

**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-06

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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 of the Claimant, Geophysical Service Incorporated, (“GSI”).
2. 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. Based on my involvement and my review of books and records kept in the ordinary course of business of GSI, 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. MY RELATIONSHIP TO THE OTHER CLAIMANTS IN THIS ARBITRATION

A. Relationship to Other Claimants in this Arbitration

3. In addition to myself and GSI, the other Claimants in this Arbitration are my father, Theodore David Einarsson, whom everyone refers to as “Davey”, and my brother, Russell John Einarsson, who I will refer to herein as “Russell”. All three of Davey, Russell and I are investors in GSI. Davey is also the current President and Chief Executive Officer of GSI, while Russell is a former employee of an affiliate of GSI based in Houston, Texas named Ocean Geophysical Service Incorporated (“OGSI”).
4. I have been Chairman of GSI continuously since March 2002. I previously served as GSI’s Chief Operating Officer from approximately 2002 to 2017. As described below, I was employed by GSI full-time since 1997 until January 1, 2017, after which time I remained a board member of GSI only.
5. Throughout my 25 years of employment with GSI, I gained an intimate knowledge of the seismic data industry and managed most of the Canadian operations, marketing, legal, licensing, and finances of GSI. In my capacity as Chairman and Chief Operating Officer of GSI, I have been intensely involved in the business of GSI over the years, including all

of the operations since 2008. During that time, I managed GSI's marketing, licensing, finances, daily operations, regulatory, safety, financial reporting and tax activities.

B. Overview of GSI's Business

6. GSI is a privately-owned corporation incorporated pursuant to the laws of Canada and doing business in Canada.¹
7. GSI was a full-service, fully integrated seismic company.² That included branches of the business dedicated to the creation of marine and land seismic data, processing seismic data and licensing seismic data. The GSI business employed approximately 250 employees until in or around 2009.
8. GSI's seismic acquisition business included two seismic ships owned by GSI, the GSI Admiral and the GSI Pacific, and related seismic equipment. For a time, GSI also had land crews creating land based seismic and had rental divisions leasing 45,000 pound source (TI-Mertz Vibrators) and recording systems in the United States and Canada on land, and leased and installed marine source and recording systems to third party seismic ships. At its peak, GSI operated up to three geophysical land crews at certain times.
9. GSI's processing business included a processing centre in Calgary, Alberta, Canada and related processing equipment with approximately 15-30 employees from time to time.
10. GSI's licensing business held approximately 325,000 km of seismic data in Canada, with a smaller amount of data from other areas in the world, such as the Falkland Islands Chile, Morocco and the Caribbean. All of that data was licensed to various oil and gas companies for license fees.
11. I estimate that the cost to replace the various assets of GSI's business at the peak of its operations (two dimensional ("2D") seismic ship, three dimensional ("3D") seismic ship,

¹ C-234, Certificate of Incorporation of GSI, dated January 1, 2013.

² C-316, Geophysical Service Incorporated Brochure.

Land crews and equipment, processing center) are in the range of more than USD\$800,000,000.

12. The lifeblood of GSI's business was earning substantial revenues from the licensing of seismic data to oil and gas companies for oil exploration. After the seismic data was created and processed, GSI marketed and promoted its seismic data for oil and gas companies and other interested parties to license from GSI. GSI would earn significant revenues from those licenses, which it would then use to fund its entire business, ships, investing in new non-exclusive data, storage and maintenance (such as reprocessing and periodic re-transcription) of its seismic data.
13. GSI's business was, and technically still is, focused almost entirely on seismic data in the Canadian offshore. Approximately 93% of GSI's entire seismic database is Canadian offshore seismic data that is the subject of this Arbitration (the "Seismic Works").³ Because of that, GSI's business depended on earning substantial licensing revenues from the Seismic Works. Without those licensing revenues, GSI's business cannot and could not survive.

C. My Investments in GSI

14. In addition to being a board member of GSI, I am also an investor in GSI.
15. I have been a shareholder of GSI since the 1990s. Currently I hold ████████ of the issued and outstanding shares of GSI, while Davey owns the other ████████ of outstanding shares in GSI.⁴ Those particular shares were acquired between January 1, 2013 and December 15, 2016 and held continuously by both Davey and I since that time. On December 15, 2016 a Canadian entity that I owned amalgamated with GSI, transferring a non-majority interest in GSI from that entity to me.⁵

³ C-047, List of Seismic Survey Assets.

⁴ C-235, Paul Share Certificate for ████████ Shares dated ████████; C-236, Paul Share Certificate for ████████ Shares dated ████████; C-237, Davey Share Certificate for ████████ shares dated ████████; C-238, Davey Share Certificate for ████████ dated ████████.

⁵ C-287, Articles of Amalgamation Between GSI and Daval Holdings Ltd.

16. Davey, Russell and I also have the following loans to GSI, or its former subsidiaries:
- (a) loan from Davey to GSI dated June 15, 2001 in the amount of CAD\$900,000, plus interest;⁶
 - (b) loan from me to GSI dated June 15, 2001 in the amount of CAD\$564,901.30, plus interest,⁷ which loan was subsequently increased by a promissory note to CAD\$820,946.67;⁸
 - (c) loan from me to Precision Seismic Processing & Consultants Ltd. (which was, at the time, a wholly-owned subsidiary of GSI) dated June 15, 2001 in the amount of CAD\$74,132,⁹ which loan was subsequently increased by a promissory note to CAD\$79,605;¹⁰
 - (d) loan from Alexandra Holdings Ltd. (a holding company that I wholly own)¹¹ to GSI dated February 19, 2004 in the amount of CAD\$113,578.53, which loan was repayable to me;¹² and
 - (e) loan from me to GSI dated May 5, 2005 in the amount of USD\$350,000.¹³
17. Portions of those loans were repaid more than three years after they were advanced, but each of them still have significant outstanding balances on them. As of November 30, 2017, those outstanding balances were as follows:
- (a) Davey – \$2,391,471.41;

⁶ C-239, Loan Agreement between T. David Einarsson and Geophysical Service Incorporated, dated June 15, 2001.

⁷ C-240, Demand Loan Agreement between H. Paul Einarsson and Geophysical Service Incorporated dated June 15, 2001.

⁸ C-241, Promissory Note from Geophysical Service Incorporated to H. Paul Einarsson dated October 31, 2003.

⁹ C-242, Agreement between H. Paul Einarsson and Precision Seismic Processing & Consultants Ltd. dated June 15, 2001; C-243, Promissory Note between Precision Seismic Processing & Consultants Ltd. and H. Paul Einarsson, dated June 15, 2001.

¹⁰ C-244, Promissory Note Between Precision Seismic Processing & Consultants Ltd. and H. Paul Einarsson, dated June 1, 2002.

¹¹ C-245, Corporation/Non-Profit Search for ALEXANDRA HOLDINGS LTD., dated September 13, 2022.

¹² C-246, Loan Agreement between Alexandria Holdings Ltd. and Geophysical Service Incorporated dated February 19, 2004.

¹³ C-247, Demand Loan Agreement between H. Paul Einarsson and Geophysical Service Incorporated dated May 5, 2005.

- produce a digital product and also images. Marine seismic data creates that illustrative map using sound reflections of the subsurface/subsea strata and rocks.
22. The other types of datasets commonly created by seismic operators are gravity and magnetic data. Gravity data are measurements recorded by a gravimeter, which measures the variation in the gravitational force exerted by the Earth as it is affected by rocks of various densities below the surface. Gravity measurements are processed to facilitate images of the variations in the Earth's gravitational field and are presented as maps and cross sections of the gravity variations across an area. Magnetic data is similarly recorded and presented, with variations in the magnetic properties of rocks in the subsurface recorded by a magnetometer.
 23. Raw or unprocessed seismic data is often referred to as "field data" or "raw seismic", and is recorded on field tapes (also known as "SEG-D" data, and sometimes initially recorded and stored in "SEG-A" and "SEG-B"). The processed product, once it has been filtered, corrected and manipulated using skill and judgment to select and use various algorithms, then contributes to a digital product and image of the subsurface, known as "SEG-Y" or "Processed" data. Oil and gas companies prefer seismic data in SEG-Y format (an industry standard of presentation digitally) because it can be loaded onto powerful work stations that can enhance and manipulate the data. Being able to manipulate the SEG-Y data allows oil and gas companies to gain much more utility from the data to explore, develop and produce hydrocarbons in an area.
 24. Seismic data acquisition and processing relies on the expertise of a company's survey planning personnel to select equipment, set parameters to fit the geologic conditions, seismic acquisition crew, and highly skilled geophysicists who process the field data and the proficiency of the algorithms and other software tools used to turn the field data into an image that best approximates the location and characteristics of the geological layers beneath the Earth's surface.
 25. Work, skill, judgment, experience and investment decisions are involved in every step of the process of creating and investing in the Seismic Works. The following typically sequential steps were undertaken by GSI to create the Seismic Works:

- (a) generally, the seismic surveys were funded by shareholder and related party loans, institutional loans and financing, or directly by GSI;
- (b) hire skilled and trained employees, including marine geologists, geophysicists, data processors, marine staff, specialized mechanics, trained recording system operators, trained quality control “observers”, experienced management, computer analysts and researchers, all or some of which worked in combination to create the Seismic Works;
- (c) buy or contract a specialized seismic research ship, which costs approximately (2007 prices) \$60-100 million dollars (including the geophysical equipment on it) and requires hiring a crew that charters for approximately \$30,000-80,000 per day (2007 prices) for two-dimensional seismic data (the figures can be multiplied by three to five times when the seismic data being created is 3D rather than 2D);
- (d) buy or lease seismic equipment depending upon the survey choices made, inventory of equipment owned, available, and most suitable for the geologic conditions, all of which is selected based on the experience and know-how of senior staff who plan the survey, including gravity and magnetic equipment, source equipment (guns, umbilicals, air lines, compressors and rigging) and recording equipment (consists of streamers, compass birds, GPS tail-buoy, recording systems, media systems), from a variety of suppliers. The selection and mix of equipment used were based on knowledge, training and know-how of the planner of the survey, which included highly experienced individuals and often geophysicists. Development and construction of equipment is very expensive and varies depending upon the required components and their configuration. When available, and if funds are lacking, leasing of equipment is common in the industry from vendors and other seismic leasing entities which eliminates some of the capital needs and creates a fixed cost one can more easily factor into prices;
- (e) obtain all certificates, licenses, insurance, and regulatory requirements (permits, approvals, safety and environmental regulatory requirements, etc.) to conduct seismic surveys;

- (f) use skill, judgment and research to locate and plot the seismic survey lines;
 - (g) use skill, judgment, knowledge of the subsurface, testing and research to select the equipment and set the acquisition parameters for the source and receiver systems. Selection of prospective seismic surveys involves an analysis of previous seismic surveys, well logs or outcrop information, client input, reports, publications, market information, gravity and/or magnetic data;
 - (h) use skill, judgment and specialized knowledge in the collection of field data utilizing selections of source and receiver systems deployed in the water. The source system designed (number and type of units, size, configuration of units, pressure used, etc.) is activated periodically based on the parameters selected. The reflections from sub-surface acoustic boundaries are recorded by the receiver system (also selected components, spacing and designed parameter settings) and then stored as “unprocessed seismic”, “raw seismic” or “field data” on media;
 - (i) use skill, judgment, testing and research to apply techniques, and proprietary and non-proprietary hardware and software to process the field data, specific to the geologic conditions in the area of the survey;
 - (j) use skill, judgment and knowledge to select parameters, tools, methods, and processes to create the best processed data possible; and
 - (k) continue education, research and development to maintain and improve skills, judgment and knowledge of all of those involved.
26. Arranging raw seismic field data into finalized seismic surveys involves laying out a location and pattern of seismic lines to create the best image of the layers of geological formations beneath the Earth’s surface, accounting for geophysical principles for the dip, dependent on whether there are salt or shale structures, faulting, hard or soft water bottoms, ray path issues such as uneven and reflective water bottoms, depth to prospective targets and depth of the basin. This analysis involves geological and geophysical knowledge and skill to place the correct direction of the lines and calculate the best grid and distance between lines.

27. Processing involves judgment in the selection from the various proprietary GSI software tools to be used for a particular data set and setting the parameters on the software and making educated inputs and choices that are combined to properly process the raw seismic field data. Processing field data is an interactive and labor-intensive process. First, the field data is converted into a format that the specialized software can process, and filters are applied to it to remove random noise and correct reflection distortions from the Earth. Up until the 1980s, processing was undertaken by TIAC and TIMAP computers, proprietary hardware that was originally designed for GSI's predecessors. Field data is sorted into common depth points and normal move-out (related to the effect that the distance between a seismic source and a receiver has on the arrival time of a reflection) was applied. The traces within the common depth points are summed together, the data might be migrated and more filtering applied at this stage based on the judgment and know-how of the processor. Processing utilizes proprietary software, techniques and sequences developed by GSI and its predecessors through extensive internal research and development. The final product is then output to magnetic tape in SEG-Y format and paper and mylar plots of the processed seismic data is generated for further use, reproduction and storage.
28. Most of the hardware and software used in the creation of the Seismic Works prior to 1990 is proprietary to GSI, including the recording systems, streamers, acquisition and processing software, and hardware for processing. That hardware and software was primarily developed by Davey as head of GSI's predecessors, but was also improved upon and refined by GSI.
29. GSI's predecessor and GSI itself used the most advanced hardware and software available contemporaneously with the acquisition and processing of the Seismic Works. From the commencement of seismic data acquisition through the time that about half of the Seismic Works were created (prior to 1991), GSI's predecessor was the leading edge innovator in seismic data technology and practices. Many of the seismic surveys created by GSI and its predecessors have led to significant oil and gas development in the Canadian offshore.

E. Overview of the Seismic Industry

30. The seismic data industry focuses on, among other things, the creation and licensing of seismic data. Oil and gas companies obtain seismic data, often by purchasing or licensing that data from seismic operators, to provide themselves with geologic characteristics (such as hardness, gas, liquid and other characteristics) and an image of the configuration and depth of the various geological layers beneath the Earth's surface to determine whether to explore and commence drilling activities for hydrocarbons in a particular area. Historically, seismic data was treated as a valuable commodity because of its inherent informative value and, as a result, seismic data was kept confidential and its copying was strictly restricted.
31. Seismic data created by seismic operators can fall into one of two categories commonly used in the seismic data industry. Seismic data that is created by a seismic operator for the exclusive use of a single oil company or a joint venture of oil companies is referred to as "exclusive" seismic data. Seismic data that is created by a seismic operator for its own account for licensing to multiple parties is referred to as "speculative" or "non-exclusive" seismic data. In practice, the difference between the two categories is that a seismic operator can license non-exclusive seismic data to multiple customers but cannot license exclusive seismic data to customers because it is owned by and proprietary to the oil and gas company or joint venture that commissioned the exclusive seismic data. Normally exclusive data is owned by the oil and gas company, with the seismic operator working for a fee for service to create the data.
32. The marine seismic data business is time and capital-intensive. Non-exclusive seismic surveys are only licensed to a small number of customers over a long period of time at a high cost to compensate the seismic operator for the associated high upfront expenses and risks in the creation of non-exclusive seismic surveys. Seismic operator expenses include the high purchase (or leasing) and operating costs of the ship and its crew, the planning, environmental, safety and permit process to operate the ship, the expensive source and recording equipment, processing, research and development, staff, offices, equipment, marketing, legal costs, secure storage, upgrading of media and periodic reprocessing.

B. Moving to Canada from the United States in 1997 to Support GSI

37. In 1997, Davey and GSI asked me to relocate (with my family) to the business hub for Canada's oil and gas industry – Calgary, Alberta – to support and grow GSI's expanding Canadian seismic business. At that time, I understood that GSI intended for me to reside in Canada for only a few years to support and really grow GSI, after which I would then return to the United States, leaving staff in Calgary to manage the well-established business.
38. [REDACTED] and I purchased a residential home in Calgary in 1997. At the time we purchased it, we only intended to live in it for a few years before returning to the United States. However, we ended up generally residing in Calgary between 1997 and 2011. During the entire time that we lived in Canada, I intended for my family to eventually permanently reside in the United States. [REDACTED] and I also frequently travelled back to the United States during the time we lived in Canada, because that is where our friends and family were located.
39. In 2004, I purchased a farm in Alberta, Canada that would be used to store the Seismic Works in Canada due to what I understand to be requirements to maintain Canadian offshore seismic data within Canada or forfeit it pursuant to Canadian regulations (the "Farm").

C. Returning Back to the United States from Canada

40. In October 2006, after our family had been in Canada several years longer than GSI originally promised, [REDACTED] and I decided to move back to California, United States for at least the winters. Shortly thereafter, [REDACTED] and I engaged a realtor in California to assist us with finding a permanent home in the state. Around that time I also asked the former CFO of GSI, Zita Mulligan, who had experience in tax and financial planning, to assist me with organizing the family's finances in preparation to move back to the United States.²²

²² C-263, Letter from [REDACTED] to Paul Einarsson regarding Tax Planning.

41. After a bit of home searching, [REDACTED] and I put an offer in on a home in San Diego, California that was accepted in September 2008. Unfortunately, the transaction for that home did not close due to the stock market crash at the end of September 2008. Around the time we put the offer on the home in California, my daughter was applying to universities in the United States (and none in Canada), including in California.
42. In 2011, [REDACTED] and I finally purchased a home in in San Diego, California.²³ We wanted the San Diego home for several reasons, including because we were visiting the United States so frequently and wanted a place to stay there, and because we wanted to leave Canada. At the time we purchased the San Diego home, GSI's business in Canada no longer had ships operating, and our children had both left Canada and returned to the United States to attend university. In January 2012, I purchased a new vehicle for the family to use in California.²⁴
43. [REDACTED]
[REDACTED]
[REDACTED] I also travelled to and from Canada after 2011 with the main purpose of overseeing GSI's litigation in Canada.
44. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
45. In 2013, [REDACTED] and I arranged to have our home in Calgary, Alberta renovated in anticipation of selling it since we had relocated back to the United States for a large part of

²³ C-264, Subject Property History Report for [REDACTED] C-265, Buyer's Estimated Closing Statement and Escrow Documents, dated November 19, 2011.

²⁴ C-266, Lexus San Diego Statement, dated January 25, 2012.

²⁵ C-267, Paul Einarsson U.S. Customs and Border Protection entry-exit records; C-268, Travel History from January 1, 2011 to May 26, 2020 for H. Paul Einarsson.

the year. In preparation for the family's permanent relocation to the United States I also sold the Einarsson family homestead called Oxara, in Arborg, Manitoba in 2013.²⁶

46. In July 2015, [REDACTED] and I sold a commercial building investment we purchased in downtown Calgary, Alberta to provide liquidity for the litigation expenses that GSI was incurring in its litigation.²⁷
47. In October 2015, [REDACTED] and I put our home in Calgary, Alberta on the market in anticipation of departing from Canada permanently. However, the depressed economy in Calgary in 2015 and 2016 due to a crash in oil prices meant that our Calgary home stayed on the market longer than we anticipated.
48. On September 9, 2016, [REDACTED] and I entered into an agreement to sell our home in Calgary.²⁸ That home was sold to pay for GSI's legal fees arising from the proceedings leading up to the Alberta Decisions (defined below). Shortly after we sold the Calgary home, [REDACTED]
[REDACTED]
[REDACTED]
49. [REDACTED]
[REDACTED] We have resided there ever since and still reside there today.

D. My Personal Attachment for Canada Versus the United States

50. I self identify as an American and have a deep attachment with the United States.
51. My understanding is that I was born as a Libyan, Canadian and American national due to being born in Libya and my father, Davey, being both a Canadian and American citizen.³¹ However, I chose to apply for my American citizenship through naturalization instead of

²⁶ C-269, Letter from [REDACTED] to Paul Einarsson dated August 23, 2013.

²⁷ C-270, Offer to Purchase dated July 22, 2015.

²⁸ C-271, Residential Purchase Price Contract, dated November 21, 2016.

²⁹ C-272, Joint Departing Tax Return dated [REDACTED]

³⁰ C-273, Grant, Bargain and Sale Deed dated February 22, 2017; C-274, ALTA Settlement Statement – Buyer, dated February 27, 2017.

³¹ C-252, Certificate of Birth of Theodore David Einarsson, dated [REDACTED] C-253, [REDACTED]
[REDACTED]

claiming it through Davey due to my attachment with America and my desire to become an American.

52. To this day I have some relatives in Manitoba, Canada because Davey was born into a very large family there. However, other than my relatives in Manitoba, the vast majority of my personal, family and professional connections are located in the United States or other countries outside of Canada.
53. When my family and I arrived in Calgary in 1997, we had to start from scratch in terms of making connections. During the time that I lived in Canada, the connections I did build were generally related to my work for GSI and my children's friends from their local schools. Other than that, [REDACTED] and I generally spent our spare time in the United States while we lived in Canada. During our time in Canada we travelled to the United States frequently, including for annual family reunions that we never miss and to take care of our aging parents, who reside in Texas and Florida, respectively. [REDACTED] the kids and I also attended every Christmas and American Thanksgiving (with the exception of one) in the United States during the entire time we lived in Canada.
54. My personal, family and professional connections in Canada have been nearly non-existent since 2012 and even less after we left in January 2017. In fact, after [REDACTED] and I purchased the San Diego home in 2011, my focus was on solidifying the connections and relationships I had in the United States or creating new connections or relationships to settle in on our plan to be full time in the United States. Other than my relatives in Manitoba, the connections and friendships I have had in Canada since 2011 have been largely related to GSI's ongoing litigation in Canada, such as with accountants, lawyers, bankers, insurers and former GSI employees or industry connections (who sometimes serve as witnesses or consultants in GSI's litigation).

E. The United States has Always Been the Center of my Economic, Social and Family Life

55. The United States has always been the center of my economic life, including while I was living in Canada.

56. I built my economic base in the United States from 1986 onward and have held a large portion of my assets in the United States continuously from 1986 to the present day. Between 1986 and 1988, while I was attending SMU, I worked in the United States and founded both a security system business and real estate investing business, the latter of which saw me own between three to eight condominium rental investments in Dallas at any given time.
57. After I graduated from SMU, I held several jobs in the United States, eventually working my way up to Assistant Vice President of Provident Bancorp in San Francisco, California, a position I held until 1997. My hard work in the United States between 1986 and 1997 allowed me to generate the funds that I ultimately invested in GSI.
58. I continued to hold some of my assets in the United States after being stationed in Canada by GSI in 1997, as follows:
- (a) I maintained almost all of my banking and investment accounts in the United States continuously since the 1980s;
 - (b) I owned a one-third interest (with the other two thirds being owned by Russell and Davey) in OGSi, an affiliate of GSI, which built, serviced and rented marine seismic source and receiver systems out of a 10 acre commercial property (owned by OGSi) located in Pearland, Texas from 2004 to 2014;³²
 - (c) I acquired and held a number of vehicles from the United States after 1997, being an avid collector of Toyotas, and a member of a Toyota Supra car club and the Toyota Owners and Restorers Club that regularly meet in California and Nevada; and
 - (d) In addition to my San Diego, California home, I had investments in residential real estate in Dallas, Texas, one third ownership in a 10 acre commercial warehouse

³² **C-275**, Option to Purchase dated December 30, 2004; **C-276**, Commercial Contract – Improved Property; **C-248**, Certificate of Incorporation of Ocean Geophysical Service Inc; **C-249**, OGSi Directors’ Meeting and Resolution Approving Issuance of Shares, dated December 24, 2003.

property in Houston, Texas through my one-third ownership of OGSI, and an interest in a wine property in Napa, California between 2005 and 2015.

59. I owned, or currently own, several assets in Canada, all of which are directly either related to GSI and were (or are) necessary for its business, or were maintained for convenience purposes due to me being stationed in Calgary by GSI and having my wife and children there with me.
60. In 2012, I purchased an office in Calgary, Alberta for GSI to operate out of and store the Seismic Works in.³³ I sold that office for a loss in 2021.³⁴ I also still own the Farm, which is the only remaining real estate asset I own in Canada. I owned, or currently own, the office and the Farm solely to comply with a Canadian regulatory requirement that GSI must store the Seismic Works in Canada. My understanding is that I am unable to sell the Farm due to that regulatory requirement.
61. Other than my real estate holdings, almost all of which have been sold off, I have held certain Canadian bank accounts, including an investment account, retirement accounts and a chequing account. However, my primary net worth resided in the United States, not in those Canadian accounts. I effectively closed my Canadian investment account in 2015, but it remains open to hold a few delisted stocks in Canadian companies. I continue to maintain Canadian chequing accounts for convenience purposes due to my occasional travels to Canada to support GSI's litigation in Canada, but I stopped using that account as my primary personal account in 2012.
62. As an American, I have always paid taxes in the United States, including while I was living in Canada. I also paid Canadian taxes between the date I was stationed in Canada by GSI and when [REDACTED] Due to the increased taxes I was to pay, GSI agreed to pay for all of my tax preparation and tax advice

³³ C-277, Commercial Real Estate Purchase Contract dated July 5, 2012.

³⁴ C-278, Commercial Purchase Contract dated December 15, 2021.

while I was living in Canada.³⁵ GSI also agreed to reimburse me for any additional taxes I paid in Canada and upon my departure from Canada, which GSI ultimately did.³⁶

63. The United States has also been the center of my social life since I was a child.
64. I am, or have been, a member of a number of social and professional organizations based in the United States, including throughout the time I was stationed in Canada by GSI. Those social organizations are detailed as follows:
 - (a) I started and was the President of the Dallas Young Republicans (“DYR”) throughout my time at UT Dallas and SMU, and beyond school, between 1986 and 1995, after which I left DYR when we left Dallas. I made many personal and professional connections based in the United States during my time with DYR, many of whom I have kept in touch with, including throughout my time in Canada. In fact, my connections at United States based lenders, whom I met through DYR, ended up providing tens of millions of dollars in financing for GSI to acquire its ships in Canada. I also met George W. Bush many times, who went on to become Governor of Texas and President of the United States, during my time with DYR.³⁷
 - (b) I was a member of the Council for National Policy (“CNP”), a conservative political networking organization based in the United States from 2006 through 2011. I maintained my membership in CNP during my time in Canada from 2006 and 2011, and attended meetings held three to four times per year for CNP in the United States during that time. I remained close with the founder and President (Brad Dacus) of a member organization, the Pacific Justice Institute, who I grew up with in Texas.
 - (c) I was also a member of The Executive Committee (now called Vistage), an executive coaching group based in California, United States, from approximately 2001 to 2011. As with my membership in CNP, I maintained my membership in

³⁵ C-251, Paul Einarsson Employment Agreement dated [REDACTED]

³⁶ C-251, Paul Einarsson Employment Agreement dated [REDACTED]

³⁷ C-279, Photograph of Paul Einarsson with George W. Bush at DYR Event.

The Executive Committee throughout my time in Canada and attended meetings in the United States from time-to-time.

- (d) I have been a member of Supras in Vegas, the world's largest annual Toyota Supra owners gathering in Las Vegas, Nevada, United States, continuously since 2010. I maintained my membership in Supras in Vegas throughout my time in Canada and attended annual meetings held by Supras in Vegas in Las Vegas, Nevada during that time. I have made many personal and professional connections based in the United States through Supras in Vegas and the Toyota Owners and Restorers Club, many of whom I regularly stay in touch with and kept in touch with during my time in Canada.
 - (e) I was an active board member of the International Association of Geophysical Contractors in Houston, Texas between 2000 and 2011, during which time that organization was actively involved in industry issues, creating template seismic data license agreements, attending meetings in Canada with government and government lobbying.
65. I was a member of several organizations in Canada between 1997 and 2011, but those organizations were all related to GSI's business. As consideration for requiring me and my family to relocate to Canada, GSI agreed to pay membership fees and for all expenses incurred by me at the Calgary Golf and Country Club and the Calgary Petroleum Club during my employment with GSI.³⁸ Those were the two forums where I met and entertained clients of GSI in Canada. I ceased my memberships with those Canadian clubs in 2008, around which time GSI became involved in a number of lawsuits in Canada. The defendants in those lawsuits would spend time at those Canadian clubs, providing for awkward encounters.
66. The United States has also been the center of my family life since I was a child.
67. With the exception of a handful of relatives in Manitoba, Canada, my family resides in the United States and has done so for my entire life since I first moved to the United States in

³⁸ C-251, Paul Einarsson Employment Agreement dated [REDACTED]

1975. Over time, my extended family also resided in the United States. As noted, my wife is also from the United States, as is her entire extended family.

68. [REDACTED]

F. My Use of my Canadian Nationality

69. My use of my Canadian nationality has been declining since 2012 and any such use of my Canadian nationality has been related to GSI.

70. My immigration records from Canada and the United States indicate that I predominately (almost exclusively) used my United States citizenship to enter both Canada and the United States since mid-2012.⁴¹ Since that time, I have only used my Canadian passport when my United States passport or my Nexus card was unavailable.

71. I also used my Canadian residency to obtain Canadian controlled corporation tax advantages for GSI and to satisfy Canadian director residency requirements for GSI until 2016. Those tax advantages and residency requirements were based solely on me being resident in Canada, were not related to my Canadian citizenship and do not result in me feeling more connected to Canada.⁴²

72. Between 2009 and 2014, I was attempting to spread awareness of the issues GSI was facing in getting information from Canada and Canadian regulatory agencies regarding the use and disclosure of the Seismic Works under Canadian regulations. During that time, I was

³⁹ C-280, [REDACTED] Passport of United States of American, issued [REDACTED]

⁴⁰ C-281, The University of Queensland Oschsner Clinical School Certificate for [REDACTED]

⁴¹ C-267, Paul Einarsson U.S. Customs and Border Protection entry-exit records; C-268, Travel History from January 1, 2011 to May 26, 2020 for H. Paul Einarsson.

⁴² C-282, Government of Canada Website on Canadian-controlled private corporation.

quoted in many newspapers and appeared in online videos describing the ordeal that GSI was facing. I identified myself as a resident of Alberta or as a Canadian in several of those articles or videos. My statements to that effect were correct, as I did have an Alberta residence up until 2016 and was, and still am, a Canadian citizen. I believed that making those statements would attract more attention to the issues GSI was facing and avoid the anti-American bias that I often encountered when I told GSI's story.

IV. CORPORATE HISTORY OF GSI

A. Davey Founded GSI in the Early 1990s

73. I did not become employed full-time by GSI until 1997. However, over the last 25 years I have come to learn of GSI's history based on my review of corporate records, my former employment with the predecessor of GSI, speaking to my brother, Russell, who was employed with the predecessor of GSI, and speaking to my father who worked for the predecessor GSI/Halliburton since about 1956.
74. Davey founded GSI in 1993. Prior to founding GSI, Davey had worked for predecessors to GSI since the 1950s, including an entity named "Geophysical Service Inc." that was incorporated in Delaware, United States in 1938 ("GSI Delaware").⁴³ GSI Delaware was the beginnings of, and eventually evolved into, Texas Instruments Inc. in the 1950s.
75. Texas Instruments Inc. continued its seismic business as a key component of its enterprise into the 1980s. In 1989, Halliburton acquired GSI Delaware from Texas Instruments Inc., including all of the Canadian offshore seismic data that GSI Delaware had been creating since the early 1970s. Davey began working for Halliburton after that acquisition.
76. Davey's employment with Halliburton ended in 1991. Davey also acquired the trademark to "Geophysical Service Inc." around that time. After a dispute between Halliburton related to his wrongful dismissal and trademark infringement by Halliburton,⁴⁴ Davey

⁴³ C-124, Certificate of Incorporation of GSI Delaware.

⁴⁴ C-046, Court Documents of the United States District Court, Southern District of Texas, Houston Division, C.A. No. H-92-4079.

acquired the Canadian seismic data business that had been carried on by GSI Delaware and subsequently acquired by Halliburton.

77. In 1992, Davey established a company called Geophysical Speculative Investment Corp. (“Geophysical Speculative”), which was based in Texas, United States. Shortly thereafter, on March 18, 1993, Davey incorporated a Canadian corporation that eventually became GSI through a series of name changes and acquisitions, as follows:
- (a) 559720 Alberta Ltd. was incorporated as an Alberta corporation on March 18, 1993;
 - (b) effective April 20, 1993, 559720 Alberta Ltd. changed its name to Geophysical Service Incorporated;
 - (c) effective July 6, 1993, Geophysical Service Incorporated changed its name to Geophysical Service Incorporated;
 - (d) effective July 8, 1997, Geophysical Service Incorporated was continued as a Canada corporation under the name GSI Geophysical Service Incorporated; and
 - (e) GSI was continued as a federal corporation on July 8, 1997, and remains federally registered today.⁴⁵
78. At the time of GSI’s incorporation, I understand that Davey owned 50% of the shares of GSI, directly and indirectly through a Texas corporation with its registered office in Houston, called Geophysical Services Inc. [REDACTED] owned the other 50% of the shares of GSI. I acquired my [REDACTED] shares in GSI shortly after I joined GSI in Canada and he is no longer a shareholder of GSI.
79. Davey had a very strong reputation in the seismic industry given his many years in it, during which time he had pioneered Canadian offshore work and many of the techniques

⁴⁵ C-045, Certificate of Incorporation of 559720 Alberta Ltd. and related amendments.

for creating marine seismic data.⁴⁶ I also understand that Davey founded GSI to capitalize on the high returns on investment for speculative seismic data in Canada, particularly due to the expansion in development of the offshore Canadian energy industry in the late 1980s and early 1990s.

80. In 1993, Geophysical Speculative purchased the Canadian seismic data business of Halliburton Geophysical Services, Inc. (“HGS”), Halliburton’s affiliate and a predecessor to GSI (the “Geophysical Speculative Acquisition”).⁴⁷ My understanding from the associated records is that the intention, purpose and effect of the Geophysical Speculative Acquisition was to transfer the entire Canadian seismic data business of HGS to Geophysical Speculative, including physical records of field seismic data, processed seismic data, magnetic, gravity, and navigation data, all the intellectual property rights therein, including copyrights and trade secrets, and contractual rights and obligations of all existing license agreements, together with all client correspondence and agreement files relating to the acquired seismic data to Geophysical Speculative (the “HGS Interests”).⁴⁸ The Geophysical Speculative Acquisition also transferred the lease to the HGS facility in Calgary, Alberta, Canada, where all the HGS Interests were stored and from which it conducted its seismic data business, along with the employees who worked in that business and all the business records related to that business.
81. Following the Geophysical Speculative Acquisition, the right, title and interest in the HGS Interests were eventually transferred to GSI through the following series of corporate transactions:
- (a) Seismic Data Purchase Agreement dated May 8, 1994 between Geophysical Speculative (as seller) and GSI (as buyer);⁴⁹

⁴⁶ C-125, Canadian Society of Exploration Geophysicists, “Something no one ever did before!”: An interview with Davey Einarsson (2008), Recorder 33:5; C-126, Davey Einarsson, *a Life of Adventure* (Calgary: Theophania Publishing, 2015).

⁴⁷ C-049, Seismic Data Purchase Agreement dated February 20, 1993.

⁴⁸ C-048, Speculative Data Brought from Halliburton.

⁴⁹ C-050, Seismic Data Purchase Agreement, dated May 8, 1994.

- (b) Seismic Data Purchase Agreement dated September 30, 1995 between Ardal Resources Inc. (as buyer) and GSI (as seller);⁵⁰ and
 - (c) Corporate amalgamation between Ardal Resources Inc. and GSI on January 1, 1999.⁵¹
- (the “GSI Acquisitions”).

82. These transactions have been confirmed as transferring the intellectual property rights in the HGS interests by the Court of Queen’s Bench of Alberta decision in *Geophysical Service Incorporated v 612469 Alberta Limited (Calwest Printing & Reproductions)* (the “Calwest Trial”).⁵²
83. Russell and I became involved in GSI in the 1990s. Russell started with an affiliate of GSI as its Vice President in 1992, after which he worked out of GSI’s branch in Houston, Texas (for OGSi) during the entirety of his time with the GSI corporate family. As noted, I became employed by GSI full-time in 1997.

B. Expansion of GSI’s Business from the Late 1990s through the 2000s

84. GSI’s business expanded significantly from the late 1990s through the 2000s. During that time, GSI’s business became very profitable due to very high revenues from licensing what was the largest collection of marine seismic data in Canada to oil and gas companies.
85. In 1997, GSI began reinvesting the profits in its business to create further marine seismic data. Between 1998 and 2000, GSI chartered several ships to create further marine seismic data to add to its non-exclusive collection.
86. In 1999, GSI bought a seismic data processing centre in Canada called Precision Seismic Processing & Consultants Ltd. (“Precision Processing”) to better process the marine

⁵⁰ C-051, Seismic Data Purchase Agreement, dated September 30, 1995.

⁵¹ C-052, Certificate of Amalgamation, dated January 1, 1999.

⁵² C-132, *Geophysical Service Incorporated v 612469 Alberta Limited (CalWest Printing & Reproductions)*, 2016 ABQB 356, Reasons for Judgment, June 28, 2016 (“*Calwest*”) at ¶¶ 31 and 32.

seismic data and to no longer be reliant on contracted third parties to do so.⁵³ GSI subsequently converted that seismic processing centre from being able to process only land seismic data to also being able to process marine seismic data. After that conversion was complete, Precision Processing was used as a branch of GSI and was eventually amalgamated with GSI.⁵⁴ That branch had approximately 15-30 employees utilizing approximately 9,000 square feet of office space in Calgary, Alberta, Canada.

87. In 2002, GSI purchased a vessel named the GSI Admiral to create marine seismic data and no longer be reliant on charters or contractors.⁵⁵ The GSI Admiral was the only Canadian-flagged seismic ship with the capability to create both 2D and 3D seismic data. The GSI Admiral was also the only year round marine seismic service vessel in Canada.
88. In 2004, GSI purchased a second vessel, the GSI Pacific, to create 2D marine seismic data.⁵⁶
89. By the early 2000s, GSI's business had grown to approximately 250 employees and had become a fully integrated full-service seismic company.
90. Through its efforts between 1993 and 2009, GSI amassed the Seismic Works, which is the largest collection of Canadian marine seismic data in the world. The Seismic Works are unique. Seismic data of similar vintages available from sources other than GSI tends to be of poor quality, has degraded and not been reprocessed, resulting in many datasets of similar vintages being abandoned. Much of the Seismic Works are also unique as they relate to locations where no other seismic data has been created, can no longer be created due to subsequent environmental "off-limits" restrictions (which moratoriums change over time), or is otherwise not available.⁵⁷

⁵³ Precision Seismic subsequently became a wholly-owned subsidiary of GSI, see **C-250**, Corporation/Non-Profit Search for PRECISION SEISMIC PROCESSING & CONSULTANTS LTD.

⁵⁴ **C-127**, Articles of Amalgamation Between GSI and Precision Seismic Processing & Consultants Ltd.

⁵⁵ **C-128**, GSI Specification Sheet for Marine Seismic Survey Vessel M/V GSI Admiral.

⁵⁶ **C-129**, GSI Specification Sheet for Marine Seismic Survey Vessel M/V GSI Pacific.

⁵⁷ **C-130**, Order Prohibiting Certain Activities in Arctic Offshore Waters, SOR/2019-280.

91. The efforts of GSI to create, acquire and license the Seismic Works were, and still are, instrumental to the development of the offshore oil and gas industry in Canada. Without those efforts, the offshore oil and gas industry of Canada would not be what it is today.
92. The Seismic Works have directly led to the discovery of some of Canada's largest offshore oil fields, including the Sable Island, Bay Du Nord and the Hibernia oil fields off the coast of Newfoundland and the Amauligak oil field in the Beaufort Sea. In fact, in those and other regions, GSI or GSI Delaware was the first geophysical company to create 3D seismic data, and in most cases, 2D seismic data. GSI perhaps to this day has seismic data the furthest north of any other non-exclusive data beyond 80 degrees north latitude.
93. The importance of the work that GSI, Davey and I have done in Canada's offshore areas has been publicly recognized. In the early 2000s, an underwater mountain called a seamount off the coast of Newfoundland was named the "Einarsson Seamount" after the Seismic Works led to its discovery.⁵⁸

C. Control of GSI from 2010s Onward

94. As noted above, the share structure of GSI is such that Davey owns the majority of the issued and outstanding shares of GSI [REDACTED] and I own the remaining issued and outstanding shares of GSI [REDACTED].⁵⁹ That has been the case continuously since December 14, 2016. As noted, at that time an entity that I owned amalgamated with GSI, resulting in a non-majority share of GSI being transferred from that entity to me.⁶⁰

95. [REDACTED]
[REDACTED]
[REDACTED]

⁵⁸ C-131, Michael E. Enachedscu, "Conspicuous deepwater submarine mounds in the northeastern Orphan Basin and on the Orphan Knoll, offshore Newfoundland", *The Leading Edge*, (2004) 23(12): 1290-1294.

⁵⁹ C-235, Paul Share Certificate for [REDACTED] Shares dated [REDACTED]; C-236, Paul Share Certificate for [REDACTED] Shares dated [REDACTED]; C-237, Davey Share Certificate for [REDACTED] shares dated [REDACTED]; C-238, Davey Share Certificate for [REDACTED] dated [REDACTED]

⁶⁰ C-287, Amalgamation Certificate Between GSI and Dorval Holdings, dated December 14, 2016.

⁶¹ C-288, Share Structure Schedule of GSI.

100. GSI has always treated the Seismic Works as confidential since they were acquired and continues to take a strict approach to doing so. That approach includes a comprehensive suite of measures, such as:
- (a) strict licensing arrangements limiting the copies and usage of the Seismic Works by the licensees;
 - (b) previews of the Seismic Works being monitored in controlled, supervised environments;
 - (c) the Seismic Works being stored in locked facilities only accessible by select GSI personnel;
 - (d) the Seismic Works never being broadcast and only being available in an electronic format, delivered in physical form to a customer;
 - (e) use of the recommended practices set out in The Association of Professional Engineers, Geologists and Geophysicists of Alberta Guideline for Ethical Use of Geophysical Data;⁶⁴
 - (f) use of the Quality Inspection Standards of the International Association of Geophysical Contractors; and
 - (g) the use of prescribed confidentiality agreements when licensees disclose any data or work products to potential acquirers or joint venture partners, vendors and contractors, which confidentiality agreements must be executed by such third parties prior to access the data.
101. Throughout the course of its active business operations, GSI followed a general practice regarding the licenses it entered into with third party oil and gas companies to provide them with the Seismic Works. Establishing a general practice was important, as the high licensing fees for the Seismic Works were the lifeblood of GSI's business. GSI therefore endeavoured to make its license agreements as watertight as possible, including by

⁶⁴ C-084, APEGGA Guideline.

acknowledgements that GSI maintained ownership in the Seismic Works covered by those licenses, and by making the Seismic Works licensed under the license agreements and the license rights themselves, non-transferrable such that there was no sharing between companies.

102. GSI's general practice regarding its license agreements included its license agreements specifying that additional license fees were due upon either of the following events (compulsory or obligatory fees):
- (a) when a licensee joins an industry exploration group (which are common in Canadian offshore oil and gas exploration), thus providing the other companies in that group access to the Seismic Works as licensed by one or more of the industry exploration group parties; and
 - (b) upon a merger or acquisition that would allow another company to access the Seismic Works that were licensed by one of the parties.
103. GSI also went through considerable time and effort to register with the Canadian Intellectual Property Office its copyright in each of the approximately 135 seismic surveys that comprise the Seismic Works.⁶⁵

VI. CANADIAN REGULATIONS REGARDING MARINE SEISMIC DATA

A. GSI and its Predecessors Obtained Permits to Create the Seismic Works and Submitted Copies of the Seismic Works to Canadian Regulators in Accordance with Regulatory Requirements

104. In order to conduct Canadian offshore seismic survey work, Canadian law required GSI and its predecessors to obtain operating permits or program authorizations before commencing the work. As a condition of operating under those permits, Canadian regulations required GSI and its predecessors to submit routine information to Canadian regulatory bodies about the seismic surveying, acquisition and processing undertaken (the

⁶⁵ C-136, Bundle of GSI Canadian Copyright Registrations for Seismic Works.

“Submissions”).⁶⁶ The content of the Submissions varied over time, as Canada’s regulations required an increasing amount of information in them.

105. GSI and its predecessors submitted the Submissions through final reports that they created to various Canadian regulatory bodies.⁶⁷ GSI and its predecessors would not have created the Submissions except to comply with the applicable Canadian regulations. Those Submissions contained copies of the Seismic Works, although those copies of the Seismic Works that were included in the Submissions were scaled-down and less detailed versions of the Seismic Works that GSI and its predecessors kept for themselves to license to customers. Despite that, the copies of the Seismic Works that were contained in the Submissions were detailed enough to enable an oil and gas company to explore and exploit oil and gas resources.
106. The operating permits or program authorizations obtained by GSI and its predecessors do not state that the Submissions are assigned or licensed to the Canadian regulatory bodies they are submitted to. In fact, they do not address the intellectual property rights in the Submissions at all.⁶⁸ GSI also never agreed or consented to waive its intellectual property rights in the Submissions or transfer those intellectual property rights to Canada. In fact, most of the Submissions have notices regarding GSI’s proprietary rights in the data directly on them.
107. In the mid-2000s, the C-NLOPB began without notice and unilaterally inserting language into the program authorizations that stated GSI consented to the disclosure of the Seismic Works under Canadian access to information legislation, but that language never

⁶⁶ **C-137**, *Territorial Oil and Gas Regulations*, SOR 53-123; **C-138**, *Canada Oil and Gas Land Regulations*, SOR 61-253; **C-139**, *Canada Oil and Gas Land Regulations*, CRC 1978, c. 1518; **C-140**, *Newfoundland Offshore Area Petroleum Geophysical Operations Regulations*, SOR 95-334; **C-141**, *Nova Scotia Offshore Petroleum Geophysical Operations Regulations*, SOR 95-144; **C-142**, *Canada Oil and Gas Geophysical Operations Regulations*, SOR/96-117 (“1996 COGOA Regulations”).

⁶⁷ See **C-143**, Final Report for 8620-G5-4P (Excluding the Enclosed Seismic Works) (example of one of the final reports).

⁶⁸ **C-144**, C-NLOPB Geophysical Program Authorization for Program No. 8924-G005-001P, dated January 10, 1998; **C-145**, Letter to GSI from C-NSOPB regarding Geophysical Program Authorization No. NS24-G005-2P, dated April 9, 1998; **C-146**, Letter to GSI from NEB regarding Oil and Gas Operating License No. 869, dated March 17, 1997; **C-147**, Bundle of Permits and Authorizations for GSI Surveys Conducted Prior to 1986; **C-148**, C-NLOPB Geophysical Program Authorization for Program No. 8924-G005-003P.

referenced intellectual property rights, assignments or licenses.⁶⁹ As discussed below, the privilege period provided that the Submissions could not be disclosed for a prescribed period of time, which period varied throughout the evolution of the applicable legislation from one year, to two years, to five years, to longer periods prescribed by policies. GSI notified the C-NLOPB that it did not consent and inquired with the C-NLOPB about the language it unilaterally added to the program authorizations, but the C-NLOPB never responded to GSI and the language at issue did not appear in the permits after GSI's inquiry.

108. Starting in the mid-2000s, Canadian regulatory agencies began requiring GSI to submit one paper copy of the Submissions and one copy in electronic format in the form of a CD with an electronic file in TIF, PDF or JPG format.
109. In addition to requiring the Submissions as a condition of operating the seismic creation business, I understand that the Canadian legislation and regulations governing the Submissions (the "Submission Legislation") also impose a perpetual commitment upon GSI to finance the costs to secure, store and retain the Seismic Works in Canada, including all iterations of the Seismic Works, with the consequence of possibly forfeiting the Seismic Works should the Canadian regulators request that.⁷⁰

B. Canada Introduced Regulations That Provided for the Submissions to Remain Privileged for a Prescribed Period of Time, at Canada's Discretion

110. The Submission Legislation was accompanied by legislative provisions that allowed for the Submissions to be "released" or "disclosed" after a prescribed period of time (the "Disclosure Legislation" and, together with the Submission Legislation, the "Regulatory Regime").⁷¹ That period of time set out in the Disclosure Legislation referred to the

⁶⁹ C-149, Letter from GSI to C-NLOPB.

⁷⁰ C-142, 1996 COGOA Regulations at Section 39.

⁷¹ C-160, *Canada Oil and Gas Act*, SC 1980-81-82, c 81; C-150, *Canadian Oil and Gas Operations Act*, RSC 1985, c. 07; C-167, *Canada Petroleum Resources Act*, RSC, 1985, c 36 (2nd Supp); C-151, *Canada-Newfoundland and Labrador Atlantic Accord Implementation Act*, SC 1987, c. 3; C-152, *Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation Act*, SC 1988, c. 28; C-153, *Canada-Newfoundland and Labrador Atlantic Accord Implementation Newfoundland and Labrador Act*, RSNL 1990, c. C.2; C-154, *Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation (Nova Scotia) Act*, SNS 1987, c.3.

Submissions being “confidential” or “privileged”. The length of the confidential or privilege period increased throughout the evolution of the Disclosure Legislation from one year, to two years, to five years, to more years prescribed by policies. All of the periods of time that the Submissions remained “confidential” or “privileged” under the Disclosure Legislation were shorter than the length of time that I understand copyright protection is afforded to copyright holders in Canada, which is the life of the author plus fifty years.⁷² GSI never consented to truncating its intellectual property rights.

111. The Disclosure Legislation has been in place since the 1950s. However, the key detail of the Disclosure Legislation, the length of time the Submissions remain privileged, and the policies regarding the exercise of the discretion to release or disclose the Submissions by the applicable Government regulatory bodies, changed considerably over time. GSI’s uncertainty and exasperation with those changing details and policies ultimately led to the Canadian court decisions that are at issue in this Arbitration.
112. Throughout my time with GSI, as the Regulatory Regime has been evolving, the Boards implemented various retroactive policy changes to the Regulatory Regime, such as revising the length of time that the Submissions remained privileged, threatening to disclose the Seismic Works in SEG-Y format and to disclose the field data. With some exceptions, those policies and the status of their implementation were unknown to GSI, Davey, Russell and me until the proceedings resulting in the Alberta Decisions (defined below). The policy changes were also implemented to apply to Submissions retroactively (i.e., Submissions made in the past were affected by the new policy).
113. GSI interacted with various Canadian regulatory bodies who oversaw the administration of the Regulatory Regime in their respective jurisdictions, including the Canada Oil and Gas Land Administrator, the Canada Newfoundland and Labrador Offshore Petroleum (“C-NLOPB”), the Canada Nova Scotia Offshore Petroleum Board (the “C-NSOPB”) and the National Energy Board (the “NEB”) (collectively, the “Boards”). I understand that the C-NLOPB and the C-NSOPB were created by Canada and the respective provinces shortly after the collapse of world oil prices in 1986. It is GSI’s understanding that when the C-

⁷² C-133, *Canadian Copyright Act* at Section 6.

NLOPB and C-NSOPB were each formed, the Submissions, which were previously submitted by GSI's predecessor and related to the areas offshore of Newfoundland and Labrador, and Nova Scotia, respectively, were copied from the COGLA for the C-NLOPB or CNSOPB, which was unbeknownst to GSI (which did not exist yet) or myself at the time. My understanding is that no notice about this sharing of the Submissions was provided to GSI's predecessor, Davey or Russell.

C. GSI, Davey and I Were Led to Believe that the Intellectual Property Rights in the Seismic Works would be Protected

114. At various times, Canada, Newfoundland, Nova Scotia, Natural Resources Canada ("NRC", which is a department of the Federal Government of Canada) and the Boards led GSI, Davey and me to believe, either through explicit representations or conduct, that GSI's intellectual property rights in the Seismic Works would be protected. Those representations and conduct were as follows:

- (a) In September 1974, the Province of Newfoundland represented to GSI Delaware and Davey that the Submissions could not be released unless GSI Delaware consented, pursuant to the permit terms that GSI Delaware had to create Seismic Works off the coast of Newfoundland.⁷³ While I was not with GSI Delaware or privy to that correspondence in 1974, I became aware of Newfoundland's correspondence and Davey's understanding of it during my employment with GSI. Throughout my time with GSI, both GSI and I have understood that Newfoundland and Canada coordinated their practices with respect to the Regulatory Regime.
- (b) In November 1974, the Province of Nova Scotia represented to GSI Delaware and Davey that non-exclusive seismic data did not need to be included in the Submissions and that only exclusive seismic data needed to be included in the Submissions.⁷⁴ While I was not with GSI Delaware or privy to that correspondence

⁷³ C-155, Letter from Government of Newfoundland and Labrador Department of Mines and Energy, dated November 18, 1974 at enclosed Interim Permit, Section 3.

⁷⁴ C-156, Letter from Nova Scotia Department of Mines to Geophysical Service Incorporated enclosing Permit No. 5, dated November 28, 1974.

in 1974, I became aware of Nova Scotia's correspondence and Davey's understanding of it during my employment with GSI. Throughout my time with GSI, both GSI and I have understood that Nova Scotia and Canada coordinated their practices with respect to the Regulatory Regime.

- (b) In or around the early 1990s, the Boards and the division of the NEB where the Seismic Works are held, the Frontier Information Office ("FIO"), began displaying notices at their offices where the Seismic Works contained in the Submissions are held, which notices warned viewers of seismic data that intellectual property rights of Canada, including copyright, must be respected.⁷⁵ GSI and I learned of the existence of those notices after the fact through Access to Information requests (discussed below) and by physically attending at the FIO. The presence of those notices indicated to GSI and me that Canada would protect GSI's intellectual property rights in the Seismic Works that were contained in the Submissions.
- (c) Also in or around the early 1990s, the Boards, the FIO and other Canadian regulatory bodies began using liability forms that were executed by third parties who accessed seismic data. While they may have varied somewhat from Board to Board, those liability forms all generally stated that the intellectual property laws of Canada, including copyright, would be complied with by those third parties when accessing seismic data.⁷⁶ GSI and I learned of the existence of those liability forms after the fact through Access to Information requests (discussed below) and by physically attending at the FIO. Like with the notices, the use of the liability forms indicated to GSI and I that Canada would protect GSI's intellectual property rights in the Seismic Works that were contained in the Submissions.
- (d) In October 1993, Canada, on behalf of the Geological Survey of Canada, entered into a license agreement with GSI, the terms of which affirmed that at least certain of the Seismic Works are proprietary to GSI, protected by copyright and as a trade

⁷⁵ C-173, Frontier Information Office Copyright Notice.

⁷⁶ C-174, Bundle of NEB Liability Agreements Regarding Copying and Borrowing of Submissions; C-221, Letter from NEB to me sated September 27, 2000, indicating that the NEB uses the liability forms for all access requests.

secret, and that they would not be disclosed to third parties.⁷⁷ On the basis of that license, GSI understood that Canada acknowledged that GSI had intellectual property rights in at least some, if not all, of the Seismic Works.

- (e) In 2010, NRC (a department of the Federal Government of Canada) issued a letter to me and GSI advising that, among other things, NRC would not provide reproductions or digital versions of any third party seismic data to any individuals outside of NRC, would not present or publish images of seismic data owned by others without prior written permission of the owner and would not copy the Submissions into digital SEG-Y versions without prior written consent of GSI until Justice Canada (a department of the Federal Government of Canada) provided a legal opinion to the NRC on the intellectual property issues associated with doing so.⁷⁸ Since that time, the NRC has never indicated to the Claimants whether it has obtained that legal opinion or made clear whether its position has changed. As a result of the NRC's letter, GSI and I were under the impression that Canada recognized that GSI likely had copyright and other intellectual property rights in the Seismic Works contained in the Submissions, and would be taking steps to limit the disclosure or dissemination of the Submissions.

115. I also relied on the following conduct of Canada when making my investments in GSI:

- (a) The Disclosure Legislation has never employed the terms “copy”, “reproduce”, “copyright” or “publish”, has not referred to Canadian copyright legislation, has not amended Canadian copyright legislation and has not been enacted notwithstanding Canadian copyright legislation. The lack of connection of the Disclosure Legislation to Canadian copyright legislation indicated to me (and to GSI) that copying or reproduction of the Submissions was not intended;
- (b) the purpose statement of the Submission Legislation related to **safety and environmental regulation**. The Submission Legislation never had a purpose

⁷⁷ C-175, General License Agreement #GSC0893 Between GSI and Her Majesty the Queen in the Right of Canada.

⁷⁸ C-187, Letter to GSI from NRC dated June 4, 2010.

statement that related to the promotion of Canadian offshore oil and gas development. The purpose of the Submission Legislation indicated to me (and to GSI) that the Submissions were only required for that purpose – safety and environmental regulation;

- (c) the permits and other authorizations issued to GSI and GSI Delaware under the Submission Legislation did not reference copyright, intellectual property rights or copying, which indicated to me (and to GSI) that the intellectual property rights in the Submissions remained intact;⁷⁹
- (d) the Submissions Legislation differentiated between exclusive and non-exclusive seismic data, indicating to me (and to GSI) that exclusive and non-exclusive seismic data would be treated differently. However, the Disclosure Legislation did not differentiate between exclusive and non-exclusive data. Canada and the Boards also often conflated or confused the difference between exclusive and non-exclusive seismic data in its policies implementing the Disclosure Legislation;
- (e) the Boards and the FIO never gave me or GSI notice that the Submissions were being copied, instead allowing GSI to proceed with its business on the understanding that the Submissions were not being copied; and
- (f) GSI and its predecessors labelled each of the Seismic Works with notices that demonstrate and assert ownership over it, and to provide proprietary, copyright and confidentiality notices. Neither Canada nor the Boards commented or rejected the labelling practices of GSI or its predecessors to identify the Seismic Works contained in the Submissions, indicating to me (and GSI) that Canada did not disagree with the notices or the contents of them. Those notices variously state:

⁷⁹ **R-001**, ABQB Common Issues Decision at ¶ 130; **C-144**, C-NLOPB Geophysical Program Authorization for Program No. 8924-G005-001P, dated January 10, 1998; **C-145**, Letter to GSI from C-NSOPB regarding Geophysical Program Authorization No. NS24-G005-2P, dated April 9, 1998; **C-146**, Letter to GSI from NEB regarding Oil and Gas Operating License No. 869, dated March 17, 1997; **C-147**, Bundle of Permits and Authorizations for GSI Surveys Conducted Prior to 1986; **C-148**, C-NLOPB Geophysical Program Authorization for Program No. 8924-G005-003P.

- (i) “Contains proprietary trade secret and copyright property of Halliburton Geophysical Services, Inc. — Not for Resale — Subject to Non-Disclosure Restrictions. Copyright. Halliburton Geophysical Services, Inc.”;⁸⁰
 - (ii) “All data and information shown on this section are proprietary to Geophysical Service Incorporated and its affiliates. Disclosure to third parties is restricted.”⁸¹
 - (iii) “All data and information shown on this section are proprietary to Geophysical Service Inc. and its affiliates (“GSI”) and are furnished by GSI to [blank space] (Company”) under restrictions of disclosure and reproduction contained in the Agreement” between GSI and “Company” dated [blank space];⁸²
 - (iv) “All data and information represented on these media contain proprietary trade secret and confidential information – not for resale – subject to non-disclosure restrictions, copyright, Halliburton Geophysical Services 1990. This Notice supercedes all other statements”;⁸³ and
 - (v) “All data, analyses, studies, compilations, reports and other information represented on or contained in these media and the media itself constitute confidential information and trade secrets of Geophysical Service Incorporated (“GSI”). GSI retains all proprietary rights [...]”.⁸⁴
- (g) from time-to-time, GSI also wrote letters to the Boards requesting that they place further notices and stickers on the Seismic Works contained in the Submissions. The Boards never responded to those letters with any objection or disagreement with GSI’s assertion of intellectual property rights, including copyright, nor does GSI know whether the Boards ever placed those additional notices and stickers on the Seismic Works. The lack of objections to those letters from the Boards indicated to me (and GSI) that the Boards and Canada did not object to GSI’s intellectual property rights in the Seismic Works.

⁸⁰ C-188, Notice – Line LB-82-1FM, merge of LB-82-1F + LB-82-1G.

⁸¹ C-189, Notice – Line NK-89-385.

⁸² C-190, Notice – Line FC83-3A S.P. 484 to 7290.

⁸³ C-191, Notice – Line ST-508-1.

⁸⁴ C-192, Notice – L-SGS02-0055.

D. Historical Information Regarding the Regulatory Regime

116. The Claimants' counsel, Borden Ladner Gervais LLP ("BLG"), employs a librarian, Kira Maros, who gathered certain Canadian historical materials that I understand from BLG are relevant to understanding the Regulatory Regime, including:
- (a) information regarding the history of Canadian elections;⁸⁵
 - (b) information regarding policies or unpassed Bills implementing the Regulatory Regime;⁸⁶
 - (c) legal materials regarding the history of jurisdiction over frontier lands in Canada;⁸⁷ and
 - (d) pieces of Canadian legislation that are related to the Regulatory Regime, or the interpretation thereof.⁸⁸
117. During the proceedings that led to the Common Issues Decision (defined below), Canada also produced certain historical records regarding the Regulatory Regime that I was previously unaware of.⁸⁹

⁸⁵ **C-157**, Canada Elections Database: 1979 Federal Election; **C-158**, Canada Elections Database: 1980 Federal Election; **C-162**, Canada Elections Database: 1984 Federal Election;

⁸⁶ **C-159**, An Act to regulate oil and gas interests in Canada lands and to amend the Oil and Gas Production and Conservation Act, Bill C-48, First Reading, December 9, 1980 (Canada, 32d Parl., 1st sess.); **C-164**, Briefing Book, Canada Petroleum Resources Act, June 1986.

⁸⁷ **C-163**, *Reference re Newfoundland Continental Shelf*, [1984] 1 SCR 86, Judgment, March 8, 1984; **C-172**, Rowland J. Harrison, "Jurisdiction over the Canadian Offshore: A Sea of Confusion" (1979), 17:3 Osgoode Hall Law Journal.

⁸⁸ **C-176**, *Act to amend the Canada Oil and Gas Operations Act, the Canada Petroleum Resources Act and the National Energy Board Act and to make consequential amendments to other acts*, CSC 1994, c 10; **C-177**, *National Energy Board Act*, RSC 1985, c N-7.

⁸⁹ See, **C-165**, Letter from John Clink to Marcel Masse, dated October 7, 1986; **C-166**, Background Information for the Senate Committee on Energy, November 18, 1986; **C-168**, Letter from Minister of Energy, Mines to Theodore David Einarsson dated June 1, 1987; **C-169**, Government of Canada Memorandum re Disclosure of Geophysical Data dated July 31, 1987; **C-170**, Disclosure of Geophysical Data: Discussion Paper on Modification to the Five Year Confidentiality Period, Draft II, Undated, at Appendix A, Correspondence and Background Information Concerning Disclosure of Non-Exclusive Geophysical Data; **C-171**, Letter from Canada Oil and Gas Lands Administration to John Clink, dated February 16, 1988.

VII. GSI'S EFFORTS TO INVESTIGATE THE INFRINGEMENT OF ITS INTELLECTUAL PROPERTY RIGHTS IN THE SEISMIC WORKS

A. The Access to Information Act Requests

118. Prior to 1999, GSI was not aware of what disclosure, if any, of the Seismic Works included in the Submissions was being made to third parties by the Boards. However, in the fall of 1999, GSI became concerned that the Boards, or some of them, were allowing third party access to the Seismic Works that were included in the Submissions.
119. Concerns arose by the fall of 1999 about the protection of Seismic Works for several reasons. First, changes in technology meant that seismic data could be more readily viewed, copied and distributed. Second, the emergence of 'data copy companies' (companies whose sole or major business was to access and copy the data of others for resale) became evident at industry trade shows. Third, in GSI's discussions with the Boards, and specifically the C-NSOPB, there was talk of a "shared data repository" being created, which suggested that traditional confidentiality and intellectual property protection for seismic data could be compromised going forward. Fourth, GSI was becoming concerned that oil and gas companies were not treating the seismic data of others with the same degree of proprietary care that had been historically customary or that they practiced with their own proprietary information.
120. As a result of its concerns, beginning in the fall of 1999, GSI took steps to determine what the Boards were doing with the Seismic Works in their possession. GSI's inquiries with the Boards at that time were out of a general concern that the Boards were not honouring GSI's intellectual property rights, despite their conduct and the representations they made to GSI to the contrary. The responses of the Boards at that time led GSI to believe that the Boards were not being forthright regarding their treatment of the Seismic Works. Consequently, in 2000, I started making requests on behalf of GSI under Canadian access to information ("AIA") legislation, as that was the only avenue for compelling information from the Boards.

121. GSI made AIA requests to each of the NEB, the C-NLOPB and the C-NSOPB in both 1999 and 2000.⁹⁰ Those AIA requests sought information about the identities of parties who accessed the Seismic Works from each Board, along with details of what each Board provided in response to the request. In response, the NEB told GSI that only a handful of parties had accessed information provided by it, which GSI later confirmed to be untrue, while the C-NLOPB and the C-NSOPB refused the requests on the basis that GSI was seeking privileged information.
122. After GSI could not reach a resolution with the C-NLOPB and the C-NSOPB about the privilege issue, GSI brought three applications before the Federal Court of Canada that challenged the Boards' refusals to provide the records that GSI requested in its AIA requests.⁹¹ GSI commenced those applications to discover if the Boards were disclosing the Submissions, and to determine the scope, nature and identities of third parties, if any, who were receiving disclosure.⁹² Those three applications were heard together in 2003 by the Federal Court of Canada.⁹³
123. GSI was successful in its three applications before the Federal Court of Canada to compel the Boards to provide better answers to GSI's initial AIA requests.⁹⁴ However, despite its success before the Federal Court, GSI became embroiled in a lengthy, adversarial AIA process with the Boards that continues to this day.
124. The responses the Boards provided to comply with the decision of the Federal Court stated that only a limited number of third parties were accessing the Seismic Works included in the Submissions. Those responses also did not include any evidence that the Boards were allowing copying of the Seismic Works included in the Submissions, which indicated to

⁹⁰ **C-194**, Letter from GSI to NEB enclosing Canadian Access to Information Request; **C-195**, Letter from GSI to C-NLOPB enclosing Canadian Access to Information Request; **C-196**, Letter from GSI to C-NSOPB enclosing Canadian Access to Information Request.

⁹¹ **C-197**, *Geophysical Service Inc. v. Canada Newfoundland Offshore Petroleum*, 2003 FCT 507, Reasons for Orders ("Federal Court AIA Decision").

⁹² **C-197**, *Federal Court AIA Decision* at ¶ 6.

⁹³ **C-197**, *Federal Court AIA Decision* at ¶¶ 2.

⁹⁴ **C-198**, Order of the Honourable Justice Gibson responding to NEB Access to Information Request; **C-199**, Order of the Honourable Justice Gibson responding to C-NLOPB Access to Information Request; **C-200**, Order of the Honourable Justice Gibson responding to C-NSOPB Access to Information Request.

GSI that no copying was occurring and its intellectual property rights in the Seismic Works were being upheld. At the time, GSI was also not aware that the Boards were creating lists to respond to the AIA requests that were based on underlying source documents, such as the liability forms and emails from third parties requesting for Seismic Works to be copied. In other words, the Boards were not disclosing the actual documents responsive to the AIA requests, which I understand is the typical practice to respond to AIA requests. Instead, the Boards were creating and disclosing spreadsheet lists of third-party names that had limited information and did not indicate that copying occurred.

125. GSI submitted a number of follow-up AIA requests in the ensuing years. As a result, GSI knew the following by 2006:
- (b) based on the responses received from the Boards to that date, GSI believed that relatively few third parties were accessing the Seismic Works contained in the Submissions; and
 - (c) GSI did not believe that copying was occurring as there was no evidence that any of the Boards, Canada or third parties were copying or facilitating copying of the Seismic Works contained in the Submissions.
126. GSI continued submitting AIA requests after 2006. By 2010, GSI learned of a general practice where the Boards paid GSI's licensees (through allowable expenditure credit applications and otherwise) to submit Seismic Works to the Boards that licensees only licensed from GSI ("Secondary Submissions"). The allowable expenditure credit applications were made by GSI's licensees to recoup portions of work commitment bid deposits that they had paid to develop an exploration area.⁹⁵ According to my understanding of Canadian law, one of the costs that can be recouped through such an application is the cost for "purchasing" seismic data for exploration purposes. GSI was shocked that the licensed Seismic Works were being sold to the Boards if it was exclusive seismic data that GSI's licensees owned. The regulations and forms for such allowable expenditure credit applications require proof of "purchase" from the applicant but that

⁹⁵ **C-201**, *Geophysical Service Incorporated v Encana Corporation*, 2017 ABQB 466, Reasons for Judgment dated July 26, 2017 at ¶ 71.

proof could not be provided since it was licensed but the applications were made and approved, anyway.

127. The Secondary Submissions all followed an identical procedure and were put under codes indicating that they were owned by the submitting oil company with no mention of GSI, despite the Seismic Works contained in the Secondary Submissions often being labelled as property of GSI. First, the licensed Seismic Works were submitted by GSI licensees who incorrectly stated that they “owned” them. Second, the Boards accepted those licensed Seismic Works as if they were owned by the licensees without the required proof of transfer per the regulations. Third, the Boards would then disclose the licensed Seismic Works that had been submitted by licensees to third parties, often prior to the expiry of otherwise applicable administrative privilege periods for non-exclusive data, as the Boards treated the data as if it was exclusive data (which had shorter privilege periods) under the Regulatory Regime. The result of the Secondary Submissions was that more content and different versions of the Seismic Works were submitted to the Boards than was necessary, since GSI’s seismic data was non-exclusive. GSI was unaware of this practice and never authorized or consented to it, since it was contrary to its licensing terms.
128. By 2011, the Boards’ responses to the AIA requests were finally providing GSI with some clarity as to the Boards’ actual use and disclosure of the Seismic Works, and GSI was horrified by what it found: the Boards were copying and publishing the Seismic Works contained in the Submissions either in-house or through copying companies and were allowing third parties to do the same. That included the NRC, which had previously represented to GSI that it would abide by GSI’s intellectual property rights in the Seismic Works.⁹⁶ Around that time, GSI also discovered that the C-NLOPB and Canada were engaging in discussions with stakeholders in the Canadian offshore seismic industry to amend legislation to make it more difficult for GSI to bid on contract seismic exploration work off the coast of Newfoundland and Nova Scotia.⁹⁷

⁹⁶ C-187, Letter to GSI from NRC dated June 4, 2010.

⁹⁷ C-202, Letter to Paul Einarsson from the Canadian Transportation Industry dated July 19, 2013.

129. GSI continued submitting AIA requests after 2011, but, since the Supreme Court of Canada Decision (defined below), the Boards' responses to those AIA requests have slowed to a crawl. Additionally, after the Supreme Court of Canada Decision (defined below), the Boards created new digital forms of disclosure where there was no record of who accessed the Seismic Works or otherwise ceased keeping records of the parties that accessed or copied the Seismic Works. That change by the Boards ended GSI's ability to police the infringement of the Seismic Works and its licensees' compliance with their license agreements.
130. As a result of the Boards' conduct, GSI did not receive proper responses to the AIA requests it submitted after 2011 until many years later. While GSI now knows that the Seismic Data was being disclosed and copied by Canada for some time, GSI still does not know when that conduct started because only viewing of seismic data occurred for a long time. I was unaware of any copying or disclosure of the Seismic Works before I invested in GSI or commenced my employment with GSI in 1997. In fact, GSI obtained the majority of the information and evidence that it has regarding Canada's disclosure and copying of the Seismic Works just prior to commencing and during the proceedings that resulted in the Alberta Decisions.
131. GSI's current understanding of the Boards' disclosure practice is that it evolved significantly from no disclosure at all, to viewing with no note taking in government controlled offices, to loaning out documents often with copyright notices and borrowing agreements, then to Boards making copies and sending Seismic Works to copy firms that they had agreements with to make copies of the Seismic Works. GSI's current understanding of the latter arrangement is that the Boards would send the copies of the Seismic Works to third parties and then bill those third parties for the time it took the Board to pull the Seismic Works and the copy company would bill the recipient for shipping, copying and media costs. GSI's understanding is that after that, the disclosure evolved to the point where the Boards sought to skip the work with third party copy companies by releasing SEG-Y digital data online in a "Shared Data Repository", which GSI and I understand has been up and running for years, but we have been unable to find out what is being disclosed through it.

132. GSI continues to have some AIA requests outstanding and is still receiving AIA responses periodically, some over ten years after the AIA requests were first made. GSI also continues to request reviews from the Office of the Information Commissioner of Canada (and, in some cases, the equivalent body in various provinces) to address the Boards' conduct, which conduct the commissioners have been critical of.⁹⁸ In fact, one of many examples occurred recently. GSI received a further response to one of its AIA requests for NRC on August 10, 2022, which request was first made on March 4, 2013 and was first responded to on September 24, 2013 with heavy redactions and missing information.⁹⁹
133. The response from August 10, 2022 removes the redactions from the NRC's initial response (the "August 2022 AIA Response"). That revision was prompted by the result of an investigation conducted by the Office of the Information Commissioner of Canada, which was requested by GSI and confirmed that the NRC should provide the unredacted information.¹⁰⁰ Based on the unredacted information, GSI learned that the NEB had provided a copy company, Lynx, with Seismic Works for copying and that the NEB was aware that Lynx could convert paper seismic images into SEG-Y format and even asked for a copy. As such, GSI learned that, while Canada and the Boards claim not to or apparently do not disclose the Seismic Works in SEG-Y format, they knowingly disclose the Seismic Works to third parties in formats that are then easily scanned and reconstructed/converted to SEG-Y.

B. The C-NSOPB and C-NLOPB Plans to Disclose Submissions in Digital Format

134. In 2004, GSI and I became aware of a proposed policy of the C-NSOPB regarding the disclosure of digital formats of the Seismic Works contained in the Submissions. In 2006, the C-NSOPB announced an implementation plan to enact that policy.¹⁰¹

⁹⁸ See, **C-203**, Information Commissioner's Final Report dated September 21, 2022 regarding GSI Complaint Against C-NSOPB; **C-284**, Information Commissioner's Final Report regarding GSI Complaint Against Canada Energy Regulator, dated September 26, 2022; **C-285**, Information Commissioner's Final Report regarding GSI Complaint Against Natural Resources Canada, dated September 13, 2022.

⁹⁹ **C-204**, Letter from NRC to Paul Einarsson dated August 10, 2022 ("August 2022 AIA Response").

¹⁰⁰ **C-204**, August 2022 AIA Response.

¹⁰¹ **C-179**, C-NSOPB News Release regarding C-NSOPB Reaches Digital Data Disclosure Decision; **C-178**, Letter from C-NSOPB to Stakeholders, dated February 23, 2006.

135. By 2009, after extensive lobbying by industry groups and GSI, the C-NSOPB agreed to defer the implementation of its policy regarding the disclosure of digital formats of non-exclusive Submissions.¹⁰² The C-NOSPb further advised GSI that none of the Seismic Works were uploaded to the platform by which the Submissions could be made available in electronic format (the Shared Data Repository).¹⁰³
136. GSI had a similar encounter with the C-NLOPB regarding disclosure of digital formats of the Seismic Works contained in the Submissions.
137. Through AIA responses, GSI became aware that in 2009 the C-NLOPB proposed revising its policy on the disclosure of the Submissions to disclose the Seismic Works contained therein in SEG-Y format following the expiration of a 15-year privilege period.¹⁰⁴ Shortly thereafter, the C-NLOPB engaged in negotiations with NRC regarding the disclosure of the Seismic Works in SEG-Y format,¹⁰⁵ recommended the disclosure of digital field data,¹⁰⁶ and requested retroactive copies of the Seismic Works in SEG-Y format from GSI.
138. GSI refused the C-NLOPB's request for retroactive copies of the Seismic Works in SEG-Y format and eventually commenced a lawsuit against the C-NLOPB alleging that, among other things, that the C-NLOPB did not have the ability to disclose the Seismic Works in SEG-Y format.¹⁰⁷ GSI came to learn from representations made by an official of the C-NLOPB during the proceedings that culminated in the Alberta Decisions that the C-NLOPB ultimately did not disclose the Seismic Works contained in the Submissions in SEG-Y format. GSI has no information as to disclosure since that time.

¹⁰² C-180, Letter from Paul Einarsson to C-NSOPB dated May 24, 2007; C-181, C-NSOPB Press Release; C-182, Letter from C-NSOPB to Anthony J. Jordan, dated January 6, 2009.

¹⁰³ C-182, Letter from C-NSOPB to Anthony J. Jordan, dated January 6, 2009.

¹⁰⁴ C-183, CNLOPB Memorandum Regarding Seismic Data Disclosure Policy – Additional Considerations, dated February 3, 2009; C-185, Email from Nicholle Carter to Frank Smyth regarding Data Release – Type and Format, dated January 25, 2011.

¹⁰⁵ C-184, Email from Frank Smyth to Pierre Tobin and Eric Landry dated April 20, 2010.

¹⁰⁶ C-186, Letter from C-NLOPB to Minister of Natural Resources of Newfoundland & Labrador and Minister of Natural Resources Canada, dated June 18, 2010.

¹⁰⁷ R-004, *Geophysical Service Incorporated v. Canada-Newfoundland and Labrador Offshore Petroleum Board and Her Majesty in Right of Newfoundland and Labrador* (Case No. 2011 01G 5430), Supreme Court of Newfoundland and Labrador Trial Division (General), Statement of Claim, August 10, 2011.

C. GSI Commenced Litigation to Enforce its Intellectual Property Rights in the Seismic Works

139. Between 2007 and 2015, as it was receiving the AIA responses from the Boards and other Government entities, GSI began commencing lawsuits against various parties who it discovered were either in breach of their license agreements with GSI or infringed its intellectual property rights in the Seismic Works. GSI was forced to commence those claims to enforce the intellectual property rights that were the foundation of its business or be deemed to abandon them.
140. By 2015, GSI had commenced approximately 30 lawsuits against oil and gas companies, Boards, Canadian government agencies and copy companies (collectively, the “Domestic Actions” and each a “Domestic Action”). The Domestic Actions were generally sorted into the following categories according to the identity or nature of the defendants involved:
- (a) claims regarding the Regulatory Regime against the Boards or other government bodies such as the NRC, the Province of Newfoundland and Labrador, the Department of Public Works and Government Services Canada, and Canada itself;
 - (b) claims against oil and gas companies that are (or were) licensees of GSI pursuant to written license agreements or came to possess GSI’s licensed data from a licensee; and
 - (c) claims against data companies and copy companies that were either seismic companies in competition with GSI that copied the Seismic Works from the Boards and were offering it for re-sale or companies whose business was to copy the Seismic Works for other third parties or the Boards.
141. GSI commenced the claims against oil and gas companies because it was investigating its licensees’ compliance with their license agreements in conjunction with the AIA requests, to gain a better understanding of what was happening. As a result of those investigations and the AIA responses from the Boards, GSI came to learn that many of the oil and gas companies that were its existing licensees were not only copying Seismic Works from the Boards, but were also breaching one or many terms of their existing license agreements

with GSI. GSI also came to learn that those breaches of its license agreements were becoming more prevalent as the oil and gas companies began copying the Seismic Works from the Boards and often sharing them with other oil and gas companies.

142. In the course of the Domestic Actions, some of the defendants began asserting that the Boards or other Government bodies were responsible for the disclosure and copying of the Seismic Works, sometimes even asserting that the NEB hired third party copy companies to copy that data. As a result, as alternative relief, GSI amended some of its Domestic Actions or commenced additional Domestic Actions to add alternate claims against the Boards, the NRC, Public Works or Canada under Canadian law for expropriation (the “Government Domestic Claims”). The primary position of GSI in the Government Domestic Claims remained that the original defendants were liable for copyright infringement and the alternative claims for expropriation were not actively pursued by GSI.
143. Around the same time as it was commencing the Domestic Actions now that GSI had discovered the copying of the Seismic Works, GSI also attempted to stop future disclosure of the Seismic Works. In spring and summer 2010, the NEB wrote to GSI to set out its then current understanding of the law relating to the period for which it must keep the Seismic Works privileged, pursuant to the terms on which it had authorized GSI to conduct a non-exclusive marine seismic survey.¹⁰⁸ The letters further stated that the NEB was bound by Canadian legislation to not disclose the Submissions for five years, and that a policy initiated by Indian and Northern Affairs Canada, and adopted by the NEB, requires that the information be kept confidential for another ten years.¹⁰⁹ As a result, the information at issue could not be published for 15 years from when the survey was completed (i.e., until 2023).¹¹⁰

¹⁰⁸ **C-205**, *Geophysical Service Incorporated v National Energy Board*, 2011 FCA 360, Reasons for Judgment of the Court, December 15, 2011, at ¶ 1 (“*FCA NEB Appeal*”); **C-206**, Letter from Geophysical Service Incorporated to National Energy Board dated April 22, 2010; **C-207**, Letter from National Energy Board to H. Paul Einarsson dated May 21, 2010 (“May 2010 NEB Letter”); **C-208**, Letter from Geophysical Service Incorporated to National Energy Board dated July 27, 2010; **C-209**, Letter from National Energy Board to H. Paul Einarsson dated 12 August 2010.

¹⁰⁹ **C-205**, *FCA NEB Appeal* at ¶ 2; **C-207**, May 2010 NEB Letter.

¹¹⁰ **C-205**, *FCA NEB Appeal* at ¶ 2.

144. GSI commenced a judicial review of the NEB's letters before the Federal Court of Canada, which then also led to an appeal before the Federal Court of Appeal of Canada.¹¹¹ GSI did not succeed in that appeal because the Federal Court of Appeal found that the issue was premature given that disclosure was anticipated in the future and policies could change by that future date.
145. Another issue arose in one of the Alberta-based Domestic Actions, where an energy company was unable to persuade the Court of Queen's Bench of Alberta to summarily dismiss GSI's claims on the basis that Canadian law allowed the defendant to copy certain Seismic Works from the C-NLOPB because the law was not clear enough to meet the test for summary dismissal.¹¹²
146. GSI made a similar attempt to stop disclosure of the Seismic Works in 2014. At that time, GSI applied to the Federal Court of Canada for a permanent injunction and damages for breach of copyright against the C-NSOPB.¹¹³ The C-NSOPB had used Seismic Works in SEG-Y format that were contained in Submissions to create a map of prospects in the Nova Scotia Offshore Area, which map was then posted on the C-NSOPB website for interested oil and gas companies.¹¹⁴ GSI's application for an injunction was ultimately dismissed, but the Court also noted that copyright does not subsist in seismic data.

D. The Court of Queen's Bench of Alberta and the Court of Appeal of Alberta Held that GSI Had Valid and Enforceable Copyright in its Seismic Data, But Declared that that Copyright was 'Confiscated' Without Compensation

147. The Alberta-based Domestic Actions were proceeding through their initial phases until 2014, at which time 26 of the defendants in 17 of the Alberta-based Domestic Actions, including Canada and the NEB in the Government Domestic Claims, applied for security

¹¹¹ C-205, *FCA NEB Appeal* at ¶ 5.

¹¹² C-211, *Geophysical Service Incorporated v Antrim Energy Inc.*, 2015 ABQB 482, Memorandum of Decision, July 31, 2015, at ¶¶ 1 and 5.

¹¹³ C-210, *Geophysical Service Incorporated v Canada-Nova-Scotia Offshore Petroleum Board*, 2014 FC 450, Order and Reasons, May 5, 2014 ("*GSI v C-NSOPB*") at ¶ 17.

¹¹⁴ C-210, *GSI v C-NSOPB* at ¶¶ 11-13, 31.

for costs against GSI.¹¹⁵ The Court of Queen’s Bench of Alberta ultimately ordered that GSI pay \$1,434,164.50 into trust as security for costs to the 26 defendants, which included \$328,000 for the NEB and \$49,850 for Canada (the “Security for Costs Award”).¹¹⁶ Not once during that process did Canada tell GSI that it had confiscated GSI’s copyright, which could have saved all that hassle. Davey, Russell and I were forced to give up the priority that our loans to GSI had, as was the case prior to the Security for Costs Award and stop any payments of principal or interest as the defendants alleged that we could just transfer the funds to the United States.

148. GSI had been sending letters in respect of the instances of access to its data to recipients thereof, but received very few responses. One of the parties responded honestly and advised that it had made copies – Calwest. GSI filed a claim against Calwest, which was defended, but in early 2015, GSI and Calwest agreed to a trial date in late 2015.¹¹⁷
149. The defendants in the other Alberta-based Domestic Actions sought to participate in the Calwest Trial after they learned of it. Ultimately, that led to GSI and the defendants in the Alberta-based Domestic Actions agreeing to two common issues for determination in conjunction with the Calwest Trial.¹¹⁸
150. On April 21, 2016, the Court of Queen’s Bench of Alberta released its decision on the two common issues, finding that copyright could subsist in the Seismic Works but that the Regulatory Regime confiscated that copyright through a compulsory license (the “Common Issues Decision”).¹¹⁹ The Court of Queen’s Bench of Alberta released its decision on the Calwest trial a few months later.¹²⁰

¹¹⁵ **C-212**, Canada Application for Security for Costs from Court of Queen’s Bench Action No. 0901-08210; **C-213**, Canada Application for Security for Costs from Court of Queen’s Bench Action No.1401-00777; **C-214**, Canada Application for Security for Costs from Court of Queen’s Bench Action No. 1401-05316; **C-215**, Canada Application for Security for Costs from Court of Queen’s Bench Action No. 1201-05556; **C-216**, Canada Application for Security for Costs from Court of Queen’s Bench Action No. 1201-16166; **C-217**, Canada Application for Security for Costs from Court of Queen’s Bench Action No.1301-02933.

¹¹⁶ **C-218**, *Geophysical Service Incorporated v Encana Corporation*, 2016 ABQB 49, Memorandum of Decision at ¶ 57.

¹¹⁷ **C-219**, Request to Schedule Trial Date, Action No. 1101-15306.

¹¹⁸ **C-289**, Order of Chief Justice N.C. Wittmann dated June 10, 2015.

¹¹⁹ **R-001**, ABQB Common Issues Decision.

¹²⁰ **C-132**, *Calwest*.

151. GSI appealed the Common Issues Decision to the Court of Appeal of Alberta. In a decision released on April 28, 2017, the Court of Appeal of Alberta dismissed GSI's appeal.¹²¹
152. On October 30, 2017, GSI filed an application for leave to appeal the Common Issues Appeal to the Supreme Court of Canada. On November 30, 2017, the Supreme Court of Canada denied GSI's application for leave to appeal (collectively, with the Common Issues Decision and the Common Issues Appeal, the "Alberta Decisions").¹²²
153. The outcome of the Alberta Decisions was surprising to GSI. The compulsory license and corresponding confiscation that the Alberta Decisions imposed was not set out in the Regulatory Regime, nor was it set out in the Board guidelines or policies. The outcome of the Alberta Decisions was also contrary to the conduct of Canada and representations by Canada, which created an expectation on the part of GSI, Davey and I that Canada would abide by GSI's intellectual property rights in the Seismic Works.

E. Unable to Enforce its Copyright in its Seismic Data Against Infringers, GSI's Business Was Destroyed

154. The Alberta Decisions destroyed GSI's business.
155. GSI hoped to recover damages for the breaches of its intellectual property in the Seismic Works through the Domestic Actions. However, the Alberta Decisions rendered GSI unable to pursue any of those claims in the Domestic Actions as they related to disclosure from the Boards, as of November 30, 2017, the date the Supreme Court of Canada denied GSI's application for leave to appeal the Common Issues Decision. In fact, after that date, GSI had to discontinue many of the Domestic Actions and pay significant sums to the defendants in those Domestic Actions in relation to the discontinuances.
156. The Alberta Decisions also rendered the Secondary Submissions (the majority of which included the Seismic Works in SEG-Y format) accessible to the public for free. With that, the Seismic Works that GSI licensed to licensees, which were more valuable than the

¹²¹ **R-002**, *Geophysical Service Incorporated v. Encana Corporation, et al.*, 2017 ABCA 125.

¹²² **R-003**, *Geophysical Service Incorporated v. Encana Corporation, et al.*, 2017 SCC 37634.

Seismic Works included in the Submissions, were also in the general public domain and could no longer be licensed.

157. Ultimately, the Alberta Decisions allowed third parties, many of whom would ordinarily have been GSI's customers, to access and copy the Seismic Works from the Boards after the expiration of the privilege period, which was not enough time for GSI to recoup its investment in each seismic survey. The Alberta Decisions also prohibited GSI from doing anything to protect its copyright in the Seismic Works. As a result, third parties stopped licensing the Seismic Works from GSI. No longer benefitting from the revenue generated by its licensing fees, GSI was forced to limit its creation of new data, limit new investment, liquidate assets, lay off its remaining staff and, ultimately, halt its operations entirely.
158. As a result of the Alberta Decisions, GSI's once proud, successful business as the only large, fully private marine seismic company in Canada, is effectively no more.
159. The Alberta Decisions also impacted Davey, Russell and me's personal investments in GSI. Those investments, each of which depended on GSI, are now worthless as a direct result of the Alberta Decisions, as follows:
 - (a) The Alberta Decisions destroyed GSI's business and the value of Davey and me shares, which are now worthless assets. The destruction of GSI's business also frustrated our ability to exercise our rights as shareholders, such as the right to receive the assets of GSI when it is liquidated and the right to receive dividends;
 - (b) The Alberta Decisions destroyed the value of the loans that each of Davey, Russell and I provided to GSI (or its affiliates). Those loans, which were debt assets, can never be repaid by GSI due to the destruction of GSI's business as a result of the Alberta Decisions and are now apparently worthless; and
 - (c) Davey, Russell and I suffered losses due to the losses of our respective remuneration and reputations because the Alberta Decisions effectively put GSI out of business and destroyed our ability to do business with customers because our reputations were tarnished.

160. Had I known that all of this would happen in advance of my investment in GSI, and GSI's investment in Canadian operations, I would have never made any such investment in the first place. The expectation was that my father and I would be treated fairly and reasonably, and that GSI would be, too. Based on Canada's conduct and representations, we had understood and expected that the Seismic Works would be afforded intellectual property protections.
161. GSI was the most significant investment I have ever held. I am personally associated with the business of GSI, having intensely run its operations for over two decades with my father. My father was known as "The Admiral", a nickname in the seismic industry given his pioneering roots in it and having built GSI up in Canada. Our reputations are intricately tied with GSI and those reputations have been completely tarnished.

VIII. THE CLAIMANTS' INITIATION AND CONDUCT OF THIS ARBITRATION

A. Attempts to Settle this Arbitration

162. Davey, Russell, GSI and I commenced this Arbitration against Canada to recover the losses that resulted from the Alberta Decisions.¹²³
163. On January 28, 2019, my counsel, BLG, and I travelled to Ottawa, Ontario to meet with Canada to discuss a settlement of this Arbitration.¹²⁴ The parties did not agree to a settlement during that meeting and Canada did not even extend an offer.

¹²³ See records and correspondence regarding the initiation of the arbitration at **C-053**, Tape Recorded Interview regarding the Claims; **C-054**, Letter from Borden Ladner Gervais LLP to Canada; **C-055**, Medical Report; **C-294**; Letter from Borden Ladner Gervais serving NOI; **C-295**; Letter from Borden Ladner Gervais serving NOI (2); **C-224**, Letter from Borden Ladner Gervais LLP to Trade Law Bureau regarding Appointment of Arbitrator; **C-225**, Letter from Trade Law Bureau to Borden Ladner Gervais LLP; **C-226**, Letter from ICSID to Borden Ladner Gervais LLP dated July 9, 2020; **C-227**, Letter from ICSID to Borden Ladner Gervais LLP and Trade Law Bureau; **C-228**, Letter from Borden Ladner Gervais LLP and Trade Law Bureau to ICSID; **C-229**, Letter from ICSID to Borden Ladner Gervais LLP and Trade Law Bureau; **C-230**, Letter from Tribunal to Borden Ladner Gervais LLP and Trade Law Bureau regarding Initial Procedural Meeting; **C-231**, Email from Tribunal to Borden Ladner Gervais LLP and Trade Law Bureau regarding minutes for Initial Procedural Meeting; **C-232**, Letter from ICSID to Borden Ladner Gervais LLP and Trade Law Bureau; **C-233**, Letter from Borden Ladner Gervais LLP to Tribunal.

¹²⁴ **C-293**, Letter from Borden Ladner Gervais to Canada regarding settlement conference of January 28, 2019.

B. The Waiver

164. I signed a waiver on behalf of GSI, Davey, Russell and myself that I understand prohibits us from commencing or carrying on claims regarding the conduct of Canada that is at issue in this Arbitration (the “Waiver”).¹²⁵ [REDACTED]

165. We have taken a number of steps to comply with that Waiver, which steps are as follows:

- (a) GSI discontinued a domestic Court action for *de facto* expropriation in Federal Court of Canada File Number T-1023-17, prior to the service of the Waiver and in anticipation of commencing this Arbitration;¹²⁷ and
- (b) GSI discontinued the Government Domestic Claims, which, despite them not being pursued for some time well before April 18, 2019, were technically still on the Court record before they were discontinued even though they had been determined by the Alberta Decisions:
 - (i) *Geophysical Service Incorporated v. West Canadian Digital Imaging Inc., West Canadian Industries Group Ltd., Her Majesty the Queen in Right of Canada as represented by the Attorney General of Canada on behalf of the National Energy Board* (Court of Queen’s Bench of Alberta Case No. 1201-05556) – GSI discontinued the claim as against Canada and the NEB on February 14, 2018,¹²⁸ which discontinuance was declared effective by a

¹²⁵ C-223, Consent to Arbitration and Waiver of Rights of Disputing Investor and Enterprise dated April 3, 2019; C-222, Letter to Deputy Minister of Justice and Deputy Attorney General serving NOA dated April 18, 2019.

¹²⁶ C-296, Statutory Durable Power of Attorney for Russell John Einarsson [REDACTED] C-297, Statutory Durable Power of Attorney for Theodore David Einarsson dated October 8, 2019.

¹²⁷ C-298, Statement of Claim in Federal Court of Canada File Number T-1023-17, filed July 12, 2012; C-299, Notice of Discontinuance in Federal Court of Canada File Number T-1023-17, filed March 21, 2018; C-300, Notice of Discontinuance in Federal Court of Canada File Number t-1023-17, filed April 17, 2019.

¹²⁸ C-301, Discontinuance of Action filed by GSI in QB Action No. 1201-05556 on February 14, 2018; C-290, NEB Statement of Defence to Amended Amended Amended Statement of Claim in Court File No. 1201-05556.

Court Order filed March 19, 2018, after the NEB applied to set aside the Notice of Discontinuance filed by GSI;¹²⁹

- (ii) *Geophysical Service Incorporated v. Olympic Seismic Ltd., Her Majesty the Queen in Right of Canada as represented by the Attorney General of Canada on behalf of the National Energy Board; and Companies A-Z* (Case No. 1201-16166) – GSI discontinued the claim against Canada and the NEB on March 8, 2018,¹³⁰ which discontinuance was declared effective by a Court Order filed March 19, 2018;¹³¹
- (iii) *Geophysical Service Incorporated v. Arcis Seismic Solutions Corp., Her Majesty the Queen in Right of Canada as represented by the Attorney General of Canada on behalf of the National Energy Board; Canada-Newfoundland and Labrador Offshore Petroleum Board and Companies A-Z* (Case No. 1301-02933) – GSI discontinued the claim as against Canada, the NEB and the C-NLOPB on February 14, 2018,¹³² which discontinuance was declared effective by a Court Order filed March 19, 2018, after the NEB applied to set aside the discontinuance filed by GSI;¹³³
- (iv) *Geophysical Service Incorporated v. Lynx Canada Information Systems Ltd.; Lynx Canada Information Systems Ltd. operating as Lynx Information Systems Ltd.; the said Lynx Information Systems Ltd.; Her Majesty the Queen in the Right of Canada as represented by the Attorney General of Canada on behalf of Public Works and Government Services, the Department of Natural Resources Canada, and the National Energy Board; and Companies A-Z* (Case No. 0901-08210) – GSI discontinued the claim against Canada, Public Works, NRC and the NEB on March 8, 2018,¹³⁴

¹²⁹ **C-302**, Order of Honourable Justice K.M. Horner filed in QB Action No. 1201-05556 on March 19, 2018.

¹³⁰ **C-303**, Discontinuance of Action filed by GSI in QB Action No. 1201-16166 on March 8, 2018.

¹³¹ **C-316**, Order of Honourable Justice K.M. Horner filed in QB Action No. 1201-16166 on March 19, 2018.

¹³² **C-304**, Discontinuance of Action filed by GSI in QB Action No. 1301-02933 on February 14, 2018; **C-291**, Statement of Defence of C-NLOPB in Court File No. 1301-02933.

¹³³ **C-305**, Order of Honourable Justice K.M. Horner filed in QB Action No. 1301-02933 on March 19, 2018.

¹³⁴ **C-306**, Partial Discontinuance of Action filed by GSI in QB Action No. 0901-08210 on March 8, 2018.

which discontinuance was declared effective by a Court Order filed March 19, 2018;¹³⁵

- (v) *Geophysical Service Incorporated v. Exploration Geosciences (UK Limited); Her Majesty the Queen in Right of Canada as represented by the Attorney General of Canada on behalf of the Department of Natural Resources Canada and the National Energy Board and ABC Corporation Ltd.* (Case No. 1401-00777) – GSI discontinued the claim against Canada, NRC and the NEB on February 14, 2018,¹³⁶ which discontinuance was declared effective by a Court Order filed March 19, 2018, after the NEB applied to set aside the discontinuance filed by GSI;¹³⁷
- (vi) *Geophysical Service Incorporated v. Her Majesty the Queen in Right of Canada as represented by the Attorney General of Canada itself, and on behalf of the Department of Natural Resources Canada; and the National Energy Board* (Case No. 1401-05316) – GSI discontinued the entire claim against all defendants on March 21, 2018;¹³⁸
- (vii) *Geophysical Service Incorporated v. Canada-Newfoundland and Labrador Offshore Petroleum Board and Her Majesty in Right of Newfoundland and Labrador* (Case No. 2011 01G 5430) – GSI discontinued that claim against Her Majesty in Right of Newfoundland and Labrador on August 2, 2019,¹³⁹ after which it settled its claim against the C-NLOPB on June 8, 2020;¹⁴⁰ and
- (viii) *Geophysical Service Incorporated v Canada Newfoundland and Labrador Offshore Petroleum Board, Her Majesty in Right of Newfoundland and Labrador, and others* (Case No. 2013 01G 1671) – that action was

¹³⁵ **C-307**, Order of Honourable Justice K.M. Horner filed in QB Action No. 9001-08210 on March 19, 2018.

¹³⁶ **C-308**, Partial Discontinuance of Action filed by GSI in QB Action No. 1401-00777 on February 14, 2018; **C-292**, Statement of Defence of Attorney General of Canada in Court File No. 1401-05316.

¹³⁷ **C-309**, Order of Honourable Justice K.M. Horner filed in QB Action No. 1401-00777 on March 19, 2018.

¹³⁸ **C-310**, Discontinuance of Action filed by GSI in QB Action No. 1401-05316 on March 21, 2018.

¹³⁹ **C-311**, Notice of Discontinuance against Her Majesty in Right of Newfoundland and Labrador in Case No. 2011 01G 5430.

¹⁴⁰ **C-312**, Satisfaction piece for NL Action 2011 01G 5430 dated June 8, 2020.

summarily dismissed by consent on February 2, 2020,¹⁴¹ after which GSI negotiated a settlement of the costs with the C-NLOPB on June 8, 2020.¹⁴²

166. The two Newfoundland-based Government Domestic Claims were terminated after the date of the Waiver, but had been inactive since before April 18, 2019. GSI was also not intending to continue those two Newfoundland-based Government Domestic Claims, as I understand that the Alberta Decisions became the law in Newfoundland and Labrador after the Supreme Court of Canada denied leave to appeal and then would prevent GSI from continuing them. Long delays were encountered communicating with opposing counsel and on the matter of costs.
167. Since the Waiver, GSI has only continued claims in the Domestic Actions that involve claims against third parties for breaches of private law remedies, including but not limited to contractual and obligatory license claims or transmission of licensed data to a non-licensee that give rise to equitable or tort claims. Those ongoing Domestic Actions seek damages for breaches of GSI's private law rights, such as damages for breach of contractual licenses, conversion of Seismic Works or unjust enrichment. None of the claims in the Domestic Actions that GSI has continued after the Waiver involved claims against Canada, Canadian provinces or Boards with respect to the Alberta Decisions or the Regulatory Regime.
168. I understand that Canada has alleged that cases GSI carried on against Total S.A. (in the Court of Queen's Bench of Alberta) and Anadarko Petroleum Corporation (various jurisdictions) indicate that GSI did not comply with the Waiver. Those claims both involved GSI claiming for breaches of its private law rights and, in any event, GSI was successful against Total S.A. at trial on January 25, 2020,¹⁴³ and settled the cases against

¹⁴¹ **C-313**, Order of Justice Faour in Court File No. 2013 01G 1671.

¹⁴² **C-314**, Satisfaction Piece filed by Canada-Newfoundland and Labrador Offshore Petroleum Board in Case No. 2013 01G 1671 dated June 8, 2020.

¹⁴³ **C-286**, *Geophysical Service Incorporated v Total SA*, 2020 ABQB 730.

Anadarko Petroleum Corporation on February 27, 2021 after it had been stayed since June 2016.¹⁴⁴

C. The Assessment of Damages Suffered as a Result of the Conduct of Canada

169. I understand that BLG retained PricewaterhouseCoopers LLP (“PwC”) to prepare an expert report on the damages suffered by the Claimants in this Arbitration.

170. During PwC’s preparation of its expert report, I provided the following information to PwC beyond that which is already included in this Witness Statement regarding GSI’s understanding of the Regulatory Regime, the parties that accessed the Seismic Works and the nature of GSI’s licensing practices:

- (a) based on the responses to the AIA requests GSI received, the parties requesting access to the Seismic Works could be broadly characterized into three categories:
 - (i) exploration and production (“E&P”) companies;
 - (ii) seismic data contractors (direct competitors) and scanning resale companies; and
 - (iii) governments/non-profit institutions.
- (b) each instance of the Seismic Works being disclosed by the Boards would have resulted in at least a single license fee payable to GSI, but for the Alberta Decisions;
- (c) a double multiplier of GSI’s standard license fee in 2017 should be applied to instances of the Seismic Works being disclosed by the Boards to E&P companies, as, on average, once the E&P Companies would obtain the Seismic Works from the Boards, they would either transfer the Seismic Works to another E&P company (whether by way of a direct peer to peer transfer or an acquisition) or join an exploration group at least once, both of which would result in a license fee;

¹⁴⁴ C-315, Order Granting the Parties’ Joint Motion Seeking Temporary Suspension of Case Schedule Deadlines Pending Disposition of Defendants’ Motion to Dismiss, filed in Case No. 4:15-cv-02765.

- (d) a triple multiplier of GSI's standard license fee should be applied to instances of the Seismic Works being disclosed to seismic data contractors and third party copy companies, because those parties were established almost solely for the purpose of obtaining or vectorizing the Seismic Works from the Boards and then selling them to multiple third parties for profit;
- (e) a zero multiplier of GSI's standard license fee should be applied to instances of the Seismic Works being disclosed to government or non-profit institutions (like universities), as they were not likely to be accessing the Seismic Works for commercial purposes and would have been unlikely to license the Seismic Works from GSI at market value (or would have been able to access the Seismic Works for free);
- (f) the market value of hypothetical license fees generated from instances of the Seismic Works being accessed by third parties should be divided evenly over three years, as GSI likely would have received the license fees over a multi-year period;
- (g) GSI issued a number of unpaid invoices between 2011 and 2016 that totalled \$474.7 million that were for Seismic Works provided between 2007 and 2016 (the "Unpaid Licenses");
- (h) GSI did not include the Unpaid Licenses in its historical revenues;
- (i) the dates of the Unpaid Invoices do not necessarily correspond to the date that GSI would have provided services or when the invoiced license fees would become due, as fees on those invoices generally spanned a multi-year period. As such, the invoices should be split between the year of the invoice and the five preceding years.

171. I also provided PwC with the following information beyond that already included in this Witness Statement regarding GSI's finances:

- (a) the standard practice in the seismic data industry is to capitalize certain expenses related to the creation of seismic data, but GSI does not follow that practice and instead expenses those costs through its income statement;
- (b) GSI's cost structure comprises direct costs, which are variable with the level of new acquisition and creation of seismic data conducted by GSI, and indirect costs, which are primarily fixed overhead costs;
- (c) as a private company, GSI generally has a lower overhead burden than comparable public companies;
- (d) GSI's direct costs include mostly costs related to acquisition and creation of new seismic data, while Seismic Works that have previously been acquired (which is sometimes called "shelf data") can be provided to customers of GSI at minimal costs;
- (e) GSI would not have incurred any additional costs related to the Seismic Works disclosed by the Boards if it had received license fees for those Seismic Works in the normal course of its business, as GSI was attempting to do in the Domestic Actions prior to the Alberta Judgments;
- (f) GSI's average direct costs from 2000 to 2008 would be most appropriate to use in any valuation, as GSI was actively creating new Seismic Works during that period and the figures from subsequent years would reflect the decrease in direct costs that resulted from GSI becoming significantly less active in creating new Seismic Works transitioning to a data licensing operation only;
- (g) GSI's indirect costs from 2006 to 2008 represented GSI's highest years of indirect costs, making it an appropriate starting point for determining a normalized level of indirect costs;
- (h) GSI's historical average capital expenditures are equal to █████ of revenues;
- (i) GSI had an average of █████ of third party debt and related-party debt from individuals other than Davey, Russell and I; and

- (j) Pulse Seismic is the most similar company to GSI in terms of its operating model, as both companies are primarily providers of non-exclusive seismic data to multiple customers.
172. I also provided PwC with the following information beyond that already included in this Witness Statement regarding Davey, Russell and I:
- (a) Russell and I ceased our employment with GSI (or affiliates of GSI) in 2013 and 2017, respectively, because GSI could no longer afford to pay us, but would have continued that employment in our respective roles as Chief Operating Officer and Vice President, Marketing, if not for impact of the Alberta Decisions;
 - (b) Davey and I would have retired from GSI in the following years:
 - (i) Davey – 2019; and
 - (ii) Me – when I turned 75 years old in 2039. Russell also would retire at 75 years old.
173. Additionally, I provided PwC with the following records of GSI for the purposes of performing its valuation:
- (a) Financial Statements of GSI;¹⁴⁵
 - (b) Tax Returns of GSI (2006 to 2008);¹⁴⁶
 - (c) List of Seismic Works Disclosed by the Boards;¹⁴⁷
 - (d) Unpaid GSI Invoice Listing;¹⁴⁸ and
 - (e) Outstanding Loan Balances at the Valuation Dates.¹⁴⁹

¹⁴⁵ C-109, Financial Statements of GSI.

¹⁴⁶ C-110, Tax Returns of GSI (2006 to 2008).

¹⁴⁷ C-111, List of Seismic Works Disclosed by the Boards.

¹⁴⁸ C-112, Unpaid GSI Invoice Listing.

¹⁴⁹ C-113, Outstanding Loan Balances at the Valuation Dates.

IX. CONCLUSION

174. I make this witness statement in support of my own, my father's, my brother's and GSI's claim against Canada in this proceeding and for no other purposes.

175. I swear this witness statement in English and anticipate giving testimony at the hearing of this Arbitration in English.

176. I affirm that the contents of this witness statement are true.

Signed at [REDACTED] on September 27, 2022

[Signed]

HAROLD PAUL EINARSSON
[REDACTED]