

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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PETROLEUM GEO-SERVICES INC.

Petitioner

v.

WESTERNGECO LLC

Patent Owner

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CASE IPR: Unassigned

Patent 7,080,607 B2

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**DECLARATION OF DR. BRIAN J. EVANS, PhD.**

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I, Dr. Brian Evans, hereby state the following:

## I. INTRODUCTION

1. I have been retained by Petroleum Geo-Services, Inc. (“PGS”) to provide technical assistance related to the filing of a Petition for *Inter Partes Review* of U.S. Patent No. 7,080,607 B2 (“the ’607 Patent”) (Ex. 1001). I am working as a private consultant on this matter and the opinions presented here are my own.

2. I have been asked to prepare a written report, including comments related to whether Claims 1 and 15 of the ’607 Patent are unpatentable because they are anticipated or would have been obvious to one of ordinary skill in view of the prior art. I have reviewed the documents set forth in the attached Appendix of Exhibits below and relied on my decades of knowledge and experience in the field of seismic marine surveys (detailed in Section II) in reaching my opinions regarding validity. This report sets forth the bases and reasons for my opinions, including the materials and information relied upon in forming those opinions and conclusions.

3. This report is based on information currently available to me. I reserve the right to continue my investigation and analysis, which may include a review of documents and information not yet produced. I further reserve the right to expand or otherwise modify my opinions and conclusions as my investigation and study

continues, and to supplement my opinions and conclusions in response to any additional information that becomes available to me.

## II. QUALIFICATIONS

4. I am a Professor of Geophysics in the Department of Petroleum Engineering at Curtin University located in Bentley, Western Australia. I have worked continuously in the field of marine seismic surveying for over 44 years, since the 1970s. I have been involved in the design of dozens of marine seismic surveys, and have been onboard seismic vessels as they were conducting a marine seismic survey over one-hundred times.

5. I authored a textbook devoted to marine seismic surveying and data acquisition, entitled “A Handbook for Seismic Data Acquisition in Exploration.” I began writing the textbook in 1985 for use in my “Seismic Acquisition” class, and continued to update it over the years. It was first published in 1997 by the Society of Exploration Geophysicists (SEG), the premier international organization for seismic professionals and researchers, including marine seismic professionals. At the time of its publication, it was considered the authoritative textbook in the field of seismic data acquisition. Over the past 15 years, it has been used throughout the world in seismic surveying courses and on seismic survey vessels.

6. I obtained my Diploma of Electrical Engineering, the equivalent of a bachelor’s degree, at the J.M. University of Liverpool in the United Kingdom in

1969. I took my first job in the marine seismic industry in 1971, working as an instrument engineer for Geophysical Service, Inc. In that role, I monitored and repaired the seismic recording and navigation instruments, including the equipment that positioned marine seismic streamers and source arrays. As a qualified electrical engineer, I also repaired electronic equipment on seismic vessels, including on-board computers, and navigation/positioning systems. While with Geophysical Services, Inc., I traveled the world working offshore West Africa, South America, India, Vietnam, the Persian Gulf, Indonesia, the Philippines, the South China Sea, and the Gulf of Thailand—all offshore oil exploration areas.

7. After leaving Geophysical Service, Inc. in 1974, I joined Aquatronics, a London-based seismic company, where I managed seismic survey ships used in seismic surveys. In 1975, I joined Southern Geophysical Consultants of London as a Seismic Acquisition and Surveying Consultant. In that capacity, I represented many oil companies while onboard seismic survey ships to ensure the quality of the acquired seismic data and that the seismic data was within the oil company's specifications. I was also involved in deep water operations and rig relocations for different oil companies during my time at Aquatronics.

8. In 1976, I established my own seismic-acquisition consulting company in Perth, Australia, called "Offshore-Onshore Exploration Consultants PTY LTD." As an independent consultant, I participated in seismic surveys on

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