



Pulse Seismic Inc.  
Annual Information Form  
For the year ended December 31, 2014

March 3, 2015

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## **FORWARD LOOKING INFORMATION**

This AIF contains information that constitutes “forward looking information” or “forward looking statements” (collectively, “forward looking information”) within the meaning of applicable securities legislation. This forward looking information includes, among other things, statements regarding:

- Estimated future demand for seismic data;
- Estimated future seismic data sales;
- Estimated future demand for participation surveys;
- Pulse’s dividend policy;
- Pulse’s business and growth strategy; and
- Other expectations, beliefs, plans, goals, objectives, assumptions, information and statements about possible future events, conditions, results or performance.

Undue reliance should not be placed on forward-looking information. Forward looking information is based upon current expectations, estimates and projections that involve a number of risks and uncertainties which could cause actual results to differ, in some instances materially, from those anticipated in the forward looking information.

The material risk factors that could cause actual results to differ materially from the forward-looking information include, but are not limited to:

- Oil and natural gas prices;
- Seismic industry cycles and seasonality;
- The demand for seismic data and participation surveys;
- The pricing of data library licensing sales;
- Relicensing (change-of-control) fees and partner copy sales;
- The level of pre-funding of participation surveys, and the Company’s ability to make subsequent data library sales from such participation surveys;
- The ability of the Company to complete participation surveys on time and within budget;
- Environmental, health and safety risks;
- The effect of seasonality and weather conditions on participation surveys;
- Federal and provincial government laws and regulations, including those pertaining to taxation, royalty rates, environmental protection and safety;
- Competition;
- Dependence upon qualified seismic field contractors;
- Dependence upon key management, operations and marketing personnel;
- The loss of seismic data;
- Protection of intellectual property rights; and;
- The introduction of new products.

The foregoing list of risks is not exhaustive. Additional information on these risks and other factors which could affect the Company’s operations and financial results are included in the Risk Factors section of the Company’s MD&A for the most recent calendar year and interim periods which are on SEDAR at [www.sedar.com](http://www.sedar.com). Forward looking information is based upon the assumptions, expectations, estimates and opinions of the Company’s management at the time the information is presented.

## CORPORATE STRUCTURE

### Name, Address and Incorporation

Pulse Seismic Inc. (“Pulse” or the “Company”) was originally incorporated pursuant to the Canada Business Corporations Act as 144020 Canada Ltd. on August 26, 1985.

On September 16, 1999 the Company acquired “Pulse - A Joint Venture” and commenced the business of non-exclusive seismic data acquisition and marketing. On October 12, 1999 the Company changed its name from Augusta Gold Corporation to Pulse Data Inc.

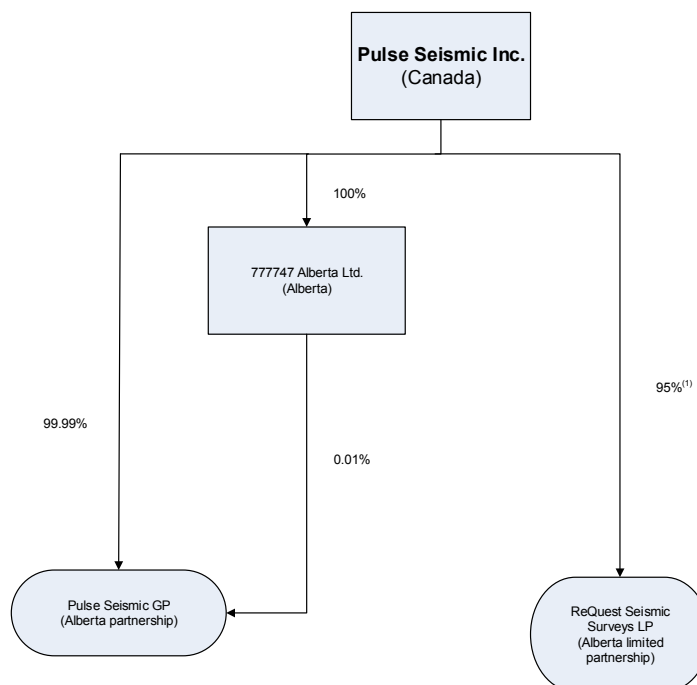
At the Company’s Annual and Special Meeting of Shareholders held on May 21, 2009, shareholders approved the change of the Company’s name from Pulse Data Inc. to Pulse Seismic Inc.

Restated Articles of Incorporation were filed by the Company under the Canada Business Corporations Act on May 18, 2012, consolidating all amendments to the Company’s articles since the original incorporation. A Restated Certificate of Incorporation was issued under the Canada Business Corporations Act, a copy of which is on SEDAR at [www.sedar.com](http://www.sedar.com).

Pulse’s head office is located at 2400, 639 – 5<sup>th</sup> Avenue S.W., Calgary, Alberta, T2P 0M9. The registered office of Pulse is located at 1600, 421 – 7<sup>th</sup> Avenue S.W., Calgary, Alberta, T2P 4K9.

### Intercorporate Relationships

The following diagram sets out the intercorporate relationships among the Company and its subsidiaries at December 31, 2014:



- (1) Pulse is the general partner of, and owns 100% of the Class A units of, ReQuest Seismic Surveys LP. The Class B units are held by a third party, and only entitle the holder to 5% of gross revenues from licence sales from a specific seismic data base.

## **GENERAL DEVELOPMENT OF THE BUSINESS**

The general development of the Company's business over the last three completed financial years is as follows:

### **2014:**

#### **Seismic Data Library Sales:**

- Pulse increased data library sales from \$27.1 million in 2013 to \$35.7 million in 2014.
- On September 30, 2014 the Company announced it had signed a \$10.3 million seismic data licence agreement.

#### **Participation Surveys:**

- Pulse did not conduct any participation surveys in 2014. In December 2014, Pulse signed a participation survey agreement for one new 3D participation survey. The 137 square kilometre survey is located near Edson in west central Alberta, and field operations commenced in January 2015.

#### **Credit Facility:**

- In January 2015, Pulse extended the maturity date of the \$50 million revolving credit facility to February 13, 2018. As part of such extension, the negative covenant on the payment of dividends (other than special dividends) was also removed.

#### **Capital Allocation:**

- During 2014, Pulse paid dividends of \$0.08 per share (\$4.7 million in total), purchased and cancelled approximately 2.1 million common shares through its normal course issuer bid for a total of \$6.3 million, and repaid \$16.6 million of long term debt.

### **2013:**

#### **Credit Facility:**

- On February 15, 2013 Pulse announced that it had executed a new \$50.0 million three-year revolving credit facility with a syndicate led by TD Bank and including ATB Financial. The new facility replaced the previous credit facility with a syndicate led by Roynat and including TD Bank and ATB Financial and an operating line with TD Bank.
- On December 16, 2013 Pulse announced that it had renewed and extended the \$50.0 million three-year revolving facility for an additional year, with a new maturity date of February 13, 2017.

#### **Seismic Data Library Acquisitions:**

- During the first half of 2013, Pulse completed the McKinley, Fox Creek 3D surveys, which has commenced in 2012, and also conducted the Pembina 3D survey, adding approximately 1,182 square kilometres of new 3D seismic data to the data library. In total, these three surveys conducted during the 2012/2013 winter season cost \$58.0 million to shoot, with 60 percent of that cost prefunded by the participants, and the remaining 40 percent, totalling \$24.0 million, was Pulse's net cost.

**Capital Allocation:**

- In addition to the capital invested in participation surveys, during 2013 Pulse paid dividends of \$0.08 per share (\$4.8 million in total), purchased and cancelled approximately 2.4 million common shares through its normal course issuer bid for a total of \$8.4 million, and repaid \$4.8 million of long term debt.

**2012:****Record Data Library Sale:**

- On March 13, 2012 the Company announced it had signed a \$27.8 million 3D seismic data licence agreement, the Company's single largest seismic data library sale. The majority of the data was located in the Cutbank Ridge area of northeast British Columbia.

**Seismic Data Library Acquisitions:**

- During the first quarter of 2012, the Company completed the three 3D participation surveys that were commenced in the third and fourth quarters of 2011, adding approximately 567 square kilometres of new 3D data to the seismic data library. The total cost of these surveys was \$20.4 million, of which Pulse's net cost was \$7.1 million.
- During the second half of 2012, Pulse commenced operations on two 3D participation surveys. The 541-square-kilometre McKinley 3D and the 487-square-kilometre Fox Creek 3D surveys are both located in the Fox Creek vicinity of west central Alberta.

**Dividends:**

- On May 4, 2012 Pulse announced a 60 percent increase in the annual dividend from \$0.05 per common share to \$0.08 per common share.

**Capital Allocation**

- During 2012, Pulse paid dividends of \$0.725 per share (\$4.5 million in total), purchased and cancelled approximately 5.0 million common shares through its normal course issuer bid for a total of \$10.5 million, and repaid \$16.6 million of long term debt.

For a discussion of the Company's outlook of its business for the 2015 financial year, the "Outlook" section of the MD&A for the 2014 financial year is incorporated by reference. The Company's MD&A for the year ended December 31, 2014 is on SEDAR at [www.sedar.com](http://www.sedar.com).

**DESCRIPTION OF THE BUSINESS****GENERAL**

Pulse is a pure-play seismic data library company focused on the acquisition, marketing and licensing of seismic data to the western Canadian energy sector.

Pulse's business model is designed to generate a growing stream of cash flow by repeatedly re-licensing data in its seismic data library to oil and natural gas companies. Success in this business model requires extensive coverage through high-quality seismic data encompassing all geological target zones, with focused coverage in active play areas.

Pulse acquires seismic data to grow its data library through two main methods. The Company purchases proprietary rights to complementary 2D and 3D seismic data sets from competitors and oil and gas E&P companies when the opportunity arises, and conducts 3D participation surveys. Pulse partners with customers on participation surveys from which the seismic data acquired is added to Pulse's data library to generate future licensing revenue. Pulse retains proprietary rights to the data and participating customers are provided with a licensed copy. Pulse uses internal staff to market, manage and oversee participation surveys and subcontracts all field acquisition activities to third parties.

The Company is continuously seeking and evaluating additional opportunities to acquire high-quality 2D and 3D data sets at favourable valuations and to conduct 3D participation surveys in areas complementary to Pulse's current data library.

Pulse generates revenue through licensing 2D and 3D seismic data from the library and from pre-funding on new participation surveys.

### **Seismic Data**

Seismic data is used by oil and natural gas exploration and development companies to identify portions of geological formations that have the potential to hold hydrocarbons. Seismic data is used in conjunction with well logging data, well core comparisons, geological mapping and surface outcrops to create a detailed map of the Earth's subsurface at various depths.

Seismic data is an essential part of the oil and natural gas exploration and development process. Companies engaged in oil and natural gas exploration and development use seismic data to assist in planning land acquisition programs, in exploring for and developing new reserves and in establishing the extent of existing reserves.

In acquiring seismic data, an acoustical energy wave is transferred from an energy source at or near the surface of the earth to the subsurface. These seismic waves reflect off of the various geological beds or strata in the Earth's subsurface. Sophisticated sensors and recording instruments at the surface collect the reflected waves and convert them to digital form. The data is subsequently processed and an image of the subsurface formations is created. The resultant seismic data provides explorationists with valuable data on the potential of a particular area to yield oil or natural gas reserves, and assists in the selection of drilling locations.

2D seismic data is measured in linear kilometres and after processing provides a sectional illustration of geological formations on a straight line directly below the line on which the data was acquired. 2D seismic can extend over a distance spanning many kilometres. Intersecting 2D lines can enable explorers to map large pools of oil and natural gas, but without the precision required for smaller or more complex targets. Exploration companies typically use 2D seismic to get a sense of the regional geology of an area they think is prospective for oil and natural gas. 2D seismic data continues to be used to generate regional initial leads and prospects in oil and natural gas exploration areas.

3D seismic data is measured in square kilometres and after processing provides map-like overhead views as well as three-dimensional visualizations of the subsurface geology. 3D seismic data is shot in grids, generating a three dimensional image of the subsurface. 3D seismic data enables a more precise definition of geologically complex targets, and facilitates precise placement of oil and natural gas wells. 3D seismic is generally used to zero-in on a discrete area of geological interest initially identified with 2D seismic. 3D seismic data is particularly important for horizontal drilling, unconventional plays (such as shale gas and tight sands) and complex conventional drilling. Typical 3D seismic surveys cover an area anywhere from a few square kilometres to several hundred square kilometres.

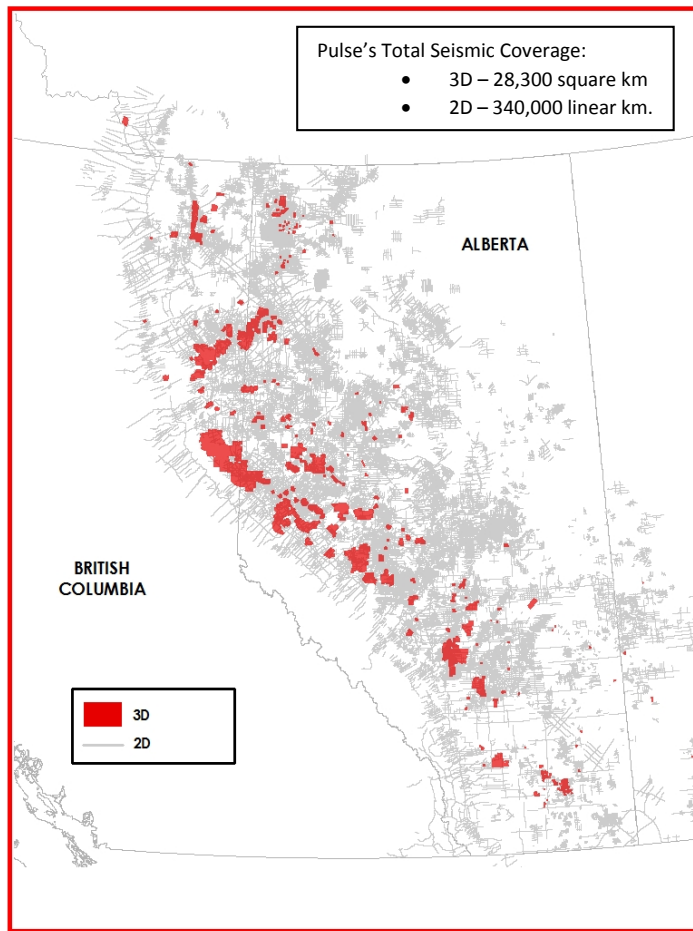
Pulse calculates net kilometres of 2D data and net square kilometres of 3D data by multiplying the number of kilometres of seismic data in each 2D line and the number of square kilometres of seismic data in each individual 3D seismic dataset by Pulse's percentage of ownership in each.

The oil and natural gas exploration and development industry continues to shift towards natural gas reservoirs that are high in natural gas liquids and crude oil, in unconventional shale and less-permeable or tight formations that were not economic or technically possible to develop in the past. 2D and 3D seismic data are important tools for these developments or "plays". 2D seismic data is used to map the regional faults in shale gas prospects, and 3D seismic data is used to map the exact contours of variable reservoirs, as well as small-scale fractures in shale formations, to plan accurate paths for horizontal wells.

## Seismic Data Library

Pulse owns the second largest licensable seismic data library in Canada, currently consisting of approximately 28,300 square kilometres of 3D seismic and 340,000 linear kilometres of 2D seismic. An additional 137 Km<sup>2</sup> survey is nearing completion and the data will be added to the library in the first quarter of 2015. The library extensively covers the Western Canada Sedimentary Basin where most of Canada's oil and natural gas exploration and development occur.

Pulse's 2D and 3D seismic data library coverage is shown on the following map:



## Customers

Pulse has a diverse base of more than 300 oil and gas company customers. The top 10 customers by revenue are usually different each year.

## Revenue

Total seismic revenue includes data library sales and participation survey revenues. The following is a breakdown of Pulse's revenue over its last two fiscal years:

Years ended December 31	2014		2013	
(thousands of Canadian dollars)	Revenue	% of Total Revenue	Revenue	% of Total Revenue
Data Library Sales	35,743	100	27,079	67
Participation Surveys			13,429	33
<b>Total Seismic Revenue</b>	<b>35,743</b>	<b>100</b>	<b>40,508</b>	<b>100</b>

### *Data Library Sales*

Data library sales are conducted under various types of sale contracts. The sale contracts are classified as retail data library sales, library cards (discount agreement, paid on predetermined payment terms with periods of up to one year to select data), commitment cards (discount agreement, paid when data is selected and delivered within a one year period) and review and possession agreements (client is provided with data to review and selects a portion of this data to licence, with the agreement having set payment terms). If the licensee approached Pulse via a broker, a brokerage fee of 5 to 10 percent of the licence fee is generally paid to the broker by Pulse upon receipt of the proceeds from the licensee.

Data library sales also include transaction-based sales. There are three main types of transaction-based sales. The first is the partnership or joint venture, in which an oil and gas asset holder elects to pool their expertise, capital and/or assets with one or more new participants to explore or develop a play. Under the Company's current standard form licensing agreements, any new technical or operational participant that wishes to view or interpret the seismic data must purchase a data licence from Pulse, generally at a discount (usually pre-defined in the initial licensing agreement). Purely financial partners that do not wish to view or interpret the seismic information are exempted.

The second kind of transaction-based sale is a corporate merger or acquisition. In this case, the seismic data is transferred to the new organization. Under the Company's current standard form licensing agreements, the buyer has 30 days to determine whether they would like to pay a change-of-control fee to keep the data or return the data to Pulse.

The third kind is the sale of an oil and gas asset or group of assets (as well as partial mineral rights to particular zones below the asset-owner's lands). Under the Company's current standard form licensing agreements, the license agreement is not transferable upon an asset sale. In this case, no rights to the seismic data transfer to the buyer, and there are no terms of payment in the licence agreement. Should the buyer be interested in Pulse's seismic data, they must license the data from Pulse at the regular price. Following this type of transaction, considerable time may pass until a data licensing sale occurs because the new asset owner may defer development of the particular asset. In addition, the new asset owner may be interested in only portions of the original dataset. The attraction of Pulse's library remains the far lower cost of licensing the data than shooting new seismic over the same area.

The precise terms of individual license agreements (including those historically used by Pulse and its predecessors and those assumed by Pulse on data acquisitions) can vary greatly. Change of control fees and joint venture copy fees may not always be payable, and license agreements may not always be non-assignable.

Where Pulse owns less than a 100 percent ownership interest in a seismic data set in its existing library, the remaining undivided interests in such seismic data are owned by various other parties. In those circumstances, agreements are generally in place between the various interest owners of the seismic data providing for, among other things, the management of the seismic data, the licensing of the seismic data and the division of revenues arising from the licensing of the seismic data. In the absence of a written agreement, industry practice is that any licences of the seismic data require the consent of all of the owners of undivided interests in the data.

When Pulse licenses seismic data in which it owns less than a 100 percent interest, the licence fee, net of commissions and management fees, is divided among Pulse and the other interested parties. Pulse records the net amount of the revenue in data library sales. Where Pulse manages the seismic data, Pulse generally earns a 5 percent management fee and a 10 percent commission on the licence fee. This income is recorded against brokerage fees paid to external brokers.

Certain datasets are also subject to revenue sharing agreements with other parties who do not own an undivided interest in the dataset. The revenue sharing agreements provide for the management, licensing and sharing of revenues from data licence sales from these datasets. The precise terms of these revenue sharing agreements (including those assumed on data purchases or entered into as part of data acquisitions) can vary greatly.

#### *Participation Surveys*

Pulse designs, markets and operates participation surveys and grants licences to the seismic data acquired to parties that participate in the surveys. Pulse, either by itself or in consultation with oil and gas companies, selects a location for the survey based upon a risk analysis undertaken. Once an area has been selected, Pulse approaches oil and natural gas companies to subscribe for the seismic information to be obtained from the survey prior to the information being gathered in the field. Obtaining such subscriptions assists in the financing of the surveys and helps to indicate the marketability of the data. When sufficient subscriptions have been procured, Pulse hires sub-contractors to perform all field acquisition activities (surveying, clearing and mulching vegetation, providing the drills and energy source, recording the physical survey, and processing the data), although Pulse supervises all aspects of the survey. By way of presales of licences, the oil and natural gas companies participating in the survey purchase a non-exclusive licence to use the seismic information obtained. Such licences are perpetual and transfer no ownership rights. Pulse retains the ownership rights to continue to licence the seismic data to interested parties.

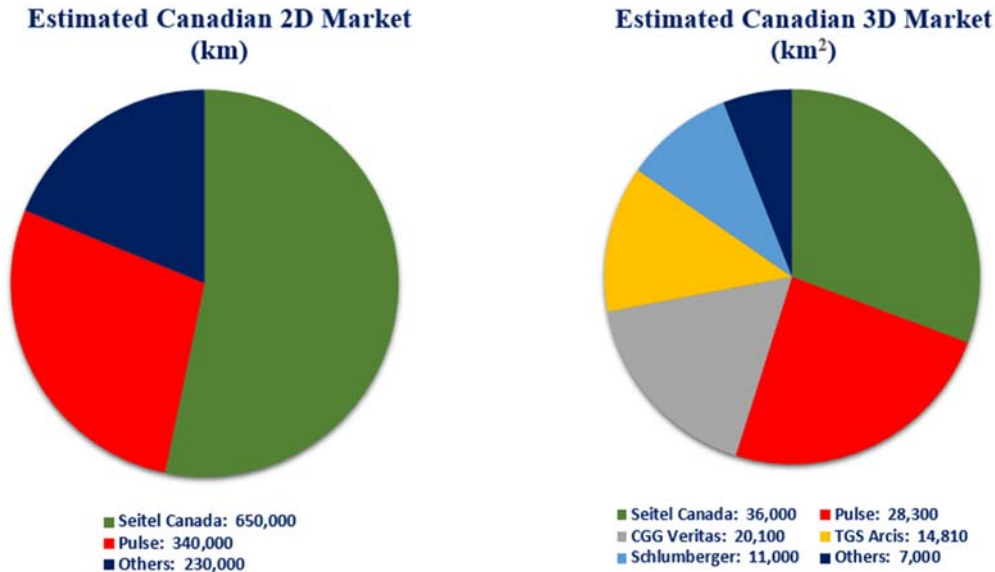
Pulse's rate of pre-funding for participation surveys varies, with the actual target percentage funding of each particular survey determined by Pulse ahead of time depending upon Pulse's risk analysis of such survey and competitive conditions in the area. Factors affecting these individual survey program targets include: circumstances where Pulse believes that there is a high probability of additional participants joining the survey before completion or additional licence sales after completion of the survey, or where a survey is located in a strategic location, or where competitive conditions require a lower level of pre-funding.

The advantages to oil and gas companies of purchasing a licence to the participation surveys are: (i) cost-effective method of obtaining seismic information for exploration purposes; (ii) ability to use experienced and knowledgeable project managers that would potentially not be available by using internal resources; and (iii) the ability to re-allocate personnel to other tasks that would otherwise be tied up supervising the acquisition of this seismic data. These advantages accrue not only to large oil and natural gas companies, which may utilize the surveys to complement their own seismic databases, but also to junior and intermediate companies which gain access to seismic data through their direct investment in participation surveys or on a licensed basis. The primary benefit to Pulse from its participation in these surveys is the addition, on a cost-effective basis, of modern seismic information to its database. The asset value of these surveys ranges from hundreds of thousands to tens of millions of dollars depending on the size and location of the project.

**Seismic Data Library Business Competitive Conditions**

The use of seismic data by oil and gas companies in exploration and development activities greatly enhances their chances for success. As a result, seismic data is essential information in the oil and natural gas exploration and development business. Pulse owns the second largest licensable seismic data library in Canada, currently consisting of approximately 28,300 square kilometres of 3D seismic and 340,000 kilometres of 2D seismic.

Based upon information available to Pulse, its competitive position against its direct competitors in the Western Canadian seismic data library business is estimated to be as follows:



The western Canadian geophysical services industry is fragmented and is comprised of a full spectrum of service providers from large multi-national full service companies to single proprietorship owners of seismic data. Unlike full-service companies, which own and operate equipment and field crews for the purposes of seismic data acquisition and seismic data processing, Pulse's focus remains on the procurement of seismic data by purchasing existing data and developing new participation surveys through the use of contracted equipment and crews as well as the marketing and management of its seismic data library.

The western Canadian geophysical services industry is highly competitive and price sensitive. Pulse competes with other companies which may have greater financial resources, and certain of which are large international geophysical services companies that offer a wider array of geophysical services to their clients than Pulse. The Company also competes with other companies that acquire, market and license seismic data, that maintain their own seismic data libraries, and that compete against Pulse in shooting participation surveys and licensing seismic data to their customers. Other data library companies may be prepared to sell competing seismic data for less than Pulse, and other participation survey companies may be prepared to proceed with participation surveys with lower levels of pre-funding than Pulse. The Company also competes against oil and gas companies that may choose to license their own proprietary seismic data to customers.

In general, there is little overlap between 3D databases, due to the high costs of overshooting existing 3D seismic surveys, and so there is little direct competition between specific 3D datasets. However, seismic data library companies and individual oil and gas companies may elect to overshoot an existing 3D dataset if it is not of the desired quality or specifications.

### **Intangible Properties**

Pulse relies upon a combination of licence agreements, copyright and other intellectual property rights to protect its ownership rights and confidentiality of its seismic data.

### **Seismic Industry Cycles and Seasonality**

Revenue fluctuations are a normal part of the seismic data library business, and data library sales can vary significantly from quarter to quarter and year over year. Fourth quarter data library sales have frequently been stronger than in other quarters, with seismic data sales being triggered as oil and natural gas companies finalize capital expenditures near year end. Third quarter data library sales are often lower than in other quarters due to slower business conditions during the summer months. Data library sales can, however, occur at any time during any quarter. This is due to the nearly continual changes in general oil and natural gas industry conditions, increased demand for seismic data covering a specific area or play, timing of public offerings of petroleum and natural gas rights (land sales), as well as corporate merger-and-acquisition, joint venture and asset disposition activity by Pulse's clients.

Participation survey revenues can also vary significantly from quarter to quarter. The majority of new 3D seismic data is typically acquired under frozen ground conditions from November to March. Summer seismic programs can only be completed in certain areas that have drier ground conditions and that can be easily accessed without environmental harm. The demand for seismic equipment and contractors is typically lower during the summer months; therefore, programs during this time can be more cost-effective. Pulse intends to continue seeking appropriate opportunities to conduct participation surveys during the summer months in order to capitalize on lower costs. In addition, the size and pre-funding levels of individual participation surveys can vary significantly.

## **Environment**

### ***Environmental Regulation:***

Seismic survey field operations are subject to extensive environmental protection laws and regulations.

Before proceeding with a seismic survey, Pulse must first obtain the necessary governmental geophysical permits and approvals. These permits and approvals include operating and environmental restrictions for the survey, including conditions and restrictions on activities in environmentally sensitive areas, wildlife zones, archeological sites, water crossings, pipeline crossings, power lines, private landowners, FMA (Forest Management Agreement areas) and road usage, and any seasonal access restrictions.

Within a set period of time (usually two years after completion of field operations), Pulse is required by laws and regulations to obtain a letter of clearance from the applicable governmental body that granted the geophysical permits and approvals, that the surface of the lands have been satisfactorily reclaimed and restored.

### ***Field Operations:***

Acquiring new seismic data comprises scouting and mapping the area of interest, preparing the ground so personnel and low impact equipment can travel safely, and placing lines of receivers on the ground to record the sound waves generated by an energy source. The management process is highly involved to minimize environmental and safety risks, control costs and comply with regulations.

Pulse subcontracts all field operations to seismic contractors, which encompass four main phases: (i) line clearing; (ii) surveying; (iii) drilling, if required; and (iv) recording. Line clearing involves the cutting of trees and vegetation to prepare for the receiver and source points and for site access for equipment and crews. Surveying involves pre-determining the exact source and receiver locations. Drilling, if required, involves the drilling and preparation of holes with the energy source, which is usually dynamite. Recording involves the laying out of the receivers, initiating the energy source (usually the detonation of dynamite or hydraulic Vibroseis unit that physically shakes the ground) and recording the seismic energy.

Dynamite provides a superior geophysical signal, especially when surveying deeper targets. Dynamite is also required in environmentally sensitive areas and challenging terrain. Vibroseis equipment requires wide access lines and therefore may not be best suited for these areas. Vibroseis is commonly used in areas that are accessible to large equipment such as open fields and areas that restrict the use of dynamite.

### ***Mitigation of Environmental Impact:***

Modern technology and processes have enabled Pulse and its field subcontractors to steadily reduce the environmental footprint of seismic survey operations. Before each survey, Pulse's experienced project managers scout the survey area and perform a detailed evaluation of the landscape, ecosystem and ground conditions, followed by developing an operational plan that will minimize environmental impact.

The environmental impact of field operations has been greatly reduced due to improved field practices:

- Consultation with local stakeholders, including provincial energy regulator officials, First Nations, operating energy companies, land and cabin owners, hunters and trappers, snowmobile clubs and trail users, to ensure that potential environmental issues or concerns are properly addressed.
- Utilizing low-impact seismic equipment, such as low-ground pressure, lighter and smaller equipment.
- GPS technology means that surveyors no longer require line-of-sight, and so lines are allowed to meander, allowing mulchers on source lines to reduce their cutting of trees.
- Cut trees and vegetation are completely mulched and spread on the lines, to facilitate faster regrowth. Mulchers do not disturb the duff layer of the soil, so that root systems are left intact and regrowth begins immediately.

### ***Costs of Compliance:***

The costs of compliance with environmental laws and regulations and the conditions and restrictions in the geophysical permits and regulations (including the restoration and reclamation of the surface of the lands) are budgeted by Pulse and accrued as part of the survey costs. Since participation survey customers usually subscribe for a survey at a fixed rate, any cost overruns will effectively reduce the percentage of pre-funding for that survey.

Depending on the survey area, Pulse may be required to pay private landowners for crop damages and for site access fees. Pulse may also be required to pay the Crown and timber companies for timber damage caused by line clearing and for site access fees. Timber damages are minimal due to the low impact techniques used by Pulse. These costs are based on the width of the line clearings.

To minimize the environmental impact, Pulse is required to construct pipeline and water crossings, and depending on the situation may be required to remove these crossings upon completion of the project.

Applicable costs payable by Pulse are determined based on the information contained in the final plan. The final plan details the exact location of line clearings, pipeline and water crossings and other environmental impacts and is required to be submitted upon completion of the survey to the applicable governmental body that granted the geophysical approvals.

***Risks and Risk Management:***

If Pulse fails to conduct a seismic survey in accordance with the conditions and restrictions in the applicable geophysical permits and approvals, the permits and approvals for that survey could be terminated and Pulse could be fined. Under current laws and regulations, these fines could be significant. Pulse mitigates this risk through comprehensive training, field supervision and monitoring.

Pulse subcontracts all field operations to seismic contractors. Under applicable environmental laws and regulations, Pulse is generally responsible for ensuring compliance by these seismic contractors with environmental laws and regulations and with the applicable government permits and approvals. Pulse mitigates this risk by carefully screening its seismic contractors, by requiring all seismic contractors to sign Master Service Agreements under which they are required to comply with environmental laws and regulations and with the applicable government permits and approvals, and by using Pulse field supervisors to supervise all field operations by seismic contractors.

The detonation of dynamite in shot holes could potentially damage water aquifers, including private landowner wells. The incidence of this type of damage is very rare, but the costs of remediating this type of damage could include the drilling of a replacement water well. Pulse mitigates this risk by adhering to appropriate setback distances. In addition, Pulse tests private landowner wells both before and after field operations for flow rates and quality, in order to accurately assess whether or not there has been any damage.

The drilling of shot holes or the detonation of dynamite in shot holes could cause underground water to be released and flow to the surface (a flowing hole). Pulse mitigates this risk by plugging any flowing holes with bentonite to stop the flow of water to the surface.

Seismic surveys are typically conducted during winter when frozen ground conditions permit the movement and operation of equipment. In addition, government geophysical permits and approval for environmentally sensitive areas may be restricted to winter access only. If an unseasonably late or warm winter delays or prevents sufficient freezing, or if an early spring results in an early thaw, Pulse may not be able to complete its winter seismic surveys on time and within budget.

Seismic surveys may be conducted during summer in certain areas that have drier ground conditions. Under excessive rainfall, field operations may be shut down to prevent environmental damage until the ground dries up. Under typical line clearing, surveying and drilling contracts, the seismic contractors are paid standby rates and mobilization / demobilization costs during these shutdown periods. Since participation survey customers usually subscribe for a survey at a fixed rate, any cost overruns will effectively reduce the percentage of pre-funding for that survey. If excessive rain results in significant shutdowns, Pulse may not be able to complete its summer programs on time and within budget.

While Pulse maintains liability insurance, including insurance for environmental claims, the insurance is subject to coverage limits and exclusions. There can be no assurance that the possible types of environmental liabilities that may be incurred by Pulse will be covered by Pulse's insurance, or that the dollar amount of such liabilities will not exceed Pulse's policy limits.

## **Employees**

As of December 31, 2014, the Company had 23 full time employees.

## **Environmental, Health and Safety Policies**

The Company has implemented written policies and procedures to promote a safe, healthy and accident free workplace for its employees and contractors and to mitigate adverse effects on the environment. In addition, the Board of Directors has established an Environment, Health and Safety Committee, whose mandate is to monitor the environmental, health and safety practices and procedures of the Company for compliance with applicable legislation, conformity with industry standards, and prevention or mitigation of losses. In September 2012, Pulse received the renewal of its three-year Certificate of Recognition (COR) issued by Enform and the Government of Alberta. In 2014 the Company completed its annual internal COR maintenance audit, with the next full external audit scheduled in 2015.

## **RISK FACTORS**

The Section entitled "Risk Factors" in the Company's MD&A for the year ended December 31, 2014 is incorporated by reference. The Company's MD&A for the year ended December 31, 2014 is on SEDAR at [www.sedar.com](http://www.sedar.com).

## **DIVIDENDS**

The following table discloses the amount of cash dividends declared per common share for each of the three most recently completed financial years:

Year ended December 31, 2012	Year ended December 31, 2013	Year ended December 31, 2014
\$0.0725 <sup>(1)</sup>	\$0.08 <sup>(2)</sup>	\$0.08 <sup>(2)</sup>

Notes:

<sup>(1)</sup> Represents one quarterly dividend of \$0.0125 per common share and three quarterly dividends of \$0.02 per common share paid in 2012.

<sup>(2)</sup> Represents four quarterly dividends of \$0.02 per common share paid in each of 2013 and 2014.

On August 4, 2011 Pulse announced the reinstatement of the dividend at \$0.05 per year per common share. On May 4, 2012 Pulse announced a 60% increase in the dividend to \$0.08 per year per common share. The Dividend Reinvestment Plan and Optional Share Purchase Plan were not reinstated in August 2011 and were terminated in May 2012.

Under the Company's syndicated revolving credit facility, the Company may not pay any special dividend (excluding regular quarterly dividends) if the Total Debt to Adjusted EBITDA Ratio is, or would be after giving effect to such dividend, greater than 1:50:1, without the consent of the lenders. (The definition and calculation of the Total Debt to Adjusted EBITDA Ratio are explained in detail in the Company's MD&A for the year ended December 31, 2014, which is on SEDAR at [www.sedar.com](http://www.sedar.com).)

## DESCRIPTION OF CAPITAL STRUCTURE

The Company is authorized to issue an unlimited number of common shares and an unlimited number of preferred shares, issuable in series. As of December 31, 2014 there were 57,247,843 common shares outstanding and no preferred shares outstanding.

The holders of the common shares are entitled to receive dividends if, as and when declared by the Board of Directors. The holders of common shares are entitled to receive notice of and to attend all meetings of shareholders and are entitled to one vote per common share held at all such meetings. In the event of the liquidation, dissolution or winding up of the Company or other distribution of assets of the Company among its shareholders for the purpose of winding up its affairs, the holders of the common shares will be entitled to share equally, share for share, in any distribution of the assets of the Company.

The preferred shares are non-voting and are issuable in series, with such designations, rights, privileges, restrictions and conditions as are determined by the Board of Directors at the time of issue.

The Company adopted its Shareholder Rights Plan by way of an Amended and Restated Shareholder Rights Plan Agreement dated May 22, 2013 between the Company and Valiant Trust Company, as Rights Agent. The Shareholder Rights Plan was ratified and confirmed by the shareholders at the annual and special meeting of shareholders of the Company on May 22, 2013.

## MARKET FOR SECURITIES

The common shares of Pulse are listed for trading on the TSX under the trading symbol PSD.

The following table provides information on the price ranges and volumes traded on the TSX for each month during 2014:

Month	Trading Volume	Price Range
January	2,206,634	\$3.71 - \$4.85
February	2,150,105	\$3.42 - \$4.00
March	2,801,064	\$3.19 - \$3.87
April	1,294,023	\$3.22 - \$3.76
May	1,164,269	\$3.30 - \$3.75
June	2,515,105	\$3.06 - \$3.40
July	3,999,898	\$3.00 - \$3.41

August	1,030,294	\$3.00 - \$3.23
September	2,327,791	\$2.75 - \$3.12
October	2,602,739	\$2.95 - \$3.24
November	1,020,982	\$2.81 - \$3.21
December	1,413,837	\$2.84 – \$3.07

## DIRECTORS AND OFFICERS

The name, province or state and country of residence, positions and offices held with the Company, and principal occupations of the directors and executive officers of Pulse are as follows:

<b>Name and Residence</b>	<b>Positions Held</b>	<b>Date First Elected as a Director<sup>(5)</sup></b>
Clark Zentner <sup>(2)(3)</sup> Alberta, Canada	Director	April 2002
Daphne Corbett <sup>(1)(3)(4)</sup> British Columbia, Canada	Director	June 2004
Robert Robotti <sup>(1)(2)(3)</sup> New York, USA	Director, Chair of the Board	December 2007
Peter Burnham <sup>(2)(3)(4)</sup> Alberta, Canada	Director	January 2012
Brent Gale <sup>(4)</sup> Alberta, Canada	Director	May 22, 2013
Karen El-Tawil <sup>(1)(2)(3)</sup> Texas, USA	Director	May 21, 2014
Neal Coleman Alberta, Canada	President and Chief Executive Officer	N/A
Pamela Wicks Alberta, Canada	Vice President, Finance and Chief Financial Officer	N/A
Jeff Bectold Alberta, Canada	Vice President Operations	N/A
Trevor Meier Alberta, Canada	Vice President Sales and Marketing	N/A

### Notes:

- (1) Member of the Audit Committee. Daphne Corbett is the Chair of the Committee.
- (2) Member of the Compensation Committee. Peter Burnham is the Chair of the Committee.
- (3) Member of the Corporate Governance and Nominating Committee. Clark Zentner is the Chair of the Committee.

- (4) Member of the Environment, Health and Safety Committee. Peter Burnham is the Chair of the Committee.
- (5) Each of the directors holds office until the next annual meeting of shareholders or until their successor is duly elected or appointed.

The background of each of the directors of Pulse and their principal occupations for the past five years are as follows:

<b>Director</b>	<b>Principal Occupations during the last 5 years</b>	<b>Other relevant experience</b>
Clark Zentner	Retired Businessman  Was General Manager of Silver Sage Beef, a family owned Western Canadian cattle ranching and retail beef operation from 2011 to 2014.  Business advisor for Grupo Integer, a Monterrey, Mexico non-profit educational organization, from 2007 through 2010.	Mr. Zentner has over 30 years' experience in the Canadian oil and gas industry. He worked primarily in financial analysis and advisory capacities, including serving as Managing Director of ARC Financial, an investment banking and merchant banking company, from 1990 through 1998.
Daphne Corbett	Retired corporate banker.  Director of various business and non-profit organizations.  Currently a director of Pulse Seismic Inc. and on the board of the Royal B.C. Museum.	Ms. Corbett has over 20 years' experience in corporate banking. From 1981 to 2003 she worked in various senior and executive positions with HSBC, including Head of Audit Canada from 1994 – 1997, Head of Audit Latin America with HSBC Brazil from 1997 – 2000, Senior Vice President BC Region from 2000 – 2002, and Senior Vice President and Business Manager Wealth and Tax Advisory Services in San Francisco, California from 2002 – 2003.
Robert Robotti	President of Robotti & Company, LLC, a US registered broker-dealer, and President of Robotti & Company Advisor, LLC, a US registered investment advisor.	Mr. Robotti is actively invested in the oil and gas industry. He has been a director of Panhandle Oil and Gas Inc. (NYSE) since 2004, and is a director of Building Materials Holding Corporation, a private building materials and construction services company.

Peter Burnham	<p>Retired oil and gas executive.</p> <p>Director of various private and public oil and gas companies and non-profit organizations.</p> <p>Currently a director of Pulse Seismic Inc., Epping Energy Inc. and Freemont Resources Ltd. (privately held oil and gas companies).</p> <p>Previously was a director of Renegade Petroleum Ltd. (a TSX-V listed oil and gas company).</p> <p>In addition, assists private organizations on a consulting basis in evaluating investment opportunities in start-up and junior oil and gas companies.</p>	<p>Mr. Burnham is a professional geologist with over 30 years' experience in the Canadian oil and gas industry, primarily as an executive in the upstream sector. He was Vice President, Exploration of Tri Link Resources Ltd. from 1981 through 2000, and co-founder, President and a director of Arista Energy Ltd. from 2004 through 2008.</p>
Brent Gale	<p>Retired as Senior Vice President and COO of Pulse Seismic Inc. on May 22, 2013.</p> <p>Currently an independent businessperson that invests in real estate and commercial gravel operations.</p>	<p>Mr. Gale is one of the founders of Pulse. He has over 35 years' experience in the seismic industry, with extensive knowledge and experience in seismic field operations and the seismic data library business.</p>

Karen El-Tawil	<p>Retired from TGS-NOPEC in December 2012 as Vice President Business Development.</p> <p>Currently a director of Polarcus Limited, a marine geophysical company based out of Dubai and listed on the Oslo Bors Stock Exchange.</p>	<p>Ms. El-Tawil has 30 years' experience in the Geophysical Services industry, with 15 years' experience at the executive level. Her management experience in the Geophysical Services industry includes: Quality Control, Project Development, Customer Service, Marketing, Sales, Information Technology, Investor Relations, and Mergers and Acquisitions.</p> <p>Ms. El-Tawil retired from TGS-NOPEC in December 2012 as Vice President Business Development. She was with Western Geophysical from 1984 through 1987, Schlumberger Geco-Prakla from 1987 through 1997, and TGS-NOPEC from 1997 through 2012.</p>
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The background of each of the executive officers of Pulse and their principal occupations for the past five years are as follows:

**Neal Coleman, President and Chief Executive Officer**

Neal Coleman was appointed President and Chief Executive Officer of Pulse on November 1, 2012. Prior thereto, Mr. Coleman was Vice President Sales and Marketing of Pulse since April 1, 2008, and Manager, Sales and Marketing of Pulse since January 2006.

**Pamela Wicks, Vice President Finance and Chief Financial Officer**

Pamela Wicks was appointed Vice President Finance and Chief Financial Officer of Pulse on March 10, 2010. Prior thereto, she was Vice President Finance of Pulse since May 2007, and prior thereto was Controller of Pulse since January 2002.

**Jeff Bectold, Vice President Operations**

Mr. Bectold assumed the role of Vice President Operations effective April 1, 2011. Mr. Bectold joined the Company in 2008 as Manager, Participation Surveys.

**Trevor Meier, Vice President Sales and Marketing**

Trevor Meier was appointed as Vice President Sales and Marketing effective June 1, 2013. Mr. Meier joined Pulse as a Sales and Marketing Representative in 2006, and was appointed Manager, Sales and Marketing in November 2012.

## **Securities Owned**

As at March 3, 2015, the directors and executive officers of Pulse, as a group, beneficially owned, or controlled or directed, directly or indirectly, 8,678,821 Pulse common shares (representing approximately 15.2% of the issued and outstanding Pulse common shares).

## **Cease Trade Orders, Bankruptcies, Penalties or Sanctions**

On November 29, 2006 Robert Robotti was appointed to the Board of Directors of Advanced Marketing Services Inc. ("MKTS"), a San Diego, California based company. On December 29, 2006 MKTS filed a voluntary petition under Chapter 11 of the Federal Bankruptcy Code in United States Bankruptcy Court for the District of Delaware. On January 16, 2007 Mr. Robotti resigned as a director of MKTS.

## **TRANSFER AGENT AND REGISTRAR**

The Company's transfer agent and registrar is Valiant Trust Company with registers of transfers of the Company's common shares in Calgary, Alberta and Toronto, Ontario.

## **MATERIAL CONTRACTS**

Other than contracts entered into in the ordinary course of business, the following contracts that are material to the Company were entered into within the most recently completed financial year, or before the most recently completed financial year but which are still in effect:

Amended and Restated Shareholder Rights Agreement dated May 22, 2013 between the Company and Valiant Trust Company, as Rights Agent, a copy of which is on SEDAR at [www.sedar.com](http://www.sedar.com).

## **INTERESTS OF EXPERTS**

KPMG LLP, Chartered Accountants, audited the annual consolidated financial statements for the financial year ended December 31, 2014.

KPMG LLP is independent in accordance with the auditor's Rules of Professional Conduct of the Institute of Chartered Accountants of Alberta.

## **ADDITIONAL INFORMATION**

Additional information relating to the Company may be found on SEDAR at [www.sedar.com](http://www.sedar.com).

Additional information, including directors' and officers' remuneration and indebtedness, principal holders of the Company's securities and securities authorized for issuance under equity compensation plans, if applicable, is contained in the Company's Information Circular for its most recent annual meeting of shareholders that involved the election of directors.

Additional financial information is provided in the Company's financial statements and MD&A for its most recently completed financial year.

## **AUDIT COMMITTEE INFORMATION**

The following Audit Committee information is provided in accordance with NI 52-110 Audit Committees:

## The Audit Committee's Charter

The Audit Committee's Charter is attached to this AIF.

### Composition of the Audit Committee

The members of the Audit Committee are Daphne Corbett (Chair), Robert Robotti and Karen El-Tawil. All members of the Audit Committee are considered to be independent and financially literate within the meaning of NI 52-110 Audit Committees.

### Relevant Education and Experience

The education and experience of each Audit Committee member that is relevant to the performance of such member's responsibilities as an Audit Committee member are as follows:

MEMBER'S NAME	RELEVANT EDUCATION AND EXPERIENCE
Daphne Corbett	<p>Relevant Education:</p> <ul style="list-style-type: none"><li>• B.A. (Major in Psychology and Minor in Math) – 1970 – University of Victoria</li><li>• CMA – Member of the BC Association 1989-1999 (resigned as a member in good standing)</li></ul> <p>Relevant Experience:</p> <ul style="list-style-type: none"><li>• Senior Vice President BC Region for HSBC Bank Canada 2000 -2002</li><li>• Head of Internal Audit for Canada for HSBC Bank 1994-1997</li><li>• Head of Internal Audit for Latin America for HSBC Bank 1997-2000</li><li>• Chair of the Finance VISTA Steering Committee of HSBC Group</li><li>• Chair of the Audit Committee for Emergency Communications for Southwestern B.C.</li><li>• Member of the Finance Committee for the Pacific Salmon Foundation</li><li>• Chair of Audit Finance Committee for the Royal BC Museum since 2010</li></ul>
Robert Robotti	<p>Relevant Education:</p> <ul style="list-style-type: none"><li>• B.S. – 1975 – Bucknell University, Pennsylvania</li><li>• MBA – 1978 – Pace University, New York</li></ul> <p>Relevant Experience:</p> <ul style="list-style-type: none"><li>• President and founder of Robotti &amp; Company, LLC a registered broker-dealer, since 1983</li><li>• President and founder of Robotti &amp; Company Advisors, LLC, a registered investment advisor, since 2003</li><li>• Managing Member of Ravenswood Management Company, LLC since 1980</li><li>• Member of the Governance and Nominating Committee, Compensation Committee and Board of Directors for Panhandle Oil and Gas Inc.</li></ul>

	<ul style="list-style-type: none"> <li>Chair of the Finance Committee, member of the Audit Committee and Board of Directors of Building Materials Holding Corporation.</li> </ul>
Karen El-Tawil	<p>Relevant Education:</p> <ul style="list-style-type: none"> <li>B.A. – 1983 – Adrian College, with majors in Mathematics and Earth Science.</li> </ul> <p>Relevant Experience:</p> <ul style="list-style-type: none"> <li>30 years experience in the Geophysical Sciences industry, with 15 years experience at the executive level, including investor relations and M&amp;A.</li> </ul>

### Pre-Approval Policies and Procedures

The Audit Committee has adopted the following specific policies and procedures for the engagement of non-audit services:

- On an annual basis, the Audit Committee updates and approves a list of pre-approved audit, audit-related, tax and other services, and pre-approves services that are recurring or are otherwise reasonably expected to be provided.
- The Audit Committee is informed quarterly of the services on such list for which the auditor has actually been engaged.
- Additional requests for pre-approval are addressed on a case by case specific engagement basis as follows:
  - Where the aggregate fees for an engagement are estimated to be less than or equal to \$10,000, the VP Finance & CFO submits a recommendation to the Chair of the Audit Committee for pre-approval. The full Audit Committee is informed of the service at the next meeting of the Audit Committee. The engagement may commence upon pre-approval by the Chair of the Audit Committee;
  - Where the aggregate fees for an engagement are estimated to be greater than \$10,000, the VP Finance & CFO submits a recommendation to the full Audit Committee for pre-approval. The engagement may commence upon pre-approval by the full Audit Committee.

### External Auditor Service Fees (by Category)

	2014 Financial Year	2013 Financial Year
Audit Fees <sup>(1)</sup>	\$142,500	\$135,500
Audit-Related Fees	Nil	Nil
Tax Fees <sup>(2)</sup>	Nil	\$22,700

Notes:

- (1) Includes the audit of annual consolidated financial statements, and the review of interim consolidated financial statements for the periods ended March 31, June 30 and September 30. The 2014 audit fees is an estimate and the 2013 audit fees have been revised to actual.
- (2) Canadian compliance and tax planning.

## **PULSE SEISMIC INC.**

### **Audit Committee**

### **Terms of Reference**

**Revised March 9, 2011**

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#### **Overview and Purpose**

The Audit Committee (the “Committee”) is appointed by and responsible to the Board of Directors (the “Board”) of Pulse Seismic Inc. (the “Corporation”). The Committee oversees the accounting and financial reporting processes of the Corporation and the audits of the financial statements of the Corporation, in accordance with applicable laws and securities policies and instruments and these Terms of Reference.

The Committee has the authority to investigate any financial activity of the Corporation. The primary responsibilities of the Committee include:

- assessing the processes related to identification of risks and effectiveness of the control environment;
- overseeing financial reporting; and
- evaluating the external audit process.

The Committee shall have unrestricted access to the Corporation’s personnel and documents and will be provided with the resources necessary to carry out its responsibilities.

#### **Composition**

The Committee will be comprised of a minimum of three directors. All Committee members will be independent and financially literate within the meaning of NI 52-110 Audit Committees.

The members of the Committee shall be appointed or reappointed at the meeting of the Board immediately following each annual meeting of the shareholders of the Corporation. Each member of the Committee shall continue to be a member thereof until such member’s successor is appointed, unless such member shall resign or be removed by the Board or such member shall otherwise cease to be a director of the Corporation. Where a vacancy occurs at any time in the membership of the Committee, it may be filled by the Board and shall be filled by the Board if the membership of the Committee is less than three (3) directors as a result of the vacancy.

The members of the Committee shall choose one of its members to serve as Chair (the “Chair”) who is responsible for the preparation of reports to the Board and conducting the meetings of the Committee. If the Chair of the Committee is not present at any meeting of the Committee, the Chair of the meeting shall be chosen by the Committee from among the members present. Resolutions of the Committee shall be carried by the majority of the votes of the members of the Committee present at the meeting.

All members of the Board shall be free to attend any meetings of the Committee and participate, but only those members of the Committee shall be entitled to vote on any question before the Committee. Other than members of the Board, entitlement to attend all or a portion of any Committee meetings shall be determined by the Chair of the Committee or its members. The Chair of the Board is an ex-officio and non-voting member of the Committee, unless appointed by the Board as a full member of the Committee.

The members of the Committee shall be entitled to receive such remuneration for acting as members of the Committee as the Board may from time to time determine.

## **Responsibilities**

The responsibilities of the Committee include the following:

- To review the Corporation's quarterly financial statements, quarterly management's discussion and analysis and the financial information contained in the interim results news releases and interim reports to shareholders, and to provide recommendations to the Board for their approval;
- To review the Corporation's annual audited financial statements and notes thereto and satisfy itself that they are fairly presented in accordance with International Financial Reporting Standards (IFRS) and to recommend to the Board whether such financial statements should be approved;
- To review the financial information contained in the annual management's discussion and analysis, the financial information contained in the annual results news releases and annual reports to shareholders, and the financial information contained in the Annual Information Form (the "AIF"), to determine that they provide consistency of disclosure with the financial statements themselves, and to provide recommendations to the Board for their approval;
- To review the disclosure of Audit Committee information contained in the AIF, and to provide recommendations to the Board for its approval;
- To review such other financial information as the Corporation may publish from time to time including financial information in prospectuses and other offering documents and financial information required by regulatory authorities, to satisfy itself that they are fairly presented in accordance with IFRS, and to provide recommendations to the Board for their approval;
- To review and monitor accounting policies and practices;
- To review and monitor risk management practices;
- To review and monitor any material litigation involving the Corporation;
- To satisfy itself that management of the Corporation has implemented appropriate systems of internal control over financial reporting and determine that these are operating effectively;
- To obtain reasonable assurance through discussions with management and external auditors that the Corporation's accounting systems are reliable and that internal controls are adequate. The Committee will review the evaluation of internal controls by the external auditors, including any recommendations for improvement of accounting procedures and internal controls, together with management's response.
- To satisfy itself that the external audit function has been effectively carried out in a cost effective manner and that any matter which the external auditors wish to bring to the attention of the Board has been addressed;

- To review the annual appointment of external auditors for recommendation to the Board for approval by the shareholders of the Corporation, and to review the compensation of the external auditors and provide a recommendation to the Board for approval;
- To review any new appointment to the position of chief financial officer or to any other key executive position with financial reporting responsibilities;
- To review and pre-approve any non-audit services to be provided to the Corporation or its subsidiaries by the Corporation's external auditors (provided that the Committee may adopt policies and procedures for the pre-approval of de minimus non-audit services and for the delegation of the pre-approval of non-audit services to one or more members of the Committee, in accordance with NI 52-110 Audit Committees);
- To review on an annual basis the Terms of Reference of the Committee; and
- To satisfy itself that the interim and annual certifications by the Corporation's CEO and CFO of the Corporation's interim and annual financial statements are completed and filed in accordance with applicable securities laws and policies.

In addition, the Chair of the Committee (or in the Chair's absence, any other member of the Committee) will review and approve any earnings guidance and any news release containing financial information based on the Corporation's financial statements prior to their release (other than financial information contained in interim and annual results news releases, which are to be approved by the Committee as provided above.)

## **Procedures**

The Committee will be satisfied that adequate procedures are in place for the review of the Corporation's public disclosure of financial information extracted or derived from the Corporation's financial statements (other than the public disclosure of financial statements, MD&A and annual and interim earnings news releases and reports to shareholders referred to above under "Responsibilities") and will periodically assess the adequacy of those procedures.

The Committee will establish procedures for:

- (a) the receipt, retention and treatment of complaints received by the Corporation regarding accounting, internal accounting controls, or auditing matters, and
- (b) the confidential, anonymous submission by employees of the Corporation of concerns regarding questionable accounting or auditing matters.

The Committee will review and approve the Corporation's hiring policies regarding partners, employees and former partners and employees of the present and former external auditor of the Corporation.

## **External Auditor**

The external auditor will report directly to the Committee.

The Committee is directly responsible for overseeing the work of the external auditor engaged for the purpose of preparing or issuing an auditor's report or performing other audit, review or attest services for the Corporation, including the resolution of disagreements between management and the external auditor regarding financial reporting.

**Authority**

The Committee has the authority:

- (a) to engage independent counsel and other advisors as it determines necessary to carry out its duties;
- (b) to set and pay the compensation for any advisors employed by the Committee; and
- (c) to communicate directly with the internal and external advisors.

**Meetings**

The Committee will meet at least four times per year and additionally as necessary to discharge its responsibilities as outlined herein. Upon consultation with and approval by all parties affected, the business of the Committee may be conducted by way of a telephone conference call.

The time and place of meetings of the Committee and the procedures at such meetings shall be determined from time to time by the members thereof, provided that a quorum for meetings shall be a majority of the members of the Committee.

Notice of the time and place of and an agenda and related materials respecting every meeting shall be given in writing or electronic communication to each member of the Committee at least 48 hours prior to the time listed for such meeting, provided, however, that a member may in any manner waive a notice of a meeting and attendance of a member at a meeting is a waiver of notice of the meeting, except where a member attends a meeting for the express purpose of objecting to the transaction of any business on the grounds that the meeting is not lawfully called.

The Committee may invite such officers, directors and/or employees of the Corporation as it may see fit from time to time to attend a meeting of Committee and assist in the discussion and consideration of the matters being considered by the Committee.

The Corporation's external auditors will be invited to attend Committee meetings when appropriate, particularly if they have been asked to provide any form of service with respect to specific agenda items.

**Reporting**

The minutes of all meetings of the Committee are to be provided to the Board. Oral reports by the Chair on recent matters not yet recorded in the minutes are to be provided to the Board at its next meeting.

Supporting schedules and information reviewed by the Committee will be available for examination by any directors upon request to the Chair of the Committee.

**Calendar for Meetings**

The following outlines a suggested program for regular meetings of the Committee. Prospectuses, acquisitions, or takeovers will require meetings over and above the following annual program.

### **Meeting Prior to Release of Annual Financial Statements (March)**

- Discuss the audited annual financial statements and auditors' report thereon and annual management's discussion and analysis in detail with the Corporation's senior officers and external auditors.
- Review and confirm the scheduled filing of the annual certifications by the Corporation's CEO and CFO of the annual financial statements.
- Review the financial information contained in the annual results news release and annual report to shareholders.
- Review the financial information and the disclosure of Audit Committee information contained in the AIF.
- Review a summary provided by the Corporation's senior officers of the status of any material pending or threatened litigation, claims and assessments.
- Review the Terms of Reference for the Audit Committee.
- Review and assess the adequacy of the procedures for the review of the Corporation's public disclosure of financial information extracted or derived from the Corporation's financial statements.
- Review and assess the adequacy of the procedures for (a) the receipt, retention and treatment of complaints received by the Corporation regarding accounting, internal accounting controls, or auditing matters, and (b) the confidential, anonymous submission by employees of the Corporation of concerns regarding questionable accounting or auditing matters.
- Discuss in private with the external auditors matters affecting the conduct of their audit and other corporate matters.
- Discuss in private with the Corporation's senior officers the level and timeliness of service provided by the auditors and whether they recommend the reappointment of the auditors.
- Provide the Board a recommendation as to whether the annual financial statements and management's discussion and analysis, the financial information contained in the annual results news release and annual report to shareholders, and the financial information and disclosure of Audit Committee information contained in the AIF should be approved.
- Recommend to the Board each year the retention or replacement of the external auditors and their compensation.

### **Meeting Prior to Release of First Quarter Results (May)**

- Obtain information on any changes in financial reporting requirements that may affect the current year's financial statements.

- Review interim financial statements, interim management's discussion and analysis, the interim review report of the external auditors, and the financial information contained in the interim results news release and interim report to shareholders with the Corporation's senior officers and the external auditors and provide recommendations to the Board for their approval prior to their release.
- Review and confirm the scheduled filing of the interim certifications by the Corporation's CEO and CFO of the interim financial statements.
- Obtain information on how the Corporation's senior officers monitor the effectiveness of the Corporation's financial reporting controls. Inquire into any significant changes planned regarding systems or controls within the next year.
- Review reports from senior officers outlining any significant changes in financial or other risks facing the Corporation.
- Review the management letter of the external auditors and the Corporation's responses to the suggestions made.

#### **Meeting Prior to Release of Second Quarter Results (August)**

- Review interim financial statements, interim management's discussion and analysis, the interim review report of the external auditors, and the financial information contained in the interim results news release and interim report to shareholders with the Corporation's senior officers and the external auditors and provide recommendations to the Board for their approval prior to their release.
- Review and confirm the scheduled filing of the interim certifications by the Corporation's CEO and CFO of the interim financial statements.
- Review reports from senior officers outlining any significant changes in financial or other risks facing the Corporation.

#### **Meeting Prior to Release of Third Quarter Results (November)**

- Review interim financial statements, interim management's discussion and analysis, the interim review report of the external auditors, and the financial information contained in the interim results news release and interim report to shareholders with the Corporation's senior officers and the external auditors and provide recommendations to the Board for their approval prior to their release.
- Review and confirm the scheduled filing of the interim certifications by the Corporation's CEO and CFO of the interim financial statements.
- Review reports from senior officers outlining any significant changes in financial or other risks facing the Corporation.
- Review the terms of engagement of the external auditors and the audit planning summary.

- Obtain summaries of complex financings and other significant transactions, and other potentially difficult matters whose treatment in the annual financial statements merits advance consideration.
- Obtain draft skeleton financial statements and draft notes to financial statements and assess, on a preliminary basis, the reasonableness of the financial statements in light of presentations by the chief financial officer.

### **Meeting(s) to be called as Required**

- Review the financial information contained in any prospectus or other offering document prior to its release.
- Review any significant accounting policy changes.
- If there is a plan to change auditors, review all issues related to the change and the steps planned for an orderly transition.
- Review any new appointment to the position of chief financial officer or to any other key executive position with financial reporting responsibilities.

### **Standard Agenda Items**

- Questions for Management and Auditors
- Questions for Private Discussion with External Auditors (Members of Management not present)
- Questions for Private Discussion with Management (External Auditors not present)
- Report from the Chair of the Committee on (a) any complaints received by the Corporation regarding accounting, internal accounting controls, or auditing matters, and (b) any confidential, anonymous submissions by employees of the Corporation of concerns regarding questionable accounting or auditing matters (Management and External Auditors not present).