

**IN THE MATTER OF AN ARBITRATION UNDER CHAPTER ELEVEN OF THE
NORTH AMERICAN FREE TRADE AGREEMENT AND THE
UNCITRAL ARBITRATION RULES, 1976**

-BETWEEN-

**THEODORE DAVID EINARSSON, HAROLD PAUL EINARSSON, RUSSELL JOHN
EINARSSON, GEOPHYSICAL SERVICE INCORPORATED**

(the “Claimants”)

-AND-

GOVERNMENT OF CANADA

(the “Respondent”)

(ICSID Case No. UNCT/20/6)

**WITNESS STATEMENT OF HAROLD PAUL EINARSSON
CWS-12**

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I. INTRODUCTION

1. I make this Witness Statement in my personal capacity as a Claimant in this Arbitration and in my capacity as Chairman of the Board of Directors and President of the Claimant, Geophysical Service Incorporated (“GSI”).
2. My father, Theodore David Einarsson (“**Davey**”), passed away on January 2, 2024. As further explained in Section II of this Witness Statement, I am named as his executor in his last will and am the beneficiary of his interests in GSI, including his shares and his shareholder loans, all of which was confirmed by the Texas Court. I also make this Witness Statement in my capacity as the personal representative of the Estate of Theodore David Einarsson (the “**Estate**”).
3. I became the President of GSI shortly after the death of my father.
4. I have been personally involved in the matters discussed in this Witness Statement, both on my own behalf and in my capacity as an employee, shareholder, director and officer of GSI, and as the personal representative of the Estate.
5. Based on such involvement and my review of books and records kept in the ordinary course of business of GSI and the Estate, I have personal knowledge of the matters discussed in this Witness Statement, except where based upon information and belief. Where my knowledge is stated to be based on information and belief, I verily believe the same to be true.

II. ESTATE OF DAVEY EINARSSON

6. On January 2, 2024, my father, Davey, passed away. I provide a redacted copy of Davey’s death certificate in support hereof.¹
7. On February 28, 2024, probate proceedings were filed by my local counsel in the County Court of Fort Bend County, State of Texas, United States, seeking, *inter alia*, that Davey’s will be admitted to probate and that Letters Testamentary be issued in favour of me, in my capacity as executor of the Estate, considering that I was named Davey’s

¹ C-349, Redacted Copy of Theodore David Einarsson’s Death Certificate.

executor in his will. I provide a copy of Davey's will to the County Court of Fort Bend County in support of that request.²

8. On April 1, 2024, the County Court of Fort Bend County ordered³ the issuance of Letters Testamentary pursuant to which I was formally appointed as independent personal representative of the Estate.⁴ The Letters Testamentary were not actually issued that day, as they were ordered to be issued; they were issued some days later and then sent physically to my address.
9. I therefore have full authority to administer and represent the Estate, including in the context of this Arbitration.
10. On April 12, 2024, I executed, on my own behalf, as the personal representative of the Estate, and on behalf of GSI, a Power of Attorney confirming that Stikeman Elliott LLP has full authorization to act in a full counsel of record role in this Arbitration.⁵
11. Pursuant to Davey's will, I am the ultimate beneficiary of all of Davey's interests in GSI.⁶
12. Davey's interests in GSI currently vest in the Estate. In time, I will therefore inherit Davey's interests in GSI.

III. WAIVER

13. On May 22, 2024, I executed, in my capacity as personal representative of the Estate, a letter pursuant to which I acknowledged and affirmed that the Estate remains bound by the Article 1121 NAFTA Waiver executed in respect of Davey on April 3, 2019.⁷
14. I also provide in support hereof the Court Dockets in cases No. 2011 01G 5430 (against the Province of Newfoundland and Labrador and CNLOPB) and No. 2013 01G 1671 (against numerous private defendants) filed in the Province of Newfoundland and

² C-350, Redacted Copy of Theodore David Einarsson's Will.

³ C-386, Order rendered on April 1, 2024, by the County Court of Fort Bend County, State of Texas in Davey's probate proceedings.

⁴ C-387, Letters Testamentary issued on April 1, 2024, by the County Court of Fort Bend County, State of Texas.

⁵ C-388, Power of Attorney executed on April 12, 2024.

⁶ C-350, Redacted Copy of Theodore David Einarsson's Will, s. 2.02.

⁷ C-389, Letter signed on May 22, 2024, acknowledging and affirming that the Estate of Davey Einarsson remains bound by the Article 1121 NAFTA Waiver executed on April 3, 2019.

Labrador showing that such claims were terminated on August 2, 2019⁸ and February 2, 2020⁹, respectively.

15. To my knowledge – and as indicated in these two Court Dockets – these two cases were not actively pursued after the filing of the NOA on April 18, 2019.
16. In Case No. 2011 01G 5430 against the Province of Newfoundland and Labrador and CNLOPB, the proceedings remained inactive for approximately two years, until the CNLOPB applied for the dismissal of the proceedings.
17. In Case No. 2013 01G 1671 against numerous private defendants, the Province of Newfoundland and Labrador and CNLOPB, the proceedings also remained inactive for approximately two and a half years, until the CNLOPB applied for the dismissal of the proceedings.
18. These two-year long inactivity periods are explained by the fact that GSI did not intend to continue those domestic proceedings given that it had commenced this Arbitration under NAFTA against Canada.
19. These two cases thus remained “administratively existent” between 2017-2016 and 2019, respectively, but GSI did not pursue them after 2017-2016.

IV. COMMENTS ON CANADA’S WITNESS STATEMENTS

A. Canada’s Failure to Call Witnesses in this Arbitration

20. As explained in my first Witness Statement, GSI and Canada previously took part in domestic proceedings referred to as the “Common Issues Trial”.¹⁰
21. During the Common Issues Trial, Canada called several witnesses to testify, including Bharat Dixit, John Andrews, Samuel Millar and Rowland Harrison.
22. In this Arbitration, Canada has only tendered a witness statement from one of those individuals, namely Bharat Dixit. The evidence of Bharat Dixit is provided here.¹¹ The

⁸ C-390 Court Docket in File No. 2011 01G 5430.

⁹ C-391 Court Docket in File No. 2013 01G 1671.

¹⁰ CWS-06, Witness Statement of Paul Einarson dated September 27, 2022 at para. 116-117.

¹¹ C-392, Affidavit of Bharat Dixit in Common Issues Trial, dated August 31, 2015; C-393, Transcript of Questioning of Bharat Dixit in Common Issues Trial, dated October 1, 2015; C-394, Undertakings and Responses of Bharat Dixit in Common Issues Trial, dated November 7, 2016.

evidence of the other Canadian government witnesses is provided here.¹² The transcripts for the Common Issues Trial are also provided here.¹³

23. The three witnesses that Canada has tendered witness statements from in this Arbitration are representatives of the Boards, namely:
- a) Bharat Dixit
 - b) Carl Makrides
 - c) Trevor Bennett
24. Canada did not call any witness in this Arbitration that is a representative of the Canadian Government, such as Marc D'Iorio, who corresponded with me on the issues that Canada raises in this Arbitration.
25. In any event, in the present section, I wish to answer and re-contextualize some of the comments that Bharat Dixit, Carl Makrides and Trevor Bennett have made in their respective witness statements.

B. Bharat Dixit

26. In response to paragraphs 8-9 of Mr. Dixit's Witness Statement (**RWS-01**), the COGLA, NEB and now CER possess the seismic data covering all onshore Northern territories, and offshore areas of Canada, including Nova Scotia, and Newfoundland and Labrador, so it does not just possess offshore seismic data north of the 60° latitude, the Gulf of the St. Lawrence and the west coast offshore area. The seismic data covering areas now within the jurisdiction of the CNSOPB and CNLOPB is still available through the CER, as that seismic data was copied for the CNSOPB and CNLOPB, not merely transferred.
27. In response to paragraphs 16-17 of Mr. Dixit's Witness Statement, Delaware GSI advocated for confidentiality in perpetuity as its primary position, not for a 15-year

¹² C-395, Affidavit of John P. Andrews, dated August 27, 2015; C-396, Transcript of Questioning of John P. Andrews dated September 15, 2015; C-397, Undertakings and Responses of John P. Andrews, from Questioning held September 15, 2015.; C-398, Affidavit of Rowland J. Harrison dated August 28, 2015; C-399, Affidavit of Rowland J. Harrison dated August 31, 2015; C-400, Transcript of Questioning of Rowland J. Harrison held September 25, 2015; C-401, Response to Undertaking of Rowland J. Harrison from Questioning held October 19, 2015; C-402, Affidavit of Samuel S. Millar dated September 1, 2015; C-403, Transcript of Questioning of Samuel S. Millar dated September 24, 2015; C-404, Response to Undertaking of Samuel S. Millar, dated September 30, 2015.

¹³ C-405, Trial Transcripts of the Common Issues Trial from November 23, 24, 25, 27, and 30 2015, and December 1, 2, 3, 4, 8, 9, and 10, 2015. ("Common Issues Trial Transcripts")

period which was an alternative settlement offer made when facing the ultimatum of Canada's unilateral prerogative to pass legislation. My father, Davey, did not advocate for a 15-year confidentiality period, but rather to extend the confidentiality period. It is my understanding that Mr. Clink passed away many years ago (possibly 2002), was only with GSI Delaware and had no relationship with GSI.

28. On June 1, 1988, Mr. Marcel Masse, on behalf of Canada, penned a letter to my father Davey that he would issue a Ministerial Order to extend the confidentiality period for speculative seismic data.¹⁴ I am unaware of whether my father ever received a copy of the correspondence from Marcel Masse because no such record was in our possession prior to its inclusion as an exhibit during the Common Issues Trial. I am advised by my counsel in this proceeding that no such Ministerial Order was ever issued.
29. In response to paragraph 23 of Mr. Dixit's Witness Statement, Rudy Klaubert of the NEB, in fact, participated in discussions regarding the "shared data repository" that the CNSOPB and CNLOPB pursued, whereby field data would be submitted and SEG-Y format seismic materials would be made available. The CNSOPB for instance provided FTP online access to data to various parties and has disclosed digital GSI data to GSI's seismic industry competitors, such as RPS and Beicip-Franlab for a study performed as part of the Play Fairway Analysis project.¹⁵
30. In response to paragraph 24 of Mr. Dixit's Witness Statement, the "final reports" referenced therein take a specific format prescribed by regulation,¹⁶ which format is not of a type that GSI would ever have created but for the prescribed regulations. Those regulations, the Geophysical Operations Regulations, mandated GSI to create and provide proprietary information to Canada in formats that Canada sought, and not in any format that GSI would have otherwise created.
31. In response to paragraph 26 of Mr. Dixit's Witness Statement, the Boards have demonstrated their intent to demand submission of SEG-Y processed digital data¹⁷, which first started with the CNSOPB changing its policy in order to do so, and the

¹⁴ C-406, Letter from Mr. Marcel Masse to Davey Einarsson on June 1, 1988.

¹⁵ C-407, Letter from Sandy MacMullin to Murray Coolican dated October 20, 2010.

¹⁶ C-142, *Canada Oil and Gas Geophysical Operations Regulations*, SOR 96/117.

¹⁷ C-407, Letter from Sandy MacMullin to Murray Coolican dated October 20, 2010.

Boards generally employ the same policies as one another. In fact, the CNSOPB demanded that GSI submit SEG-Y digital data **retroactive** for all of the Seismic Works in its jurisdiction and GSI complied due to potential for regulatory repercussions or retribution. Given the Alberta Decisions, all seismic data, regardless of format, could be disclosed and copied, including SEG-Y digital data. The Alberta Decisions do not differentiate between the formats of seismic data that can be disclosed and copied. The Secondary Submissions also include different versions of GSI processed and reprocessed SEG-Y digital data, which is then available for disclosure and copying under the Alberta Decisions.

32. Mr. Dixit does not disclose any guidelines or catalogues of allegedly disclosed and available seismic data prior to 1984 in his Witness Statement. GSI did not exist until 1993, so was not privy to such documents. In any event, the 1984 catalogue of available seismic data was not provided to GSI. GSI could not know of a document that it did not know existed. In any event, this catalogue does not demonstrate that there was any disclosure or copying that occurred in 1984. In fact, through AIA Responses, GSI has obtained evidence of copying of the Seismic Works through the Boards at the following dates as the earliest instances of copying:
- (a) NEB – First evidence of copying is in an email to Arcis, a copy company, dated March 23, 2000, seeking copying of some of the Seismic Works, which was provided to GSI through an AIA Request made on November 28, 2005, with a responding cover letter date of December 16, 2005. All of the names of parties involved were redacted until an unredacted version was provided on October 10, 2012 and indicated who was copying.¹⁸
 - (b) CNLOPB – First evidence of copying is in forms indicating that some of the Seismic Works were being sent for copying on December 18, 2007, which was provided to GSI through a AIA Response dated August 9, 2011.¹⁹
 - (c) CNSOPB – First evidence of copying is in an email from Lynx and a letter to Wade Company to copy some of the Seismic Works for Lynx, dated November 5,

¹⁸ C-408, AIA Response File RMDI ATI IND 2005 16 dated December 16, 2005.

¹⁹ C-409, AIA Response No. 11452-019-041 dated August 9, 2011.

1993, which was provided to GSI through an AIA Responses on July 12, 2012.²⁰

(d) NRCan – First evidence of copying is a contract between NRCan and Lynx to scan some of the Seismic Works, dated July 17, 2009, which was provided to GSI through an AIA Response on March 12, 2012.²¹

33. In other words, disclosure or copying was simply not occurring until later in time, so the Claimants could not possibly have known about it earlier in time. The technologies available to the industry and policies employed by the Boards evolved over time and were not static, as confirmed by the Alberta Decisions. The Claimants could not have been aware of disclosure or copying until they discovered it and could not have been aware of copying if it was not occurring until later in time.
34. In response to paragraphs 33-34 of Mr. Dixit’s Witness Statement, the NEB did not allow copying. In fact, the Frontier Information Office (“**FIO**”) at the NEB and now CER explicitly posted signs regarding the intellectual property laws of Canada being followed and required borrowers of the seismic materials at the FIO to sign a “liability agreement – borrowed materials”, which further required such parties to acknowledge the intellectual property laws of Canada. Mr. Dixit states that “GSI would have been aware of this [the FIO making copies of paper and mylar seismic materials whose confidentiality period had expired]”, but GSI was unaware of this practice. In fact, the opposite messages were provided to Delaware GSI, based on my review of the records that GSI took over from Delaware GSI. Further, GSI was aware of the warnings regarding intellectual property laws at the FIO and relied on them being enforced. Many libraries have similar postings in Canada and authors rely on libraries enforcing the intellectual property laws of Canada to ensure that their copyright works are not reproduced in the sole discretion of library users. For unclear reasons, Mr. Dixit notes that GSI and its personnel visited the Boards, but that was to conduct research into the Boards’ policies and Secondary Submissions. A letter to Delaware GSI in 1983 sought shotpoint location data for certain seismic data and assured Delaware GSI that the law and the COGLA policies in place at that time would protect that seismic data from any disclosure to industry, which seismic data is disclosed

²⁰ C-410, AIA Response No. 10,555.103 date July 12, 2012.

²¹ C-411, AIA Response No. DC-7040-11-057 dated March 12, 2012.

- by Canada to GSC and various contractors of the government.²² Nevertheless, during the course of the Common Issues Proceedings, GSI learned that the NEB worked with MJ Systems to copy the Seismic Works and further allowed MJ Systems to keep a copy of the Seismic Works that it had reproduced, enabling further dissemination.²³
35. At paragraphs 37-38 of Mr. Dixit's Witness Statement, he confirms that some of the Seismic Works still had not been released by the time that this Arbitration commenced. However, with the Alberta Decisions, the Boards treat all of the Seismic Works the same upon the expiration of the confidentiality period that the Boards apply – that is, all of the Seismic Works can be disclosed and copied without compensation.
36. By 2008, GSI had commenced some of the litigation that led to the Alberta Decisions and was concerned that the NEB was actively hindering GSI's efforts to enforce its confidentiality and copyright in the Seismic Works. Therefore, GSI protested submission of the GSI 2D Marine Seismic Survey North Labrador Sea 2008.
37. In response to paragraph 40 of Mr. Dixit's Witness Statement, he notes a lack of activity in certain areas, but then there is no explanation as to why the Seismic Works covering those areas was disclosed by the NEB. If activity in those areas is off-limits or there are no calls for bids by Canada, then there is no need to disclose those Seismic Works to promote activity in those areas.
38. In response to paragraph 50 of Mr. Dixit's Witness Statement, I was misled by Canada in various ways as to how it was treating the intellectual property in the Seismic Works, including through the public notices regarding intellectual property at the FIO,²⁴ the liability agreements for borrowed materials from the FIO,²⁵ the letter from Marc D'Orio indicating that Canada was seeking legal advice regarding copyright and would comply with copyright in Canada with respect to the Seismic Works,²⁶ the licence that Canada entered into with GSI regarding certain of the Seismic Works that confirms that GSI

²² C-412, Letter from the Canada Oil and Gas Lands Administration to Delaware GSI dated June 22, 1983.

²³ C-394, Undertakings and Responses of Bharat Dixit in Common Issues Trial, dated November 7, 2016, Response to Undertaking 12, p. 106 of 131.

²⁴ R-297.

²⁵ R-294, R-295, R-296.

²⁶ C-413, Letter from Marc D'Orio dated June 4, 2010.

owns intellectual property rights in those Seismic Works,²⁷ and decisions of the Canadian Courts that indicated that GSI had a right to know who was accessing its data²⁸ and that GSI's claim for copyright infringement from accessing Board data could not be summarily dismissed because the law was unclear.²⁹

39. In response to paragraph 51 of Mr. Dixit's Witness Statement, the Secondary Submissions require submission of seismic data to obtain the allowable expenditure credits, which are a credit based on the amount of money spent by a company on that seismic data or in earlier instances a fixed rate that was often more than GSI charged its customers. Canada uses forms for these credits,³⁰ and the form specifically indicates that a copy of the purchase invoice and the licensing agreement indicating that rights to the data have passed from the original owner to the applicant for the seismic data should be included.³¹ Canada relies on applicants to indicate and provide proof that they own the seismic data for which credit is being claimed, but the applicants that submitted the Seismic Works never owned that seismic data, GSI did. Canada used the allowable expenditure credit program to then apply a shorter time for the Privilege Period because the companies were indicating that they owned the data as exclusive data, as opposed to the data being classified as non-exclusive seismic data which is under a longer Privilege Period (often double or triple the time).³² The Boards generally never required proof of ownership from applicants or generally disregarded evidence to the contrary. This program completely undermined GSI's ability to control its proprietary information, as other versions of the Seismic Works and different formats were submitted to Canada which were then disclosed without intellectual property protections as a result of the Alberta Decisions. Contrary to Mr. Dixit's statement that the applicants seek allowable expenditure credits on their own volition (and Mr. Makrides' statement at paragraph 53

²⁷ C-175, General License Agreement #GSC0893 Between GSI and Her Majesty the Queen in the Right of Canada, dated October 1, 1993.

²⁸ C-197, *Geophysical Service Inc. v. Canada Newfoundland Offshore Petroleum*, 2003 FCT 507, Reasons for Orders.

²⁹ C-414, *Geophysical Service Inc. v. Antrim Energy Inc.*, 2015 ABQB 482, Memorandum of Decision.

³⁰ See examples of forms, templates and guidelines with respect to the application for allowable expenditure credits at C-415, Application for Allowable Expenditure Credit Template; C, 416, Allowable Expenditure Credit Guideline from the CNLOPB dated October 2021; C-417, CNSOPB Geophysical, Geological, Geotechnical and Environmental Program Guidelines dated January 16, 2015.

³¹ C-416, Allowable Expenditure Credit Guideline from the CNLOPB dated October 2021: [AECguideline.pdf \(cnlopb.ca\)](#); C-418, Government of Canada Guidance Notes on Claiming Allowable Expenditures: [Guidance Notes on Claiming Allowable Expenditures \(rcaanc-cirnac.gc.ca\)](#).

³² See for instance the list attached to RWS-01, Dixit Statement which classifies seismic surveys as non-exclusive or exclusive.

of his Witness Statement and Mr. Bennett's statement at paragraph 53 of his Witness Statement to the same effect), the Alberta Court determined that the program is a requirement of the Regulatory Regime, finding that it is not voluntary.³³

40. In response to paragraph 52 of Mr. Dixit's Witness Statement, contrary to his statement that "[t]he NEB had no control over what third parties were doing with the borrowed seismic materials", in fact the NEB did have control because it was within its discretion how it would make available any seismic materials in its possession, used liability agreements that required borrowers to acknowledge the intellectual property laws of Canada and yet recommended certain copy companies could be used such as KP Seismic, Lynx, MJ Systems and Arcis for copying seismic materials.
41. In response to paragraph 53 of Mr. Dixit's Witness Statement, Canada not only knew of vectorizing of the Seismic Works, the NEB also obtained copies of vectorized versions of the Seismic Works from MJ Systems and Arcis, and NRCan obtained copies of vectorized versions of the Seismic Works from Olympic Seismic and Lynx.
42. The current geophysical authorization form with the NEB still indicates whether seismic data is exclusive data.³⁴

C. Carl Makrides

43. In response to Mr. Carl Makrides' Witness Statement (**RWS-03**), I note that he does not reference a single instance in which GSI acknowledged, consented, authorized or agreed to disclosure of the Seismic Works.
44. Further, it is unclear to me how the CNSOPB or CNLOPB came to possess any of the Seismic Works that predate the existence of the CNSOPB and CNLOPB. Copies had to have been made as the Seismic Works are available at both the FIO at COGLA, then NEB and now CER, and also simultaneously available at the CNSOPB and CNLOPB. The legislation governing the CNSOPB and CNLOPB does not indicate any retroactive application. The legislation governing COGLA, NEB and now CER also does not indicate any permissions to share the Seismic Works. Needless to say, new Boards and

³³ C-419, Geophysical Service Incorporated v Devon ARL Corporation, 2017 ABQB 463 at paras 103-105.

³⁴ C-421, Instruction for Form Completion of NEB.

legislation also could not have been and was not consented to by GSI³⁵ or, to my knowledge based on my review of Delaware GSI's records, by Delaware GSI. At all times, the Claimants believed that their intellectual property rights in the Seismic Works protected the Seismic Works.

45. In response to paragraph 29 of Mr. Makrides' Witness Statement, the Liability Agreement – Borrowed Materials confers that the materials may be covered by intellectual property laws, which gave the Claimants comfort that those laws were being complied with in respect of the Seismic Works.
46. In response to paragraph 33 of the Mr. Makrides' Witness Statement, to the best of my knowledge, all seismic data required to be submitted that relates to the Seismic Works has been submitted. The seismic surveys identified by Mr. Makrides in his Witness Statement as not being at the CNSOPB is inaccurate, according to my information. The CNSOPB made a demand to GSI for SEG-Y for all seismic surveys retroactively and GSI complied. In fact, in Exhibits R-219 and R-220, I wrote to the CNSOPB on behalf of GSI to provide some of the Seismic Works to the CNSOPB because the CNSOPB had demanded same, and reiterated that GSI did not consent to the release of the Seismic Works, affirming that intellectual property rights protected them and that by filing the information with the CNSOPB, GSI was not to be seen as consenting or authorizing the CNSOPB to override GSI's intellectual property rights. GSI consistently maintained its intellectual property rights in the Seismic Works and advised the CNSOPB numerous times of same, including by providing GSI's copyright and confidential information notices to accompany any and all of the Seismic Works in the CNSOPB's possession.
47. In response to paragraph 36 of Mr. Makrides' Witness Statement, as noted just above, GSI always complied with reporting requirements for the Seismic Works. I am unaware of any non-compliance with CNSOPB submission requirements.
48. In response to paragraph 38 of Mr. Makrides' Witness Statement, the Seismic Works are unique in many ways, often the only available data in an area or of a superior quality to any seismic data in the same areas. It is impossible to create an identical seismic line

³⁵ C-422, See for instance a letter sent from GSI's attorney to the Legal Services Division of the Nova Scotia Department of Justice and dated September 28, 2010.

even using similar parameters, so all seismic data is unique by its very nature.

49. GSI maintained its entitlement to its intellectual property rights. Through numerous pieces of correspondence, GSI let it be known that it relied on its intellectual property rights. Just as Canada asserts that it provided notice of its rules, GSI also provided notice of its intellectual property rights and its reliance on those rights. At no time did Canada communicate to GSI that GSI did not have those intellectual property rights. With reference to Exhibit R-217, I wrote this letter in 2006 to the CNSOPB alleging expropriation in direct response to the CNSOPB's repeated overtures that it would release digital seismic data to third parties, which was a debate that carried on for many years and is the subject of much documentation produced by Canada in this Arbitration, as further described below in this Witness Statement.
50. With reference to Exhibit R-218, GSI's legal counsel wrote in early 2007 to the CNSOPB in further response to the CNSOPB's overtures that it would digitize seismic data to disclose to third parties, noting that it was a change in policy and that GSI may seek an injunction to stop such policy.
51. In further response to paragraph 53 of Mr. Makrides' Witness Statement, the CNSOPB was made aware of the licence terms of several of GSI's licences for some of the Seismic Works that were submitted as Secondary Submissions, including Hunt Oil Company.³⁶ Further, the invoices associated with GSI's licences also indicate that the data is non-exclusive. The government application forms to conduct a geophysical survey usually required that the applicant disclose whether the geophysical survey would be "exclusive" or "non-exclusive"³⁷, which made it abundantly clear to Canada that the Seismic Works were non-exclusive seismic data. In other words, it was known to the CNSOPB that GSI licence terms did not transfer ownership to the parties submitting the Secondary Submissions, yet the CNSOPB accepted the Secondary Submissions in any event and catalogued them under the submitting party's name instead and released them as if the data was exclusive.

³⁶ C-423, AIA Response No. 10,555.134 dated June 7, 2013; C-424, AIA Response No. 11452-019-089 dated April 18, 2013; C-425, AIA Response No. 10,555.13 dated June 7, 2013; C-426, AIA Response No. 10, 555.134 dated June 7, 2013; C-427, AIA Response No. 10,555.134 dated June 7, 2013.]

³⁷ See for instance C-428, CNSOPB's Geophysical/Geological Work Authorization Application. Accessible at: <https://callforbids.cnsopb.ns.ca/2008/02/PDF/GGWA.pdf>.

52. In response to paragraph 54 of Mr. Makrides' Witness Statement, the CNSOPB reproduced the Seismic Works internally but mostly facilitated vectorization and copying of the Seismic Works as it sent the Seismic Works to be copied mostly by two preferred vendors (Sharp Images³⁸, Cansel Wade³⁹ and to a lesser extent Lynx), instructing the copying vendors to reproduce the Seismic Works and then invoice the third parties with the copies and return the originals to the CNSOPB. Further, the Alberta Decisions negated the conduct of third parties, including copy companies, as actionable for copyright infringement or breach of confidentiality, contrary to his Witness Statement suggesting that those third parties are responsible and not the CNSOPB.

D. Trevor Bennett

53. In response to Mr. Trevor Bennett's Witness Statement (**RWS-02**) at paragraph 13, Mr. Bennett incorrectly states "[a]n authorization is subject to such approvals and requirements as the C-NLOPB determines", citing section 138(1) of the *Canada-Newfoundland and Labrador Accord Implementation Newfoundland and Labrador Act*.⁴⁰ However, that section of the Act does not state that, instead stating that "[t]he Board may, on application made in the form and containing the information fixed by it, and made in the prescribed manner, issue: (a) an operating licence; and (b) subject to section 45, an authorization with respect to each work or activity proposed to be carried on". There is no mention of "subject to such approvals and requirements as the C-NLOPB determines", as Mr. Bennett states, which shows a misguided understanding of the law by Mr. Bennett, that the C-NLOPB has such broad discretion as to determine any approvals and requirements for authorizations. In any event, as noted in my prior Witness Statement, there are no instances in which GSI or the GSI Predecessors consented, authorized or agreed to remove intellectual property rights or allow copying in the Seismic Works.
54. In response to Mr. Bennett's Witness Statement, Mr. Bennett fails to mention that there were changes in technology and subsequent retroactive demands made by the CNLOPB for SEG-Y data from geophysical companies, including GSI, and for seismic surveys that

³⁸ C-429, Sharp Images Copying List.

³⁹ C-430, Cansel Wade Copying List; see examples of request for copies made to Cansel Wade at C-431, Letter from CNLOPB to GSI dated October 4, 2013. C-432, Letter from CNLOPB to GSI dated December 18, 2023.

⁴⁰ C-153, Canada-Newfoundland and Labrador Accord Implementation Newfoundland and Labrador Act, RSNL. 1990, c. C-2.

pre-dated GSI's incorporation in 1993 (indicating that the CNLOPB was aware that GSI had acquired the pre-1993 Seismic Works). Mr. Bennett also does not make mention of Secondary Submissions because he views seismic data without field work as the seismic data of the submitter, despite any reprocessed version of the Seismic Works being a derivative work of the Seismic Works. All of the Seismic Works are registered with the Copyright Registry of Canada but the CNLOPB never checked the Registry to determine who was the owner of the Seismic Works or Secondary Submissions.⁴¹

55. In response to paragraph 17 of Mr. Bennett's Witness Statement, I note that the CNLOPB's announcement of the extension of the privilege period merely serves to confirm that the CNLOPB knew that any disclosure of seismic data was detrimental to geophysical operators and hampered promotion of exploration in its jurisdiction because no geophysical operators would agree to disclose their valuable seismic data in that timeframe.
56. In response to paragraph 18 of Mr. Bennett's Witness Statement, he incorrectly states that an extension to a 10-year privilege period "benefitted" GSI for some of the Seismic Works; however, there is no benefit to GSI at all because GSI's intellectual property rights are confiscated from it as a result of the Alberta Decisions. It is not a benefit to lose intellectual property rights just because it is delayed by 10 years when third parties know that it will occur because those third parties can just wait out the 10-year period until the Seismic Works are not privileged. 10 years is very minimal in comparison to the copyright protection afforded to copyright works in Canada normally.
57. In response to paragraph 19 of Mr. Bennett's Witness Statement, he refers to an obiter dicta comment made by the Federal Court Trial Division of Canada in a decision with respect to GSI's AIA requests that were the subject of that judicial review. The issue before that Court was whether the requested information should be disclosed to GSI, not whether the CNLOPB is entitled to disclose the Seismic Works.⁴² In fact, no specific disclosure was at issue in that judicial review at all. Later Canadian Court decisions, including in *Antrim*, determined that the legislation governing the Privilege Period was

⁴¹ C-433, Affidavit of Trevor Bennett dated March 15, 2024, Federal Court File No. T-543-23; C-434, Transcript of Questioning of Trevor Bennett dated April 5, 2024, Federal Court File No. T-543-23.

⁴² C-197, *Geophysical Service Incorporated. v. Canada Newfoundland Offshore Petroleum*, 2003 FCT 507, Reasons for Orders.

not clear.⁴³

58. In response to paragraph 21 of Mr. Bennett's Witness Statement, the CNLOPB and the Government of Newfoundland and Labrador was inconsistent in its position regarding seismic data over the years, as detailed in the evidence in this Arbitration. Nevertheless, GSI was consistent that it had proprietary rights in the Seismic Works.
59. In response to paragraph 26 of Mr. Bennett's Witness Statement, the CNLOPB does not record Secondary Submissions of seismic data as being related to the geophysical operator / owner. Mr. Bennett is therefore only commenting on GSI's submitted versions of the Seismic Works and not any Secondary Submissions of the Seismic Works when he says that the CNLOPB has not disclosed SEG-Y data of the Seismic Works. Further, in respect of both the Seismic Works as submitted by GSI and its predecessors and Secondary Submissions, the CNLOPB has published reports and interpretations that use and incorporate some of the Seismic Works in SEG-Y format. For instance, the Nova Scotia / CNSOPB Play Fairway Report contained knowledge gained by RPS and Beicip-Franlab from having access to digital versions of the Seismic Works, as mentioned above. The GSC and NRCAN also disclosed SEG-Y scanned versions of the Seismic Works by Lynx to third parties, as mentioned herein.
60. In response to paragraph 29 of Mr. Bennett's Witness Statement, the CNLOPB did not take the position that intellectual property rights do not exist in the Seismic Works except in the litigation culminating in the Alberta Decisions.
61. In response to paragraph 30 of Mr. Bennett's Witness Statement and R-246, this list does not include any Secondary Submissions of the Seismic Works, is missing some GSI Delaware portions of the Seismic Works and is also missing other Seismic Works from other predecessors to GSI, including under the name of Geophoto and Eureka, but owned by GSI. It is an inaccurate list of the Seismic Works owned by GSI in the Newfoundland and Labrador region.
62. In response to paragraph 34 of Mr. Bennett's Witness Statement, GSI was only aware of disclosure that allowed limited viewing by third parties until, through AIA Responses,

⁴³ C-211, Geophysical Service Incorporated v Antrim Energy Inc, 2015 ABQB 482, Memorandum of Decision.

GSI obtained evidence of copying of the Seismic Works through the Boards, as described above. Moreover, GSI has always made clear in its correspondence that its data was proprietary, as detailed herein.

63. In response to paragraphs 35 to 36 of Mr. Bennett's Witness Statement, GSI did not agree to any letters that the CNLOPB sent to it and the terms of a letter do not legally govern or condition the proprietary rights of the Seismic Works.
64. In response to Section VII of Mr. Bennett's Witness Statement, the maps at the Annexes to his Witness Statement are unclear. Those maps were never provided in a raw data format so they could not be unlayered for further analysis. However, it appears that Secondary Submissions of the Seismic Works were layered over the Seismic Works to leave the Tribunal with the impression that the Seismic Works have largely been replaced with competitive seismic data; that overlapping seismic data is often the Secondary Submissions of the Seismic Works, rather than competitive seismic data. Further, with reference to the offshore Labrador region, if there are no production or significant discovery licences being issued in this region, there is no explanation as to why the Seismic Works in that region would be disclosed to any party as it does not appear to be promoting offshore oil and gas development. For instance, if the seismic data in an area is not resulting in production or significant discovery licences, then the seismic data is not promoting offshore oil and gas development.
65. In response to paragraph 45 of Mr. Bennett's Witness Statement, I note that the letter filed as R-269 and sent by Sam Nader, a former employee of GSI, does not reflect GSI's long-standing position on the issue of disclosure of the Seismic Works by Canada, as GSI has consistently made clear in its correspondence that its data was proprietary, as detailed herein. Mr. Nader was not an officer or director of GSI with authority to speak on GSI's behalf.
66. In response to paragraphs 46 to 47 of Mr. Bennett's Witness Statement, GSI consistently took the position that the Seismic Works could not be disclosed and that GSI held proprietary rights in the Seismic Works. The CNLOPB may have taken a different position, but these are just positions with conflicting applicable laws.

67. In response to paragraph 54 of Mr. Bennett's Witness Statement, to my knowledge, the CNLOPB inserted specific language on only GSI geophysical permit authorizations, and not on those of other geophysical operators, which was to the effect that GSI acknowledged disclosure under the domestic access to information legislation, but once GSI noticed and complained, the wording was removed without explanation.

V. COMMENTS ON CANADA'S DOCUMENTARY PRODUCTION

68. In the context of this arbitration, I have reviewed Canada's documentary production ("**Canada's Redfern Production**") in response to Claimants' document requests ("**Claimants' Redfern Request**").

69. I wish to note that Canada did not produce a single document in which GSI consented to, authorized or agreed to disclosure and copying of the Seismic Works. To the best of my knowledge, that is because no such document exists.

70. My review of Canada's Redfern Production shows that it is clearly deficient. The documents produced are so heavily redacted and incomplete that it is highly difficult to decipher the information requested in the Claimants' Redfern Request.

71. Overall, Canada mostly did not produce new information to GSI. That does not mean that other information that was requested does not exist. Canada appears to have carved out new exceptions in its production obligations and then produced only a part of the same materials it had provided before in the context of AIA requests. Canada produced only a small portion of the AIA Responses previously issued to GSI over the years, but now with even more missing pages, redactions (the validity of which is impossible to determine based on the documents) and documents incoherently gathered together and even undated. In other words, Canada did not respond to the Claimants' Redfern Request with a proper document production.

72. To provide a few examples, Canada's Redfern Production fails to provide information about the following relevant and important topics:

- (a) Canada produced policy documents on disclosure without producing information as to whom it was disclosed, despite clearly having recorded that type of information through liability agreements and borrowed materials documents.

- (b) With respect to the access and copying by third parties of GSI's Seismic Works, it would appear that Canada has concealed or not recorded such access and copying by third parties. In Redfern Response No. 12, Canada produced information about a digital "ARCHub" that was so heavily redacted it is incomprehensible. It appears that there is some system to check out USB keys containing seismic data, but Canada does not record that information. This practice of not properly recording this type of information renders it very difficult to quantify properly the market interest in the Seismic Works over time. Also, this digital repository is a recent creation of Canada, further demonstrating the changing nature of Canada's program of disclosure and copying (a topic that I more fully address below). Much of the Seismic Works were created prior to the invention of USB keys or the internet, so there was clearly no consent to that digital disclosure process.⁴⁴
- (c) Canada did not produce any recent documents regarding the alleged ongoing need to disclose the Seismic Works to promote offshore development activity. For instance, it produced a 1976 statement of policy⁴⁵ which does not mention copying. Regarding this statement of policy, titled "Statement of Policy Proposed Petroleum and Natural Gas Act and New Canada and Oil and Gas Land Regulations"⁴⁶, I note that it states that its purpose is to "*stimulate increased levels of exploration*" and "*to promote the early assessment of Canada's frontier oil and gas resources through incentives to explore, and disincentives to allow land to remain idle, and by granting the necessary authority to require a certain pace in exploration activity as a condition of holding exploration permits*". This policy states that it was connected to the "*National Energy Strategy*", which appears to be the National Energy Program, a Canadian federal government program which was highly criticized and abolished in the 1980s. This document appears to connect confidentiality of geophysical data to completion of programs or upon termination of rights or specific governmental commitments in writing, which relates to exclusive data owned by an oil company that conducts a program or has rights or specific governmental commitments related to production of a

⁴⁴ C-435, Emails between Mr. Trevor Bennett and Mr. Paul Einarsson exchanged in March and April 2024.

⁴⁵ R-310.

⁴⁶ C-436, CAN.NAFTA0011401.

discovery of hydrocarbons. An oil company generally does not make that geophysical (or seismic) data otherwise available to others because it is exclusive, whereas non-exclusive data is created for the purpose of licensing to as many as possible and is readily available to any party willing to pay the licence fee for that data, so there is no need to disclose that data to encourage others to explore an area. In any event, that paper was not provided to GSI nor, to my knowledge, Delaware GSI. Canada did not provide any documents regarding a need to disclose the Seismic Works in “frontier lands” due to there being less seismic data, yet Canada’s Witness Statements suggest that there is plenty of seismic data in those regions. Canada also failed to produce information regarding its current moratoriums in various offshore frontier areas in Canada (meaning that there is no offshore development at all in those areas currently, yet the Seismic Works in those areas continue to be disclosed for copying possibly because Canada intends to lift the moratoriums eventually). Canada also failed to produce information regarding its current carbon limitations, meaning that Canada is not necessarily promoting oil and gas development in Canada nearly like what it did a decade or more ago, which also can shift the focus of oil and gas development in the different regions in Canada, promoting more offshore development. Canada did not produce any statistical analyses or similar documents indicating that the public dissemination of seismic data, without a requirement for compensation to the owner of intellectual property rights in such data, stimulates additional exploration interest, and improves efficiencies and safety for the benefit of the public as a whole.

- (d) Canada did not produce any documents indicating that the 1984 COGLA Catalogue⁴⁷ was provided to the Claimants or GSI’s predecessors.
- (e) Canada did not provide documents as to its knowledge of the application of intellectual property laws over the Seismic Works. Yet, Canada’s Witness Statements assert that documents such as public notices and liability agreements regarding the intellectual property laws of Canada were used by the Boards

⁴⁷ R-226.

without consideration as to whether those laws applied to the Seismic Works. Therefore, some consideration was thus given to the application of intellectual property laws over the Seismic Works, or such documents would never have been used by Canada. No correspondence, internal memoranda, briefing notes, backgrounders, reports, plans, discussion papers, meeting minutes, planning documents, analyses, or presentations relating to the creation or changing of such public notices and liability agreements regarding the intellectual property laws of Canada, nor the supervision of third parties accessing or copying seismic data hosted at the Boards, were produced by Canada.

- (f) Despite being ordered to provide the website or downloaded seismic data in excel format underlying Annex I, II- A, II- B, II-C, II-D and II-E of the Witness Statement of Trevor Bennett, and despite the Compel Motion, Canada did not produce the documentation it was ordered to provide.⁴⁸ It is impossible to determine the extent to which there is overlap in this stored and downloaded seismic data and the Seismic Works, which Canada alleges in its Counter-Memorial materials to say that there is competition to the Seismic Works. To my knowledge, most seismic contractors plan seismic surveys to complement existing data, but not to duplicate it. Further, the quality of the data may be different. Again, it appears that Secondary Submissions of the Seismic Works were mapped over the Seismic Works in Mr. Bennett's Witness Statement to give the illusion that there is more competing seismic data to the Seismic Works.
- (g) Canada failed to produce information indicating the number of seismic surveys submitted to Canada from 1960 onwards. As a result, it is not possible to confirm the exact market share of GSI or its proportionate share of seismic data in the Canadian offshore. To my knowledge, GSI had over 50% of the quality data available in the Canadian offshore up until approximately 2010, and it is estimated to have had approximately 30% in 2017.

⁴⁸ Procedural Order No. 2 dated July 29, 2023, Annex A at Request 29.

- (h) Canada failed to produce information related to GSI's competitors, despite being ordered to do so⁴⁹. GSI had few competitors in the 2D and small 3D market in Canada as no one could beat its low production fees for non-exclusive data up until about 2008 (as GSI's ship(s) were generally in the area, GSI had lower mobilization and demobilization costs compared to competitors). After 2008, Canada assisted GSI's competitors with direct investments in the tens of millions of dollars (including a project with TGS for seismic data) and preferential treatment under the *Coasting Trade Act* by deciding that GSI's ships were "not available or not suitable" for removable equipment that was being installed on foreign chartered ships (when the same removable equipment could be installed on GSI's ships). For instance, the Canadian Transportation Agency disqualified GSI's ship for removable equipment on the Harrier Explorer on May 20, 2010⁵⁰, but a year later, in May 2011, it reversed its position with the Sanco Spirit (although based on the same facts)⁵¹. The Sanco Spirit was then temporarily flagged, only for a few months, as Canadian in July 2011, to complete the same work.
- (i) Canada has not provided evidence regarding documents, payments, credits relating to GSI licensees, who reprocessed and resubmitted the Seismic Works, proving ownership over said reprocessed and resubmitted data as required under Canadian law, nor did it provide information concerning what was paid to such licensees. This is relevant to Secondary Submissions to show the value that Canada itself assigned to the Seismic Works.
- (j) Based on Canada's Redfern Production, I am also unable to decipher the yearly royalties paid to Canada (by specific areas in the offshore) as a result of the Seismic Works being expropriated (yet without any compensation being paid to GSI). The reason that we sought this information was to show the substantial economic benefits that Canada derived from this. Additionally, given that Canada

⁴⁹ Procedural Order No. 2 dated July 29, 2023, Annex A at Request 31.

⁵⁰ C-437, Canadian Transportation Agency decision dated May 20, 2010; See also C-438, Canadian Transportation Agency decision dated August 20, 2010.

⁵¹ C-439, Canadian Transportation Agency decision dated May 30, 2011; See also C-440, Canadian Transportation Agency decision dated July 21, 2011.

has provided allowable expenditure credits for the Secondary Submissions, it is known that third parties have been paid millions for the Seismic Works despite GSI being the owner of said Seismic Works. Left with this lack of information, I personally conducted some research and found royalty information from 1981 to 2017, which shows the significant royalties collected by Canada in relation to the energy sector in Canada (over \$380 billion in Crown Lease Payments and Rents and Royalties):⁵²

Table 1

The Energy Sector's Revenue Contributions to Federal and Provincial Governments, 2000 to 2019

2000-2019 cumulative	\$ billions (2020 dollars)
Provincial	473.2
Provincial personal income taxes*	49.4
Provincial corporate tax revenues	46.2
Crown lease payments	44.2
Rents and royalties	333.4
Federal	160.9
Federal personal income taxes*	79.4
Federal corporate income taxes	81.5
Federal, provincial, and municipal indirect taxes**	67.1
Total federal, provincial, and municipal revenues from the energy sector	701.2

*Excludes personal income taxes from 2000 to 2006.
**Indirect taxes include sales taxes, fuel and excise taxes, import duties and others.

Canadian Energy Centre

- (k) Finally, Canada produced a detailed summary of the history of GSI, but redacted its “Conclusions” for unknown reasons, which are likely relevant to this Arbitration.⁵³ There are several instances in which Canada appears to have done analysis on GSI, singling it out or negating GSI’s business interests, some of which are further detailed herein.

⁵² C-441, Royalties of Canada's petroleum industry from 1981 to 2017 (in million Canadian dollars). Statista

⁵³ C-442, CAN.NAFTA00020845-20849 – Summary of GSI History.

73. In sum, I find that Canada, in the context of this Arbitration, is being as non-transparent as it was during the course of GSI uncovering Canada's seismic data disclosure, copying and reprocessing policies which took many years.
74. I noted the same when I reviewed the two following reports prepared by the information and privacy commissioners for Nova Scotia and Canada:
- a) On August 14, 2019, the Office of the Information and Privacy Commissioner for Nova Scotia issued a detailed report authored by Catherine Tully, in which it came to the conclusion that the Department of Energy and Mines of Nova Scotia was actively hiding information and using the access to information process not to promote transparency, but rather to thwart GSI's right to obtain full answers to its request to obtain all records relating to RPS Canada and RPS Group PLC, as appears from the summary of such report⁵⁴:

Summary: The applicant has been waiting almost five years for an open, accurate and complete response to his access to information request. The responses he received thus far have convinced the applicant that the Department of Energy and Mines is actively hiding information and is using the access to information process not to promote transparency but rather to thwart his right to know. The Commissioner finds that the Department's responses so far have included excessive fees, numerous unauthorized time delays, over-severing unsupported by any evidence and a failure to process clearly responsive documents. The Commissioner recommends that the Department reprocess the entire access to information request with few if any allowable exemptions. The Commissioner further recommends that the Department refund the applicant's fee.

- b) On February 2, 2024, another report from the Office of the Information Commissioner of Canada was issued, in which it found that the C-NLOPB had wrongfully withheld requested information by GSI under the Access to Information Act. GSI has received many instances of these types of reports with similar scathing commentary about Canada's conduct.

VI. CANADA'S SEISMIC DATA DISCLOSURE, COPYING AND REPROCESSING PRACTICES

75. In Canada's Counter-Memorial, Canada argues that GSI was or should have been aware of Canada's seismic data disclosure and copying practices.

⁵⁴ C-443, Report of the Office of the Information and Privacy Commissioner for Nova Scotia issued on August 14, 2019, by Ms. Catherine Tully; C-444, Information Commissioner's Final Report, dated February 2, 2023.

76. In the present section, I provide additional context as to how and why GSI was in fact not fully aware of such practices and, in fact, GSI was maintaining the confidential and proprietary character of the Seismic Works.

A. GSI Expressly Asserted Its Intellectual Property Rights to Canada

77. In the Witness Statement that my father, Davey signed on December 2, 2019, he explained how GSI maintained the confidentiality of the Seismic Works.

78. In addition to this, over time, GSI expressly asserted its intellectual property rights in the Seismic Works to Canada.

79. I hereby provide a few additional examples of these expressions by GSI:

- (a) On October 7, 1986⁵⁵, Delaware GSI wrote a letter to Minister Marcel Massé, indicating that Delaware GSI was starting to observe an evolution in Canada's approach to seismic data. Delaware GSI stated that it understood that non-exclusive seismic data was not being released to third parties until the 1980s, when there was a change that may have allowed release but not copying because technological advancements did not allow it previously. Delaware GSI then requested that its seismic data be kept confidential in perpetuity. Its settlement offer of 15 years of confidentiality appears to be nothing more than a settlement offer, especially considering that Canada did not accept that offer.
- (b) On February 1987,⁵⁶ Davey wrote letters to Minister Marcel Massé. My father indicated that he believed that seismic data was proprietary and any confiscation of it would require compensation. He put Canada on express notice of the consequences of a policy that would enable third parties to access to seismic data through Canada.
- (c) In 1989, the seismic line AM-86-996 (which is part of the Seismic Works) was labelled as proprietary trade secrets and subject to copyright:

CONTAINS PROPRIETARY TRADE SECRET AND COPYRIGHT PROPERTY

⁵⁵ C-445, CAN.NAFTA0011659 – Letter dated October 7, 1986, from Delaware GSI to Minister Masse.

⁵⁶ C-446, CAN.NAFTA0011632 to CAN.NAFTA0011638 – Letter from Davey Einarsson to Minister Marcel Masse dated February 17, 1987.

OF HALLIBURTON GEOPHYSICAL SERVICES, INC. – NOT FOR RESALE –
SUBJECT TO NON-DISCLOSURE RESTRICTIONS. COPYRIGHT,
HALLIBURTON GEOPHYSICAL SERVICES, INC., 1989.⁵⁷

- (d) This language was generally included in all submissions of the Seismic Works by GSI and GSI's predecessors. That was GSI's practice to ensure that the Seismic Works, upon submission pursuant to the Submission Legislation, were communicated in a confidential manner and that Canada, as a recipient, was made fully aware of that. Upon receipt of the Seismic Works, Canada never told GSI or GSI's predecessors that the Seismic Works were not proprietary to GSI or GSI's Predecessors. Nevertheless, Canada produced documents⁵⁸ containing seismic lines from the Seismic Works scanned by Orhans Reproductions, from which the side labels were removed, but would have indicated that they are proprietary to GSI.⁵⁹
- (e) Although not in Canada's document production, GSI located a letter from October 19, 1999, from Davey Einarsson to the CNLOPB, in which GSI made very clear that it continued to make large investments in non-exclusive seismic data in the Newfoundland and Labrador region and believed that it had rights to protect its intellectual property therein.⁶⁰ By this time, GSI had done due diligence on its intellectual property rights in Canada and obtained an opinion from a well-respected law firm in Calgary (now part of Gowlings LLP, and which firm included the former Chief Justice of Alberta, Neil Wittmann). That opinion made clear that GSI retained its intellectual property rights in the Seismic Works and could enforce them. Without waiving any further privilege, in an effort to respond to Canada's allegations that it was well known in law that GSI's proprietary rights in the Seismic Works were confiscated, GSI provides such opinion for the sole purpose of responding to that allegation and nothing further.⁶¹

⁵⁷ C-447, CAN.NAFTA0011655.

⁵⁸ C-448, CAN.NAFTA0000001-CAN.NAFTA0000072.

⁵⁹ C-448, CAN.NAFTA0000001-CAN.NAFTA0000072.

⁶⁰ C-449, Letter from CNLOPB to GSI dated October 19, 1999.

⁶¹ C-450, Opinion of Code Hunter on GSI data to CNLOPB and CNSOPB dated July 30, 1998.

- (f) On April 22, 2010, I sent a letter to Mr. Dixit of the NEB to advise it of GSI's position that it had intellectual property rights in the Seismic Works.⁶² I asked for a response with details of any disagreement and the reasons therefore.
- (g) On May 6, 2010, I emailed Mr. Dixit an agenda for a meeting between the NEB and GSI. In that agenda, I proposed that the NEB “[p]rovide GSI with evidence to show that the NEB is exempt from Federal laws of Copyright, Laws of Confidential Information, Access to Information Act, and other Intellectual Property protections, - OR - show how other legislation strips GSI's Confidential Information, filed at the NEB, of these Federal protections”.⁶³ I did not receive a response from the NEB. Instead, Canada took positions during domestic litigation that indicated that it believed that GSI did not hold intellectual property rights in the Seismic Works, which ultimately turned out to be incorrect according to the Alberta Decisions.
- (h) Attached is a bundle of documents that Canada produced as part of Canada's Redfern Production.⁶⁴ This bundle of documents contains communications from GSI, through me directly, in which I make it clear that GSI asserts copyright in the Seismic Works. Not one person at Canada ever said that I was wrong or that copyright did not subsist in the Seismic Works.
- (i) On August 2, 2007, I had an email exchange with Steve Bigelow (from CNSOPB) concerning CNSOPB using the Seismic Works in a promotional report.⁶⁵ In this email exchange, I agreed that CNSOPB use the Seismic Works for promotional purposes, but under certain conditions, namely that CNSOPB's report not indicate line names, source points, timing lines, geospatial references and locations, and that it would confirm GSI as being the source of the Seismic Works. This email exchange further shows that GSI collaborated with the Boards on several occasions so that they could promote their territories to oil and gas companies, while always advocating for the seismic data to remain confidential in order to

⁶² C-451, CAN.NAFTA00018396 – Letter to Mr. Dixit from P. Einarsson dated April 22, 2010.

⁶³ C-452, CAN.NAFTA00018407 – Email from P. Einarsson to B. Dixit dated May 6, 2010

⁶⁴ C-453, CAN.NAFTA00012389.

⁶⁵ C-454, CAN.NAFTA00013968-CAN.NAFTA00013972.

preserve seismic data companies' ability to license seismic data to oil and gas companies.

- (j) Enclosed herewith is a bundle of heavily redacted correspondence between GSI and various Canadian government officials in which GSI repeatedly asserts its intellectual property rights and speaks about the legislation.⁶⁶ GSI put the government on notice about its position with respect to its intellectual property rights and the legislation. In my experience, GSI was always very clear in its position, but Canada was not, instead evading GSI's very direct communications on point and advising that it would analyze issues further or consult more.

80. In sum, through communications, GSI took all actions it could to protect the confidentiality and proprietary character of the Seismic Works. We maintained this approach consistently given the importance of the Seismic Works for GSI's business.

81. Also, GSI, out of transparency but also with the hope to gain clarity, consistently attempted to convey this position to Canada. However, in 2010, Canada refused to continue to entertain any discussions:

- (a) On July 22, 2010, the NEB wrote to GSI's legal counsel to advise that further meeting requests by me to attempt to resolve and narrow legal issues should be directed through counsel.⁶⁷
- (b) On August 6, 2010, I emailed Mr. Dixit and Sandy Lapointe (Business Unit Leader – Operations, NEB) to request a meeting to discuss a judicial determination process that would allow the parties to understand how the laws apply.⁶⁸ It was clear that GSI was taking the position that the Seismic Works were protected by intellectual property laws and Canada was taking a multitude of positions, but never saying that intellectual property laws did not apply. I was trying to find a path forward for the parties to understand the conflict in the positions at the least expense possible for those involved. That meeting did not occur. Canada did not apparently want a judicial determination of the issues.

⁶⁶ C-455, CAN.NAFTA00018265.

⁶⁷ C-456, CAN.NAFTA00018361.

⁶⁸ C-457, CAN.NAFTA00018306.

- (c) On August 17, 2010, GSI's counsel, now the Honourable Justice Eamon of the Court of King's Bench of Alberta, emailed counsel to the NEB to propose a manner by which a judicial determination could be made as to whether it was legal for Canada to disclose the Seismic Works. GSI was attempting to resolve the legal issue at an early opportunity.⁶⁹ In the end, the Federal Court of Appeal of Canada determined that the issue was premature to address because the particular Seismic Works at issue in that Court proceeding had not yet been disclosed by the NEB. This Court proceeding is described further in my first Witness Statement.⁷⁰

B. Canada's Evolving Positions on Disclosure and Copying of Seismic Data

82. In the Witness Statement that Davey signed on December 2, 2019⁷¹, he explained how Canada's practices with respect to the collection, disclosure, copying and reprocessing of seismic data changed over time.
83. I hereby provide additional examples of these inconsistent and changing practices, which prevented GSI from knowing that GSI's proprietary rights in the Seismic Works were confiscated until the Alberta Decisions determined that.
84. I also hereby provide additional examples of Canada changing practices with respect to seismic data in its offshore regions:
- a) Similar to examples provided in Davey Einarsson's Witness Statement, there were additional permit documents indicating that Canada would not disclose the Seismic Works. For instance, Canada produced permit documents that indicate that "the Province shall keep all such data confidential until such release date as may be mutually agreed upon" on page 11 of the PDF.⁷²
 - b) Canada produced a letter dated December 3, 1986, enclosing a briefing to the Senate Committee on Energy regarding Delaware GSI.⁷³ Delaware GSI indicates it was not consulted about any changes in legislation or policies.

⁶⁹ C-458, CAN.NAFTA00018467.

⁷⁰ C-205, *Geophysical Service Incorporated v National Energy Board*, 2011 FCA 360, Reasons for Judgment of the Court.

⁷¹ CWS-03, CWS-03, Witness Statement of Theodore David Einarsson, dated December 2, 2019 at paras 55-63.

⁷² C-459, CAN.NAFTA0011368

⁷³ C-460, CAN.NAFTA0011704 – Letter enclosing a briefing to the Senate Committee on Energy regarding Delaware GSI dated December 3, 1986.

- c) Canada produced a letter dated February 6, 1987 from Mr. Clink of Delaware GSI, further confirming that Delaware GSI was not consulted regarding any changes in legislation, regulations or policies regarding disclosure of non-exclusive seismic data.⁷⁴
- d) Canada produced CAN.NAFTA0011750⁷⁵, which is a letter dated February 25, 1987, from Minister Masse to D. E. Janveau of the IAGC (although another version was produced at CAN.NAFTA0011783 dated July 31, 1987⁷⁶), which confirms that the IAGC was not consulted regarding any legislation or policy changes regarding disclosure of seismic data by Canada and indicating that Canada would review the issue and history more thoroughly. The results of that review are unknown as Canada has failed to produce the review.
- e) Canada produced CAN.NAFTA0011765 to CAN.NAFTA0011767⁷⁷, which is a letter dated March 25, 1987 to Mr. Clink of Delaware GSI from Minister Masse advising that “*we will get back to you after we consult internally*” regarding disclosure of non-exclusive seismic data by Canada. Canada was providing assurance that it was reviewing the matter. The results of that review are unknown as Canada has failed to produce the review.
- f) Canada produced CAN.NAFTA0011772⁷⁸, which is a letter dated June 19, 1987 from the Canadian Association of Geophysical Contractors to Minister Masse indicating that it was not consulted about any changes in law or policy regarding the disclosure of seismic data by Canada.
- g) Attached hereto are letters dated June 30, 1987 between the Government of Newfoundland and COGLA indicating that the *Access to Information Act* could be invoked to prevent the release of seismic data where such release would cause commercial harm.⁷⁹ To my knowledge, the *Access to Information Act* was never applied to protect Delaware GSI’s seismic information from disclosure, but was used

⁷⁴ C-461, CAN.NAFTA0011731 to CAN.NAFTA0011740 – Letter from Mr. Clink of Delaware GSI dated February 6, 1987.

⁷⁵ C-462, CAN.NAFTA0011750 – Letter from Minister Masse to D. E. Janveau of the IAGC, dated February 25, 1987

⁷⁶ C-463, CAN.NAFTA0011783 – Letter from Minister Masse to D. E. Janveau of the IAGC, dated July 31, 1987

⁷⁷ C-464, CAN.NAFTA0011765 to CAN.NAFTA0011767 Letter to Mr. Clink of Delaware GSI from Minister Masse dated March 25, 1987.

⁷⁸ C-465, CAN.NAFTA0011772 – Letter from the Canadian Association of Geophysical Contractors to Minister Masse dated June 19, 1987.

⁷⁹ C-466, CAN.NAFTA0011777 – Letter from the Government of Newfoundland to COGLA dated June 30, 1987; C-467, CAN.NAFTA0011781 – Letter from the Government of Newfoundland to COGLA dated June 30, 1987.

by Canada to protect the identity of the third parties (often GSI's licensees) that accessed said seismic information or submitted Secondary Submissions as if they had the proprietary rights in the seismic data.

- h) Canada produced a letter dated August 5, 1987 from COGLA to Nova Scotia Mines and Energy.⁸⁰ In this letter, Canada acknowledges knowing that there is significant impact on the geophysical companies through disclosure of seismic data by Canada under a 5-year confidentiality period and indicates that “[a]dditional work has been done with our legal counsel”. I do not have any knowledge of what that legal work was and whether it considered intellectual property laws, as it should have, because Canada did not produce that information. A meeting agenda for a meeting of the Boards is attached to the letter. The meeting discussion is unknown to me as Delaware GSI has no records of this correspondence or meeting. It appears from Canada's document CAN.NAFTA00011795⁸¹, that the meeting occurred in Halifax on August 26, 1987.
- i) Canada produced a letter from Nova Scotia Department of Mines and Energy to COGLA to advise that it believes that exclusive and non-exclusive seismic data should be distinguished and that the non-exclusive seismic data confidentiality period should be 10 years.⁸² Apparently, this letter attached a summary of the August 1987 meeting, but Canada failed to produce it.
- j) On August 27, 1987⁸³, Graham Campbell from COGLA Ottawa wrote a memorandum to Steve Bigelow from COGLA Nova Scotia. In this letter, Graham Campbell states:

However, I sympathize with the concerns expressed by Mr. Clink. The five year rule has proven not to be in the best interest of geophysical contractors involved in speculative surveys. I appreciate and agree with the pros and cons of the five year rule as expressed by our provincial colleagues. The loss to the contractor outweighs the gain to the public through early access to data. It is clear the confidentiality period for non-exclusive data must be increased. It is, however, extremely difficult to determine and justify precisely how much of an extension is required to correct this inequity.

and

⁸⁰ C-468, CAN.NAFTA00011792 - Letter

⁸¹ C-469, CAN.NAFTA00011795

⁸² C-470, CAN.NAFTA00011874

⁸³ C-471, CAN.NAFTA00028976

To qualify for the ten year rule non-exclusive, surveys should be acquired at the contractor's risk and expense with no government grants or funding.

The definition of non-exclusive and exclusive surveys should be clarified in our G/G guidelines to avoid confusion or abuse of the ten year rule.

The ten year rule should be implemented by letters to operators and a simple revision to our G/G guidelines. It is my understanding, based upon Mary Temple's comments, that an amendment to the act is not necessary.

I understand that COGLA's own understanding of the disclosure policies was then evolving and that it knew of the need for clarifications regarding the treatment of exclusive versus non-exclusive seismic data.

- k) On January 8, 1988⁸⁴, COGLA prepared a draft report titled "*Disclosure of Geophysical Data*". This report acknowledges that recommendations for changes to governmental disclosure practices would be made to Ministers and that changes to the legislation itself or its implementation could occur, showing how the legislation was unclear as to its application in reality. Canada acknowledged in this document that it may be responsible for destroying the property of seismic data companies and that the "*optimum solution*" would be to amend the legislation to identify classes of data and different confidentiality periods. Various letters are identified in this report, but Canada failed to produce them. From this draft report, I also understand that a meeting with oil industry stakeholders was scheduled for January 21, 1988, at which said industry was to be told that amendments to the disclosure legislation would occur.
- l) Canada produced Minutes of the CPA Negotiating Subcommittee Meeting with Graham Campbell re: Bills C5 and C6 dated January 22, 1988⁸⁵, in which oil industry met with government representatives of the Boards. The Meeting Minutes indicate an ongoing dialogue and misunderstandings by government officials regarding the mechanics of oil exploration in frontier areas. The government officials indicated that an administrative directive would occur to enact changes to the confidentiality period. Nevertheless, despite representations by Canada, amendments to the legislation did not occur and no administrative directive was undertaken by regulation or order in council. No further correspondence is known to exist on this issue and it appears unresolved.

⁸⁴ C-472, CAN.NAFTA00011879

⁸⁵ C-473, CAN.NAFTA00011893.

- m) Canada produced a letter from Newfoundland Department of Mines and Energy dated December 17, 1990 to Graham Campbell at COGLA regarding a draft letter to Mr. Clink at Delaware GSI about disclosure of non-exclusive seismic data.⁸⁶ Canada failed to produce the attachments to this letter. This letter indicates downplay of issues in the draft correspondence to Mr. Clink and a note “[d]o we really want to bring attention to the Access to Information and Privacy Act at this time?”, which emphasizes the confusing nature of the Regulatory Regime, where Boards without regulatory power are making rules and calling them “administrative”. Canada produced the draft letter dated December 17, 1990 from COGLA to Mr. Clink of Halliburton Geophysical Services, which indicates that Mr. Clink was not kept apprised of what Canada was doing with respect to the confidentiality period for non-exclusive seismic data.⁸⁷ It further indicates that there was an intention to have different periods in different jurisdictions and that it would be addressed by way of legislative amendments, but to my knowledge, no amendments have been made to the legislation.
- n) Attached hereto is GSI’s NF81-130C seismic line indicating that it was released on October 17, 1991.⁸⁸ However, this Seismic Work had not been prepared, finalized and processed until July 22, 1982, which means that it was submitted to Canada in 1982 at the earliest. The 10 or 15-year long privilege period attached to this Seismic Work thus began in 1982. Yet, Canada disclosed this Seismic Work approximately eight years after GSI submitted it to Canada. I understand that Canada did not respect the privilege period attached to this Seismic Work, thereby obliging GSI to compete with Canada’s released version of that Seismic Work when trying to license it for fees. That data was thus not retained as privileged by Canada for its full policy term. In my own observations, this is just one example of many instances of early disclosure by Canada, outside of its alleged stated policies. Further, unbeknownst to the Claimants, copy companies for seismic data began to grow businesses out of vectorizing and reprocessing the seismic data available at the Boards, running in direct competition with geophysical contractors with multi-client, non-exclusive

⁸⁶ C-474, CAN.NAFTA00011942.

⁸⁷ C-475, CAN.NAFTA00011944.

⁸⁸ C-476, CAN.NAFTA00000472.

seismic data that was available for license.

- o) On August 1, 1992, the CNLOPB wrote to Halliburton Geophysical indicating that Canada was not contemplating any changes to the Disclosure Legislation to address confidentiality and assuring Halliburton Geophysical that no interest or inquiries were being expressed in the survey submitted by its predecessor, Delaware GSI, from the 1980s.⁸⁹
- p) On December 15, 1993⁹⁰, CNLOPB prepared an internal memorandum referencing the November 3, 1993 letter that it received from GSI's counsel regarding the release of its non-exclusive seismic data. This memorandum is heavily redacted for solicitor client privilege, but it contains a list of the GSI Delaware seismic data that had been requested from 1987 to 1992. I understand from this list that CNLOPB once kept records of such requests. Also, on December 20, 1993, CNLOPB prepared a memorandum regarding a prior internal meeting held to discuss said letter. Both letters were produced in a bundle by Canada.
- q) Attached hereto is a memorandum of understanding between the CNLOPB and GSC. This memorandum of understanding confirms that both entities will share seismic data, but obliges GSC not to disclose confidential seismic data to anyone outside of the GSC.⁹¹
- r) On December 21, 1993, the CNLOPB wrote to my father to tell him that only one disclosure had been made of the 1985-1986 3D seismic data to Lamata Consultants⁹². This letter appears to be part of due diligence done by Davey regarding the seismic data that would be part of the Seismic Works. I understand from the CNLOPB's letter dated December 21, 1993, which I reviewed in conjunction with the CNLOPB's memorandum dated December 15, 1993, that the CNLOPB was not honest with my father when it told him that only one disclosure had been made of GSI's 1985-1986 3D seismic data that is part of the Seismic Works. The list appended to the CNLOPB's memorandum dated December 15, 1993 indicates that third parties requested access to GSI Delaware's seismic data on at least nine occasions between

⁸⁹ C-477, CAN.NAFTA00011958.

⁹⁰ C-478, CAN.NAFTA00011985

⁹¹ C-453, CAN.NAFTA00012389 at PDF p. 21-27.

⁹² C-479, CAN.NAFTA00011972 – Letter dated December 21, 1993.

1987 and 1992.⁹³

- s) On October 6, 1998, the CNLOPB prepared a memorandum noting that copyright and common law, along with *Access to Information Act*, preclude unilateral release by the CNLOPB of the Seismic Works. GSI's legal counsel had provided an opinion prepared by Code Hunter Wittmann to the CNLOPB on July 27, 1998.⁹⁴ Legal counsel at the CNLOPB indicates that he will investigate and report to the CNLOPB, showing that Canada did not know whether those laws prohibited disclosure of the Seismic Works. GSI was very clear in stating that copyright and confidentiality protected the Seismic Works.⁹⁵
- t) At an unknown date⁹⁶ – but it would appear it was in 1999 - Canada produced the minutes of a CNLOPB meeting regarding the Shared Integrated Data Repository dated March 3, 1999. These minutes indicate how long Canada has been intending to disclose digital versions of seismic data.
- u) On May 5, 1999, Canada produced a draft of the Shared Data Repository Initiative Report from SubCommittee, which identified a series of “policy questions” about a shared data repository, including “who owns the data after it is submitted to the repository”, “what of digital data that has been purchased from vendors and cannot be copied to a third party” and “will digital well and seismic data be released”.⁹⁷ It is my understanding that Canada then understood that ownership issues arose from its shared data repository initiative.
- v) On June 24, 1999, Canada produced minutes of a meeting for the Joint Government / Industry Frontier Geophysical Committee, which included the following comment, indicating that Canada believed that seismic companies needed to enforce their ownership if there were copyright violations: “*There was discussion on the distinction between spec and exclusive data, and the definition of spec data was clarified. Spec data has to be publicly and reasonably available at all times. CNOPB was of the opinion that if data were held private for any period of time, it would not qualify as spec data. This led to further discussion on the issue of scanning companies and*

⁹³ C-478, CAN.NAFTA00011985.

⁹⁴ C-450, Opinion of Code Hunter on GSI data to CNLOPB and CNSOPB dated July 30, 1998.

⁹⁵ C-480, CAN.NAFTA00012034

⁹⁶ C-481, CAN.NAFTA00020908.

⁹⁷ C-482, CAN.NAFTA00020922.

copyright violations. NEB explained its position that there is no transfer of ownership of data from the operator to the government when data is submitted. The data is also not placed in the public domain when the regulators release the information from privileged status under the legislation. Ownership of the data rests with the operators and they must enforce that ownership if they feel their data is being mis-appropriated".⁹⁸ As is apparent from the Common Issues Proceedings, GSI attempted to enforce its ownership and was told through the Alberta Decisions that ownership was confiscated by Canada, yet I understand from this document that Canada also believed that GSI was entitled to enforce its ownership against third parties.

- w) Canada produced a document entitled "*Chronology – Data Release Policy*", from 1999 to 2004, discussing numerous meetings and positions of various parties with respect to changing the seismic data disclosure policy in offshore areas in Canada. Again, the policies were clearly not static over time.⁹⁹
- x) On October 21, 2001, Erlandson & Associates (a surveying firm) prepared a memorandum for Canada referencing NRC's "*desire to find a solution to the impasse reached by Newfoundland, Nova Scotia, Canada and the oil and gas industry regarding the release of digital seismic and other data to the public*". In this memorandum, Erlandson & Associates stated its view on involved stakeholders' initiative to meet to discuss these aforementioned issues. The memorandum notes that the "*conditions of release of digital data as they affect ownership must be addressed*". I understand that Canada was then advised to consider the implications of digital data release as the seismic data disclosure landscape was changing.¹⁰⁰
- y) On January 21, 2003, notes from a meeting in Toronto (which I attended) were prepared.¹⁰¹ At this meeting, we discussed potentially permitting limited viewing of seismic data at the Board's premises. These notes also confirm that SEG-Y data would not be disclosed.
- z) Attached hereto are also the draft notes of this January 21, 2003 meeting held in

⁹⁸ C-483, CAN.NAFTA00020950.

⁹⁹ C-484, CAN.NAFTA00020445-20446.

¹⁰⁰ C-485, CAN.NAFTA00020993.

¹⁰¹ C-486, CAN.NAFTA00012181 - Notes from Data Release meeting on January 21, 2003.

Toronto.¹⁰² I wish to underline that these notes confirm that the “*meeting arose from industry’s concerns that its ownership of geological and geophysical (G&G) data, and the asset value of that data was being compromised by technological developments, other changing circumstances, current arrangements under the Accord Acts for governing public availability of the data and changes to the practices for data disclosure that have recently been proposed. The objective of the meeting was to consider the feasibility and desirability of changing current arrangements for making G&G data acquired by industry available so that an improved balance could be struck between the interests and responsibilities of industry and governments*”. It was noted at Item No. 10 that “[a]cquisition of G&G data requires substantial investment. For example, between 1998 and 2001, in the Accord Act areas, investment in seismic data totaled \$730M”. Item No. 29 further indicates that “[d]evelopments in digital and scanning technology since the development and enactment of the Accord Acts in the early to mid-1980s, make it much easier for third parties to make commercial and other use of data generated by E&P and spec seismic companies. [...] In hard copy, these plots, which can cover the area of a large room, are generally difficult to reproduce, disseminate, store, and preserve, and the information they contain cannot be easily manipulated. In digital form, the opposite is true. Using modern scanning technology, the information in such plots may be digitized”.

- aa) I understand that the purpose of the *Accord Acts* or the CPRA could not have been to enable scanning because scanning was not a technology available at the time of their enactment. Based on the foregoing, the Claimants continued to understand that Canada’s intellectual property laws protected the Seismic Works.
- bb) Attached hereto is a CNSOPB report prepared in 2005 and titled “*The Upper Jurassic Abenaki Formation Offshore Nova Scotia: A Seismic and Geologic Perspective*”,¹⁰³ which contains a confidentiality notice whereby certain edits were brought to the original report prepared by CNSOPB to protect the confidentiality of the original seismic work provided to CNSOPB.

¹⁰² C-487, CAN.NAFTA00012186 - Draft Notes from Meeting dated January 21, 2003.

¹⁰³ C-488, CAN.NAFTA00012215 - The Upper Jurassic Abenaki Formation Offshore Nova Scotia: A Seismic and Geologic Perspective, 2005.

CONFIDENTIALITY

This Report was originally created by the Canada-Nova Scotia Offshore Petroleum Board for its exclusive internal use. This version has been edited for public release, as the original work contained portions of well, seismic, and other information currently held under confidentiality agreements between the respective owners of the data and the CNSOPB. Most of the figures that were included in the original Report are included herein, and where appropriate, with the express permission of the data owners.

- First, I wish to point out that Canada has not produced the original version of said report. Secondly, I wish to add that although pages 12 and 15 of this report reference some of the Seismic Works, to my knowledge, GSI did not conclude any confidentiality agreement with CNSOPB nor provided consent or authorization for the Seismic Works to be referenced in this report. Nevertheless, I understand that the CNSOPB considered the original seismic data submitted to it to be confidential.
- cc) On September 13, 2005, a draft policy document was prepared regarding the receipt and release of seismic data (and related reports) acquired under the Nova Scotia and Newfoundland & Labrador *Accord Acts*.¹⁰⁴ It stated that “*A change in policy has been deemed necessary to bring data management and release provisions in line with modern technological and industry trends, and in that regard, the geological and geophysical data will be released in a digital as opposed to hardcopy format*”.¹⁰⁵ This was to apply to both exclusive and non-exclusive seismic data.
- dd) On February 23, 2006, the CNSOPB announced in a letter to an unknown distribution list that it wished to update its data disclosure policies to include digital seismic data and SEG-Y for seismic trace data (i.e. processed seismic data). To my knowledge, this was a departure from prior policies and neither GSI, nor GSI’s predecessors, knew about, agreed to or consented to such policy.¹⁰⁶
- ee) On May 16, 2006, the CNSOPB issued a press release advising that it would “*begin distributing digital well data and seismic data*” and “[*d*]igital well and seismic data (i.e. image files and SEG-Y will be submitted to the Board”. Again, this was a significant change in policy, with no amendments to applicable laws.¹⁰⁷
- ff) In January 2007, the CNSOPB had prepared a data release comparison for various countries, indicating that the United States, the Netherlands and the United Kingdom, arguably the most mature and highly regulated offshore oil development jurisdictions,

¹⁰⁴ C-453, CAN.NAFTA00012389 at PDF p. 153-155

¹⁰⁵ C-453, CAN.NAFTA00012389 at PDF p. 153-155.

¹⁰⁶ C-453, CAN.NAFTA00012389 at PDF p. 2.

¹⁰⁷ C-453, CAN.NAFTA00012389 at PDF p. 5-6.

do not release non-exclusive seismic data as Canada does.¹⁰⁸

gg) On *February 17, 2009*, the CNLOPB sent a letter to Ministers of Natural Resources of Newfoundland & Labrador and of Canada, advising that the CNLOPB was going to provide Memorial University a copy of privileged seismic data, during the privilege period, in the event that data owners did not provide access to the data.¹⁰⁹

To my knowledge, this was not authorized by the legislation.

hh) On April 21, 2009, Nova Scotia Department of Energy wrote to the CNSOPB.¹¹⁰ In this communication, it expressed various positions, including that seismic data should be disclosed as SEG-Y in the future.

ii) On June 24, 2009, Kirk Osadetz of Geological Survey Canada, Calgary emailed Mr. D'Iorio and Jim Davidson of the NEB noting that:

[T]he GSI claims regarding intellectual property and copyright questions are significant, as they appear to challenge the intent of the Accords and the CPRA with respect to the provision of non-confidential petroleum exploration and development data to the public through the boards.

[...]

In practice, this all types of petroleum [*sic*] data released as non-confidential are treated as public domain in all jurisdictions. For example, there are service companies that copy and make well logs and tests submitted to regulators available on both microfiche and computer systems. People in companies, academia and government routinely make copies of these data and use them in their work and reports, both public and private. Where this is a copyright infringement, or a permitted use is a legal questions [covered up with a document identification code] answer. However, it would be a key case, if brought before the courts and it should be followed, and the best interest of the Crown protected¹¹¹

Canada did not know the answer to the legal question as to whether intellectual property laws or the CPRA and the *Accord Acts* were paramount. GSI then enforced its intellectual property rights in the domestic litigation that led to the Alberta Decisions.

jj) On September 25, 2009¹¹², shortly after Canada learned that GSI was making claims against it under intellectual property laws, Eric Landry of NRCAN wrote an email

¹⁰⁸ C-453, CAN.NAFTA00012389 at PDF p. 235-236.

¹⁰⁹ C-489, CAN.NAFTA0013598 – Letter from CNLOPB to Canada dated February 17, 2009.

¹¹⁰ C-490, CAN.NAFTA0029017 – Letter from Nova Scotia Department of Energy to CNSOPB dated April 21, 2009.

¹¹¹ C-491, CAN.NAFTA00135621.

¹¹² C-492, CAN.NAFTA00013677-13679.

regarding the *Coasting Trade Act* in relation to GSI to add to the discussion about seismic data disclosure. This email noted that “[t]his issue has been a major irritant for the provinces and the Offshore Boards”. Canada amended the *Coasting Trade Act* shortly thereafter to remove preference for Canadian-flagged ships for seismic work offshore Canada, which eroded GSI’s investments in meeting the high standards that Canada uses for being a Canadian-flagged vessel, and to further starve GSI of business. There is no connection between GSI’s claims regarding intellectual property laws applying to non-exclusive seismic data and Canadian-flagged vessels having preference under the *Coasting Trade Act*, yet it appears that Canada found a way to connect the two matters in order to harm GSI’s business so that it would have difficulty litigating against Canada.

kk) On November 10, 2009, Tom Brent (Geophysicist at GSC) emailed Marc D’Iorio (the Director General of GSC), indicating that Canada was trading the Seismic Works with other governments or entities. In this email correspondence, he stated:

“[f]act is some of the key seismic I need to share with both BGR and the Danes is old GSI data from Baffin Bay, and the lack of clarity on this issue continues to make me uncomfortable. I believe the true problem with all this is the fact that when the federal NEB regulations were written (1974, I think), no scanner was invented and folks who wanted copies for personal or corporate use, reproduced paper or fiche photo reprographically”. Canada has no authority to disclose the Seismic Works to other countries.¹¹³

ll) On March 29, 2010¹¹⁴, the Government of Newfoundland and Labrador issued a letter to the CNLOPB regarding the seismic data disclosure policy, advising that it agreed that “*changes to existing policy are necessary to allow for data availability in digital format*”. This letter is heavily redacted without explanation.

mm) On May 17, 2010, John Harper (Director of GSC (Calgary) Earth Resources), wrote a letter that indicated that GSI had been “very accommodating” to the GSC.¹¹⁵

The letter also stated:

“[b]e aware that we are responsible to secure data from many sources, not just GSI, and therefore our security measures have been established to protect all companies. We honour the contracts we sign with the various

¹¹³ C-453, CAN.NAFTA00012389.

¹¹⁴ C-493, CAN.NAFTA00013753 – Letter from NF to CNLOPB dated May 29, 2010.

¹¹⁵ C-453, CAN.NAFTA00012389 at PDF p. 85 – Letter from GSC to GSI dated May 17, 2010.

owner companies. [...] We direct individuals and companies who ask for access to specific lines or groups of liens to contact either the owner companies, or the data acquisition owners. [...] If we wish to publish copies of seismic data we are obliged to obtain the permission of the owner companies and to acknowledge the granting of such permissions according to the directions of the owner companies. [...] I intend to sit down with Paul to discuss any further concerns so that we can continue to move forward in the GSC in the regard of our mandate [sic], with his full support, and our support for his contribution and his ownership". This meeting occurred and I was then assured that the Seismic Works would be protected from copying.

nn) On May 21, 2010, Mr. Dixit of the NEB wrote to GSI in response to GSI's claims asserting intellectual property rights in the Seismic Works.¹¹⁶ The NEB stated:

"[t]he Board acknowledges that GSI's information may be subject to copyright. In any event, the Board notes that the disclosure of the information (after the expiration of the fifteen year term) is consistent with Canadian copyright laws and, in particular, the Supreme Court of Canada's direction in CCH Canadian Ltd. v. Law Society of Upper Canada, [2004] 1 S.C.R. 339. In this regard, the Board notes that GSI's information will, after the expiration of the fifteen years, be made available to the frontier information office ("FIO"). The FIO is a library that is open to the public to access and reproduce geophysical data. Any individual that requests access to the FIO must sign a NEB liability agreement, if the information is borrowed). The liability agreement advises patrons that material contained in the FIO may be subject to copyright and that making copies of materials may infringe copyright. Moreover, the Board can advise that it will adhere to its obligations under Canadian copyright law (in a manner consistent with CCH Canadian Ltd., supra) when it discloses GSI's information after the expiration of the fifteen year term". Rather than refute that copyright may subsist in the Seismic Works, Canada acknowledged it may exist and that it uses the liability agreements to protect copyright.

oo) On June 1, 2010, briefing notes were prepared for the Deputy Minister (NRC) before a meeting with CNSOPB regarding seismic digital data submission and disclosure policies.¹¹⁷ In this document, even the CNSOPB acknowledged that it intended to have a "new" seismic data policy and that several recommendations and proposals were made between 2006 and 2009. This confirms GSI's experience that the policies have not been static. Furthermore, as part of the "talking points" proposed to the Deputy Minister, I observed the following: *"A consistent policy that applies to all*

¹¹⁶ C-494, CAN.NAFTA00013826 – Letter from NEB to GSI dated May 21, 2010.

¹¹⁷ C-495, CAN.NAFTA00029033.

three Boards would simplify and clarify the regulatory regime for companies submitting data, as well as for individuals and companies accessing data". It is my understanding that NRCan observed that there was an inconsistent character of disclosure policies in Canada.

- pp) On June 4, 2010, I received a letter from GSC¹¹⁸, informing me of the procedures established by GSC to protect the data of GSI, among others. GSC indicated that the procedures provided that it would not provide reproductions or digital versions of the Seismic Works to third parties, and that it would not create SEG-Y data from scanned images without prior written consent from GSI (or other seismic data owners) until it received a clear legal opinion from Justice Canada on potential intellectual property issues.
- qq) On June 4, 2010¹¹⁹, a memorandum was prepared for a meeting of NRCan with CNSOPB. It references a Canada-wide seismic data policy as there were differences between various provincial jurisdictions and notes that GSI asserts *Copyright Act* protections.
- rr) In July 2010¹²⁰, NRC prepared a power point presentation concerning the release policies governing seismic data from Canada's frontier lands. This presentation notes "*Federal support for NL's proposal re: field data requires clarity on whether such data can be disclosed*".
- ss) On March 16, 2011, Phil Moir (from the Geological Survey of Canada ("GSC")) wrote to John Harper (Director of GSC).¹²¹ In this email, Phil Moir stated that none of my personal concerns that I had transmitted to GSC concerning the illegal copying of the Seismic Works had reached him directly. However, Phil Moir state:

¹¹⁸ C-453, CAN.NAFTA00012389 at PDF p. 88-89.

¹¹⁹ C-453, CAN.NAFTA00012389 at PDF p. 243-244.

¹²⁰ C-496, CAN.NAFTA00018634.

¹²¹ C-453, CAN.NAFTA00012389 at PDF p. 65-66.

I am certainly aware of the concerns of GSI and other seismic data owners about illegal copy and distribution of their seismic data. We respect and protect all industry seismic data that we are permitted to use in the course of our work. It is treated as protected data” and ended this email exchange by further indicating that he believed that the seismic data was protected from copy and disclosure.¹²²

- tt) On June 8, 2011¹²³, a memorandum was prepared for the Assistant Deputy Minister indicating that the “GSC will follow the guidelines and procedures to respect copyright and intellectual property rights of confidential data”.¹²⁴
- uu) On June 15, 2010¹²⁵, Bradley Adams-Barrie of NRCAN emailed Eric Landry of NRCAN regarding the CNLOPB seismic policy, regarding a conference call discussing changes to the seismic data policy, noting “[u]sual discussion took place around the legality of the activities, and it seemed to be accepted by both the Province and the Board that any changes would result in legal action against the Board”. The Board acknowledged that it was proposing changes to its seismic data policy and it further acknowledged that legal action was likely, indicating that the Board believed that there are legal issues with the changes to the policy. I understand that this is why the Boards have stopped expanding to SEG-Y and field data disclosures and retroactive demands for such data from GSI, but those demands are likely to reignite based on the outcome of this Arbitration.
- vv) In July 2010, Natural Resources Canada prepared a PowerPoint presentation regarding Canada’s seismic data disclosure policy for frontier lands, and included a note regarding how to address seismic data policies and the *Coasting Trade Act* to deal with GSI.¹²⁶ This tying together of the *Coasting Trade Act* to eliminate GSI as the sole Canadian-flagged seismic vessel that grants priority for seismic work in Canada before foreign vessels continued; for instance, on July 15, 2011, Canada issued a Memorandum to the Deputy Minister regarding Implications for the Offshore Oil and Gas Sector of Canada’s *Coasting Trade Act*, discussing GSI as the sole Canadian-flagged seismic vessel and removing the coasting trade restrictions for

¹²² C-453, CAN.NAFTA00012389 at PDF p. 65-66.

¹²³ C-453, CAN.NAFTA00012389 at PDF p. 101-103.

¹²⁴ C-453, CAN.NAFTA00012389 at PDF p. 101-103.

¹²⁵ C-497, CAN.NAFTA00013799 – Email from B. Barrie Adams to E. Landry dated June 15, 2010.

¹²⁶ C-498, CAN.NAFTA00013812-13823 – PowerPoint Presentation of NRCAN.

foreign flagged seismic vessels.¹²⁷

ww) On January 25, 2011¹²⁸, Nicholle Carter of CNLOPB provided to Frank Smyth of CNLOPB a list of seismic data to be released under the Digital Data Release Policy, which includes:

seismic in SEGY format (final Migrated data); Gravity and Magnetic data in ASCII (final processed data}, CSEM (or any other EM variation) in SEGY/ASCII (final processed data); Navigation Data, Velocity Data (ASCII/UKOOA); Seismic line images – replaces paper and mylar, images of 2D/3D resistivity slices, images of maps (TIFF/JPEG); Reports – Operations, Processing and Interpretation (PDF); MVO/PVO plots (PDF); any Seismic data submitted for Significant Discovery Declaration, Commercial Discovery Application, Development plan application/Am, Development plan Amendment, or submitted with any of the Geological model/Geophysical updates pertaining to the field development will not be subject to a data release policy and will remain confidential”, indicating the intention to release SEGY formats of seismic data. This intention has not been disclosed to GSI, to my knowledge.¹²⁹

xx) On September 8, 2011, Godfrey Nowlan emailed Tom Brent and others and notes the letter from Marc D’Iorio to me on June 4, 2010, yet Canada has redacted a portion of this email that should not be redacted according to the Rules of this Arbitration. The following draft data policy dated October 6, 2011, is inconsistent with the letter from Mr. D’Iorio to me in 2010.

yy) In 2012, Canada prepared a summary of current data release policies and proposed changes¹³⁰. For unknown reasons, Canada redacted all proposed changes. However, I understand that said data release policies changed over time and were thus not static.

zz) In 2012¹³¹, NRCan prepared a memorandum for approval by the Deputy Minister. It noted that GSI had commenced litigation against the NEB and the Attorney General of Canada regarding seismic data dissemination, and stated “[t]he outcome of this litigation may provide clarity with regard to seismic data release policy in both *Accord and non-Accord areas*”. I understand that according to NRCan, the implementation of disclosure policies was still then ambiguous.

¹²⁷ C-499, CAN.NAFTA00012811.

¹²⁸ C-500, CAN.NAFTA00020805.

¹²⁹ C-500, CAN.NAFTA00020805.

¹³⁰ C-501, CAN.NAFTA00019282.

¹³¹ C-502, CAN.NAFTA00013862-64.

- aaa) Attached hereto is a CNLOPB Report prepared in 2022 and entitled “*Hydrocarbon Potential Of The Deep-Water Scotian Slope*”,¹³² which indicates on page 2 that certain aspects of the seismic data reproduced in the Report – namely precise locations of geochemistry sites - were not included in said report to protect the proprietary rights of the owners of this data.
- bbb) At an unknown date, a draft *Data Release Proposal* was prepared by Nova Scotia and Newfoundland and Labrador indicating that “Speculative data will have unlimited confidentiality”.
- ccc) At an unknown date, CNSOPB prepared a review of the *Accord Act*, in which it notes that there have been “changes in technology” and it states “[w]ithin the realm of geological, geophysical and other technical data, the existing provisions related to disclosure are somewhat ambiguous. [...] There are a number of issues surrounding the current wording, e.g. ownership and intellectual property rights. These issues could be resolved by introducing clearer language”. [...] the issue of data ownership and copyright should be addressed. This would give the Board clear and unambiguous authority to release data without the threat of possible infringement of intellectual property rights”.¹³³ Canada did not have clarity as to how the legislation could or should be interpreted with respect to intellectual property rights.
- ddd) At an unknown date, Canada produced a summary of the East Coast Shared Data Repository Regulator Perspective, indicating the intention for the regulators to move towards disclosure of digital seismic data (including the Seismic Works, which are listed in Canada’s document).¹³⁴ There are several redactions for unknown reasons. I understand that this concept of disclosing seismic data in digital format was then beginning to crystallize.
- eee) At an unknown date, the OGAAC prepared a Task Force Report on The Disclosure of Petroleum Related Geological and Geophysical Data.¹³⁵ It appears that various Canadian government departments and the Boards were not aligned with respect to disclosure of seismic data, that Canada was aware of rapid changes in

¹³² C-503, CAN.NAFTA00012066

¹³³ C-453, CAN.NAFTA00012389 at PDF p. 361.

¹³⁴ C-504, CAN.NAFTA00028954.

¹³⁵ C-505, CAN.NAFTA00028957.

technology affecting disclosure. At page 11 of the report, it notes that “*the wording of the current legislation may not, in and of itself, provide clear, unambiguous, expression of the policy and intent of the legislation*”, and it further concedes that seismic data disclosure practices “*have not been very effective in attracting new players or stimulating exploration*”. The appendices are not included in Canada’s document production without explanation as to why they were not produced.

fff) There is a draft Data Release Proposal Offshore Nova Scotia and Newfoundland and Labrador indicating that “*Speculative data will have unlimited confidentiality*”.¹³⁶

85. After having read of those aforementioned documents, I confirm that throughout all these changes in policies and practices, GSI did not know that its proprietary rights in the Seismic Works were being expropriated by Canada nor did Canada say it was or could do that.

C. Canada Knew that its Disclosing, Copying and Reprocessing Practices Damage the Seismic Data Industry

86. To my knowledge, the seismic data industry has expressed many concerns with respect to Canada’s disclosure, copying and reprocessing policies.

87. I hereby provide examples of Canada recognizing and validating such concerns by admitting that the ambiguous disclosure, copying and reprocessing policies that it implemented harmed the seismic data industry, as that industry’s livelihood was to license seismic data such as the Seismic Works to third parties:

- a) On December 22, 1986, Graham Campbell (COGLA) wrote to David M. Flentge (formerly at Western Geophysical Inc. and Global Geophysical Services Inc.)¹³⁷, advising him that it was damaging to seismic companies for Canada to disclose seismic data such that it was the intention that Canada would enact new policies to exempt non-exclusive data from disclosure.
- b) On February 16, 1988, Graham Campbell (COGLA) wrote to Mr. Clink (Delaware GSI)¹³⁸. In that letter, COGLA acknowledged that the disclosure of non-exclusive

¹³⁶ C-448, CAN.NAFTA0000001-CAN.NAFTA0000072

¹³⁷ C-506, CAN.NAFTA0011725 - Letter from Graham Campbell at COGLA to David M. Flentge dated December 22, 1986.

¹³⁸ C-507, CAN.NAFTA00011903 to CAN.NAFTA00011913

data was “*potentially damaging to geophysical service companies who have invested in non-exclusive data*”, such that it recommended to lengthen the confidentiality period benefitting seismic data to 15 years, which could be dealt with administratively by way of a Ministerial Directive. It also stated that it thought that requests for access to non-exclusive seismic data could be addressed by way of the *Access to Information and Privacy Act*. During such a process, seismic companies could demonstrate an exemption from disclosure. Finally, COGLA gave examples of types of data that could be routinely disclosed, which did not include basic field data and digital shotpoint location data.

- c) On March 3, 1995, Hunt Oil wrote a letter to the Government of Newfoundland & Labrador, in which it indicates concerns and opposition to changing policy regarding disclosure of digital seismic data. Clearly, GSI was not the only party concerned about disclosure of seismic data, and there were changes in policies over time.
- d) On July 12, 2000¹³⁹, Canada received a summary of the laws related to disclosure of seismic data in Canada. This summary was prepared by industry stakeholders. Canada was clearly on notice that said stakeholders disagreed with Canada’s disclosure of seismic data.
- e) In 2005 (and onwards), the Boards documented their various attempts to change their policies regarding seismic data disclosure over time.¹⁴⁰ Canada indicates in its own documents that the “*Act recognizes that seismic surveys have commercial value*”. Further, Canadian personnel, including Duncan Smith, noted that “[w]e never actually reached an agreement with industry”. There are numerous redactions throughout the documents produced by Canada, including proposed policy changes to seismic data disclosure and briefing notes regarding what positions were taken by seismic industry participants. I understand that Canada, on its end, appears to have understood the disclosure policies’ lack of clarity for the industry.
- f) On February 6, 2006, an information memo was prepared for Wayne Chipman and Dave Hawkins from CAPP regarding a data release meeting with CAPP, Governments and Regulatory Boards held on January 12, 2006, in Toronto. CAPP

¹³⁹ C-508, CAN.NAFTA00021169.

¹⁴⁰ C-509, CAN.NAFTA00019995-20013; C-510, CAN.NAFTA00020051-20118; C-511, CAN.NAFTA00020138-20148.

expressed concerns about scanning technology eroding ownership control and indicated that the Boards could become third parties to legal actions concerning scanning practices due to such practices causing commercial harm to the data owner.¹⁴¹ In the end, CAPP proposed that the boards release “paper equivalents” and that all digital seismic data license requests made to the boards be referred to data owners as the digital seismic data is copyright protected.

- g) On April 11, 2006¹⁴², WesternGeco wrote a letter to NSOPB, in which it indicated opposition to the CNSOPB’s attempt to change its policy to disclose digital seismic data “*subject to legislated confidentiality provisions*”.

We are in receipt of your letter dated February 23, 2006. In the letter you state that “The Board decided to consider a revision of its current data disclosure policy to provide for the release, subject to legislated confidentiality provisions, of well and seismic data, in digital format, rather than paper copy.” As an owner and Licensor of multient seismic data we view this possible revision with both disappointment and alarm. Recent Industry experience has shown that even with only final paper copies being provided, a significant scanning business evolved to redirect revenue streams away from the rightful owner of the data. The existence of digital data outside of our immediate control, under normal circumstances, would be unacceptable.

I understand that other seismic data companies also took umbrage with Canada’s evolving and expanding disclosure policies.

- h) On May 18, 2006¹⁴³, Imperial Oil objected to the CNSOPB’s proposed change to the disclosure of seismic data in SEG-Y format, and noted that the “*Release of our proprietary data in SEG-Y format is a very different matter given it is considered highly confidential and to have significant commercial value to [...]. If the CNSOPB implements the proposed change in data disclosure policy and releases our SEG-Y data without our consent the Board will expose itself and most certainly the recipients of the data to breach of copyright claims and actions for improper use of 3rd party proprietary information*”. GSI was not the only party surprised by CNSOPB’s proposed changes, nor the only one asserting intellectual property protections.
- i) On August 27, 2010, the CNSOPB prepared a note summarizing the events that occurred following the board meeting of CNSOPB on June 15, 2010.¹⁴⁴ To this note is appended a *Statement of Agreed Facts and Contentions between the CNSOPB and the IAGC Member Companies*. This statement was potentially to be used as the basis

¹⁴¹ C-512, CAN.NAFTA00021014.

¹⁴² C-513, CAN.NAFTA00021336.

¹⁴³ C-453, CAN.NAFTA00012389, at PDF p.8.

¹⁴⁴ C-514, CAN.NAFTA00029038.

- of a settlement or court reference. The statement indicates that members of the IAGC believed that the policies of the CNSOPB were contrary to intellectual property laws of Canada. It was not only GSI that made that contention.
- j) In 2011¹⁴⁵, a memorandum to the Minister was prepared regarding the release of industry data in digital format, indicating that the Canadian Association of Petroleum Producers and Canadian Association of Geophysical Contractors opposed digital seismic data release, and that disclosure to the general public represented a financial loss or a loss of competitive position to the owner of this data. This memorandum further noted that technological advances are heightening the industry concerns because information technology now allows third parties to scan hard copy data into a digital format. The memorandum further notes that “[t]o this point in time, the offshore petroleum boards have not routinely released data in digital formats”, but that the “*Working Group concluded that not only should the data release provisions continue, but that this data should be released in digital format*”. Recommendations were made for data to be made available to “*users for a fee and the industry would retain its ability to sell the data past the periods provided in legislation*”.
- k) At an unknown date, Canada produced a report by Craig Rowe entitled “*Seismic Data Release: Assessment of the Newfoundland and Labrador Seismic Data Acquisition Industry and Implications to Digital Data Release*”,¹⁴⁶ which states:

*“When considering data release with respect to seismic data we must divide the discussion into exclusive and non-exclusive sub-categories. For the purpose of this review, we will focus on non-exclusive data and non-exclusive data acquisition. This is necessary because the primary force against seismic data release of digital SEG Y data are non-exclusive seismic data companies.”*¹⁴⁷

*“**CONCLUSION** Review of statistical data indicates that the local seismic data industry is dominated by the acquisition of exclusive seismic data programs. It is clear that with the exception of one Operator (GSI) there has been limited interest by seismic data acquisition companies to work non-exclusively in our*

¹⁴⁵ C-453, CAN.NAFTA00012389, at PDF p.142-143.

¹⁴⁶ C-515, CAN.NAFTA00020806.

¹⁴⁷ C-516, CAN.NAFTA00020810.

offshore. When comparing the quantities of non-exclusive data that are acquired in our offshore to other prominent petroleum producing regions the numbers are small. If considering the release of SEG Y seismic data, and the potential loss of the non-exclusive seismic data industry as the main negative effect. The statistical data indicates that there is only a limited non-exclusive industry in existence, and therefore loss of this portion of the seismic data industry would be a minimal portion of overall seismic operations. This would lead one to think that overall the industry would not be majorly affected and that the seismic operations would be continued by the exclusive operators. To that end, the potential negative effect on the offshore industry would be minimal. However, the potential positive increase in activity and interest resultant from the release of a superior product to the ‘public’ would be vast.”¹⁴⁸

I understand from this report that Canada was well aware that it would prejudice GSI, as one of the non-exclusive seismic data producing companies operating in Canada, but it appears that it was attempting to create its own justification for that prejudice by deciding that the non-exclusive seismic data industry was of minimal importance.

- l) On September 17, 2013¹⁴⁹, the Board of the CNSOPB met and minutes were noted. In those heavily redacted minutes, the Board indicated that the IAGC wanted to extend the confidentiality period for seismic data and the CNSOPB decided to suspend discussions with the IAGC until the data disclosure issue had been reviewed by the courts. GSI was not the only one taking issue with the seismic data disclosure policy and I understand that the CNSOPB clearly viewed the outcome of the Common Issues Decision as relevant to determining the policy’s implementation.
88. Canada produced a document which includes correspondence between the GSC and ExxonMobil, assisting ExxonMobil with obtaining seismic data, some of which is part of the Seismic Works.¹⁵⁰ Rather than the GSC suggesting that the seismic data could be obtained from the owner of the seismic data, the discussion is that there “there is no other source” for these shotpoints. That is not true because GSI is the source for those

¹⁴⁸ C-517, CAN.NAFTA00020815.

¹⁴⁹ C-518, CAN.NAFTA00029059.

¹⁵⁰ C-519, CAN.NAFTA00019269.

shotpoints and suggesting otherwise is harmful to GSI who was in the business of licensing that seismic data.

89. I anticipate that the policies will continue to change and, if the digital SEG-Y versions of the Seismic Works and digital versions of field data (not previously submitted) have not already been disclosed by Canada (it is unclear from Canada's evidence), then that will be retroactively demanded and disclosed in the future.

D. Canada Copied or Facilitated Copying the Seismic Works

90. In his Witness Statement signed on December 2, 2019, Davey explained that it is only in 2011, through AIA Responses, that GSI became fully informed that the Boards were copying and publishing the Seismic Works, either in-house or through copying companies.¹⁵¹
91. This had not been told to GSI before, despite Canada having begun to copy and publish the Seismic Works in the 1990s, as disclosed in AIA Responses and Canada's Redfern Production.
92. The following examples demonstrate that Canada facilitated copying for third parties for many years:
- (a) In 1989, COGLA made a requisition for goods and services for the copying of 800 seismic data microfilms for \$6,000 through Terra Surveys Ltd¹⁵². It is unknown to me who the copies were for and whether they included GSI's predecessors' seismic data that are part of the Seismic Works, but it shows that COGLA engaged in the copying of seismic data at this time, which it did not divulge to GSI.
 - (b) COGLA also published a requisition for goods and services to Terra Surveys Ltd. for the copying of boxes of data "*for microfilming*" including some of the Seismic Works.¹⁵³

¹⁵¹ For example, CWS-06, WS of Paul para 128.

¹⁵² C-520, CAN.NAFTA00011930 - Requisition of COGLA dated 1989.

¹⁵³ C-521, CAN.NAFTA00011931

- (c) On August 21, 1991, COGLA paid Terra Surveys Ltd.¹⁵⁴ To COGLA for copies of seismic data, including some of the Seismic Works.
 - (d) Canada produced a receipt dated February 20, 1992 for Terra Surveys Ltd. to copy seismic data upon instructions from the NEB.¹⁵⁵ It is unknown who obtained the copies as numerous notes are on the page.
93. Canada has produced a document identified as CAN.NAFTA00012811¹⁵⁶, which I have reviewed and have noted the following:
- (a) On page 3 of this PDF, there is reference to Canada using Lynx to copy “sgy”, which is SEG-Y.
 - (b) On page 6 of this PDF, in early 2010, Canada is proposing to vectorize GSI data “inhouse”. Canada clearly knew about vectorization. There are several other indications of vectorization and publication of the Seismic Works through Canada’s MERX website, a platform for issuing RFPs for public procurement. On pages 59-60 of this PDF, in April 2013, there is further discussion of “GSI lines compiled from inhouse microfiche which was sent to Lynx Information in Feb-March 2006 to vectorize”.

E. Secondary Submissions Further Undermined GSI’s Proprietary Rights in the Seismic Works

94. After reviewing Canada’s document production, I note that Canada has largely failed to produce the Secondary Submissions documents requested by the Claimants, even in a redacted form, that indicates the seismic data and the amounts (in the millions of dollars) provided as compensation to the submitter as a work credit to offset cash obligations for leases in areas related to that data.
95. For instance, Canada produced a bundle of disorganized records that includes documents indicating that there were Secondary Submissions of the Seismic Works, but the bundle of records has many redactions rendering it difficult or impossible to discern what of the Seismic Works was submitted and how much credit value Canada assigned to those

¹⁵⁴ C-522, CAN.NAFTA00011950

¹⁵⁵ C-523, CAN.NAFTA00011957 - Receipt for Terra Surveys Ltd. dated February 20, 1992

¹⁵⁶ C-499, CAN.NAFTA00012811.

Secondary Submissions.¹⁵⁷ Canada's Redfern Production has missing information, redactions and jumbled documents.

96. Canada's privilege log provided in Canada's Redfern Production in this Arbitration indicates that there are many instances of Secondary Submissions that Canada refuses to produce in this Arbitration, asserting privilege over those documents as a result of domestic access to information processes. Domestic access to information processes indicate that governments can refuse access to third party commercially sensitive information, but it is GSI's seismic data – the Seismic Works – that are the subject of the Secondary Submissions, so GSI is seeking its own information, as to what has been submitted and what Canada has paid for the Secondary Submissions, which would indicate the value that Canada has previously assigned to the Seismic Works. Canada cannot now credibly suggest that the Seismic Works have little to no value when Canada itself assigned significant value to the Seismic Works through the Secondary Submissions program.¹⁵⁸
97. Additionally, given that Canada has provided allowable expenditure credits through the Secondary Submissions process, third parties have been paid substantial amounts for the Seismic Works despite GSI being the owner of the Seismic Works.
98. Canada produced CAN.NAFTA0011307, CAN.NAFTA0011308, CAN.NAFTA0011310, CAN.NAFTA0011315, CAN.NAFTA0011320, and CAN.NAFTA0011341¹⁵⁹ which are letters to Delaware GSI that I have not seen before. It is unclear whether these letters were received by Delaware GSI as they do not appear in Delaware GSI's records that GSI has from its acquisition of the rights in and to the Seismic Works from its predecessors. All program authorizations sought information about the costs to create the related seismic data, but the authorizations do not indicate what such information was used for by Canada. The letters appear to indicate that the information was used by Canada to pay work expenditure credits or "work credits" to customers of Delaware GSI for the related seismic data. That practice does not make

¹⁵⁷ C-524, CAN.NAFTA00021392.

¹⁵⁸ C-525, Annex A – Canada's Reply to Motion to Compel Documents – Privilege Log, dated February 16, 2024.

¹⁵⁹ C-526, CAN.NAFTA0011307; C-527, CAN.NAFTA0011308; C-528, CAN.NAFTA0011310; C-529, CAN.NAFTA0011315; C-530, CAN.NAFTA0011320; C-531, CAN.NAFTA0011341.

sense, as Canada would be aware that the seismic data was non-exclusive data and therefore not owned by any third party submitting that data. In other words, Canada was ignoring the non-exclusive nature of the seismic data, despite having policies to treat non-exclusive data differently than exclusive data. To my knowledge, GSI and Delaware GSI did not agree to any such practice, nor does Canada's own policies support that practice.

99. I could find traces in Canada's Redfern Production of actual Secondary Submissions. Canada produced CAN.NAFTA0011301¹⁶⁰ for GM-77-01 which is part of the Seismic Works. It indicates that it was reprocessed by GSI, yet GSI did not itself ever submit reprocessed versions of the Seismic Works. Therefore, a licensee of GSI must have submitted this seismic data as part of Secondary Submissions.
100. As another example, Canada produced a collection of side labels and seismic lines from some of the Seismic Works.¹⁶¹ The side labels are cut off in part, but many of them indicate that they were reprocessed data by Precision Seismic, GSI's processing subsidiary. GSI was not required to, and did not submit, reprocessed seismic data to the Boards, so a licensee must have submitted it as part of Secondary Submissions. I have no information as to who submitted these parts of the Seismic Works nor what compensation Canada provided to these parties for submission of these Secondary Submissions.
101. I have been able to identify certain specific Allowable Credit Expenditure Applications by third parties in the context of Secondary Submissions of GSI's Seismic Works:
- (a) Canada produced a document identified as CAN.NAFTA00012039¹⁶², which is an Allowable Credit Expenditure Application by PanCanadian Energy Corporation dated February 25, 2002, for \$7,591,822. This is likely a Secondary Submission of some of the Seismic Works as it is produced in this Arbitration, and GSI was the primary seismic provider in this area at that time, but Canada has redacted the relevant details and has not disclosed the submitted seismic data and related information associated with the Application in order to determine that with certainty;

¹⁶⁰ C-532, CAN.NAFTA0011301.

¹⁶¹ C-533, CAN.NAFTA00011334; C-534, CAN.NAFTA00011383; C-535, CAN.NAFTA00011593; C-536, CAN.NAFTA00011464.

¹⁶² C-537, CAN.NAFTA00012039.

- (b) Canada produced a document identified as CAN.NAFTA00012180¹⁶³, which is an Allowable Credit Expenditure Application dated November 28, 2002, by Encana for \$1,390,800, which is likely a Secondary Submission of some of the Seismic Works as it is produced in this Arbitration, but Canada has redacted the relevant details and has not disclosed the submitted seismic data and related information associated with the Application in order to determine that with certainty;
- (c) Canada produced a document identified as CAN.NAFTA00012197¹⁶⁴, which is an Allowable Credit Expenditure Application by Encana dated May 30, 2003, for \$1,828,650, which is likely a Secondary Submission of some of the Seismic Works as it is produced in this Arbitration, but Canada has redacted the relevant details and has not disclosed the submitted seismic data and related information associated with the Application in order to determine that with certainty;
- (d) Canada produced a document identified as CAN.NAFTA00012203¹⁶⁵, which is an Allowable Credit Expenditure Application by Encana dated June 26, 2003 for \$5,443,565, which is likely a Secondary Submission of some of the Seismic Works as it is produced in this Arbitration, but Canada has redacted the relevant details and has not disclosed the submitted seismic data and related information associated with the Application in order to determine that with certainty;
- (e) Canada produced documents identified as CAN.NAFTA00012204¹⁶⁶, CAN.NAFTA00012213¹⁶⁷ and CAN.NAFTA00012214¹⁶⁸, which are other examples of Allowable Credit Expenditure Applications by Encana in 2003 and 2004.

102. On September 24, 2010, I emailed Mr. Dixit, Mr. Lapointe and copied GSI's counsel, now Justice Eamon, as I had discovered an instance of a Secondary Submission, although did not understand or know of that process at that time. This may have been the first

¹⁶³ C-538, CAN.NAFTA00012180.

¹⁶⁴ C-539, CAN.NAFTA00012197.

¹⁶⁵ C-540, CAN.NAFTA00012203.

¹⁶⁶ C-541, CAN.NAFTA00012204.

¹⁶⁷ C-542, CAN.NAFTA00012213.

¹⁶⁸ C-543, CAN.NAFTA00012214.

instance in which the process for Secondary Submissions came to my attention.

103. On September 30, 2011, I wrote an email to government personnel, including Mr. Jean-Francois Roman of NRCan, about my recent discovery¹⁶⁹, at that time, of the existence of the Secondary Submissions regime and of the extent and scope of the disclosure of GSI's proprietary Seismic Works under same, which far exceeded what I had been made aware of until that time. All my prior AIA requests had requested "GSI data", but I discovered that third parties had submitted the Seismic Works and it was catalogued by Canada under the third parties' names instead.
104. Canada has produced a document identified as CAN.NAFTA00030379¹⁷⁰, which is a AIA Response A-2013-02, enclosing a list that cross references the Seismic Works with Secondary Submissions of same.
105. On March 27, 2024, I received from Mr. Bennett of the CNLOPB, its answers to my Access to Information Act Requests #11452-019-222, #11452-019-220 and #11452-019-219, which requests were as follows:¹⁷¹
 - (a) 11452-019-219: For the timeframe January 1, 2016 to November 30, 2023: All records relating to submissions, viewing, disclosure, borrowing, and copies being made of seismic information, maps, and reports, regardless of form, including but not limited to Liability Agreements, correspondence, transmittals, request forms; pertaining to, referencing and including Operator codes 528, 838, G005, 833, H033, C137, W27 (including all secondary submissions of GSI data identified previously by the board plus any new ones) limited to any of: Equinor Canada Ltd., Joe Runcer, OMV Exploration and Production;
 - (b) 11452-019-220: For the timeframe January 1, 2016 to November 30, 2023: All records relating to submissions, viewing, disclosure, borrowing, and copies being made of seismic information, maps, and reports, regardless of form, including but not limited to Liability Agreements, correspondence, transmittals, request forms; pertaining to, referencing and including Operator codes 528, 838, G005, 833,

¹⁶⁹ C-544, CAN.NAFTA00019250 – Email dated September 30, 2011.

¹⁷⁰ C-545, CAN.NAFTA00030379 – AIA Response Letter dated July 16, 2013.

¹⁷¹ C-435, Emails between Mr. Trevor Bennett and Mr. Paul Einarsson exchanged in March and April 2024.

H033, C137, W27 and all secondary submissions of GSI data, including but not limited to, lists you previously provided;

- (c) 11452-019-222: For the timeframe January 1, 2016 to November 30, 2023: All records relating to submissions, viewing, disclosure, borrowing, and copies being made of seismic information, maps, and reports, regardless of form, including but not limited to Liability Agreements, correspondence, transmittals, request forms; pertaining to, referencing and including Operator codes 528, 838, G005, 833, H033, C137, W27 and all secondary submissions "work credit applications" incorporating any GSI data, including but not limited to, lists you previously provided.

106. The operator codes identified above are GSI or its predecessors' operator codes.
107. As part of its answers, the CNLOPB provided an updated Excel spreadsheet from the one it had provided to me years prior and evidencing the access requests from third parties and disclosures by the CNLOPB of the Seismic Works through the Secondary Submissions regime.¹⁷² It is unclear to me why the same information was not provided by Canada in this Arbitration in Canada's Redfern Production. I also obtained the same type of information from the CNSOPB and CER at some point when I became aware of this whole Secondary Submission process over a decade ago.
108. I also received an AIA Response 10,555.134,¹⁷³ which includes many instances of Secondary Submissions of the Seismic Works being submitted in exchange for work expenditure credits in the millions of dollars to third parties and includes invoices from GSI referring to the Seismic Works as "non-exclusive". However, the Secondary Submissions were not treated by Canada as non-exclusive seismic data, instead being disclosed under the much shorter privilege periods applicable to exclusive seismic data.

VII. ACCESS TO THE FIO'S RECORDS

109. As mentioned in Claimants' Memorial, the Frontier Information Office ("FIO") has a library where seismic data can be consulted.

¹⁷² C-546, Excel Spreadsheet provided to GSI by the CNLOPB on April 4, 2024, see tab "Secondary GSI".

¹⁷³ C-547, AIA Response 10,555.134 from CNSOPB dated June 7, 2013.

110. Canada's Redfern Production invited the Claimants to the FIO to answer its obligations to produce Secondary Submissions. Unfortunately, as described in my Witness Statement in support of the Compel Motion, which I hereby reaffirm and adopt, no such information was available from a visit to the FIO.¹⁷⁴
111. From my experience visiting the FIO, there are certain measures undertaken to make it impossible to quantify the number of times that the FIO has received the Seismic Works as Secondary Submissions. However, the FIO is able to direct third parties visiting the FIO library to certain versions of the Seismic Works that are part of Secondary Submissions and then are submitted, but not under GSI's name / code. There is no way to identify Secondary Submissions of GSI data unless you ask the Boards to do it or one would have to review every single submission to try to identify the data, which is an insurmountable task. GSI is left with no choice but to rely on the Boards to inform it of all Secondary Submissions of the Seismic Works.
112. Only one party is allowed to attend the FIO at any time. That person signs a check in form that indicates that copyright applies to materials in the FIO. Enclosed herewith is a current photo of that form taken January 24, 2024¹⁷⁵. That form is for statistical purposes, to assess the number of users of the FIO in a year, and not to track the materials that a user views. No one supervises attendees in the room in order to provide "confidentiality" for the users of the FIO.
113. The FIO also has a framed statement about copyright in the room. Enclosed herewith is a photo of that framed statement taken January 24, 2024.¹⁷⁶ There is a liability form if one wishes to borrow materials from the FIO, also indicating copyright applies to materials in the FIO.
114. The FIO room includes seismic data available on microfiche or CD-ROM in the FIO viewing room, which can then be scanned using the available photocopy / scanner in the

¹⁷⁴ CWS-07, Witness Statement of Harold Paul Einarsson dated January 31, 2024.

¹⁷⁵ C-548, Photograph taken at FIO, dated January 24, 2024.

¹⁷⁶ C-549, Photograph taken at FIO, dated January 24, 2024.

room. A user can bring a laptop to the room and can take photos. Enclosed herewith is a photo of the desk with photocopy / scanner equipment taken January 24, 2024¹⁷⁷

115. The catalogue of released geophysical materials that Canada has is not on the front counter of the CER library. It is available upon request or buried in the library otherwise. Enclosed herewith is a photo of the 1992 catalogue taken January 24, 2024.¹⁷⁸ Only the 1992 catalogue is used as the most recent update, as the only version issued after that in 2005 does not maintain the same coding system for the seismic data and is therefore not in accordance with the cataloguing scheme in the FIO room for the seismic data on the shelves. Enclosed herewith is a photo of the shelves of the seismic data in the FIO taken January 24, 2024.¹⁷⁹ Enclosed herewith is a photo of the legend for the cataloguing system in the FIO taken January 24, 2024.¹⁸⁰
116. The FIO has advised that it often receives requests for appointments at the FIO to review specific program numbers; in other words, visitors have a specific request for an exact seismic survey because they are seeking specific data rather than browsing randomly.

VIII. DAMAGES SUFFERED BY THE CLAIMANTS

A. Recharacterization of Certain Factual Assertions Made in the Brattle Report

117. Below I properly re-characterize certain factual assertions made in the Brattle Expert Report¹⁸¹ filed by Canada in this Arbitration.
118. Regarding the comments made at paragraph 79 of the Brattle Report, the Alberta Decisions have deprived GSI's intellectual property rights in its Seismic Works. This deprivation of GSI's intellectual property rights in its Seismic Works is the cause of the Unpaid Invoices. In the late 2000s, as GSI's Seismic Works were being freely accessed by GSI's licensees or potential licensees through the Boards' disclosures, GSI's licensees began not honouring their licensing agreements with GSI. These violations of the licensing agreements forced GSI to commence the Domestic Actions to protect its intellectual property rights in the Seismic Works. If it was not for the Alberta Decisions

¹⁷⁷ C-550, Photograph taken at FIO, dated January 24, 2024.

¹⁷⁸ C-551, Photograph taken at FIO, dated January 24, 2024.

¹⁷⁹ C-552, Photograph taken at FIO, dated January 24, 2024.

¹⁸⁰ C-553, Photograph taken at FIO, dated January 24, 2024.

¹⁸¹ RER-04.

depriving GSI of its intellectual property rights in the Seismic Works, GSI would have been able to enforce its licensing agreements with its licensees, and therefore payment for the Unpaid Invoices.

119. Regarding the comments made at paragraph 164 of the Brattle Report, GSI's downfall was not caused by the purchase of its vessels and related equipment in 2007 to 2008, nor by the 2008 financial crisis, but rather by GSI's inability to enforce its intellectual property rights in its Seismic Data and revenue stream flowing from same because of the Alberta Decisions. The narrative portrayed in the Brattle Report is false and misleading. As appears from GSI's financial statements¹⁸², GSI's ships were on the books for CAD\$9.9 million. Charters at the time involved making one or two-year commitments for ships which would have included at least CAD\$350,000-400,000 in expenses per month for the two ships. Accordingly, within a two-year timeframe, it was anticipated that GSI could break even on the purchase of its ships. By purchasing its own ships, GSI was protected from interruptions in the ability to lease, price swings due to the volatile market, loss of business flexibility, and loss of control. GSI viewed these advantages as a huge bargain compared to chartering.
120. GSI planned to continue its seismic vessel component of its business for the purposes of further creation of seismic data to supplement its database, adding to the Seismic Works. GSI bought its seismic vessels for a fraction of their worth, considering how much money was saved when GSI did not have to charter other vessels to conduct further seismic surveying work. GSI did not finance the purchase of GSI's seismic vessels, but later in time, when GSI purchased further new seismic equipment for the vessels, GSI financed that later seismic equipment. GSI's seismic vessels were profitable to GSI's business over the years and were only sold to fund the litigation that concluded in the Alberta Decisions and as a result of the ancillary effects of the Alberta Decisions during that time. GSI's seismic vessels provided a unique competitive advantage to GSI in the Canadian seismic market because competitors mostly chartered seismic vessels and GSI had the only Canadian-flagged seismic vessel which attracted a priority position under Canadian

¹⁸² C-109.

coasting trade rules.¹⁸³ The litigation was an unanticipated expenditure and, given the extensive nature of the litigation required to enforce GSI's copyrights in the Seismic Works, was significant for GSI to fund. Had GSI been successful in the Alberta Decisions, GSI planned to re-acquire seismic vessels and continue its seismic acquisition business.

121. Although GSI bought its own source and streamers, this investment was considered a low-risk investment as GSI already had a large marine source and streamer / recording system lease business to multiple ships in its sister company OGSi based in Houston. The purchase of such equipment did not contribute to GSI's demise. To the contrary, GSI's personnel and management were very skilled at running operations at a fraction of the costs of its competitors, with a spotless safety record.
122. To run marine operations in the seismic data industry obviously entails significant costs, but these were all accounted for in GSI's financial plans and projected growth. For instance, during dry-dock mandatory certificate renewals, it is customary for all ships, including all seismic ships, to rebuild engines while they are disassembled for mandatory inspection. During such disassembly, GSI took the opportunity to install four brand new state of the art larger seismic reels that expanded the capacity of the streamer lengths that GSI could handle to address long offset seismic demand in the market. This was meant to increase GSI's capacity in the long-term and the demand for its ship.
123. Although GSI was impacted by the 2008 downturn, the cause of GSI's financial difficulties was the loss of license fees due to rapidly expanding government publishing, and associated copying of GSI's Seismic Works, as well as the destruction of GSI's customer relationships due to Canada's interference in those contractual relationships, and the confiscation of GSI's intellectual property in the Seismic Works.
124. In 2008, many industries were negatively affected by the global financial crisis, including oil and gas. There was a significant decline in oil and gas prices simultaneous with a tightening of credit, resulting in less revenues while high interest rates and less availability of investment dollars left oil explorers and producers unable to raise capital to undertake further exploration.

¹⁸³ C-384, *Coasting Trade Act*, S.C., 1992, c. 31.

125. Given the seismic industry's role in the oil and gas industry, it is often dependent upon increased market activity that then supports exploration efforts. GSI, like many if not all seismic industry participants, felt the effects of the 2008 global financial crisis. Once it was known to the oil and gas industry that oil and gas prices were likely stabilized after that crisis in 2010, industry activities increased. However, intervening in that timeframe, GSI was also beginning to receive AIA Responses and commencing the litigation that resulted in the Alberta Decisions.
126. The litigation leading to the Alberta Decisions was unavoidable because GSI had to enforce its copyright in the Seismic Works to protect its copyright and confidentiality, and abandon its copyright and confidentiality in the Seismic Works as, without upholding those rights and enforcing them, it can be deemed that one has abandoned them. That litigation had a negative impact on GSI's reputation with its customers, despite GSI's efforts to be conciliatory with those customers regarding the breaches of copyright and confidentiality in the Seismic Works. GSI made every effort to mitigate any damage to its reputation, but those efforts were ultimately unsuccessful. Once GSI commenced litigation against a party, that party never entered into any further licensing arrangements with GSI but for Shell Canada and GSI has not had any business with Shell since.
127. Even if the 2008 financial crisis did not occur, the result would have been the same – GSI's intellectual property rights in the Seismic Works would have been confiscated through Canada's actions and would have consequently destroyed GSI's business.
128. Regarding the comments made at paragraph 174 of the Brattle Report, GSI was forced to lay off the majority of its staff prior to 2012 in order to cut costs, as GSI's data licence revenue stream was already affected by the rapidly expanding government publishing, scanning and copying of GSI's Seismic Works, as well as the destruction of GSI's customer relationships due to Canada's interference in those contractual relationships.

B. The Detrimental Consequences of the Alberta Decisions and Related Litigation on GSI's business

129. The nature of the disclosure of its Seismic Works leading to copying by third parties was such that it undermined GSI's intellectual property rights in the Seismic Works so that

GSI was forced into a position of protecting those rights by way of litigation. While that litigation continued, further parties were emboldened to not abide by GSI's intellectual property rights in the Seismic Works.

130. However, GSI would have been in a materially different financial and market position had the Alberta Decisions resulted in GSI being able to enforce its copyright in the Seismic Works rather than it being confiscated. The litigation that led to the Alberta Decisions resulted in an antagonistic attitude towards GSI by almost all of GSI's licensees. That attitude was further engendered by Canada's participation in the litigation that resulted in the Alberta Decisions, aligning its position with the other third parties, as Canada had disclosed the Seismic Works to these very parties. The fact that Canada was involved engendered an attitude that the Canadian government was supportive of the third parties' copying. When the third parties were aligned with Canada, it emboldened them in the litigation, and they all took the position that copyright did not exist in the Seismic Works, but for one defendant, another seismic company, who was silent on the topic.
131. There are only 15-20 oil companies capable of exploring and producing in offshore Canada, of which most were involved in the litigation leading to the Alberta Decisions (some companies have since merged or been acquired, but the attitude remains as the same personnel continue with the merged or acquiring entities).
132. Given the number of parties involved, without a decision in that litigation, those licensees and further third parties were encouraged by group thinking to try to starve GSI's business so that the litigation in which GSI sought to enforce its intellectual property rights could not carry on without revenues to support the expensive and protracted litigation to do so. That tactic by defendants was harmful to the Claimants' reputations and finances, as boycotting the Claimants was part of this approach. All GSI was attempting to do was enforce its intellectual property rights.
133. The litigation that led to the Alberta Decisions commenced in 2007. From 2007 to 2012, most of the claims that led to the Alberta Decisions were filed. GSI's business was materially affected by the litigation during that time. By 2012, GSI's business was significantly affected and debilitated as a result of the fact that it had to pursue litigation

in order to protect its intellectual property rights through enforcement against many parties that the Claimants believed were breaching their rights in the Seismic Works.

134. During this period, the Claimants halted further investment until the Canadian Courts confirmed the intellectual property rights of GSI in the Seismic Works, as was reasonable in the circumstances when the enforcement of GSI's intellectual property rights was becoming increasingly difficult to manage.
135. Had GSI been successful in the Alberta Decisions, meaning that it was able to enforce its intellectual property rights rather than them being expropriated, GSI would have been due significant damages and its business could have carried on as it had before the Alberta Decisions process. Further, third parties, including GSI's licensees, would have been required to license the Seismic Works as GSI's intellectual property rights therein would have been confirmed. GSI's business would have been in a financial position to conduct its seismic acquisition portion of its business with sustained revenues from licensing the Seismic Works, thereby adding to the Seismic Works into the future.
136. Further, as a result of the Alberta Decisions and the tactic of coordinated antagonism towards GSI, many of GSI's licensees continue to ignore the terms of GSI's licences, breaching them and citing the availability of the Seismic Works at the Boards without any restrictions as a reason that they are able to do as they please with the Seismic Works.
137. In 2012, in retaliation to GSI commencing the litigation that led to the Alberta Decisions, Canada decided to change its legislation regarding coasting trade, which led to amendments to seismic activities being part of the coasting trade that is regulated to prefer Canadian-flagged vessels. That amendment to the legislation resulted in GSI no longer enjoying the preference for Canadian-flagged vessels as it had done previously. That was not a business decision of GSI, but a decision of the Canadian government that was part of the ancillary effects of the Alberta Decisions, since Canada was manipulating the market that GSI operated in, during the course of the litigation that led to the Alberta Decisions.

C. GSI's Trademark on its Seismic Works

138. GSI holds the trademark that appears on all of the Seismic Works (the “**GSI Trademark**”).¹⁸⁴ This is the most famous and recognizable logo and name in the business.



139. All of the Seismic Works were branded with the GSI Trademark. There was a lot of value in the GSI Trademark, as it is synonymous with high quality, offshore seismic data. When Canada disclosed and made copying of the Seismic Works possible, it was directly competing with GSI for potential licensees and, worse, it was using the GSI Trademark to do so, confusing potential licensees as to what GSI’s wares and services were. That contributed to the negative attitude towards GSI because some of the Seismic Works were not processed in the same way when submitted to the Boards versus what was available for license to customers. This practice not only competed with GSI as some sort of passing off scheme, but additionally contributed to negatively impacting GSI’s reputation, which culminated in its condonation by the Alberta Decisions.

D. GSI’s invoices

140. As soon as GSI saw any “access” of its Seismic Works by a third party, GSI sent notice and demand letters to the entity and tried to resolve the issue by requiring return or destruction, or licensing of the data. In many cases early on, GSI resolved these issues. However, as the defendant group formed with Canada at their sides, GSI was forced into protracted process litigation to defend its intellectual property rights. Where GSI could not come to an amicable agreement, GSI invoiced third parties and its licensees for data obtained from a third party (usually obtained from Canada but in some instances indirectly like Encana did with KP Seismic in a joint venture). GSI tried to communicate clearly with the Canadian government, its clients, and third parties in a timely fashion.

¹⁸⁴ C-554, Email dated December 20, 2002. C-555, Letter from MLT Aikins to GSI dated December 20, 2022. C-556, Email from Regina Corrigan to Paul Einarsson. C-557, Email dated July 5, 2023 regarding Notice of Acceptance of Registration Renewal.

GSI was overwhelmed by the havoc and piracy bonanza created by the actions of Canada.

141. In Exhibit C-111, GSI summarized invoices that it created based upon GSI's most current price lists,¹⁸⁵ which are from 2013.
142. GSI had price lists that it used for its seismic database over the years.¹⁸⁶ The current price lists are from 2013¹⁸⁷ and have not been updated since, which today represents a discount in comparison to current market trends, including inflation. GSI had price lists prior to 2013 but none before 1993 as GSI did not own the Seismic Works prior to its inception. GSI's price lists stipulate data minimums per seismic survey such that there is minimum price payable, and a premium is payable for licensing a partial instead of full seismic line, which charges amount to multipliers on prices in the price list. It was not common for GSI to discount from its price list and, if it did, it was related to a volume discount on significant volumes of seismic data licensed, but no discounts were offered after 2008.
143. In Exhibit C-112, GSI summarized the various instances in which third parties accessed the Seismic Works from the Boards that GSI was aware of as of that date.¹⁸⁸ It may be missing information that has not been disclosed to GSI by the Boards to date, which was the subject of the Redfern Requests in this Arbitration and the Motion to Compel. GSI's preparation of Exhibit C-112 contained one error in which the seismic data was recorded as having been accessed in 2002 despite that seismic data being created in 2003; that was as a result of two separate seismic data surveys having confusing similar Project Number codes assigned by Canada.¹⁸⁹
144. It is unknown at this time whether GSI will recover on its licences with various parties through domestic litigation. Where GSI's claims in domestic litigation have been dismissed, it has most commonly been as a result of limitation periods expiring, which is often as a result of Canada not having disclosed in a timely manner the information to

¹⁸⁵ C-356, Unpaid Invoices.

¹⁸⁶ C-558, Bundle of GSI Price Lists.

¹⁸⁷ C-357, Historical Price Lists of GSI (cited in CER-06).

¹⁸⁸ C-112.

¹⁸⁹ The MAMOU has a code of NS24-G005-008P and the 1983 ONANDAGA 3D has a code of 8624-G5-008P. The data consumed by BP on October 7, 2022, was actually the ONANDAGA 3D. Therefore, rather than a license fee of 740 SQ KM X \$4500 (\$3,330,000), the loss should be 78 SQ KM X \$2400 (\$187,200).

GSI regarding access to the Seismic Works through the Boards. As mentioned in my prior Witness Statement in this Arbitration, AIA Responses often took several years and sometimes longer than a decade after GSI first made the requests.

145. Some of the licences that the Claimants produced in response to the Redfern Requests of Canada are not signed because GSI did not always maintain digital copies of the signed versions of all of its licences. As a result, GSI also produced signed transmittals and paid invoices to confirm that the licences were agreed upon and also identify certain supplemental copies of the Seismic Works that were licenced.
146. GSI hired Boyd Consultants in 2003, 2005 and again in 2009 to provide a valuation of its then current set of the Seismic Works.¹⁹⁰ These valuations were done from a geophysical perspective and for a specific purpose to support GSI financings. These valuations relied upon historic cash flow, but were not very detailed in their review and analysis. We attempted to contact Boyd Consultants for this Arbitration, but John Boyd is retired and unavailable due to advanced age.

E. Personal Income and Shareholder Loans in GSI

147. My income from GSI decreased as time progressed due to GSI's lesser means over time to pay employees.¹⁹¹ After I stopped earning an income from GSI in 2016, I have relied on my investments for income. After GSI, I was unable to gain employment in the seismic or oil and gas industries due to reputational damage associated with the Alberta Decisions. Had GSI been successful in the Alberta Decisions and their ancillary effects, I do verily believe that GSI would have been seen in a completely different light, as having been correct to enforce its copyright and confidentiality, but was instead seen as wrong and a loser. That result influenced the perception of the Einarsson family reputation negatively, rendering it difficult to gain employment in the relatively small offshore seismic industry that we had been involved with for many years.
148. We used various tax strategies under Canadian corporate law to reduce corporate taxes over the years, including issuing large bonuses to the individual Claimants, which would

¹⁹⁰ C-560, Bundle of Seismic Data Valuations Reports for GSI by [REDACTED].

¹⁹¹ C-561, Bundle of T4s of Paul Einarsson.

then be loaned back to GSI for use in its business. In other words, much of the bonus monies did not leave GSI as a business when they were bonused out to us, and came back as shareholder loans net of taxes. This is a common practice for private, closely held Canadian businesses.

149. The Shareholder Loans are not the type of loans that are typically documented with specific terms because of the tax strategies being employed. GSI has not repaid the Shareholder Loans because it has to be able to prosecute this Arbitration. Further, GSI had covenants to third party lenders in which GSI was prohibited from repaying the Shareholder Loans while those other loan facilities were outstanding.

F. GSI's Investment in its Seismic Works

150. As explained in the witness statements signed by my father and myself¹⁹² on December 2, 2019 and September 27, 2022, respectively, GSI created, acquired and reprocessed seismic data. GSI made a business of those different creative processes.
151. More specifically, GSI created approximately 40% of its own seismic data and has further reprocessed almost all of the seismic data it acquired from its predecessors (more than 80% to PSTM version).¹⁹³
152. At the Common Issues Trial, Davey testified regarding the transfer of intellectual property rights in the pre-1993 Seismic Works.¹⁹⁴ I provide in support thereof a copy of Davey's cross-examination transcript and of his testimony from the Common Issues Trial¹⁹⁵.
153. GSI held the largest database of seismic data in offshore Canada up until approximately 2010. Through its Seismic Works, GSI assisted in the discovery of nearly every major hydrocarbon source offshore of Canada.
154. GSI has reprocessed most of the Seismic Works over time. GSI did Pre-Stack Time Migration (PTSM) processing for most of the Seismic Works and was doing so until approximately 2011. GSI also transcribed the field data for all of the Seismic Works onto

¹⁹² See CWS-06, Paul WS, para. 12 and 32; see also CWS-03, Davey WS, para. 23, 41-42, 45, 51

¹⁹³ C-562, Percent GSI Data through PSTM; C-563, GSI Database Percentages Old New.

¹⁹⁴ C-405, Common Issues Trial Transcripts; C-564, Affidavit of T. David Einarsson in Court of Queen's Bench Action No. 1101-15306 at Exhibit A; C-565, Common Issues Trial Exhibits, Tab 65 – List of Seismic Survey Assets.

¹⁹⁵ C-566, Transcript of Questioning of Davey Einarsson, dated August 13, 2025. C-405, Common Issues Trial Transcripts.

modern DLT tapes, which was carefully done and even involved including further information from the field data. DLT tapes are a modern format for seismic data that can store 10-15 times the amount of seismic data. If the reprocessed versions of the Seismic Works are submitted to Canada as Secondary Submissions, then the value of the Secondary Submissions is also expropriated because Canada discloses those Seismic Works for copying.

155. The age of the Seismic Works is irrelevant as they have been carefully stored and cared for, updated through PSTM (Pre-Stack Time Migration) reprocessing and transcription to modern tape formats. Additionally, GSI has digital versions on servers of all of the Seismic Works, which are also not subject to any deterioration through the passage of time.
156. GSI primarily used Precision Seismic for reprocessing (also for processing of new seismic surveys that became part of the Seismic Works), and ultimately Precision Seismic was amalgamated into GSI, which means all of the costs of the reprocessing of the Seismic Works was retained within GSI and Precision Seismic. Precision Seismic was not financed in its operations and saved GSI substantial amounts in reprocessing and tape copy costs. Precision had a very profitable business, but nevertheless was generally reliant on GSI for approximately half of its revenues.
157. GSI did not finance any of the Seismic Works and instead used internal profits generated from GSI's business. GSI did not have forecasts for any of the Seismic Works. GSI generally created a seismic survey on the basis of its own understanding of the geology and interest in the marketplace, that there was interest expressed by third parties in a potential survey area and GSI had the funds available to spend on a further seismic survey. GSI often obtained pre-commitments to license seismic data from its surveys to limit its risks. GSI did not create financial models, sales forecasts or market analyses for the creation of the Seismic Works or for its business generally. GSI was a family run business. GSI was more efficient as a private company than many of its competitors with its in-house capabilities. GSI did not consider regulatory confidentiality periods within relevant jurisdictions because the Seismic Works were protected by intellectual property laws in those jurisdictions. The disclosure legislation in Canada did not use terms such as

“copyright”, “copying”, “publishing” or other copyright terms, so it was not seen as a threat to GSI’s copyright protections.

158. The acquisition costs for the Seismic Works were approximately between US\$700-800 million for field costs. Processing costs were in addition to field costs, with an average approximate cost of US\$120-130 per kilometre for 2D seismic data and US\$500 per square kilometre for 3D seismic data. No additional investment was made in the GSI MC library after 2015, as the first Common Issues Decision was issued in early 2016.
159. GSI obtained a quote for a 2D seismic program in the Gulf of the St. Lawrence, Canada dated May 28, 2015, from Seabird Exploration.¹⁹⁶ This quote was obtained for use in the proceedings that resulted in the Calwest Decision, to determine the replacement cost for the GSI seismic survey at issue in that case. It was provided to Troika for the purposes of its work in this Arbitration.
160. GSI provided the Seismic Works to Troika for the purposes of Troika to review and evaluate the Seismic Works. The Seismic Works can be made available under certain terms for the purposes of this Arbitration, should they be requested, but they were not requested by Canada in the Redfern process in this Arbitration and Canada also has the Seismic Works in its own possession for the purposes of any evaluation it wishes to do of the Seismic Works.
161. GSI did not forecast a sale or liquidation of its assets, nor dismissal or lay off of GSI staff. GSI was forced to lay off staff as a result of ancillary effects of the litigation that culminated in the Alberta Decisions.
162. GSI did not receive any advantages or benefits from obtaining geophysical program authorizations. GSI paid for the authorizations, paid all of its workers, financed the creation of the seismic surveys and paid taxes to Canada for its business and employees. Canada provides permits for numerous other types of vessels and does not assert that it is an advantage conditioned on taking property, such as a fisherman’s catch or the cargo of a bulk carrier.

G. Use of Multipliers to Instances of the Seismic Works Being Disclosed

¹⁹⁶ C-375, Seabird Exploration – Proposal for 2D Seismic Program – Gulf of St. Lawrence Canada.

163. In my prior witness statement, I indicated that certain multipliers should be applied to instances of the Seismic Works being disclosed by the Boards dependent upon the different types of third parties accessing the Seismic Works.
164. For each instance of disclosure to E&P companies, a double multiplier was used to represent the average by which E&P companies either transfer the Seismic Works (whether by way of a direct peer to peer transfer or an acquisition) or join an exploration group, both of which would result in a licence fee. The CNLOPB publicly lists information regarding active exploration licences,¹⁹⁷ significant discovery licences¹⁹⁸ and production licences,¹⁹⁹ which shows the number of interest holders per licence, which is on average more than 3 per licence and is information that I used in consideration of the multipliers.
165. For each instance of disclosure to seismic data contractors and third party copy companies, a triple multiplier was used to represent the average by which those companies would vectorize and sell the Seismic Works to further parties for profit. GSI has sought information regarding disclosure of the Seismic Works to third parties, but has been generally blocked from obtaining that information through application of Access to Information rules under domestic Canadian legislation that generally indicates that third party confidential information cannot be disclosed; in other words, that the third parties who access the Seismic Works owned by GSI is confidential from GSI. A third party copy company or seismic data contractor is in the business of copying, scanning, revectorizing and selling copies of seismic data, meaning that such a party typically intends to sell as many copies of the seismic data as possible.
166. As a result, GSI has limited information regarding the average number of times a seismic data contractor or third-party copy company has accessed the Seismic Works. Nevertheless, of the instances that GSI has knowledge, GSI has learned that there have

¹⁹⁷ C-567, CNLOPB Active Exploration Licences, retrieved on May 27, 2024 from CNLOPB Website: [EL.xlsx \(live.com\)](#); C-568, See also the Licensing webpage from CNLOPB Website retrieved on May 27, 2024: [Licensing | Canada-Nova Scotia Offshore Petroleum Board \(CNSOPB\)](#).

¹⁹⁸ C-569, CNLOPB Active Significant Discovery Licences, retrieved on May 27, 2024 from CNLOPB Website: [SDL.xlsx \(live.com\)](#).

¹⁹⁹ C-570, CNLOPB Active Production Licences, retrieved on May 27, 2024 from CNLOPB Website: [PL.xlsx \(live.com\)](#); C-571, See also the list of Oil and Gas Rights published by Crown-Indigenous Relations and Northern Affairs Canada of Canada and retrieved on May 27, 2024: [\(rcaanc-cirnac.gc.ca\)](#).

been at least the following parties gaining access to the Seismic Works through these types of companies:

- (a) KP Seismic obtained a portion of the Seismic Works, over 567 2D seismic lines and 1,356 km² of 3D seismic data from the Boards on multiple occasions between April 8, 1999 and December 17, 2002.²⁰⁰ Some of this data was directly submitted by GSI or the GSI Predecessors but other parts of this data were Secondary Submissions. KP Seismic is a seismic data contractor. KP Seismic then provided the Seismic Works to Encana through a joint venture agreement, who further acquired some of the Seismic Works from Lynx, who later sold all of that data to MGM.²⁰¹ In other words, KP Seismic, Lynx, Encana and MGM, have obtained copies of the Seismic Works from the initial disclosures from the Boards, for a total of four instances, and there could be more that are unknown to GSI.
- (b) Calwest obtained a portion of the Seismic Works, including two surveys, from the Boards in or around 2010²⁰². Calwest is a copy company. Calwest then provided the Seismic Works to the Government of Quebec, which did not have any legislation providing it with access to the Seismic Works. The Government of Quebec then loaded the Seismic Works onto its public website for disclosure to further third parties. In other words, Calwest, the Government of Quebec and the third party users of the Government of Quebec's website have obtained copies of the Seismic Works from the initial disclosures from the Boards, for a total of at least three instances, and there could be more that are unknown to GSI.

167. For each instance of disclosure to Canadian government or universities, a zero multiplier was used to represent the average by which those organizations would further disclose the Seismic Works. However, there are instances of the Canadian government and universities using, incorporating and publishing the Seismic Works, including to RPS Energy and distribution of the Seismic Works in study packages such as the Offshore Petroleum Play Fairway Analysis and Geoscience Data Package Program, that was distributed to oil companies, which in turn sell the Seismic Works to further parties for

²⁰⁰ C-572, KP Seismic Data Request Various ATIA Responses.

²⁰¹ C-572, KP Seismic Data Request Various ATIA Responses.

²⁰² C-132.

- profit. NRCan also disclosed the Seismic Works to other governments, including to Denmark in digital format created through Lynx, as further detailed elsewhere in this Witness Statement.
168. GSI obtained responses to numerous AIA requests in or around 2009-2012. Given that GSI discovered disclosure by the Boards of the Seismic Works through those AIA Responses at those times, the invoices related to such disclosures were dated at the time of their discovery by GSI. That practice was used because GSI could not change its financial information to account for any of these instances in a historical manner, having already prepared its financial statements. As a result, the invoices dates are not the dates upon which disclosure by the Boards occurred since GSI was never provided with contemporaneous notice of the disclosures and spent years seeking such information from the Boards.
169. GSI would often further discover other licence breaches as a result of the AIA Responses, as the third parties accessing the Seismic Works from the Boards would enter into joint exploration partner groups or the third parties would transfer the Seismic Works further. In order to account for historical disclosure and licence breaches, GSI averaged the preceding three years for access from the Boards and the preceding five years for licence breaches when accounting for the matters in Exhibits C-111 and C-112. GSI did not want to lump all disclosures when we found out about them as that would be improper and show a year or two of anomalous revenues, but would be inaccurate about the timing of the actual events of disclosure. It was reasonable to assume that disclosure actually occurred in years prior to GSI discovering it through the AIA Responses. This is based on our experience in reading the hundreds of AIA responses on disclosure obtained from Canada.
170. In other words, the Unpaid Invoices often could not be issued at the relevant time when the obligation would have arisen to pay the invoice due to Canada's delayed disclosure of the information required to determine that the obligation had arisen. The same issue relates to the limitation periods applying in various litigation related to the Unpaid Invoices. However, had GSI had the information contemporaneous with the obligations arising, then limitation periods would not apply. Apart from the Alberta Decisions

confiscating GSI's intellectual property rights in the Seismic Works, GSI's domestic litigation against third parties has most commonly been dismissed due to limitation periods, which directly stems from Canada's slow AIA Responses.

171. There were no damages awards or settlements in respect of C-111 or C-112 prior to 2012.
172. There was only ever one instance in which the Seismic Works were accessed by a third party, [REDACTED], and that party then paid a license fee of less than \$20,000 for a few seismic lines.

H. Falkland Islands (Malvinas)

173. With respect to the Falkland Islands (Malvinas) seismic works created by GSI from 2004 to 2006, GSI [REDACTED]. The cost of the GSI Admiral and GSI Pacific to conduct the field work from December 2004 to May 2006 was approximately [REDACTED]. By 2012, paid licences for those Falkland Islands seismic works totaled [REDACTED]. Additionally, unpaid invoices related to those Falkland Islands seismic works total [REDACTED] which continue to be pursued in domestic litigation with Edison and a demand against Chevron.²⁰³

I. Other Comments

174. OGSi relied primarily on a management fee from GSI and on business from GSI to support its seismic recording and source systems for GSI's seismic vessels in order to operate. Without that business, OGSi had no ability to sustain its operations. GSI terminated the management fee with OGSi because of the ancillary effects related to the Alberta Decisions. OGSi was a shareholder of GSI from 1993 to October 2004. OGSi was majority owned by Davey Einarsson, Russell Einarsson and me.
175. GSI suffered an employee or consultant fraud that it prosecuted through to a trial in 2009. At that trial, GSI's former controller, Wayne Lam, testified that GSI was facing a cash flow problem in 2001 resulting from the employee fraud perpetrated by Matthew Kimball. The decision does not mention a "crisis" as alleged by Canada. GSI was successful in the trial and judgment was rendered against Mr. Kimball for fraud and

²⁰³ C-559, Summary on Invoices from Falklands.

- conversion for CAD\$1,764,257.70 on February 5, 2010,²⁰⁴ which amount has not been collected from Mr. Kimball despite efforts to do so.
176. SCS paid GSI for mobilization, demobilization and acquisition of seismic data (expense of ~CAD\$2.6M but GSI was paid ~CAD\$4.6M), and then SCS / Hyperdynamics bought GSI out of the royalty arrangement for an additional USD\$1,075,000. During the period of time in which GSI had business arrangements with SCS, GSI had total profit for the two months on ship operations of CAD\$3,312,974, which resulted in 33.3% EBITDA margin and a bottom-line profit margin EBIT of 27.8%. GSI made money on its business arrangement with SCS, contrary to Canada's suggestions otherwise.
177. GSI's work for Grynberg involved Grynberg being responsible for all permits required to acquire the seismic data. GSI required a US\$1,500,000 deposit from this client which would be drawn upon for the work. It was only when Grynberg breached the agreement between it and GSI that GSI first heard assertions that there was not a proper permit for the seismic survey work. GSI was paid for mobilization and other fees prior to the dispute. Ultimately, Grynberg and GSI settled the dispute on April 1, 2008, and GSI was paid US\$850,000 for ~US\$750,000 worth of survey work and retained ownership of all of the seismic data.²⁰⁵ GSI then sold that seismic data to Global Petroleum Group Ltd. on April 8, 2013 for US\$3,150,000 and retained the ability to license that data to one further client on a non-exclusive basis. The financial statements of GSI in the relevant times show that this was a profitable investment for GSI.²⁰⁶
178. The Seismic Works have more uses than hydrocarbon exploration, including uses for offshore infrastructure, wind turbine projects, or other minerals. In fact, there is a wind project located offshore Newfoundland in the area where GSI has 3D surveys.²⁰⁷ In order to anchor a large infrastructure project, seismic data would be used to understand the geology to which the infrastructure would be affixed.
179. I attach my departing tax return from Canada in 2017, which indicates that I had disposed of most of my Canadian assets by January 1, 2017.²⁰⁸

²⁰⁴ C-573, *Geophysical Service Inc. v. Sable Mary Seismic Inc.*, 2012 NSCA 33 at para 35.

²⁰⁵ C-574, Settlement Agreement between GSI and Grynberg.


²⁰⁶ C-575, Sale Proprietary Ownership Document.

²⁰⁷ C-576, CBC News Article, "Timeline for massive N.L. wind project 'extremely ambitious,' consultant says" Accessible at: <https://www.cbc.ca/news/canada/newfoundland-labrador/wind-energy-timelines-canada-germany-deal-nl-1.6558549>

²⁰⁸ C-577, Income and Tax Return of Paul Einarsson [REDACTED]

IX. CONCLUSION

180. I make this witness statement in support of my own, my brother's (Russell John Einarsson), the Estate's and GSI's claim against Canada in this proceeding and for no other purposes.
181. I swear this witness statement in English and anticipate giving testimony at the hearing of this Arbitration in English.
182. I affirm that the contents of this witness statement are true.

Signed at HENDERSON, NV on MAY 31 2024

HAROLD PAUL EINARSSON