 (HMDC 13-10) R&D/E&T Work Expenditure Application (Sep. 4, 2013), p. 1. (p. MOB0004845).

 $^{^{382}}$ **CW-3**, Sampath Statement I, ¶ 46.

³⁸³ C-247, Letter from **Control**, HMDC to Jeff Bugden, CNLOPB attaching Testing of Fiber Optic Cable Distributed Sensing Leak Detection System for Arctic and Cold Region Applications – Phase 1 (HMDC 13-10) R&D/E&T Work Expenditure Application (Sep. 4, 2013), p. 1 (p. MOB0004845).

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		objectives are to determine if
		incentives of the project are listed as:
		The project is thus of benefit to both Hibernia and the Claimant's other projects in the offshore area. Canadian taxpayers should not have to compensate the Claimant for this value-added R&D. The Claimant also has a long-standing commitment in the Hibernia Benefits Plan to "[c]ontinue to support local research institutions and promote further research and development in Canada to solve problems unique to the Canadian offshore environment" ³⁸⁶ and to undertake and support "research to develop effective countermeasures…to minimize oil spills from ALPs and subsea components due to iceberg impact." ³⁸⁷ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Subsea Sentry System	Hibernia	This expenditure is related to R&D that will be used to
		The Claimant alleges that

³⁸⁴ **R-155**, EMC R&D Screening Committee Presentation (Mar. 4, 2013), slide 9 (p. MICI 0004730).

³⁸⁵ Ibid.

³⁸⁶ **C-37**, Hibernia Decision 86.01, p. 25.

³⁸⁷ C-37, Hibernia Decision 86.01, p. 83 (endorsing the recommendation of the Hibernia Environmental Panel). See *ibid*, p. 95.

³⁸⁸ **CW-3**, Sampath Statement I, ¶ 52; **C-249**, Letter from K. Sampath, HMDC, to J. Bugden, CNLOPB, attaching Sub-Surface Sentry System R&D Work Expenditure Application Form (Nov. 12, 2013, p. 5 (p. MOB0004863).

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		this expenditure is compensable because "[n]ormally HMDC would not step midstream into a partially completed R&D project conceived by others in order to advance it to completion." ³⁸⁹ The documents, however, show that the project was actually initiated by the Claimant who directly financed the first two phases of the project ³⁹⁰ and it was developed ³⁹¹ The documents further indicate that further indicate that Canadian taxpayers should not have to compensate the Claimant for this value- added R&D. The Claimant has a long-standing commitment in the Hibernia Benefits Plan to "[c]ontinue to support local research institutions and promote further research and development in Canada to solve problems unique to the Canadian offshore environment." ³⁹⁴

 $^{^{389}}$ CW-3, Sampath Statement I, ¶ 53.

³⁹⁴ C-37, Hibernia Decision 86.01, p. 25.

³⁹⁰ **CW-3**, Sampath Statement I, \P 52.

³⁹¹ **R-220**, Presentation, Procurement and Integration (2013), slide 3 (p. MICI 0004371).

³⁹² **R-220**, Presentation, Procurement and Integration (2013), slide 6 (p. MICI 0004374). See also **C-249**, Letter from K. Sampath, HMDC, to J. Bugden, CNLOPB, attaching Sub-Surface Sentry System R&D Work Expenditure Application Form (Nov. 12, 2013), p. 7 (p. MOB0004865).

³⁹³ **R-221**, Letter of Agreement between HMDC and the for Subsea Sentry System Project (Jan. 23, 2014), p. 2 (p. MICI 0004367); **R-222**, Letter of Agreement between HMDC and the for Subsea Sentry System Project (Feb. 27, 2014), p. 2 (p. MICI 0004403).

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Synthetic Aperture Radar	Hibernia	This R&D expenditure relates to tests that were conducted in order to determine the reliability for measuring sea ice thickness. The Claimant alleges that this expenditure is compensable because HMDC does not pay contractors to test out their proprietary technology so they can use the results to market their capabilities. ³⁹⁵ The documents, however, state that there is value added for The documents also state that the there is that the there is the transformation of the safety of assets can be used to enhance the work that HMDC is already

³⁹⁵ **CW-3**, Sampath Statement I, \P 66.

³⁹⁶ C-234, C-CORE, Development of Improved Ice Management Capabilities for Operations in Ice Environments: Joint Industry Projects Overview (Undated), slide 8 (p. MOB0004523).

³⁹⁷ **R-122**, C-CORE, Strategy and Vision for Ice Management Program, Draft Report (Sep. 2010), p. ii (p. MICI 0002723).

³⁹⁸ **R-122**, C-CORE, Strategy and Vision for Ice Management Program, Draft Report (Sep. 2010), p. 2 (p. MICI 0002733).

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		doing in the area in the ordinary course. Iceberg detection radar is of critical importance and use to Hibernia and future arctic offshore operations. Canadian taxpayers should not have to compensate the Claimant for this value-added R&D. The Claimant has a long-standing commitment in the Hibernia Benefits Plan for "research and development to improve the ability to detect and manage ice under adverse weather conditions be undertaken" and "research and development into ice detection sensors, iceberg towing and ice forecasting [continuing] to be supported." ³⁹⁹ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
	Hibernia	This R&D expenditure is related to a project which investigates the The Claimant alleges this expenditure is compensable because although HMDC provides platform, a study by the service "into the useage and efficacy of the something that HMDC would fund in the ordinary course of business." The documents, however, state that the research will "HMDC is already providing these services to offshore workers so it must view the services as worthwhile, and this expenditure merely seeks to evaluate the services in the

³⁹⁹ **C-37**, Hibernia Decision 86.01, p. 82.

R&D/E&T Work Expenditure Application Form

⁴⁰⁰ **CW-3**, Sampath Statement I, \P 61.

⁴⁰¹ C-254, Letter from K. Sampath, HMDC to Colin Dyer, CNLOPB attaching

⁽Feb. 27, 2014), p. 2 (p. MOB0004933).

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		interest of productivity efficiency. Canadian taxpayers should not have to compensate the Claimant for enhancing the Solution . The Claimant has failed to prove with reasonable certainty that it should be compensated for the full amount of this expenditure.
Towing Icebergs	Hibernia	This expenditure relates to R&D that was conducted in order to improve iceberg towing capabilities in harsh environments. The Claimant alleges that this expenditure is compensable because HMDC will not have much (if any) need for any of the resulting technologies, and Terra Nova's less-developed ice-management program is also "suitable". ⁴⁰² However, the documents confirm that the research is relevant to other projects, It is necessary because The documents further state that ""

 $^{^{402}}$ **CW-5**, Noseworthy Statement I, ¶ 27.

⁴⁰³ C-234, C-CORE, Development of Ice Management Capabilities for Operations in Ice Environments: Joint Industry Projects Overview (Undated), p. 12.

⁴⁰⁴ **C-236**, PRNL, Contribution Agreement for "Ice Loads on Floating Structures – Phase 1" (Nov. 9, 2012), p. 19.

⁴⁰⁵ **R-122**, C-CORE, Strategy and Vision for Ice Management Program, Draft Report (Sep. 2010), p. i (p. MICI 0002722).

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		The documents confirm that the objective of the project is " Canadian taxpayers should not be required to compensate the Claimant for this value-added R&D. The Claimant has a long-standing commitment in the Hibernia Benefits Plan for "research and development to improve the ability to detect and manage ice under adverse weather conditions [to] be undertaken" and "research and development into ice detection sensors, iceberg towing and ice forecasting [continuing] to be supported." ⁴⁰⁹ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Towing, Sheltering and Recovery of	Hibernia	This expenditure is related to R&D that was conducted with a goal of reducing offshore evacuation safety risks and advancing the state of knowledge of the operating performance

⁴⁰⁶ **R-122**, C-CORE, Strategy and Vision for Ice Management Program, Draft Report (Sep. 2010), p. ii (p. MICI 0002723). See also **R-129**, Presentation, Development of Improved Ice Management Capabilities for Operations in Ice Environments (Dec. 15, 2010), slide 13 (p. MICI 0003135).

⁴⁰⁷ **R-125**, Letter from **100**, HMDC to Jeff Bugden, CNLOPB attaching Ice Management Program R&D Work Expenditure Application Form (Dec. 15, 2010), slide 13 (p. MICI 0003006). See also **R-129**, Presentation, Development of Improved Ice Management Capabilities for Operations in Ice Environments (Dec. 15, 2010), slide 13 (p. MICI 0003135).

⁴⁰⁸ **R-125**, Letter from **Control**, HMDC to Jeff Bugden, CNLOPB attaching Ice Management Program R&D Work Expenditure Application Form (Dec. 15, 2010), slide 13 (p. MICI 0003006).

⁴⁰⁹ **C-37**, Hibernia Decision 86.01, p. 82.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
TEMPSC Lifeboats/Life Rafts		capabilities and limitations of TEMPSC and life rafts under different environmental and rescue/recovery scenarios. ⁴¹⁰ The Claimant alleges that this expenditure is compensable because it has done very little to increase the immediate safety record at Hibernia. ⁴¹¹ According to Mr. Durdle, this JIP was not required by Hibernia's commercial or reasonable safety demands because such events are "infrequent". ⁴¹² However, the documents state that his research was undertaken because

⁴¹⁰ **CW-7**, Durdle Statement I, \P 24.

⁴¹¹ **CW-7**, Durdle Statement I, ¶ 16.

⁴¹² **CW-7**, Durdle Statement I, \P 25.

⁴¹³ **R-223**, PRNL, Contribution Agreement for "Towing, Sheltering and Recovery of TEMPSC Lifeboats and Life Rafts" (Nov. 9, 2012), p. A-1 (p. MICI 0004462).

⁴¹⁴ **R-98**, EMC R&D Screening Committee Presentation (Sep. 28, 2012), slide 9 (p. MICI 0004703); **R-223**, PRNL, Contribution Agreement for "Towing, Sheltering and Recovery of TEMPSC Lifeboats and Life Rafts" (Nov. 9, 2012), p. A-1 (p. MICI 0004462).

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		This project is thus beneficial to the Claimant in improving safety and reducing operational risks. Canadian taxpayers should not be required to compensate the Claimant for this value-added R&D. The Claimant also has a long-standing commitment in the Hibernia Benefits Plan to "[c]ontinue to support local research institutions and promote further research and development in Canada to solve problems unique to the Canadian offshore environment." The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Wave Impact Study	Hibernia	This expenditure is related to R&D that was conducted in order to better understand the long- term effects that dynamic wave loads exert. ⁴¹⁶ The Claimant alleges that this expenditure is compensable because it is not of benefit to completed structures like the Hibernia platform. ⁴¹⁷ However, the Claimant's own witness admits that

⁴¹⁵ **R-223**, PRNL, Contribution Agreement for "Towing, Sheltering and Recovery of TEMPSC Lifeboats and Life Rafts" (Nov. 9, 2012), p. A-2 (p. MICI 0004463); **R-98**, EMC R&D Screening Committee Presentation (Sep. 28, 2012), slide 9 (p. MICI 0004703).

⁴¹⁶ **CW-3**, Sampath Statement I, \P 56.

⁴¹⁷ **CW-3**, Sampath Statement I, ¶ 57.

⁴¹⁸ **CW-3**, Sampath Statement I, ¶¶ 56-57.

⁴¹⁹ C-252, Letter from K. Sampath, HMDC, to J. Bugden, CNLOPB, attaching Wave Impact Study R&D Work Expenditure Application Form (Oct. 22, 2013), p. 1 (p. MOB0004915).

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		The documents also observe that "Documents also confirm that this research is necessary: . Canadian taxpayers should not be required to compensate the Claimant for this value-added R&D. The Claimant has, in any event, a long-standing commitment in the Hibernia Benefits Plan to "[c]ontinue to support local research institutions and promote further research and development in Canada to solve problems unique to the Canadian offshore environment." ⁴²⁴ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.
Women in Science and Engineering	Hibernia	The Claimant alleges this "community contribution" is compensable because it does "not make sense for a joint-interest project to make large charitable contributions through the

⁴²⁰ *Ibid*, pp. 2-3 (pp. MOB0004916-7).

⁴²¹ *Ibid*, p. 2 (p. MOB0004916).

⁴²² *Ibid*, p. 3 (p. MOB0004917).

⁴²³ *Ibid*, p. 1 (p. MOB0004915).

⁴²⁴ **C-37**, Hibernia Decision 86.01, p. 25.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
Program (WISE)		project account, since the individual project owners usually want to capture for themselves the recognition and goodwill that are thereby generated." ⁴²⁵ In contradiction to this claim, the documents show that HMDC valued receipt of positive recognition for this contribution and In-line with this, WISE confirms that entities providing contributions Further, HMDC uses the program not just for goodwill, but
		also as an employee benefit
		Canadian taxpayers should not be required to compensate the Claimant for contributing to the local community and taking credit for it. The Claimant has failed to prove with reasonable certainty that it should be compensated for the full amount of this expenditure.
WRDC Contributions (\$261,750)	Hibernia	The Claimant alleges this "community contribution" is compensable because it does "not make sense for a joint-interest project to make large charitable contributions through the

⁴²⁵ **CW-3**, Sampath Statement I, ¶ 132.

⁴²⁶ **R-224**, Letter Agreement between HMDC and WISE Newfoundland and Labrador for Women in Science and Engineering Student Summer Employment Program (Jun. 19, 2013), p. 2 (p. MICI 0004513).

⁴²⁷ **C-312**, Letter from **1999**, HMDC, to J. Bugden, CNLOPB, attaching Hibernia Women in Science and Engineering Student Summer Employment Program R&D Work Expenditure Application Form (Nov. 7, 2011), p. MOB0005687-5688.

⁴²⁸ **R-224**, Letter Agreement between HMDC and WISE Newfoundland and Labrador for Women in Science and Engineering Student Summer Employment Program (Jun. 19, 2013), p. 1 (p. MICI 0004512).

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		project account, since the individual project owners usually want to capture for themselves the recognition and goodwill that are thereby generated." ⁴²⁹ In contradiction to this claim, the documents show that HMDC in-fact actually valued receipt of positive recognition for this contribution and In-line with this requirement, HMDC's contribution is published on WRDC's website. ⁴³¹ Further stipulations are that the scholarship Canadian taxpayers should not be required to compensate the Claimant for contributing to the local community and taking credit for it. The Claimant has failed to prove with reasonable certainty that it should be compensated for the full amount of this expenditure.
Young Innovators Award	Terra Nova	This expenditure concerns an award that recognizes, promotes and supports outstanding and innovative new faculty and researchers at Memorial University ("MUN"). ⁴³³

⁴²⁹ **CW-3**, Sampath Statement I, ¶ 132.

⁴³⁰ **R-225**, Letter of Agreement between HMDC and Women in Resource Development Corporation for Education & Training Expenditure for Orientation to Trades and Technology Scholarships (Nov. 24, 2011), p. MICI 0004526.

⁴³¹ **R-226**, Women in Resource Development Corporation website excerpt, "About ERC" (2009). Available at: <u>http://wrdc.nf.ca/erc/index.htm</u>.

⁴³² **R-225**, Letter of Agreement between HMDC and Women in Resource Development Corporation for Education & Training Expenditure for Orientation to Trades and Technology Scholarships (Nov. 24, 2011), p. MICI 0004525-6.

⁴³³ **R-36**, Terra Nova 2009 Benefits Report, p. 10.

Expenditure Description & Gross Expenditures ¹	Project	The Claimant Has Failed to Prove That These Expenditures are Compensable
		. Canada requested documents from the Claimant concerning this Suncor expenditure, but the Claimant failed to produce any relevant documents. The only evidence the Claimant proffers is that of its own witness, Mr. Sampath. ⁴³⁵ Mr. Sampath, does not, however, file any documents from Suncor to support his testimony. The Claimant has a long-standing commitment in the Terra Nova Benefits Plan to "support education and training generally in the Province, beyond simply using local organizations and facilities to deliver the training needs of the [Terra Nova] Development". ⁴³⁶ The Claimant has failed to prove with reasonable certainty that this expenditure is compensable.

[,] Petro-Canada attaching R&D Work Expenditure Form: Terra Nova Young Innovators Award (May 5, 2009), p. 2.

⁴³⁴ **R-227**, Letter from \mathbf{C} , CNLOPB to \mathbf{C} ⁴³⁵ **CW-3**, Sampath Statement I, ¶ 137.

⁴³⁶ **C-41**, Terra Nova Decision 97.01, p. 23.