

**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 ALLAN FEIR

CWS-10

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TABLE OF CONTENTS

I. INTRODUCTION..... 3
 A. Background..... 3

II. CONCLUSION 6

I. INTRODUCTION

1. I make this Witness Statement based on my personal involvement in the matters contained in this Witness Statement, based upon my personal knowledge, except where based upon information and belief, which I verily believe to be true.

A. Background

2. I started working in the seismic industry in 1971.
3. I have been an active member of the Society of Exploration Geophysicists, and a member of the Canadian Society of Exploration Geophysicists.
4. I began my work experience in 1971 on a marine seismic ship, spending two years in the North Sea acquiring seismic data while employed by Seiscom Data Inc., after this I moved to Calgary to work in Seiscom's Canadian processing centre. Eventually, I spent three years working in several foreign processing centres for Seiscom and returned to Calgary for more work there. After a number of years, which included working for a major Oil Company in Calgary, I was hired by GSI in 2003 to be the senior member of the processing division. I was attracted to working for GSI because of its history as a pioneering company in the seismic industry. I was there until I retired in 2021. While working for GSI, I was President of Precision Seismic Processing, which was amalgamated into GSI, at which time I became VP Operations of GSI. I worked for GSI in Calgary, Alberta.
5. I had the opportunity to take a number of training courses throughout my career, including courses in signal processing and deconvolution. While at GSI, I took a number of courses in management and management principals and obtained a Management Certificate from Mount Royal College.
6. While working for GSI, I also from time to time collaborated with the marine field staff in the design of future seismic programs. Anticipated processing of these future programs was dependent on the selection of field parameters and the type of equipment available for the acquisition. That collaboration would also involve discussions with

client representatives who acquired a license to the future data or were considering acquiring a license.

7. On a daily basis while working for GSI, for seismic data processing, we would ensure we received the data from the field (from the ships), the magnetic tapes containing the field data, the observers notes, navigation information. The party manager ensured that everything was shipped to the office in Calgary.
8. Processing seismic data requires a team of people and large amount of specialized skills and judgment. I was in charge of the team of people doing processing at GSI. The field data has to be converted to an in-house format then it has to be merged with the navigation information. After that, corrections are made for the filtering effects of the earth, corrections for noise from the environment, and sorting of data into the proper physical locations. Velocity corrections need to be applied to the data and adjusted, filtering and cleaning of the data may also be done, as well as applying programs to correct for the scattering of sound waves in the earth. At GSI, during many of these steps, printouts and displays are produced for quality control purposes.
9. After the group worked on processing a seismic line/section, usually using proprietary GSI processes, algorithms, software, I would then conduct quality control on the work performed by the group. Quality control was important in the process because it would check that reasonable skill and judgment was used in selecting the methods, filters, algorithms, and numerous input parameters to choose from in processing a seismic line/section and that they were implemented and applied appropriately. At GSI, significant experience, knowledge and skill was involved based on the specific geology of an area, understanding that geology and the challenges it may involve regarding the interaction with the sound waves used to image the subsurface. Knowledge, skill, and judgment were then used by GSI personnel to select what tools and methods would best address the imaging in this area, and then skill and judgment are utilized to create input parameters into the various software, to implement the processing flow and steps to obtain an approximation of what the subsurface is. There is no single correct way to process seismic data, and it requires experience and know how to do it well. At GSI, it

was important to produce reasonably processed seismic sections based on my experience and know how to do so, in order to sell or license seismic data to customers. My team and I were hired for our skills in doing so and expected to perform our tasks based on our skills and judgment honed through our experience in processing seismic data.


10. While at GSI, there were many things that my team and I needed to review and check in order to create a final seismic section, including information about the ship, the recording parameters, observer reports, tapes containing the field data, attributes of the data itself, the navigation data, any available well data and the geologic conditions related to the specific area in which the field data was created, etc. We were instructed to produce the best section to accurately reflect the geology of the area for which the seismic data was supposed to image. In my experience, the best processing is a subjective matter, and getting the best result requires relying on knowledge and experience.
11. I worked on many seismic surveys while with GSI and conducted management and quality control on the processing of those surveys. Various members of the group of individuals that I supervised would work together on processing seismic sections. That group would perform its function in Calgary, Alberta shortly after the ship seismic crew would create the field data. Judgment, skills and experience were utilized by all employees engaged in creating seismic data at GSI, from the survey planning, acquisition to processing steps.
12. Specific GSI owned programs I worked on during my time at GSI included a yearly series off the coast of Labrador, from the years of 2003 to 2008 inclusive. This data was highly structured and transitioned from areas on the continental shelf to deep water. Over the years of 2003 to 2008, nearly 40,000 kilometres of 2D seismic data was acquired and processed. Also processed during these years were two programs offshore Nova Scotia, West Cape Breton 2003 and Sydney Basin 2005, and a program offshore Newfoundland – the Western Newfoundland 2008 3D.
13. As part of my employment, similar to all GSI employees, I undertook to maintain the confidentiality of its seismic data, all of which was proprietary to GSI. The seismic data

of GSI was created in the course of my employment, like all other employees at GSI, such that the proprietary rights in the seismic data were owned by GSI.

II. CONCLUSION

14. I make this witness statement for the purposes of the NAFTA claim of Harold Paul Einarsson, Russell John Einarsson, Theodore David Einarsson, and GSI against Canada in this proceeding and for no other purposes.
15. I swear this witness statement in English and anticipate giving testimony at the hearing of this Arbitration in English.
16. I affirm that the contents of this witness statement are true.

Signed at Calgary on October 9, 2023



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