

# REVEALING VALUE

ANNUAL  
REPORT

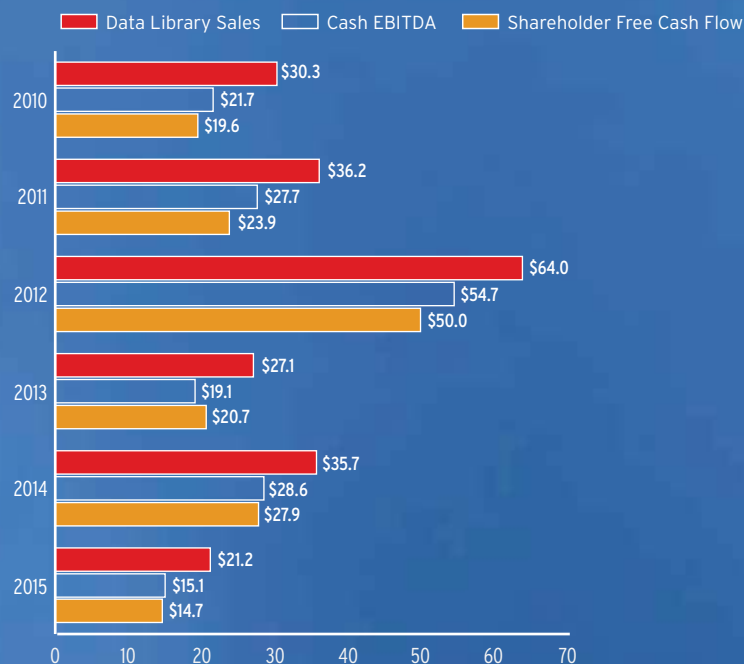
2015

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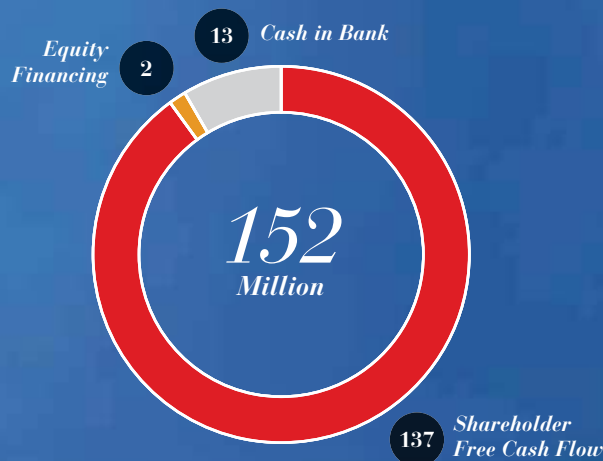
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The Annual General and Special Meeting of Shareholders of Pulse Seismic Inc. will be held on Wednesday, May 18, 2016 at 3:00 p.m. MDT in the Cardium Room of the Calgary Petroleum Club, located at 319 - 5th Avenue S.W., Calgary, Alberta.

## DATA LIBRARY SALES, CASH EBITDA AND SHAREHOLDER FREE CASH FLOW (\$Millions)



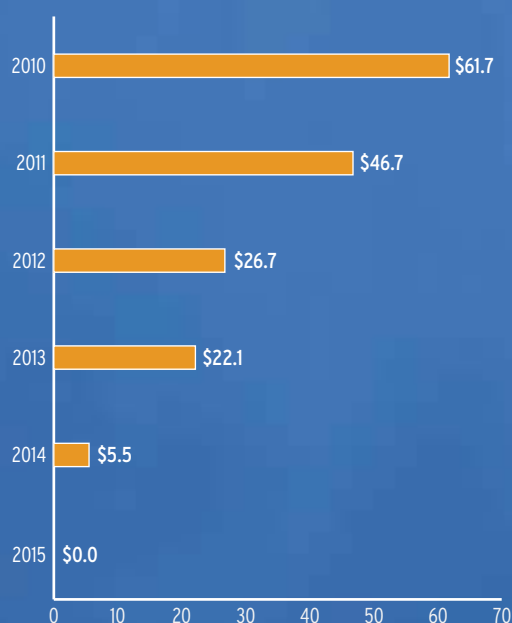
## FUNDS AVAILABLE 2011-2015 (\$Millions)





## REDUCING LONG-TERM DEBT (\$Millions)

(excluding deferred financing cost)



REVEALING VALUE

## IN OUR FINANCIAL SURVIVABILITY

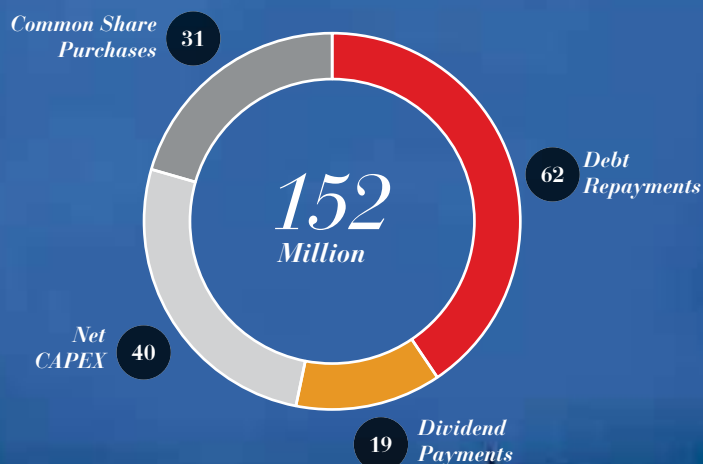
*For the North American energy services sector, survivability became the name-of-the-game in 2015.*

Like the rest of the industry, Pulse Seismic Inc. was caught in the downdraft of low commodity prices, and the Company generated significantly lower revenue and profitability year-over-year. But as a pure-play provider of seismic data, Pulse greatly outperformed the overall energy services sector in 2015 and continued to generate positive cash EBITDA and shareholder free cash flow - plus a 71 percent cash margin.

How? Through declining costs, a clean balance sheet and clear-headed capital allocation. Entering the current downturn in late 2014, Pulse was already a low-cost business. Entering 2016, our costs are much lower still. Pulse's experienced and time-tested management team in 2015 trimmed the workforce, further reduced G&A, repaid all remaining debt, reduced common share buybacks and suspended the dividend.

The year-over-year impact is dramatic: Pulse will require just \$6 million in 2016 to cover its cash costs, plus whatever we choose to spend on share buybacks. We are debt-free, with cash in the bank. In difficult times, there is great value in financial survivability.

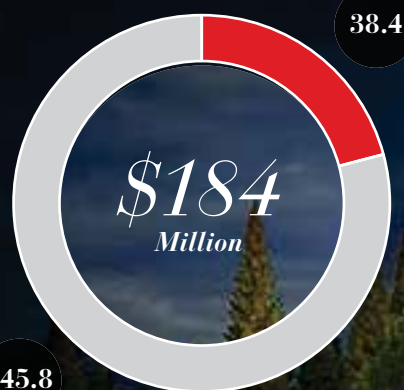
## FUNDS ALLOCATED 2011-2015 (\$Millions)



Pulse's cash G&A and operating **costs have decreased year-over-year.** With the discretionary cost of dividends having been suspended and an estimate of **\$6 million** in combined cash costs for 2016, data library sales of **over \$6 million** will generate positive shareholder free cash flow.

## SEISMIC DATA LIBRARY SALES 2011-2015 (\$Millions)

2D Seismic ●  
3D Seismic ●

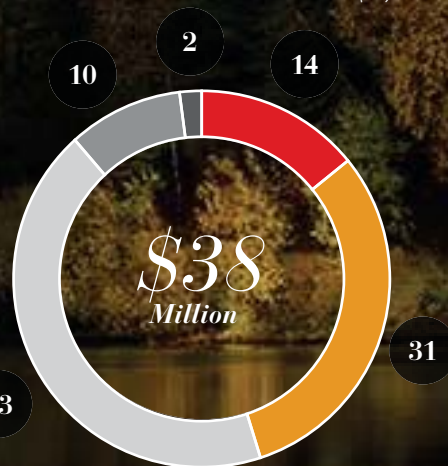


Total **2D** seismic data sales from 2011 – 2015 represented **21 percent** of total data library sales.

Pulse's counter-cyclical addition in January 2016 of a seismic dataset totalling **107,000 net km** increased the Company's **2D** coverage by **32 percent**, to **447,000**.

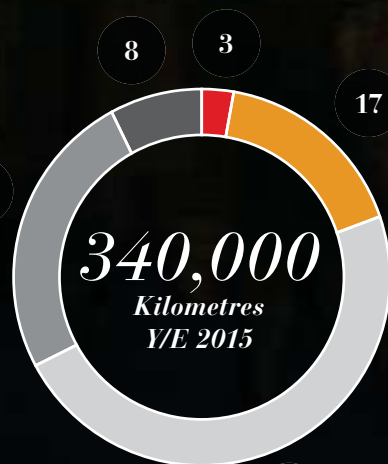
## 2D DATA LIBRARY SALES 2011-2015 BY ERA OF SEISMIC RECORDING (%)

2000s ●  
1990s ●  
1980s ●  
1970s ●  
1960s ●



## 2D DATA OWNED BY ERA OF SEISMIC RECORDING (%)

2000s ●  
1990s ●  
1980s ●  
1970s ●  
1960s ●



## IN THE GROWTH OF OUR ASSET

*Pulse is a growth company. Our core asset is our digital 2D and 3D seismic data library. Seismic data is integral to oil and gas exploration in the Western Canada Sedimentary Basin.*

We increase our revenue-generating capacity by adding high-quality datasets in attractive coverage areas. More data increases the chances that when an oil and gas company calls and asks whether we have seismic data coverage in the area they need, our answer is "Yes!"

The seismic data library's value lies in its ability to make sales over and over and generate high-margin recurring revenue over many years. It's not about the balance-sheet entry. Pulse's seismic data library is largely amortized, with a book value of just \$48 million at year-end 2015. But its estimated replacement cost is well over \$2 billion. In addition, increasing environmental restrictions have made it very difficult to replicate many historical seismic surveys.

The high cost and difficulty of replacement are two reasons our data library is so attractive to oil and natural gas producers: licensing Pulse's data is far more cost-effective than customers shooting their own new data. It's far faster and more convenient, too. The data is available almost instantly and the customer can easily widen a given area's coverage by licensing more of our data.

Seismic data does not deteriorate or expire. Thanks to modern reprocessing and interpretation software, raw data shot up to 50 years ago remains competitive with brand-new data. The data is electronically stored on ultra-modern servers, with security and backup, and the library itself incurs almost zero maintenance and operating costs. It can generate value anytime a customer calls.

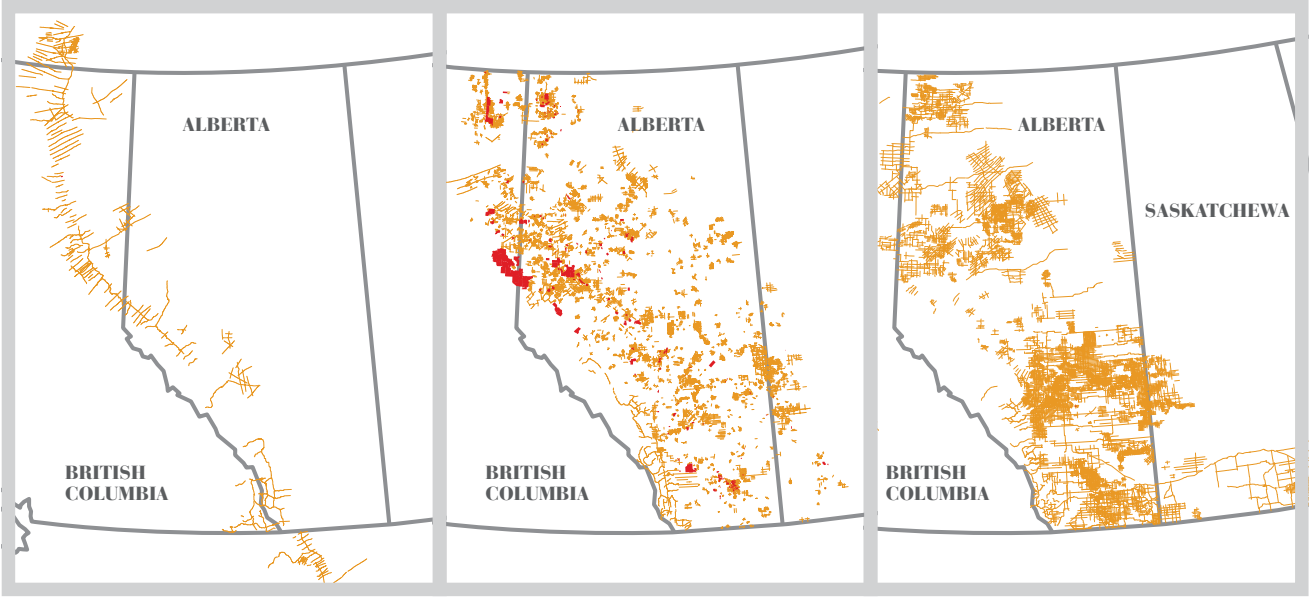
The dramatic growth in Pulse's data library has come about in two main ways:

1. Pulse has continually sought opportunities to acquire large datasets that are high in technical quality, offer coverage over active oil and gas drilling areas and are priced attractively.
2. Pulse partners with customers in shooting new 3D seismic surveys. The customers pre-fund the majority of the capital cost and receive a licensed copy of the new survey. Pulse organizes and manages the survey, contributes a portion of the capital cost and retains ownership of the data, making it available for re-licensing to generate recurring revenue.

**29 percent** of Pulse's 2015 revenue came from sales of **2D data**.



## MAJOR SEISMIC DATA ACQUISITIONS



### 2006 Foothills 2D Data Acquisition

Cost	\$32.5 million cash
2D km	14,400
Total Value	\$32.5 million

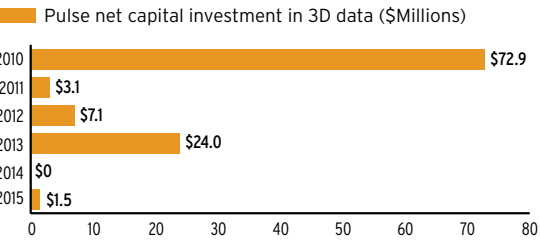
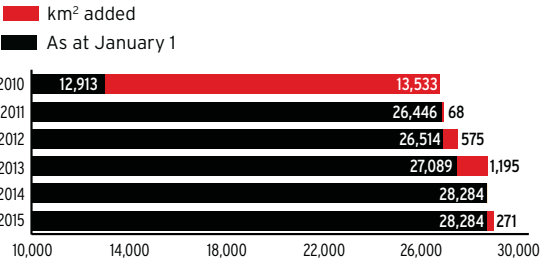
### 2010 3D and 2D Data Acquisition

Cost	\$55.5 million cash plus 14.3 million Pulse common shares
2D km	81,997
3D km <sup>2</sup>	13,461
Total Value	\$75.5 million

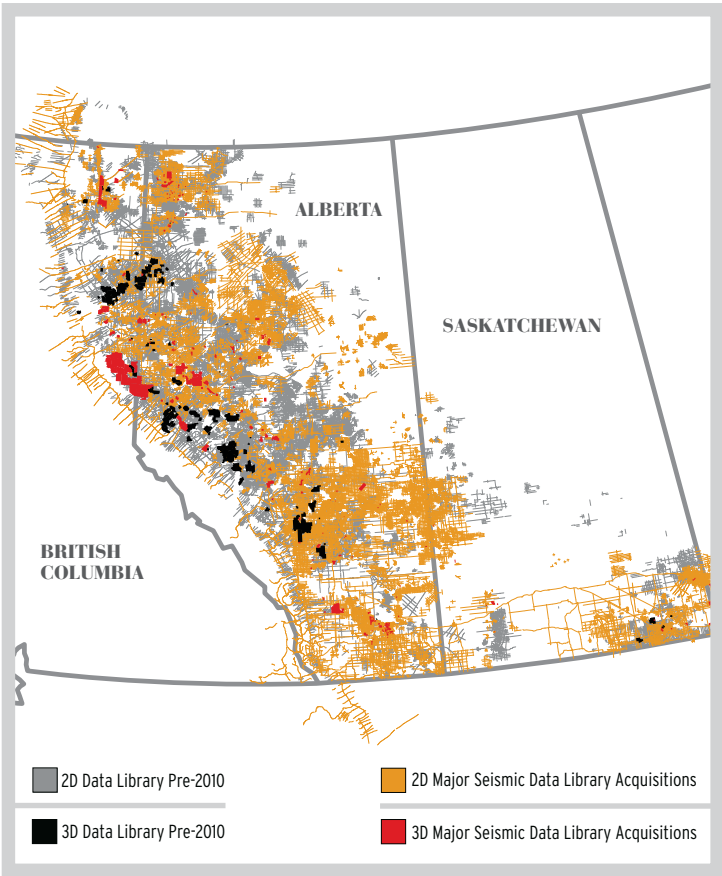
### January 2016 2D Data Acquisition

Cost	\$2.15 million cash plus 670,000 Pulse common shares
2D km	107,000
3D km <sup>2</sup>	58
Total Value	\$3.65 million

## 3D SEISMIC DATA ACQUISITIONS

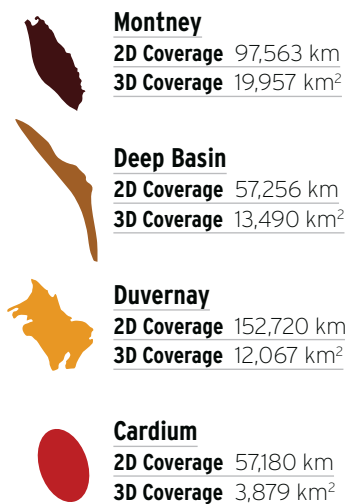


With the addition of the January 2016 **2D** data library purchase, Pulse has increased its **2D** coverage by **73 percent** since the end of 2009. Pulse's **3D** coverage has increased by **121 percent** through a combination of acquisitions and participation surveys in that same time period.



Total data library coverage area	>7 million surface acres
Total 2D data	447,000 km
Total 3D data	28,613 km <sup>2</sup>
Estimated replacement value	>\$2 billion

## KEY DATA LIBRARY AREAS



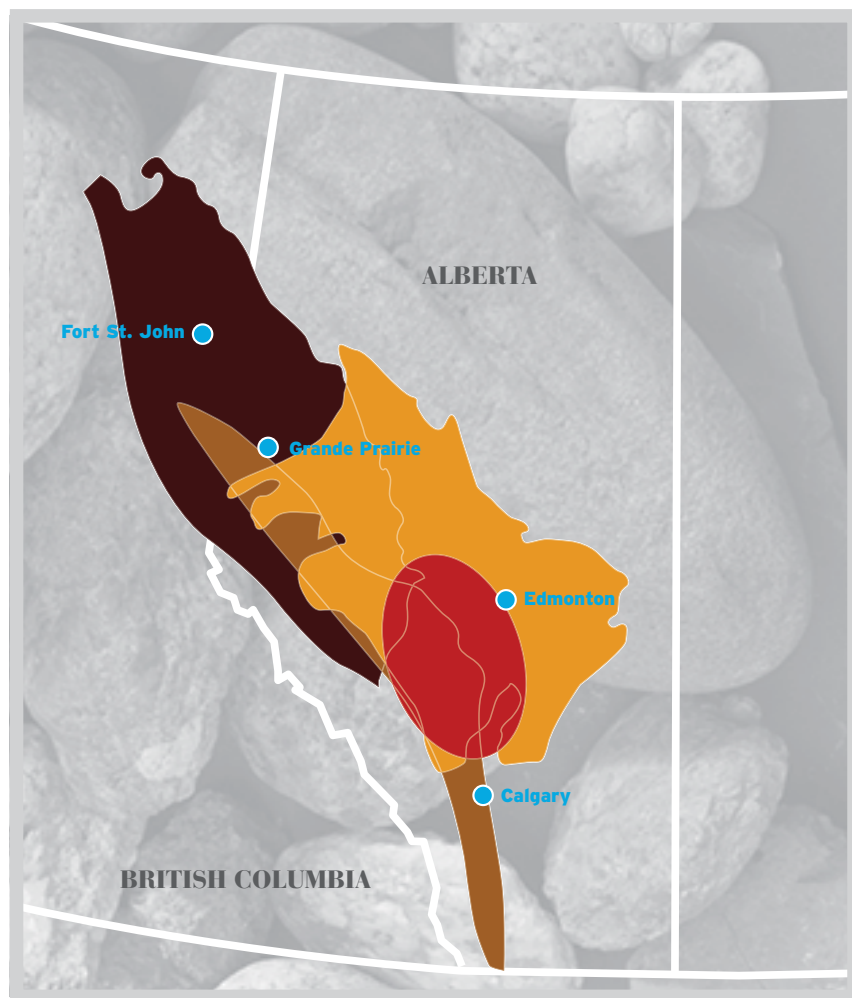
Total 3D Data Library

**28,613 km<sup>2</sup>**

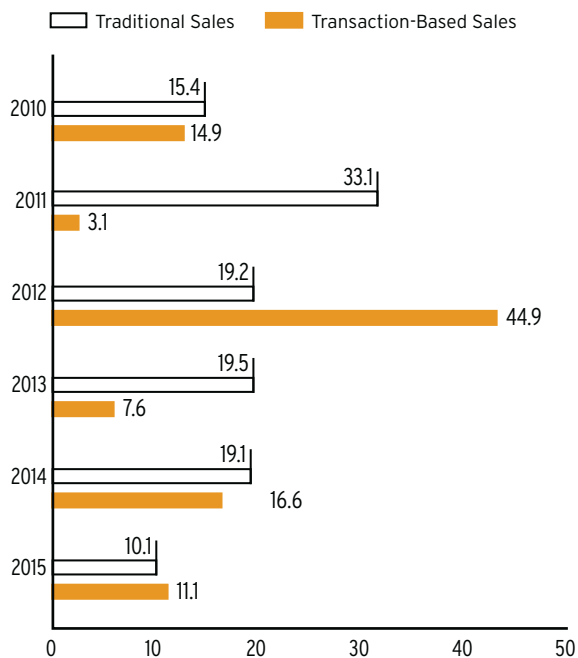
Total 2D Data Library

**447,000 km**

In 2015, **52 percent** of total seismic data library sales were transaction-based.



## SALES BREAKDOWN (\$ MILLIONS)





## IN THE WAY WE GENERATE REVENUE

*Pulse offers the second-largest licensable seismic dataset in western Canada. Overall coverage ranges from the Far North to Montana and from northeast and southeast B.C. to Manitoba.*

The 3D seismic coverage is concentrated in more recently developed “unconventional” reservoirs such as the Deep Basin, Cardium, Montney, Duvernay and others, which lie in a broad corridor stretching nearly 1,500 km along western Alberta and northeast B.C.

Pulse generates two main categories of data library sale. The first is the “regular” or “traditional” sale, in which oil and gas producing companies make a straightforward purchase of data related to drilling in new areas or new reservoirs. The second occurs as the result of the exchange of assets or companies as the highly competitive energy sector makes deals and additional international companies enter or expand in Western Canada. Sales triggered by such deal-making are known as “transaction-based” sales.

### *Traditional Sales Reflect Oil and Natural Gas Exploration and Development*

It's technically very difficult and highly uncommon to drill for oil or natural gas without first using 2D and/or 3D seismic to gain an understanding of the geological zones of interest. Companies paying licensing fees to access the enormous amounts of high-quality data in Pulse's library generate Pulse's “regular” or “traditional” sales.

Traditional sales tend to rise during periods of vigorous capital investment, high rates of drilling and continuous churn of assets and land positions. They can be especially high when large numbers of junior and intermediate-sized companies are active, as these companies tend not to have large legacy datasets or the capital for expensive proprietary shoots. In 2015, traditional sales fell to a cyclical low along with industry capital investment, drilling and mineral lease acquisitions.

### *Transaction-Based Sales Reflect Corporate-Level Activity in the Oil and Natural Gas Industry*

Transaction-based seismic data library sales have become essential to Pulse's business, as the graph at left illustrates. Transaction-based sales are a consequence of changing company structures and sizes and the movement of assets between companies. They can reflect the in-flow of new investment capital into western Canada or a re-ordering of corporate priorities as commodity prices, industry conditions or the regulatory and fiscal regime changes. Transaction-based sales can be very large, but are impossible to predict. The three main types of transaction-based sales are explained at right.

REVEALING  
VALUE





## TRANSACTION-BASED SALES HAPPEN IN THREE MAIN WAYS



### Partnerships and Joint Ventures

**ASSET OWNER:** Holds a prospective or proven oil or natural gas property, but needs additional capital or expertise for further development, wants to reduce risk or faces expiring mineral leases and needs outside resources to commence drilling immediately.

**NEWCOMER:** A partner or joint venturer – often more than one – agrees to participate in the play through partial ownership or other consideration. The group pools the assets, expertise and capital.

**WHAT HAPPENS?** Under Pulse's licensing agreements, any new technical or operational participant must purchase a data licence.

**BENEFIT TO PULSE:** Selling a second licence is very likely.



### Corporate Merger/Acquisition

**ASSET OWNER:** A corporation needs to generate immediate shareholder value and places itself for sale, or is subject to a hostile take-over.

**NEWCOMER:** Pulse's seismic data becomes available to the acquiring company at a discount.

**WHAT HAPPENS?** The event triggers a change-of-control clause in Pulse's licensing agreement, and the buyer has 30 days to act.

**BENEFIT TO PULSE:** With a low likelihood of the acquirer having data over this area (especially for a new entrant to Western Canada), Pulse has good prospects to generate transfer fees.



### Asset Sale

**ASSET OWNER:** Holds a prospective or producing oil or natural gas property that it wishes to monetize to reduce risks and/or raise capital for development elsewhere.

**NEWCOMER:** Purchases the property as a raw or producing asset, or purchases partial mineral rights to particular zones.

**WHAT HAPPENS:** The new asset owner will need to make arrangements for any seismic data they might need, because seismic licenses do not transfer with the asset.

**BENEFIT TO PULSE:** The asset sale brings in a potential new purchaser of the licenced data previously held by the asset seller.

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In 2015, **48 percent** or \$10.1 million of Pulse's \$21.2 million in revenue came from **traditional sales** of seismic data.

# FINANCIAL HIGHLIGHTS

(thousands of dollars except per share data,  
number of shares and kilometres of seismic data)

	Three months ended December 31,		Year ended December 31,	
	2015	2014	2015	2014
Revenue				
Data library sales	8,759	8,385	21,214	35,743
Participation surveys	-	-	3,220	-
Total revenue	8,759	8,385	24,434	35,743
Amortization of seismic data library	4,979	5,279	22,836	22,507
Impairment loss	937	-	937	-
Net earnings (loss)	658	824	(5,308)	3,478
Per share basic and diluted	0.01	0.01	(0.09)	0.06
Cash provided by operating activities	2,901	13,122	17,094	27,985
Per share basic and diluted	0.05	0.23	0.30	0.47
Cash EBITDA <sup>(a)</sup>	7,043	6,661	15,121	28,615
Per share basic and diluted <sup>(a)</sup>	0.13	0.12	0.27	0.49
Shareholder free cash flow <sup>(a)</sup>	6,971	6,515	14,745	27,858
Per share basic and diluted <sup>(a)</sup>	0.12	0.11	0.26	0.47
Capital expenditures				
Participation surveys	-	36	3,959	36
Seismic data purchases, digitization and related costs	750	183	933	733
Property and equipment additions	-	43	14	64
Total capital expenditures	750	262	4,906	833
Weighted average shares outstanding				
Basic and diluted	56,041,324	57,865,941	56,628,524	58,957,072
Shares outstanding at period-end			55,592,689	57,247,843
Seismic library				
2D in kilometres			339,991	339,991
3D in square kilometres			28,555	28,284

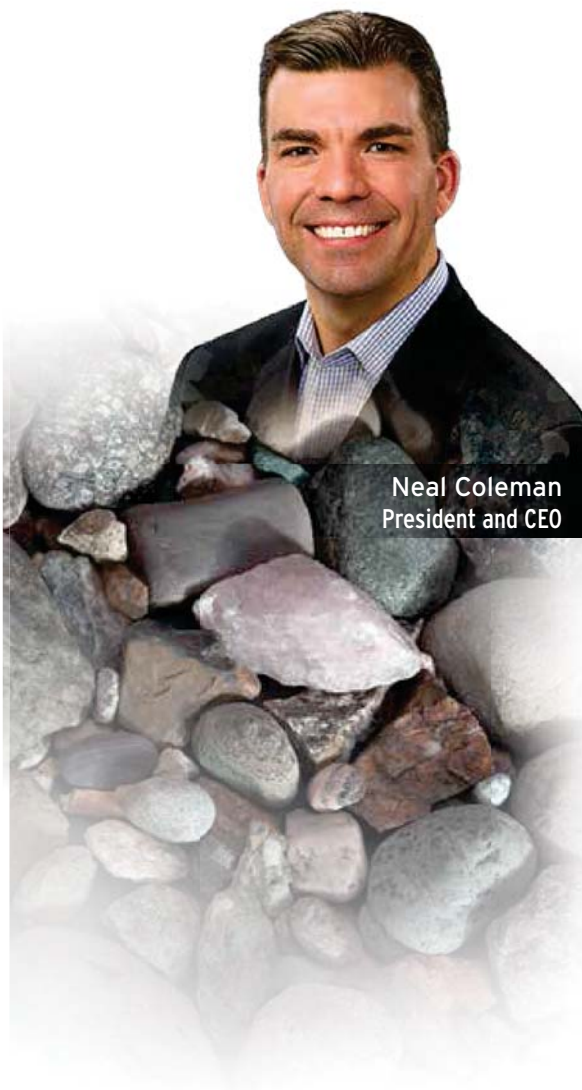
## FINANCIAL POSITION AND RATIOS

(thousands of dollars except ratios)	December 31, 2015	December 31, 2014
Working capital	4,996	5,296
Working capital ratio	4.44:1	2.79:1
Total assets	54,618	75,482
Long-term debt	-	5,367
TTM cash EBITDA <sup>(b)</sup>	15,121	28,615
Shareholders' equity	45,389	58,401
Long-term debt to TTM cash EBITDA ratio	0.00:1	0.19:1
Long-term debt to equity ratio	0.00:1	0.09:1

(a) Non-GAAP financial measure defined in the Management's Discussion and Analysis.

(b) TTM cash EBITDA is defined as the sum of the trailing 12 months' cash EBITDA and is used to provide a comparable annualized measure.





Neal Coleman  
President and CEO

*In a year of weak commodity prices, steep reductions in oil and natural gas capital spending and poor financial performance among energy services companies, Pulse delivered positive cash EBITDA and shareholder free cash flow and entered 2016 debt-free. Although the Company's financial results were significantly lower year-over-year, with seismic data library sales below the previous economic trough in 2009, we made the best of a challenging situation, further reducing costs and paying down debt, and outperformed most of the energy services sector.*

With low commodity prices, a weak industry outlook and no sales visibility, it would be easy to dwell on the negative. We are not doing so. Pulse is firmly positioned to survive an extended downturn: costs are at a record low, we have no capital commitments or debt, and there is no erosion in the pricing of our core product – seismic data. More than that, we are able to act on opportunities for counter-cyclical acquisitions to enlarge our main asset and expand future revenue-generating capacity.

While we are intent on carefully managing the challenges of the present, we also continue to think about the future. That is because Pulse has value: value in our asset, the seismic data library; value to our large number of customers across Western Canada, as well as new entrants to our resource basin; and value to our shareholders. We believe investors are increasingly looking for value, and our intention is to generate value over the long term.

### *Value in Our Asset*

Pulse has approximately 7 million surface acres of 2D and 3D seismic coverage across Western Canada with 3D coverage concentrated on the most active unconventional plays in northwest Alberta and northeast B.C. We offer the premium licensable seismic dataset in Western Canada, and its long-term value rests on these key attributes:

- High-quality seismic data does not deteriorate or expire. It remains useful indefinitely. Improvements to seismic processing and interpretation software can, in fact, make vintage data more useful over time;
- Seismic data can be relicensed over and over, generating recurring revenue for decades;
- Well-situated data in areas with multiple hydrocarbon-bearing zones can allow the same dataset to be used repeatedly by different customers pursuing different zones under the same land area;
- Seismic data providers typically do not cover the same areas. This gives each dataset unique value based on its technical quality and geographical coverage, and greatly reduces price competition; and
- Pulse's seismic library is largely amortized, but the total cost to re-acquire the same data through new shoots is estimated at over \$2 billion. This creates extremely high barriers to entering this business.

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**Pulse's Board of Directors and executive management are always thinking about how to make the best use of the Company's internal capital in furtherance of enhancing long-term shareholder value.**

Energy services providers generally suffer pricing pressure and margin erosion during a downturn. Although Pulse's sales declined in 2015, our data's pricing did not experience significant pressure. The average price per licensed kilometre actually went up and our margin declined only slightly to 71 percent. Our customers continue to see value in licensed seismic data.

Seismic data's enduring value creates the foundation for long-term recurring sales. Having more data increases a provider's future revenue-generating capacity. This is why Pulse continually seeks opportunities to grow its library. Our purchase of a large dataset from Divestco in 2010 generated \$74 million or 134 percent of its cash purchase price and nearly 100 percent of its total value of \$76 million by year-end 2015, with the \$45 million borrowed to fund that acquisition fully repaid. This performance demonstrates the long-term revenue-generating value of Pulse's primary asset and explains why we conducted a further acquisition in early 2016.

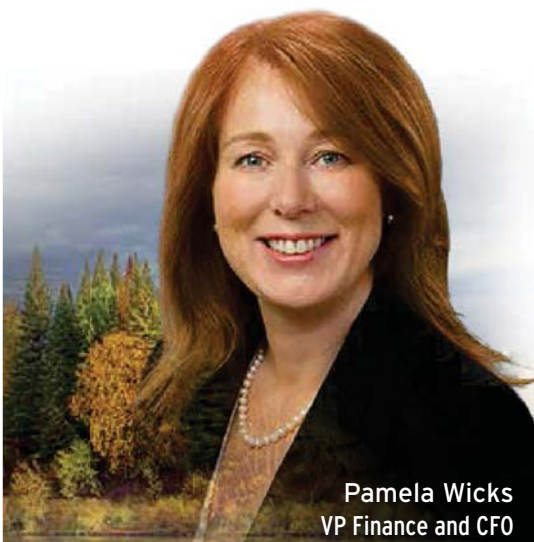
### *Value in Our Capital Allocation*

The main uses of Pulse's capital are:

- Acquiring new datasets;
- Funding the Company's portion of new 3D participation surveys;
- Repurchasing common shares;
- Repaying debt; and
- Paying dividends.

Pulse's Board of Directors and executive management are always thinking about how to make the best use of the Company's internal capital in furtherance of enhancing long-term shareholder value. Capital allocation guided last October's decision to suspend the dividend. We concluded it would be both more prudent and more forward-looking to preserve cash, repay debt and continue buying back shares while preserving our ability to act on counter-cyclical growth opportunities during a period of attractive valuations. Since suspending the dividend, we have renewed the Normal Course Issuer Bid (NCIB), repaid all remaining debt, purchased a large dataset at extremely good valuation without incurring debt, and still have cash in the bank.

In January 2016 we closed the acquisition of 107,000 km of 2D data plus 58 square km of 3D data for \$2.15 million in cash plus approximately 670,000 Pulse shares valued at \$2.24 each. While the total consideration of \$3.65 million makes this seem like a small deal, it increases Pulse's 2D library by 32 percent for just \$34 per km. We are pleased to add so much 2D data at such low cost. Over the past five years, Pulse has averaged \$7.7 million per year or nearly \$39 million from 2D sales.



**Pamela Wicks**  
VP Finance and CFO



The NCIB also represents value in capital allocation. Since late 2006 when the NCIB was put in place, Pulse has repurchased 15.6 million shares, including 1.6 million in 2015. Value investors understand that removing this many shares from the market has materially increased Pulse's financial results and value per share. Share buybacks help to stabilize the share price, generate a better than dollar-for-dollar return and focus Pulse's following on committed, long-term shareholders. We consider this practise among our best uses of capital, with the further benefit of flexibility to quickly scale back or suspend purchases if we see a higher-return use for our cash.

### *Value in Our Business Model*

The value in Pulse's business model stems from our low costs, our asset's continuing value and our business's built-in optionality. It becomes especially clear during a cyclical trough.

Traditional energy service companies depend on capital-intensive equipment fleets and labour-intensive operations to generate revenue. Navigating downturns becomes very difficult. Pulse's data library, by contrast, is a digital asset that incurs almost zero maintenance or operating costs. Our ability to generate revenue is independent of capital spending and incremental manpower. Pulse is more like a data company than a traditional energy services company.

While we want to grow for the long term, we never "grow at any cost" and we avoid acquisitions that fail our criteria for data quality, coverage, industry activity and valuation. Similarly, we only engage in participation surveys when there is solid customer pre-funding and the survey area meets multiple criteria, most important the high likelihood of future re-licensing. We seek areas where multiple factors will encourage and facilitate exploration and development activity by numerous companies. These include multiple geological zones of interest, fragmented and/or overlapping land positions, available gas processing and take-away pipeline infrastructure and a good mix of active companies. Over the past year we have not seen many opportunities for new 3D participation surveys that meet enough of these criteria. We are optimistic that new opportunities will come along and confident that previous investments in 3D data will generate recurring revenue.

The data library and the nature of licensing agreements enables Pulse to generate both traditional and transaction-based sales throughout the cycle (illustrated and explained on pages 6 and 7). In these times, we are becoming even more customer-focused in our business development approach. Instead of lowering our basic pricing, we have been lowering the customer's barriers to selecting Pulse's data by demonstrating the value of the specific data to the customer's individual project. By creating conditions for mutual success, Pulse's business model can remain a revenue-generating engine even in a downturn.

### *Value in Our Financial Management and Performance*

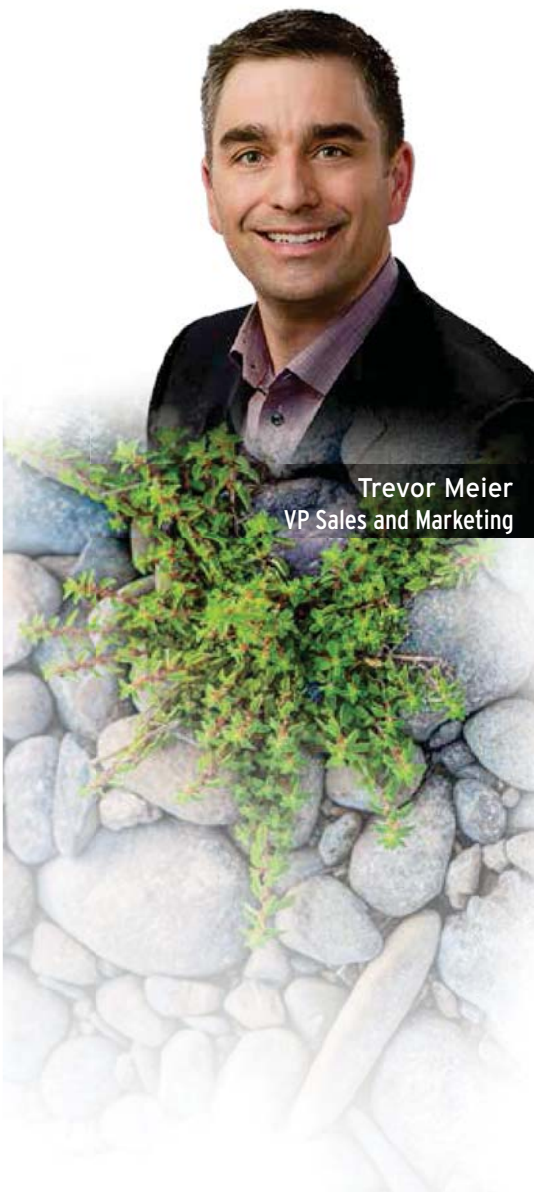
Entering 2015 we anticipated a weaker year than 2014. Following the first quarter's sales of only \$1.3 million, we made preparations for an extended downturn. The second and third quarters were also weak, followed by a strong fourth quarter that slightly outperformed the fourth quarter of 2014. Fourth quarter revenue largely comprised traditional sales; despite the seemingly ripe M&A environment, bid-ask spreads remained high and the weak deal flow generated few transaction-based sales.

During the year we made the difficult decision to reduce our team from 23 to 18 people. Decreasing annualized G&A and operating costs saved approximately \$1.2 million versus 2014 spending. Pulse continued to generate cash EBITDA and we used a portion to repay essentially all of our long-term debt of \$5.5 million, reducing interest costs. With the dividend suspension, Pulse's annualized cash costs declined to only \$6 million. That is less than half the level of 2014.

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**During the year we made the difficult decision to reduce our team from 23 to 18 people. Decreasing annualized G&A and operating costs saved approximately \$1.2 million versus 2014 spending.**



**Trevor Meier**  
VP Sales and Marketing

In Pulse, investors see a company that has focused on survivability, has the financial flexibility to continue growing, generates free cash flow at remarkably low revenue, and stands to generate shareholder value when its sales pick up again – all with fewer shares outstanding.

The approximately 25 percent decline in the Company's share price was significantly less than for most energy services and many E&P companies, and our stock ended the year trading at a higher cash EBITDA multiple. We believe the capital markets recognized the benefits of Pulse's debt repayment, dividend suspension, cost cutting, repurchase of shares and relative financial outperformance. Indeed, one financial analyst wrote that Pulse is the only company he was aware of that suspended its dividend but continues to buy back shares.

Our capital allocation decisions have received strong shareholder support. We believe this reflects a common theme amongst the holders of a large percentage of Pulse's shares, that some investors continue to seek value in a volatile market. In Pulse, they see a company that has focused on survivability, has the financial flexibility to continue growing, generates free cash flow at remarkably low revenue, and stands to generate shareholder value when its sales pick up again – all with fewer shares outstanding.

### *Financial highlights from 2015:*

- Seismic data library sales of \$21.2 million, of which 48 percent was traditional sales, an overall decrease of 41 percent from 2014;
- Cash EBITDA of \$15.1 million, down by 47 percent from \$28.6 million in 2014, with cash EBITDA per share decreasing by 45 percent to \$0.27 from \$0.49 per share basic and diluted;
- Shareholder free cash flow of \$14.7 million compared to \$27.9 million in 2014, with shareholder free cash flow per share down by 45 percent year-over-year to \$0.26 from \$0.47 per share basic and diluted;
- Data library amortization expense of \$22.8 million, essentially unchanged from 2014;
- Approximately 67 percent of revenue generated from fully amortized data;
- Repurchase of 1.6 million common shares, 3 percent of the total outstanding at year-end 2014, at a cost of approximately \$4.1 million, averaging \$2.50 per share;
- Quarterly dividends of \$0.02 per share for the first, second and third quarters, totalling \$3.4 million paid to shareholders in 2015; and
- Repayment of all of Pulse's long-term debt (\$5.5 million at December 31, 2014). At December 31, 2015 Pulse had short-term borrowing of \$222,000. At January 15, 2016 the Company was debt-free with a cash balance of \$1.4 million.

### *Value in the Operational Playing Field*

Pulse's better-than-expected fourth quarter included a large component of traditional sales. One large transaction included a transfer fee but the acquiring company also elected to expand its coverage around the acquired assets, enlarging the deal through a traditional sale. Another sale was 100 percent exploration-driven. And several smaller 3D data sales were additions to survey areas the customer already owned.



Exploration and development activity continues even in the depths of the downturn, and Pulse's asset remains a useful tool to active companies. These are mainly larger companies that can afford to take a longer-term view of investment returns while acting opportunistically to add assets at favourable valuations.

Western Canada is often described as a "high-cost basin", but the unconventional resource revolution has unlocked enormous liquids-rich gas plus some light oil reservoirs that offer among the lowest supply costs and/or best returns in North America. These especially include the Montney, Deep Basin and Duvernay. One major investment bank ranked the Montney and Deep Basin as the number-one and number-two gas plays in North America by "profit-investment ratio".

According to one research report, in 2014 the Deep Basin delivered the largest production additions in the play's 35-year history, and significant drilling continued in 2015, with production growing to 4.5 bcf-equivalent per day. Gas production from the Montney has reached 4.8 bcf per day and production additions in 2014 were almost twice as high as in 2013. Another report calculated that the Montney's best zones have a full-cycle break-even price of just US\$0.50 per mcf, with other Montney areas at \$2.25 per mcf and the Deep Basin at \$2.50-\$2.75 per mcf. Another study concluded that 1.6 bcf per day of new supply can be brought on-stream from these plays at a gas price below \$2.25 per mcf.

My point is certainly not that we should expect fast-paced drilling at current prices, only that it would not require much higher gas prices to revive capital investment in Western Canada's better plays. Companies that were visionary and lucky enough to establish positions in these areas and proved their development models repeatable over multiple wells remain active. The associated activity is concentrated in a small geographical footprint that remains busy with rigs even at a time when Canada's drilling fleet is less than 25 percent utilized. These areas fall within Pulse's Alberta-B.C. Multi-Zone Corridor, where the Company offers strong 2D and 3D coverage and generated 40 percent of its 2015 sales.

### *Value in Our Future Positioning*

Pulse's short-term outlook is even more cautious than one year ago. So far in 2016, mineral lease auctions or "land sales" in Alberta and B.C. are at record lows and drilling rig utilization is abysmal. Our seismic data library sales do not fall under long-term contracts that generate known recurring revenues. Pulse begins each year at zero and needs to work on every sale. Traditional seismic data library sales for the year could be as low as or even lower than in 2015.

We do expect far more mergers and acquisitions to close this year because commodity prices remain low, cash flows of many companies have collapsed, debt ratios have soared and banks may begin forcing the previously high bid-ask spreads to close. Last year, energy sector M&A spending in Western Canada actually declined by 50 percent and the deal count fell from 111 to 60. According to one research report, by mid-January this year there were 49 asset packages covering over 4 million acres and 250,000 boe per day of production. More M&A activity will be highly positive, although it still won't bring visibility to Pulse's revenues. Transaction-based sales are unpredictable because of the variables in the transactions themselves, ranging from whether the acquiring company already holds the same data to whether it wishes to drill on the acquired assets.

Within the current global context of volatility and weakness in many sectors and regions, however, I do not believe investors are expecting short-term miracles. Value investors are focused on the longer term – and so is Pulse. With our annual cash costs of approximately \$6 million, including essentially zero interest, and no dividend, we will make the most of every revenue dollar and can continue to generate shareholder free cash flow and buy back

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**With our annual cash costs of approximately \$6 million, including essentially zero interest, and no dividend, we will make the most of every revenue dollar and can continue to generate shareholder free cash flow and buy back shares at low revenue. We will weather the storm and, more important for the long term, we have the financial flexibility to grow the seismic data library.**

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We will continue to seek out the next transformational acquisition – including legacy datasets owned by E&P companies seeking to monetize assets – thereby building our database, adding value to our asset and further increasing revenue-generating capacity.

shares at low revenue. We will weather the storm and, more important for the long term, we have the financial flexibility to grow the seismic data library. Pulse's revised \$30 million credit facility is undrawn and has an accordion feature for expansion to \$70 million.

Our long-term goal is to become Western Canada's largest licensable data library. The January acquisition takes us part of the way. The new dataset permanently strengthens Pulse's revenue-generating capacity, and we are confident it will generate future sales. We will continue to seek out the next transformational acquisition - including legacy datasets owned by E&P companies seeking to monetize assets - thereby building our database, adding value to our asset and further increasing revenue-generating capacity. Growth positions Pulse to benefit when there is even a modest upturn. Our history demonstrates that our revenues can increase significantly with virtually no increase in operating costs, making Pulse a very high-margin business.

What might revive field activity and demand for seismic data? Foundational are supportive government policies, including the political drive to enhance western Canada's energy export capacity. Major capital projects in Canada have fallen somewhat out of political favour, yet so much of Canada's economic potential depends on a healthy energy sector. A downturn is, in fact, the most favourable time from the standpoint of labour costs and availability to construct major projects. Bluntly, the energy sector cannot thrive without a fiscal regime, particularly at the provincial level, that encourages investment, growth, drilling, land acquisition - the full cycle of oil and gas exploration and development.

In addition, we will require higher commodity prices. Higher natural gas prices would be especially helpful because Western Canada's energy sector is more responsive to changes in the gas price, a gas-related upturn tends to involve junior and intermediate companies that need seismic, and gas exploration requires a greater land area, which requires more seismic coverage. Higher gas prices would trigger private equity-funded activity, renewed interest by foreign companies, experienced local management teams launching or expanding companies, and established producers ramping up activity.

While we expect traditional sales of seismic data to remain low during this downturn, as we have seen in recent years, transaction-based sales can significantly improve our results at any time. As we wait for changes in the fundamentals which will create a more supportive business environment, we are positioned to continue to generate value for shareholders.



***Neal Coleman***

President and Chief Executive Officer  
March 18, 2016

# MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

**YEAR ENDED DECEMBER 31, 2015**

The following Management's Discussion and Analysis (MD&A) of the financial condition and results of operations of Pulse Seismic Inc. ("Pulse" or "the Company") for the year ended December 31, 2015 has been prepared taking into consideration information available to March 2, 2016 and is supplemental to the audited consolidated financial statements and related notes for the year ended December 31, 2015. Throughout this MD&A reference will be made in the text and tables to "2015", which refers to the year ended December 31, 2015, and to "2014", which refers to the year ended December 31, 2014.

The consolidated financial statements were prepared in accordance with International Financial Reporting Standards (IFRS) with comparative figures for the prior year. The consolidated financial statements and the MD&A were reviewed by Pulse's Audit Committee and approved by Pulse's Board of Directors. All financial information is reported in Canadian dollars. This MD&A discusses matters which Pulse's management considers material. Management determines whether information is material based on whether it believes a reasonable investor's decision whether or not to buy, sell or hold shares in the Company would likely be influenced or changed if the information were omitted or misstated. Readers should also read the cautionary statement in "Forward-Looking Information".

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## OVERVIEW

### **ABOUT PULSE**

Pulse is a market leader in the acquisition, marketing and licensing of two-dimensional (2D) and three-dimensional (3D) seismic data for the energy sector in Western Canada. 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.

Pulse owns the second-largest licensable seismic data library in Canada, currently consisting of approximately 28,600 net square kilometres of 3D seismic and 447,000 net kilometres of 2D seismic. The library extensively covers the Western Canada Sedimentary Basin (WCSB), where most of Canada's oil and natural gas exploration and development occur.

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.

### **SEISMIC DATA**

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 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 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, providing explorationists with valuable data on the potential of a particular area to yield oil or natural gas reserves, and assisting in the selection of drilling locations.

#### *2D Seismic*

2D seismic data is measured in linear kilometres and after processing provides a sectional illustration of geological formations 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 leads and prospects in oil and natural gas exploration areas.

#### *3D Seismic*

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.

## MISSION AND STRATEGY

Pulse is a pure-play seismic data library company focused on the acquisition, marketing and licensing of seismic data to the western Canadian oil and gas sector. The Company's business model is designed to generate a growing stream of cash flow by repeatedly licensing the data in its seismic data library to oil and natural gas companies. Pulse's strategy is to pursue growth opportunities that meet its financial and technical criteria while maintaining a low cost structure.

Current seismic processing and visualization software allows historical 2D and 3D data to be reprocessed and reinterpreted, thereby maintaining the technical usefulness and marketability of historical data and, through repeated licensing sales, generating recurring revenue. The Company is continuously seeking and evaluating opportunities to expand its data library by acquiring high-quality 2D and 3D datasets that cover some of western Canada's most prospective current exploration regions, are complementary to its current library, and are available at favourable valuations. This is accomplished in two ways. Pulse purchases proprietary rights to complementary 2D and 3D seismic datasets when the opportunity arises, and it partners with customers on surveys for new 3D seismic data. Participating customers are provided with a licensed copy while Pulse retains proprietary rights to the seismic data acquired. Pulse uses Company personnel to market and manage participation surveys, and subcontracts field acquisition activities to third parties.

## ECONOMIC ENVIRONMENT AND SEISMIC INDUSTRY

Pulse has been successful throughout prior commodity price cycles, due to its low cost structure and ability to generate a high level of shareholder free cash flow, a non-GAAP measure that the Company considers important in evaluating its financial performance.

Pulse's success depends on its ability to provide seismic coverage over the geographical areas associated with certain geological development areas or "play types" that the exploration and development sector focuses on in a given period. Activity in various play areas is driven by commodity prices, geological understanding and the economic application of available technologies. Pulse works continuously to enlarge its coverage over play areas in which numerous producers are active for sustained periods.

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 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.

Pulse's business results depend to a large extent on the level of capital spending on exploration activities by oil and natural gas companies. A sustained increase or decrease in the price of natural gas or crude oil, therefore, which could have a material impact on exploration activities, could also materially affect the Company's revenue, financial position, results of operations, cash EBITDA and shareholder free cash flow. The relationship is not direct, however, and the Company has generated high revenue in periods of weak oil and natural gas prices and vice-versa.

## KEY PERFORMANCE INDICATORS

The key performance indicators used by Pulse's management to analyze business results are seismic revenue, in total and broken down between data library sales and participation survey revenue, net earnings, cash provided by operating activities, cash EBITDA, shareholder free cash flow, and the long-term debt to trailing twelve-month (TTM) cash EBITDA ratio. The definitions of cash EBITDA and shareholder free cash flow are provided in "Non-GAAP Financial Measures and Reconciliations". The calculation of TTM cash EBITDA and long-term debt to TTM cash EBITDA ratio are provided in "Liquidity, Capital Resources and Capital Requirements".

Results for the key performance indicators for the three months and year ended December 31, 2015, with comparative figures for 2014, are set out in the following table

	Three months ended December 31,			Year ended December 31,		
(thousands of dollars except per share data and ratios)	2015	2014	Variance	2015	2014	Variance
Data library sales	<b>8,759</b>	8,385	374	<b>21,214</b>	35,743	(14,529)
Participation survey revenue	-	-	-	<b>3,220</b>	-	3,220
Total seismic revenue	<b>8,759</b>	8,385	374	<b>24,434</b>	35,743	(11,309)
Net earnings (loss)	<b>658</b>	824	(166)	<b>(5,308)</b>	3,478	(8,786)
Per share basic and diluted	<b>0.01</b>	0.01	0.00	<b>(0.09)</b>	0.06	(0.15)
Cash provided by operating activities	<b>2,901</b>	13,122	(10,221)	<b>17,094</b>	27,985	(10,891)
Per share basic and diluted	<b>0.05</b>	0.23	(0.18)	<b>0.30</b>	0.47	(0.17)
Cash EBITDA	<b>7,043</b>	6,661	382	<b>15,121</b>	28,615	(13,494)
Per share basic and diluted	<b>0.13</b>	0.12	0.01	<b>0.27</b>	0.49	(0.22)
Shareholder free cash flow	<b>6,971</b>	6,515	456	<b>14,745</b>	27,858	(13,113)
Per share basic and diluted	<b>0.12</b>	0.11	0.01	<b>0.26</b>	0.47	(0.21)
Long-term debt to TTM cash EBITDA ratio				<b>0.00:1</b>	0.19:1	(0.19):1

The significant reduction in data library sales for the year ended December 31, 2015 is the main factor contributing to the decline in nearly all of the Company's key performance metrics from the prior year's periods. The Company experienced low data library sales in 2015 due to drastic cutbacks in the energy-producing sector's capital spending. Both transaction-based sales and traditional sales were lower in 2015 than in 2014. See "Transaction-based vs. Traditional Sales: Six year history".

The improvement in the long-term debt to TTM cash EBITDA ratio from 0.19:1 at the end of 2014 to zero at year-end 2015 was a result of Pulse repaying all remaining long-term debt during 2015. Cash EBITDA decreased to \$15.1 million in 2015 from \$28.6 million in 2014.

The Company added 136 square kilometres of new high-quality 3D seismic data to the library through the completion of the Peco South 3D survey in west central Alberta, which commenced in January 2015 and was completed in March 2015. The Company recognized 100 percent of the survey revenue and the initial amortization expense related to this survey in the first quarter of 2015.

## CORPORATE HIGHLIGHTS

On December 16, 2015 the Company announced the annual renewal of its normal course issuer bid (NCIB) to purchase up to 3,509,326 common shares over the following year. During 2015, the Company purchased 1,625,400 (2014 - 2,101,277) common shares under the program at a weighted average price of \$2.50 per share (2014 - \$3.01), including commissions, for a total cost of approximately \$4.1 million (2014 - \$6.3 million). In total, since initiating the NCIB program in November 2006, the Company has purchased approximately 15.6 million common shares at a total cost of \$39.4 million, while also issuing 14.3 million shares to acquire a significant database in 2010. Management believes that its common shares may from time



to time be undervalued and that such purchases are in the interests of the Company and its shareholders. The NCIB is an integral part of Pulse's capital allocation strategy.

On January 18, 2016 the Company announced that it had extended its revolving credit facility for an additional year with a syndicate of Canadian banks. The Company elected to reduce the facility's available borrowing amount to \$30.0 million from \$50.0 million. Up to \$5.0 million of the revolving facility remains available as an operating line of credit. The three-year revolving credit facility's maturity date was extended to February 13, 2019. The accordion feature allowing the Company to increase the facility was increased from \$20.0 million to \$40.0 million leaving the total credit available at \$70.0 million.

On January 26, 2016 the Company completed the acquisition of approximately 107,000 net kilometres of 2D seismic data and 58 net square kilometres of 3D seismic data, increasing Pulse's 2D seismic data library by 31.5 percent from approximately 340,000 net kilometres to approximately 447,000 net kilometres. The acquisition includes data spread throughout the Western Canada Sedimentary Basin and is complementary to Pulse's existing data. The purchase price of \$3.65 million was funded through the issuance of 669,643 common shares plus \$2.15 million in cash.

In 2015, Pulse paid three quarterly dividends of \$0.02 per common share, totalling \$3.4 million for the year.

With lower period-over-period seismic data library sales associated with challenging market conditions and the strong possibility of an extended downturn, in November 2015 the Company suspended the regular quarterly dividend of \$0.02 per share.

## 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. 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 revenue also varies 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 can be easily accessed without environmental harm. In addition, the size and pre-funding levels of individual participation surveys can vary significantly.

## OUTLOOK

Pulse's short-term outlook is more cautious than one year ago. The Company's first quarter seismic data library sales are likely to be weaker than last year's very low level, and traditional sales for the year could well be lower than in 2015.

So far in 2016, oil and natural gas prices remain weaker than one year ago and mineral lease auctions or "land sales" in Alberta and B.C. are at record lows. The Canadian Association of Oilwell Drilling Contractors forecasts that rig utilization in 2016 will average only 22 percent, with an average of only 159 out of western Canada's industry fleet of well over 700 rigs deployed. In late January, the Petroleum Services Association of Canada lowered its 2016 drilling forecast to 4,900 wells, compared to 5,300 wells in 2015 and 11,500 wells in 2014. All of this is suggestive of low traditional seismic data sales.

Prospects have, however, improved for a faster pace of merger and acquisition activity. With commodity prices remaining low and cash flows among E&P companies widely expected to decline or become negative, causing debt ratios to increase sharply, banks are expected to strongly encourage their borrowers to narrow bid-ask spreads and close transactions to create larger, more viable companies. Following a year of surprisingly low M&A spending and weak deal-flow, one research report stated that by mid-January 2016 there were 49 asset packages being marketed, covering over 4 million acres and 250,000 boe per day of production.

More M&A activity will create favourable conditions for additional transaction-based sales. The unpredictability of transaction-based sales, however, means that Pulse will continue to lack visibility as to its 2016 revenues. Corporate transactions are a necessary but not sufficient condition to generate seismic data relicensing fees; generating transaction-based sales depends on the nature of the underlying corporate transaction and on the acquirer's plans for the assets in question. Please see "Transaction-based vs. Traditional Sales: Six-Year History" for a full explanation of transaction-based sale types and how they occur.

With its annual cash costs of approximately \$6.0 million, low financing costs and no dividend, Pulse can continue to generate cash EBITDA and shareholder free cash flow at low revenue while buying back additional shares and maintaining the financial flexibility to grow its seismic data library. Pulse's revised \$30.0 million credit facility is undrawn as of this date and includes an accordion feature for expansion to \$70.0 million.

Pulse's long-term goal is to become Western Canada's largest licensable data library. The Company's history demonstrates that its revenues could accelerate at any time, and can double or triple with virtually no increase in costs, making Pulse a high-margin business under even modestly positive industry conditions.

## **DISCUSSION OF OPERATING RESULTS**

### **SUMMARY FOR THE YEAR ENDED DECEMBER 31, 2015**

#### ***Earnings (Loss) Before Income Taxes***

Pulse generated a loss before income taxes of \$6.3 million ((\$0.11) per share basic and diluted) compared to earnings before income taxes of \$4.6 million (\$0.08 per share basic and diluted) for 2014. The decrease was mainly attributable to the \$11.3 million decrease in total seismic revenue and the recognition of an impairment loss of \$937,000, offset somewhat by decreases in both operating and financing expenses and lower deferred income taxes.

#### ***Revenue***

Total seismic revenue, including data library sales and participation survey revenue, was \$24.4 million for 2015 compared to \$35.7 million for 2014.

#### ***Data Library Sales***

Data library sales are conducted under various types of sale contracts. These are classified as 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 license, with the agreement having set payment terms). Pulse plans to continue providing customers with a variety of contract options in order to maximize data library sales in the future. The unearned portion of a contract's value is deferred until Pulse's revenue recognition criteria are met, with data library sales revenue being recognized upon delivery of seismic data to the customer.

Data library sales consist of traditional sales and transaction-based sales. There are three main types of transaction-based sale: partnership or joint venture sales, corporate merger or acquisition sales, and asset disposition-related sales. For further information on transaction-based sales, see "Transaction-based vs. Traditional Sales: Six-Year History" below.

For 2015, seismic data library sales were \$21.2 million compared to \$35.7 million in 2014. The Company experienced decreases in both transaction-based and traditional sales.

In 2015, 96 percent of seismic data library sales were generated internally by Pulse's sales staff compared to 95 percent in 2014. Large seismic data sales and relicensing (change of control) fees are negotiated by the Company's internal sales and marketing department as opposed to the external brokerage community.

### Geographical Sales Breakdown

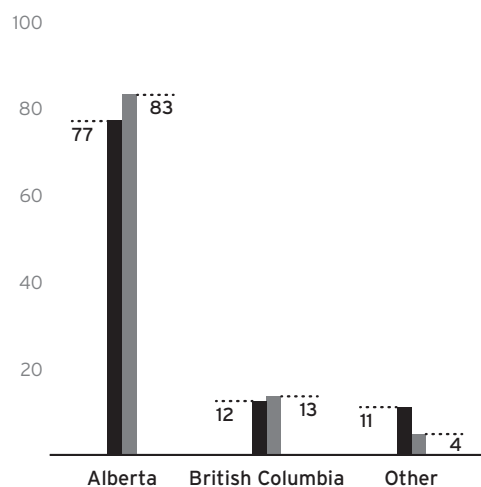
The Company's customers are generally focusing on liquids-rich natural gas and oil pools found primarily in a broad corridor running from northwest of Calgary, Alberta, along the Foothills of the Rocky Mountains to the British Columbia border, as compared to "dry" natural gas more often found in British Columbia and on Alberta's eastern prairies. The pricing of natural gas liquids (such as propane, butane and condensate) is linked to crude oil, improving the economics of developing liquids-rich gas targets over "dry" gas. Natural gas has suffered from very low pricing for many years.

### 2D/3D Sales Breakdown

As 3D seismic licence contracts are generally larger than 2D seismic licence contracts, the percentage of seismic data library sales generated from 2D and 3D data sales fluctuates significantly depending on the number of 3D seismic sale contracts signed during a given period.

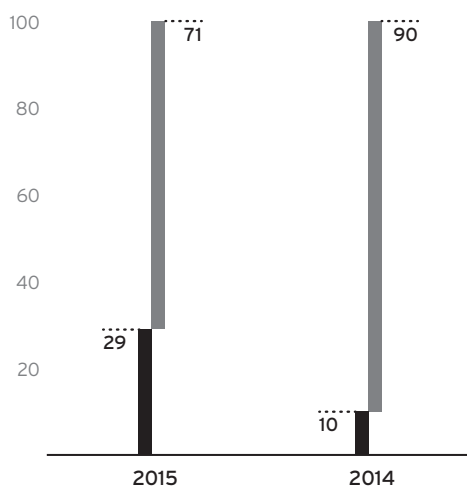
**GEOGRAPHICAL SALES BREAKDOWN (%) FOR THE YEARS ENDED DECEMBER 31**

■ 2015 ■ 2014



**SALES BREAKDOWN 2D/3D (%) FOR THE YEARS ENDED DECEMBER 31**

■ 2D ■ 3D



### Participation Survey Revenue

The Company partners with customers on participation surveys; the data becomes the Company's property, including the right to re-license the data. Participating customers are provided a licensed copy.

Participation survey revenue is recognized in the financial statements in proportion to the project's stage of completion. This is assessed using the proportion of the total estimated contract cost that has been incurred for work performed to the period-end.

In 2015 the Company completed field operations for a 3D participation survey, which generated revenues of \$3.2 million which were recognized in the first quarter of 2015. In 2014 no participation surveys were conducted.

### Amortization of Seismic Data Library

Seismic data library amortization expense was \$22.8 million for 2015 compared to \$22.5 million in 2014. The year-over-year increase in seismic data library amortization expense is due to the initial 50 percent amortization of \$2.0 million recorded by the Company upon completion of the 3D participation survey during the first quarter of 2015 offset by a decrease in the amortization of datasets fully amortized. As stated, there were no surveys completed in 2014.

Amortization of seismic data library is described further under "Critical Accounting Estimates".



### **Impairment Loss**

At December 31, 2015, the Company assessed its cash generating units (CGUs) included in its data library for indicators of impairment, as required under IFRS, and concluded there were such indicators. The principal indicator was the ongoing weakness of commodity prices along with uncertainty over the timing of any improvement. That indicator triggered an impairment test. As a result, the Company completed an impairment test. For the purpose of impairment testing, the recoverable amounts of the Company's CGUs is the greater of its value in use and its fair value less costs to sell. The recoverable amounts of the CGU's were determined based on a value in use calculation. The Company used the following assumptions to calculate the recoverable amount of each CGU:

- / The estimated future cash flows for the next five years net of variable and fixed costs;
- / The residual value of each CGU estimated to be 20 percent of the original cost for purchased data and 10 percent of the original cost for data shot in a participation survey;
- / A pre-tax discount rate of 9.1 percent to calculate the net present value of future cash flows, which is the weighted average cost of capital calculated at December 31, 2015; and
- / A combined federal-provincial income tax rate of 27 percent.

Based on these assumptions and the Company's calculations, an impairment loss of \$937,000 was recognized in the fourth quarter of 2015. The impairment specifically related to two CGUs, Altares 3D (\$323,000) and Simon East 3D (\$614,000), and was the result of less activity in the areas due to commodity prices and capital budgets. The total remaining net book value of Altares 3D and Simon East 3D was \$826,000 at December 31, 2015.

At December 31, 2014, no indicators of impairment were identified and accordingly, an impairment test was not required.

### **Salaries, Internal Commissions and Benefits (SCB)**

SCB includes salaries, related benefits, incentive compensation and internal commissions. For 2015, SCB was \$4.0 million, compared to \$4.8 million in 2014.

The factors contributing to the decrease in SCB are lower internal selling commissions and incentive plan expenses due to lower data library sales, as well as reduced salaries and benefits as the number of employees has decreased year-over-year.

### **Other Selling, General and Administrative Costs (SG&A)**

SG&A includes external commissions, occupancy costs, office and general costs, information technology expenses, mapping, data storage expenses, directors' fees and corporate costs, consulting fees and professional fees.

For 2015, SG&A was \$2.3 million compared to \$2.7 million in 2014.

The reduction was across the board in most areas, with external sales commissions, professional fees, travel and equipment leasing costs realizing some of the biggest savings. All discretionary spending has been analyzed and cost-reduction strategies have been implemented where appropriate.

### **Net Financing Costs**

Net financing costs for 2015 decreased considerably to \$494,000 from \$875,000 in 2014. This was due to the significant reduction in long-term debt. The Company repaid \$5.5 million in 2015 and the balance was nil as of December 31, 2015.

### **Income Taxes**

The deferred income tax reduction for 2015 was \$1.0 million, reflecting an effective tax rate of 16.2 percent, compared to a deferred income tax expense of \$1.1 million and an effective tax rate of 24.5 percent for 2014.

The federal-provincial corporate income tax rate for 2015 was 26 percent compared to 25 percent for 2014. The effective tax rate in 2015 was lower than the enacted income tax rate, as a result of the change in valuation allowances related to future resource deductions and the change in provincial tax rate. At December 31, 2015, the Company had \$8.0 million in non-capital loss carry-forwards available to use in future years.

On June 15, 2015 the Government of Alberta announced that the general corporate income tax rate would increase from 10 percent to 12 percent effective July 1, 2015. The impact of this rate change was recognized in the second quarter of 2015.

## SUMMARY FOR THE THREE MONTHS ENDED DECEMBER 31, 2015

### Earnings (Loss) Before Income Taxes

For the three months ended December 31, 2015, the Company generated earnings before income taxes of \$902,000 (\$0.02 per share basic and diluted) compared to \$1.1 million (\$0.02 per share basic and diluted) for the comparable period of 2014.

### Revenue

Total revenue, which includes data library sales and participation survey revenue (nil participation revenue for both 2015 and 2014), for the three months ended December 31, 2015 was \$8.8 million compared to \$8.4 million for the three months ended December 31, 2014.

### Data Library Sales

Data library sales for the quarter ended December 31, 2015 were \$8.8 million compared to \$8.4 million for the three months ended December 31, 2014.

### Geographical Sales Breakdown

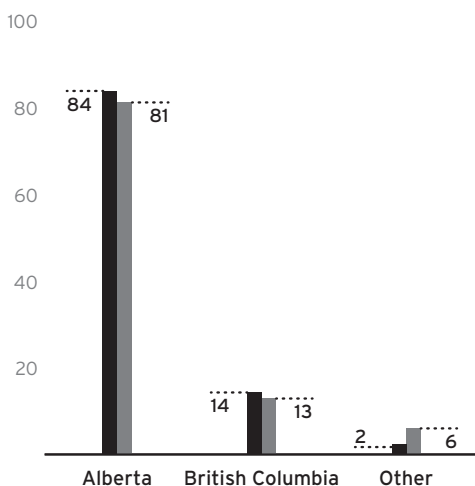
The Company's customers are generally focusing on liquids-rich natural gas and oil pools found primarily in a broad corridor running from northwest of Calgary, Alberta, along the Foothills of the Rocky Mountains to the British Columbia border, as compared to "dry" natural gas more often found in British Columbia and on Alberta's eastern prairies. In the fourth quarter of 2015, 84 percent of the data library sales were from data located in Alberta.

### 2D/3D Sales Breakdown

As 3D seismic sale contracts are generally larger than 2D seismic sale contracts, the percentage of seismic data library revenues generated from 2D and 3D seismic data fluctuates significantly depending on the number of 3D seismic sale contracts signed during a given period.

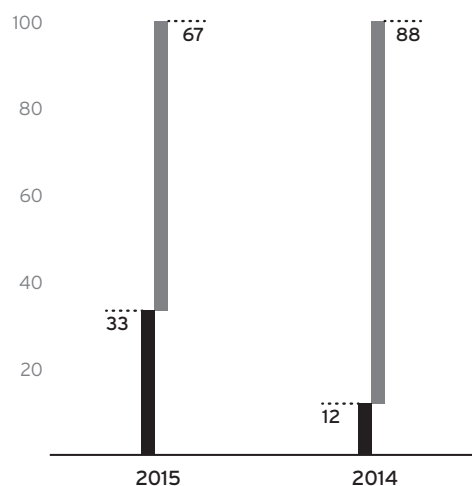
**GEOGRAPHICAL SALES BREAKDOWN (%) FOR THE THREE MONTHS ENDED DECEMBER 31**

■ 2015 ■ 2014



**SALES BREAKDOWN 2D/3D (%) FOR THE THREE MONTHS ENDED DECEMBER 31**

■ 2D ■ 3D



### Participation Survey Revenue

No participation surveys were conducted during the fourth quarter of 2015 and 2014. One participation survey contract was signed in the fourth quarter of 2014, with survey planning and permitting conducted during the fourth quarter of 2014 and field operations completed in the first quarter of 2015.

### ***Amortization of Seismic Data Library***

For the three months ended December 31, 2015, seismic data library amortization expense was \$5.0 million compared to \$5.3 million in the comparable period of 2014. The slight decrease is due to data acquired in previous years becoming fully amortized.

Amortization of the seismic data library is described further under “Critical Accounting Estimates”.

### ***Impairment Loss***

As discussed above, the Company recognized an impairment loss of \$937,000 in the fourth quarter of 2015. No impairment loss was recognized in the same period of 2014.

### ***Salaries, Internal Commissions and Benefits (SCB)***

SCB for the three months ended December 31, 2015 was \$1.3 million compared to \$1.1 million in the comparable period of 2014. The increase is attributable to severance payments made during the fourth quarter of 2015.

### ***Other Selling, General and Administrative Costs (SG&A)***

SG&A for the three months ended December 31, 2015 was \$536,000 compared to \$641,000 for the three months ended December 31, 2014. The decrease was mostly due to lower external commissions as a result of a lower value of data sold by external brokers and operating expense reductions in most other areas.

### ***Net Financing Costs***

For the three months ended December 31, 2015, net financing costs decreased to \$101,000 from \$175,000 for the same period in 2014. Net financing costs decreased due to the elimination of the long-term debt.

### ***Income Taxes***

The income tax expense for the three months ended December 31, 2015 was \$244,000, reflecting an effective tax rate of 27.1 percent, compared to income tax expense of \$266,000 and an effective tax rate of 24.4 percent for the comparable 2014 period. The effective rate in 2015 was higher than the enacted rate of 26 percent due to the impact from the change in the provincial tax rate.

## **REVIEW OF FINANCIAL POSITION**

### **AS AT DECEMBER 31, 2015**

#### ***Seismic Data Library and Participation Surveys in Progress***

The Company's business model includes growing its seismic data library. Pulse acquires seismic data to add to its library through two main methods. The Company purchases proprietary rights to complementary seismic datasets when the opportunity arises, and it also conducts participation surveys. Pulse partners with customers on participation surveys from which the seismic data collected is added to Pulse's data library to generate future licensing revenue. Pulse retains full ownership of the data, and participating customers are provided with a licensed copy.

The Company completed the seismic data digitization project during the first quarter of 2015. Pulse had been auditing the seismic data remaining on magnetic and analog tape storage and converted it to digital electronic format.

Pulse conducted one participation survey during the 2014-2015 winter season and added 136 square kilometres of high-quality 3D data to its data library in the first quarter. Pulse conducted no participation surveys during the 2013-2014 winter season.

The Company continues to evaluate new opportunities to partner with customers on potential future participation surveys.

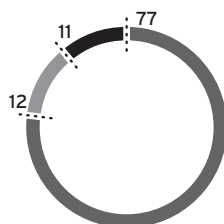
On October 16, 2015 the Company acquired, from an oil and gas company, 146 square kilometres of high-quality 3D data located in west central Alberta.



On January 26, 2016 the Company closed an acquisition and added approximately 107,000 net kilometres of 2D seismic data and 58 net square kilometres of 3D seismic data, increasing Pulse's 2D seismic data library by 31.5 percent from approximately 340,000 net kilometres to approximately 447,000 net kilometres.

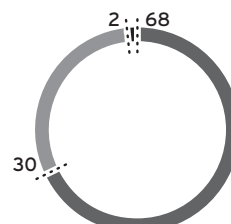
#### 2D OWNERSHIP (%)

■ Alberta ■ British Columbia ■ Other



#### 3D OWNERSHIP (%)

■ Alberta ■ British Columbia ■ Other



#### Other Long-Term Payable

Included in the other long-term payable is the long-term portion of the cash-settled liability related to the long-term incentive plan.

#### Share Capital Summary

The Company's authorized share capital consists of an unlimited number of common shares and an unlimited number of preferred shares, issuable in series.

The following table provides details of the Company's outstanding share capital:

	Three months ended December 31,		Year ended December 31,	
	2015	2014	2015	2014
Weighted average shares outstanding:				
Basic and diluted	<b>56,041,324</b>	57,865,941	<b>56,628,524</b>	58,957,072
Shares outstanding at period-end			<b>55,592,689</b>	57,247,843
Shares outstanding at March 2, 2016			<b>55,553,589</b>	

#### Diluted Earnings per Share Reconciliation

The Company does not have any dilutive securities.

#### Long-term Incentive Plan (LTIP)

In 2012 the Company's Board of Directors approved a new LTIP for employees, officers and directors designed to align the Company's long-term incentive compensation with its performance and to increase levels of stock ownership. Participants are granted restricted share units (RSUs) and performance share units (PSUs). LTIP awards are at the discretion of the Board of Directors.

RSUs and PSUs have accompanying dividend-equivalent rights and, therefore, additional RSUs and PSUs are issued to reflect dividends declared on the common shares. The plan's trustee will purchase common shares on the open market for the after-tax number of RSUs and PSUs vested with funds provided by the Company.

On March 31, 2015 one-third of the LTIP awards which were eligible to vest were RSUs and two-thirds were PSUs. Based on the Company's performance in 2014 and the predetermined performance measures, 4 percent or 10,910 of the eligible PSUs vested. RSUs vest automatically based upon time and, consequently, all of the eligible RSUs vested automatically on March 31, 2015.

To satisfy its obligation, in April 2015 the Company provided \$350,000 to the plan's trustee to purchase common shares on the open market for the total after-tax number of cash- and equity-settled RSUs and PSUs that vested on March 31, 2015. The related payroll taxes of \$211,000 were paid in May 2015 to settle the fully accrued cash-settled portion of the share-based payment liabilities.

At December 31, 2015 there were 344,729 RSUs and 498,746 PSUs outstanding. At March 2, 2016, total RSUs and PSUs outstanding remain unchanged. On March 31, 2016, 121,713 RSUs will vest automatically and, based on the Company's performance in 2015 and the predetermined performance measures, none of the PSUs will vest. In April 2016, the Company will settle its obligation to deliver the common shares by providing funds to the independent LTIP trustee to purchase the shares on the open market.

#### ***Retained Earnings (Deficit)***

On December 31, 2015 the Company had a deficit of \$33.3 million, compared to \$22.8 million at December 31, 2014. Contributing to the deficit is the net loss for the year of \$5.3 million, the payment of \$3.4 million in dividends and the reduction of \$1.8 million to retained earnings due to the required accounting treatment of the Company purchasing and cancelling its common shares. The adjustment relates to the difference between the price paid by the Company for the shares purchased and cancelled under the NCIB and the average historical cost of the Company's shares. The average historical cost of the shares purchased and cancelled was recorded as a reduction to share capital.

#### ***Dividends***

On March 3, 2015, the Company declared a quarterly dividend of \$0.02 per common share. The dividend was paid on April 10, 2015 to shareholders of record at the close of business on March 27, 2015.

On May 6, 2015, the Company declared a quarterly dividend of \$0.02 per common share. The dividend was paid on June 19, 2015 to shareholders of record at the close of business on June 5, 2015.

On July 29, 2015, the Company declared a quarterly dividend of \$0.02 per common share. The dividend was paid on September 18, 2015 to shareholders of record at the close of business on September 4, 2015.

Pulse confirms that all dividends paid to shareholders in 2015 are designated as "eligible dividends" entitling Canadian resident individuals to a higher gross-up and dividend tax credit. For non-resident shareholders, Pulse's dividends are subject to Canadian withholding tax.

With lower period-over-period seismic data library sales and the strong possibility of an extended downturn, in November 2015 Pulse's Board of Directors deemed it financially prudent and in the long-term interests of shareholders to suspend the Company's quarterly dividend of \$0.02 per share. Suspension of the dividend will help the Company maintain a strong financial position and be positioned for future potential opportunities.

#### ***Deferred Tax Liability***

The net deferred income tax liability was \$7.7 million at December 31, 2015 compared to \$8.6 million at December 31, 2014. The decrease in the deferred income tax liability is mainly due to the current year losses which is offset by the impact of the changes in the provincial tax rate.

The deferred income tax liability consists mainly of taxable temporary differences between the tax base of the seismic data library and the carrying amount on the statement of financial position, offset by non-capital tax losses carried forward.

The Company is aware that the Canada Revenue Agency (CRA) may revise the way it assesses the income tax amortization of certain seismic data library costs. No policy document has been issued by the CRA and, therefore, the Company is not able to estimate the impact this change will have on its income tax calculations, carry-forward balances or consolidated financial statements.

## FINANCIAL SUMMARY OF QUARTERLY RESULTS

	2015				2014			
(thousands of dollars, except per share data)	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
Data library sales	<b>8,759</b>	<b>4,678</b>	<b>6,461</b>	<b>1,316</b>	8,385	14,531	7,321	5,506
Participation survey revenue	-	-	-	<b>3,220</b>	-	-	-	-
Total revenue	<b>8,759</b>	<b>4,678</b>	<b>6,461</b>	<b>4,536</b>	8,385	14,531	7,321	5,506
Amortization of seismic data library	<b>4,979</b>	<b>5,262</b>	<b>5,303</b>	<b>7,292</b>	5,279	5,554	5,842	5,832
Impairment loss	<b>937</b>	-	-	-	-	-	-	-
Net earnings (loss)	<b>658</b>	<b>(1,579)</b>	<b>(1,040)</b>	<b>(3,347)</b>	824	5,086	(612)	(1,820)
Per share – basic and diluted	<b>0.01</b>	<b>(0.03)</b>	<b>(0.02)</b>	<b>(0.06)</b>	0.01	0.09	(0.01)	(0.03)

The revenue streams generated by Pulse's operations are data library sales and customer pre-funding of participation surveys. Data library sales consist of traditional sales and transaction-based sales, as described below under "Transaction-based vs. Traditional Sales: Six-Year History".

In addition to the revenue fluctuations described in "Seismic Industry Cycles and Seasonality", during the first, second and third quarters of 2014 as well as the second and third quarters of 2015, transaction-based sales contributed to data library sales to varying degrees. Very little transaction-based sales revenue was generated in the other three quarters included in the above table.

Pulse recognizes its participation survey revenue using the percentage-of-completion method. Under this method, participation survey revenue is recognized proportionately with the degree of each project's completion. With the amended standard IFRS 15, Revenue from Contracts with Customers, participation survey revenue can only be recognized in the financial statements when the survey is complete in all respects, meaning the risks and rewards of the final product have been passed on to the customer. Pulse will therefore have to adjust its revenue recognition policy accordingly.

Seismic data library amortization is greater in quarters when participation surveys are completed, as each participation survey is amortized at 50 percent immediately upon delivery of data to the participant, with the remainder amortized equally over seven years. There is a lag between the progressive recognition of participation survey revenue and initial amortization upon survey completion. As amortization is a non-cash expense, the Company continued to generate cash EBITDA and shareholder free cash flow in each quarter.

During the past eight fiscal quarters, the fluctuations in net earnings or loss have largely been a function of revenue, data library amortization and impairment loss. Increases in data library sales have a highly positive impact on earnings, as the operating costs associated with licensing seismic data from the library fluctuate little from period to period.

All financial data included in the above table is presented in Canadian dollars, the Company's functional currency, and was prepared using the latest IFRS.

## SELECTED ANNUAL FINANCIAL INFORMATION

	Year ended December 31,		
(thousands of dollars, except per share data)	2015	2014	2013
Data library sales	<b>21,214</b>	35,743	27,079
Participation surveys	<b>3,220</b>	-	13,429
Total revenue	<b>24,434</b>	35,743	40,508
Net earnings (loss)	<b>(5,308)</b>	3,478	(18,834)
Per share – basic and diluted	<b>(0.09)</b>	0.06	(0.31)
Total assets	<b>54,618</b>	75,482	98,017
Long-term debt	-	5,367	21,850
Total non-current financial liabilities	<b>7,775</b>	14,118	29,661
Cash dividends per common share	<b>0.06<sup>(1)</sup></b>	0.08 <sup>(2)</sup>	0.08 <sup>(2)</sup>

(1) Represents three quarterly dividends of \$0.02 per common share.

(2) Represents four quarterly dividends of \$0.02 per common share.

Total revenue consists of seismic data library sales and participation survey revenue. Seismic data library sales in 2013 were lower due to lower customer demand and fewer transaction-based sales and even lower in 2015 due to drastic cutbacks in the energy-producing sector's capital spending.

The Company had net earnings in 2014, compared to a net loss in 2015 and 2013, due primarily to higher data library sales during 2014. In addition, in 2013 the Company recorded high levels of non-cash seismic amortization expense upon completion of the 2012-2013 seismic surveys.

See also "Seismic Industry Cycles and Seasonality".

Total assets decreased significantly from 2013 to 2015 due to the amortization of the seismic data library during the years and the impairment loss recorded in 2015.

In the first three quarters of 2015 and all four quarters of 2014 and 2013, the Company paid a quarterly dividend of \$0.02 per share.

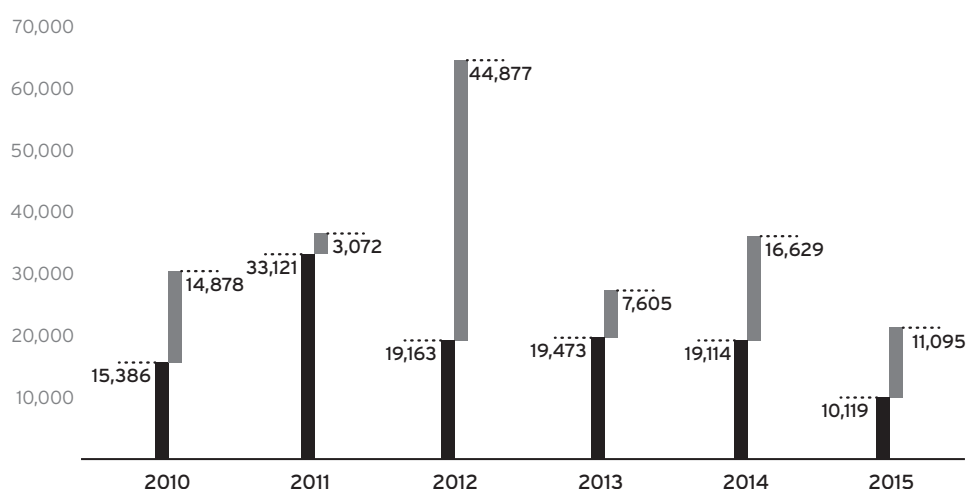
All financial data included in the table above is presented in Canadian dollars, which is the Company's functional currency, and was prepared in accordance with IFRS.



## TRANSACTION-BASED VS. TRADITIONAL SALES: SIX-YEAR HISTORY

### SALES BREAKDOWN (thousands of dollars)

■ Traditional Sales ■ 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 exempt.

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 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 licence 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 licence 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 licence agreements may not always be non-assignable.

## CONTRACTUAL OBLIGATIONS

Pulse's known contractual obligations at December 31, 2015 included a long-term syndicated debt facility led by Toronto Dominion Bank, operating leases for certain office equipment and office space, and minimum payments under seismic data services contracts. The following table reflects the Company's anticipated payment of contractual obligations (assuming that the syndicated revolving credit facility is not renewed in February 2019):

<b>Contractual Obligations</b> (thousands of dollars)	Payments due by period				
	Total	Less than 1 year	1 - 3 Years	4 - 5 Years	After 5 Years
Long-term debt	-	-	-	-	-
Interest on long-term debt	-	-	-	-	-
Operating line of credit	222	222	-	-	-
Operating leases	758	520	238	-	-
Seismic data services contracts	270	120	150	-	-
Accounts payable and accrued liabilities	885	809	76	-	-
<b>Total contractual obligations</b>	<b>2,135</b>	<b>1,671</b>	<b>464</b>	<b>-</b>	<b>-</b>

Obligations in the category of seismic data services contracts include geophysical services such as reprocessing and data storage.

The Company is subject to financial covenants relating to the long-term debt. Failure to meet their terms could constitute an event of default as defined in the debt agreement, possibly triggering a demand for accelerated repayment. Having no long-term debt and immaterial short-term borrowing and interest costs, the Company was in compliance with all of the financial covenants at December 31, 2015. See "Liquidity, Capital Resources and Capital Requirements" for further information.

In addition, as part of the acquisition of the Foothills 2D dataset in November 2006, Pulse agreed to pay additional consideration if future seismic data sales from the acquired assets exceeded \$10.0 million per year, up to a maximum of \$3.75 million. Sales from the Foothills 2D dataset have not exceeded \$10.0 million in any year since acquisition. No amounts were included for this obligation in the table above because they cannot be predicted.

## LIQUIDITY, CAPITAL RESOURCES AND CAPITAL REQUIREMENTS

At December 31, 2015 Pulse had working capital of \$5.0 million and a working capital ratio of 4.44:1. There is no current portion of long-term debt under the current credit facility. Given the flexibility of drawing and paying down debt, without penalty, on the revolving credit facility described below, and in order to reduce net financing costs, the Company maintains a minimum cash balance as required for operations.

The Company utilized cash on hand and cash provided by operating activities during 2015 for the following major cash outlays:

- / Investing activities of \$4.9 million, consisting mostly of additions to the seismic data library;
- / Purchase and cancellation of 1,625,400 common shares through its NCIB, for a total of \$4.1 million (at an average price of \$2.50 per common share including commissions);
- / Dividend payments of \$3.4 million; and
- / Debt repayment of \$5.5 million.

On February 15, 2013, the Company executed a \$50.0 million three-year extendible revolving credit facility with a syndicate of two banks.

On an annual basis, the Company has the option to extend the maturity for one additional year with the lenders' approval. On January 18, 2016, the Company extended the maturity date to February 13, 2019.

At its own discretion, the Company also reduced the facility's available borrowing amount to \$30.0 million from \$50.0 million. Up to \$5.0 million of the revolving facility remains available as an operating line of credit.

*Highlights of the credit facility:*

- / Four-tier margin structure based on the Company's total debt to adjusted EBITDA ratio as described below;
- / Accordion feature allowing the Company to increase the facility's size up to an additional \$40.0 million, subject to the lenders' consent;
- / No regularly scheduled principal payments, with voluntary prepayments permitted in whole or part at any time, without premium or penalty; and
- / Three-year term, with an extension of up to one year available on February 15 of every year with the approval of the lenders. If the extension is not granted, any outstanding amounts will be payable on the then-current applicable maturity date.

At December 31, 2015 the Company had a balance of \$222,000 (nil as at March 2, 2016) on the operating line of credit and \$49.8 million (\$30 million as at March 2, 2016) available for future draws.

The credit facility is secured by a charge on all of the assets of the Company and its material subsidiaries. The credit facility also includes the following two financial covenants:

- / Total debt to adjusted EBITDA not to exceed a ratio of 2.50:1. Total debt is equal to the sum of, without limitation, debts and liabilities for borrowed money (including the negative mark-to-market exposure of hedging obligations), bankers' acceptances, letters of credit, and letters of guarantee, capital leases and contingent guarantees.

Adjusted EBITDA is to be calculated on a trailing twelve-month basis and is defined as earnings or loss before interest, income taxes, depreciation and amortization, plus extraordinary losses, non-cash losses and expense charges, and any other unusual or non-recurring cash charges, expenses or losses consented to by the lenders, less participation survey revenue, extraordinary gains and non-cash gains and income. Adjusted EBITDA is to be adjusted for acquisitions or dispositions to reflect such acquisition or disposition as if it occurred on the first day of such calculation period.

- / Interest coverage ratio is to be at least 3:1 at all times. The interest coverage ratio is equal to adjusted EBITDA divided by interest expense.

The covenants at December 31, 2015 were calculated as follows (financial figures are stated in thousands of dollars):

**TOTAL DEBT TO ADJUSTED EBITDA RATIO:**

(thousands of dollars, except ratios)

Total debt	222
Divided by:	
Adjusted EBITDA	15,121
Total debt to adjusted EBITDA ratio (not to exceed 2.50:1)	0.01:1

Total debt was calculated as follows:

Long-term debt	-
Add: operating line of credit	222
Add: deferred financing charges	-
Total debt	222

Adjusted EBITDA was calculated as follows:

Cash EBITDA for the twelve months ended December 31, 2015	\$15,121
Adjustment for acquisitions or dispositions	-
Adjusted EBITDA	\$15,121

**INTEREST COVERAGE RATIO (ICR)**

(thousands of dollars, except ratios)

Adjusted EBITDA	15,121
Divided by:	
Interest expense	297
Interest coverage ratio (to be at least 3:1)	51:1

Interest expense was calculated as follows:

Interest paid for the twelve months ended December 31, 2015	297
Adjustments	-
Interest expense	297

The Company was in compliance with the credit facility's covenants at December 31, 2015.

At December 31, 2015, the floating interest rate on the syndicated revolving credit facility was 3.20 percent, which is based on a combination of the bankers' acceptance rate and an applicable margin tied to the Company's total debt to adjusted EBITDA ratio. The Company pays a standby fee based on the daily undrawn balance of the credit facility and its total debt to adjusted EBITDA ratio. The interest and standby fee rates are adjusted two business days after the covenant's calculation for the previous fiscal quarter is received and approved by the lenders. On December 31, 2015 the applicable margin and standby fee were set at the lowest rates available under the facility.



The applicable margin and standby fee rate are determined as follows:

#### TOTAL DEBT TO ADJUSTED EBITDA RATIO

	Applicable Margin for Canadian Prime Rate Loans	Applicable Margin for Bankers' Acceptances	Standby Fee Rate
Less than or equal to 1:1	0.50%	1.75%	0.35000%
Greater than 1:1 but less than or equal to 1.5:1	0.75%	2.00%	0.45000%
Greater than 1.5:1 but less than or equal to 2:1	1.00%	2.25%	0.50625%
Greater than 2:1 but less than or equal to 2.5:1	1.50%	2.75%	0.61875%

Toronto Stock Exchange (TSX) rules determine the number of shares the Company is permitted to purchase through its NCIB. From December 13, 2014 to December 14, 2015, the maximum number was 4,282,902 common shares, representing 10 percent of the public float of 42,829,022 common shares as at December 13, 2014. From January 1, 2015 to December 31, 2015, the Company purchased 1,625,400 common shares under the NCIB. Purchases were made on the open market through the TSX or alternative trading platforms at the market price of such shares. All shares purchased under the NCIB were cancelled.

On December 21, 2015, the Company announced the renewal of its NCIB. The Company may purchase, for cancellation, up to a maximum of 3,509,326 common shares, equal to 10 percent of the public float of 35,093,268 common shares as at December 15, 2015. The Company is limited under the NCIB to purchasing up to 5,134 common shares in any one day, subject to the block purchase exemption under TSX rules. The NCIB will continue until December 20, 2016. Purchases will be made on the open market through the TSX or alternative trading platforms at the market price of such shares. All shares purchased under the NCIB will be cancelled.

Funding for Pulse's future capital expenditures will generally depend on the level of future data library sales. Pulse's management believes that the Company's capital resources will be sufficient to finance future operations and carry out the necessary capital expenditures through 2016. The Company anticipates that future capital expenditures will be financed through customer pre-funding, cash on hand, available credit facilities, and funds from operations. The Company has a \$30.0 million revolving credit facility for future draws in 2016, and an accordion feature allowing Pulse to increase the facility's size by up to \$40.0 million, subject to the lenders' consent. If deemed appropriate by management and the Board of Directors, Pulse can also issue common or preferred shares.

Pulse requires flexibility in managing its capital structure to take advantage of opportunities in raising additional capital where opportunities for seismic data acquisitions or participation surveys arise. Historically, the Company has used a combination of debt and equity to finance various growth initiatives, and it continues to rely on key internal measures such as the long-term debt to TTM cash EBITDA ratio and long-term debt to equity ratio, to structure and forecast its capital requirements. Long-term debt is defined as long-term debt, excluding deferred financing costs. Pulse's management considers the current capital structure appropriate.

The long-term debt to cash EBITDA ratio for the years ended December 31, 2015 and 2014 is calculated using the long-term debt at year-end, divided by TTM cash EBITDA:

#### LONG-TERM DEBT TO TTM CASH EBITDA RATIO

	As at December 31,	As at December 31,
(thousands of dollars, except ratios)	2015	2014
Long-term debt	-	5,500
Divided by: TTM cash EBITDA	15,121	28,615
Long-term debt to TTM cash EBITDA ratio	0.00:1	0.19:1

The decrease in the long-term debt to TTM cash EBITDA ratio was attributable to the decrease in the long-term debt following repayments made during the year and a balance of nil as of December 31, 2015.

Pulse uses debt strategically, to acquire high-quality seismic datasets that meet economic and technical criteria.

The long-term debt to equity ratio is calculated using the long-term debt balance divided by total equity. At December 31, 2015 and 2014 the long-term debt-to-equity ratios were as follows:

	December 31,	December 31,
(thousands of dollars, except ratios)	2015	2014
Long-term debt	-	5,500
Divided by: equity	45,389	58,401
Long-term debt to equity ratio	0.00:1	0.09:1

Repayment of the long-term debt balance during the year resulted in the change to the long-term debt to equity ratio year over year.

Long-term debt was calculated as follows:

	As at December 31,	As at December 31,
(thousands of dollars)	2015	2014
Long-term debt per financial position	-	5,367
Add: deferred financing costs	-	133
Long-term debt	-	5,500

This discussion on liquidity, capital resources and capital requirements contains forward-looking information; users of this information are cautioned that actual results may vary and are encouraged to review the discussions of risk factors and forward-looking statements below.

## NON-CAPITAL RESOURCES

The Company's main non-capital resource is its key management and staff. The Company has an experienced team with extensive knowledge about the seismic industry. Pulse's management understands industry cycles and how to manage the business in the downturn and recovery phases. Pulse has built strong operations, sales, financial and information technology departments. Key management and staff are eligible to participate in the short-term and long-term incentive plans, which are tied to the Company's shareholder free cash flow per share.

## NON-GAAP FINANCIAL MEASURES AND RECONCILIATIONS

This MD&A and the Company's continuous disclosure documents provide discussion and analysis of cash EBITDA and shareholder free cash flow. IFRS do not include standard definitions for these measures and, therefore, they may not be comparable to similar measures used and disclosed by other companies. As IFRS have been incorporated into Canadian GAAP, these non-IFRS measures are also non-GAAP measures. The Company has included these non-GAAP financial measures because management, investors, analysts and others use them to evaluate the Company's financial performance.

Cash EBITDA and shareholder free cash flow are not calculations based on IFRS and should not be considered in isolation or as a substitute for IFRS performance measures, nor should they be used as an exclusive measure of cash flow, because they do not consider working capital changes, capital expenditures, long-term debt repayments and other sources and uses of cash which are disclosed in the consolidated audited and interim statements of cash flows.

## CASH EBITDA AND SHAREHOLDER FREE CASH FLOW

Cash EBITDA represents the capital available to invest in growing the Company's 2D and 3D seismic data library, to pay interest and principal on its long-term debt, to purchase its common shares, to pay taxes and to pay dividends if applicable.

Cash EBITDA is calculated as earnings or loss from operations before interest, taxes, depreciation and amortization less participation survey revenue, plus non-cash and non-recurring expenses. Cash EBITDA excludes participation survey revenue as this revenue is directly used to fund specific participation surveys and is unavailable for discretionary expenditures. The Company believes cash EBITDA helps investors compare Pulse's results on a consistent basis without regard to participation survey revenue and non-cash items, such as depreciation and amortization, which can vary significantly depending on accounting methods or non-operating factors such as historical cost.

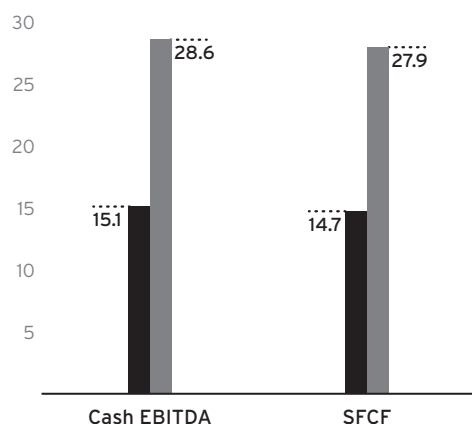
Shareholder free cash flow further refines the calculation of capital available to invest in growing the Company's 2D and 3D seismic data library, to repay debt, to purchase its common shares and to pay dividends if applicable, by deducting non-discretionary expenditures from cash EBITDA. Non-discretionary expenditures are defined as debt financing costs (net of deferred financing expenses amortized in the current period) and current tax provisions.

A reconciliation of net earnings (loss) to EBITDA, cash EBITDA and shareholder free cash flow follows:

	Three months ended December 31,		Year ended December 31,	
(thousands of dollars, except per share data)	2015	2014	2015	2014
Net earnings (loss)	658	824	(5,308)	3,478
Add:				
Amortization of seismic data library	4,979	5,279	22,836	22,507
Impairment loss	937	-	937	-
Net financing costs	101	175	494	875
Income tax expense (reduction)	497	266	(773)	1,128
Depreciation	46	62	185	248
<b>EBITDA</b>	<b>6,965</b>	<b>6,606</b>	<b>18,118</b>	<b>28,236</b>
Deduct:				
Participation survey revenue	-	-	(3,220)	-
Add:				
Non-cash expenses	78	55	223	379
Non-recurring expenses	-	-	-	-
<b>Cash EBITDA</b>	<b>7,043</b>	<b>6,661</b>	<b>15,121</b>	<b>28,615</b>
Deduct:				
Net financing costs	(101)	(175)	(494)	(875)
Current income tax expense	-	-	-	-
Add:				
Non-cash deferred financing charges	29	29	118	118
Current income tax reduction	-	-	-	-
<b>Shareholder free cash flow (SFCF)</b>	<b>6,971</b>	<b>6,515</b>	<b>14,745</b>	<b>27,858</b>
Cash EBITDA per share (basic and diluted)	0.13	0.12	0.27	0.49
Shareholder free cash flow (SFCF) per share (basic and diluted)	0.12	0.11	0.26	0.47

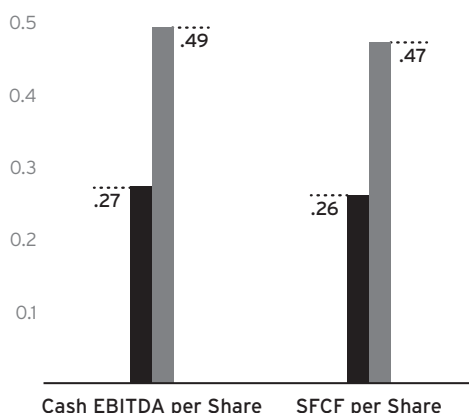
### CASH EBITDA AND SFCF FOR THE YEARS ENDED DECEMBER 31 (\$ millions)

■ 2015 ■ 2014



### CASH EBITDA AND SFCF PER SHARE (BASIC AND DILUTED) FOR THE YEARS ENDED DECEMBER 31 (\$)

■ 2015 ■ 2014



## FINANCIAL INSTRUMENTS

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity. Financial instruments are recognized on the statement of financial position when the Company becomes a party to the instrument's contractual obligations. The Company's financial assets include cash and cash equivalents, trade and other receivables. Its financial liabilities mainly comprise accounts payable and long-term debt.

### FAIR VALUE

The fair values of cash and cash equivalents, accounts receivable and accounts payable approximate their carrying amount largely due to the short-term maturities of these instruments. The fair value of the long-term debt approximates the carrying value because interest charges under the bank loan are based on current Canadian bankers' acceptance rates and margins.

### CREDIT RISK

Credit risk is the risk of financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Company's accounts receivable.

The Company is exposed to customer credit risk in connection with data sales and participation surveys with its customers. The Company's exposure to credit risk is influenced mainly by the individual characteristics of each customer. The makeup of the Company's customer base, including the default risk of the industry in which customers operate, has an influence on credit risk. As the Company operates exclusively in the oil and natural gas industry, essentially all of its trade receivables relate to customers from this industry.

The effective monitoring and control of credit risk is a core competency of the Company. Each new customer is analyzed individually for creditworthiness before payment and delivery terms and conditions are offered. The Company's review includes credit reference checks and credit limits for all customers as well as other monitoring activities. Accounts receivable aging is reviewed regularly. Certain customers have signed agreements with the Company that provide for extended payment terms.



The Company's credit risk increases on these types of arrangements due to the length of time before payments are received. The risk is mitigated by attempting to limit these types of arrangements to major oil and natural gas companies which have long operating histories and adequate resources to fulfill their commitments.

The Company has been doing business with the majority of its customers for many years, with insignificant credit losses to date. The Company does not require collateral in respect of trade receivables.

The Company's customers are in the oil and natural gas industry, with the majority located in Alberta. At December 31, 2015, 68 percent of total accounts receivable were due from two customers. These amounts were collected subsequent to year-end, with the exception of \$262,500 due from one customer with extended payment terms.

The Company recorded no bad debt expense in 2015. At December 31, 2015, none of the Company's accounts receivable were more than 60 days past due.

Cash and cash equivalents are held with a large, well-known Canadian chartered bank. The carrying amount of financial assets represents the maximum credit exposure. The Company considers the risk on cash and cash equivalents to be limited.

### **INTEREST RATE RISK**

Interest rate risk is the risk that changes in interest rates will affect the Company's income or the value of its holdings of financial instruments. The Company's interest rate risk exposure is mainly related to long-term debt. The Company is exposed to interest rate fluctuations on the cost of its variable-rate debt. An increase of 100 basis points in the lender's base-rate would have decreased earnings before income taxes by approximately \$33,000 for the year ended December 31, 2015. The Company did not have any fixed-rate interest-bearing obligations at December 31, 2015.

### **LIQUIDITY RISK**

Liquidity risk is the risk that the Company will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled in cash or other financial assets, i.e., repaying its debt and paying its suppliers. The Company's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under normal and stressed conditions, without incurring unacceptable losses or risking damage to its reputation. Beyond effective working capital and cash management, the Company has a revolving-term credit facility, which offers flexibility in drawing and paying down debt, without penalty, of which \$49.8 million remained available at December 31, 2015 (\$30 million as at March 2, 2016) for future draws, as described in "Liquidity, Capital Resources and Capital Requirements".

The Company regularly monitors cash flow. In addition, it monitors funding options available in the capital markets, as well as trends in the availability and costs of such funding, with a view to maintaining financial flexibility and limiting repayment risks. The Company does not believe that it will encounter difficulty in meeting its obligations associated with financial liabilities.

### **COMMODITY PRICE RISK**

The Company is not directly exposed to commodity price risk as it does not have any contracts directly based on commodity prices. A change in commodity prices, specifically oil and natural gas prices, could have a material impact on the Company's customers' cash flows and could therefore affect seismic data library sales and participation surveys. Commodity prices are affected by many factors, including supply and demand. The Company has not entered into any commodity price risk contracts. Given that this is an indirect influence, the financial impact on the Company of changing oil and natural gas prices is not reasonably determinable.

## **NEW IFRS STANDARDS**

A number of new standards, amendments and interpretations have been issued by the International Accounting Standards Board but are not yet effective for the year ended December 31, 2015. They were not applied in preparing the consolidated financial statements. None is expected to have a significant effect on the consolidated financial statements, except for:

/ IFRS 15, *Revenue from Contracts with Customers*, which provides guidance on revenue recognition and relevant disclosures. The standard provides a single, principles-based five-step model to be applied to all contracts with customers. IFRS 15 was issued in May 2014 and applies to annual reporting periods beginning on or after January 1, 2018, with early adoption permitted. The new standard will enhance revenue disclosure.

After review, Pulse's management concluded that IFRS 15 would affect the Company's policy for recognizing participation survey revenue. Pulse currently recognizes revenue on participation surveys based on percentage of completion. With the amended standard, participation survey revenue can only be recognized in the financial statements when the survey is complete in all respects, meaning the risks and rewards of the final product have been passed on to the customer. Pulse will therefore have to adjust its revenue recognition policy accordingly and may choose to adopt the standard before January 2018. With this adjustment, the lag between the progressive recognition of participation survey revenue and initial amortization upon survey completion will disappear.

/ IFRS 16, *Leases*. IFRS 16 was issued in January 2016, significantly revising the way in which companies account for leases by requiring almost all leases to be included on the balance sheet of lessees. The standard provides a single lessee accounting model, requiring lessees to recognize assets and liabilities for all leases unless the lease term is 12 months or less or the underlying asset has a low value. IFRS 16 is effective for annual periods beginning on or after January 1, 2019, with early adoption permitted for companies that also apply IFRS 15, *Revenue from Contracts with Customers*. The Company continues to evaluate the potential impact of IFRS 16 on the financial statements and, therefore, the impact is not known at this time.

## CRITICAL ACCOUNTING ESTIMATES

The preparation of financial statements in conformity with IFRS requires management to make estimates and assumptions. Management's estimates and assumptions affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. The Company's critical accounting estimates are described below and are discussed annually with the Audit Committee of the Company's Board of Directors.

### **SEISMIC DATA LIBRARY**

Amortization of the seismic data library, the Company's largest asset, with a net book value of \$47.6 million at December 31, 2015 (December 31, 2014 - \$66.5 million), is conducted by reference to the estimated timing of the economic return of the seismic library. Amortization of seismic library data is based on management's estimates of expected future sales, expected useful lives, market developments and experience. These estimates may change due to changes in market conditions, potential prospects, exploration licence periods, exploration and development in certain areas, government regulations and general economic conditions. Because of the inherent difficulty in estimating market developments and future sales, the amortization rates might not accurately reflect the systematic allocation of the seismic data library over its useful life.

Additions to the seismic library arise in two ways: (i) participation surveys, and (ii) the purchase of existing seismic data. Costs associated with participation surveys completed during the year are amortized at 50 percent immediately on the delivery of the data to the participants, with the balance amortized on a straight-line basis over the seven-year period commencing at the end of the period of exclusivity, if any. The costs of purchased data are amortized on a straight-line basis over seven years.

The assumptions behind the 50 percent immediate amortization on delivery are the following. The Company's historical average and target survey prefunding percentage is 70 percent of the cost of the seismic data shoot. Also, based on historical numbers, within seven years the Company usually recovers 70 percent of the total cost of the survey by selling the data acquired by the survey. After seven years the data sales are generally expected to decline.

Based on these numbers, the total return on investment (ROI) for a participation survey historically is 140 percent of cost. The 70 percent prefunding divided by the expected ROI of 140 percent equals 50 percent. This 50 percent initial amortization represents that approximately 50 percent of the expected return has been realized with the initial licensing of the data during the shoot.

The costs of purchased data are amortized on a straight-line basis over seven years.

The carrying amounts of the seismic data library are reviewed at each reporting date by management to determine whether there is any indication of impairment. If so, the asset's recoverable amount is estimated and impairment recorded, if any. The Company uses judgement in determining its cash-generating units for purposes of impairment testing. The determination of these cash-generating units was based on management's judgements in regards to the smallest identifiable group of seismic data that generates cash inflows largely independent of the cash inflows from other data. Estimating future cash flows and residual values for purposes of impairment testing requires management to make judgments regarding long-term forecasts of future revenues and costs and future residual values related to the seismic data library. These forecasts are uncertain as they require assumptions about demand for seismic data and future market conditions. Significant and unanticipated changes in these assumptions could require a provision for impairment in a future period.

As discussed above, the Company recognized an impairment loss of \$937,000 in the fourth quarter of 2015. No impairment loss was recognized in the same period of 2014.

Estimates of useful lives and the pattern of expected future economic benefits are based on historical experience and internal business plans. Expected future economic benefits are determined based on historical revenue patterns. Future deviations from the Company's historical returns could materially affect the current amortization methodology.

### **PERFORMANCE SHARE UNITS**

In determining the amount of share-based compensation related to PSUs, management makes estimates about future results and vesting criteria. It is reasonably possible that future outcomes could be different from the estimates and could require a material adjustment to the share-based compensation expense recorded in future periods. The impact of any change in the number of PSUs expected to vest is recognized in the period the estimate is revised.

### **DEFERRED TAX ASSETS**

Significant management judgement is required to determine the amount of deferred tax assets that can be recognized, based on the likely timing and level of future taxable income. The estimates of projected future taxable income are based on a variety of factors and assumptions, many of which are subjective and beyond the Company's control. Accordingly, these estimates could differ significantly from year to year, and the Company might end up realizing more or less of the deferred tax assets than recognized in the consolidated financial statements.

## **DISCLOSURE CONTROLS AND PROCEDURES (DC&P) AND INTERNAL CONTROLS OVER FINANCIAL REPORTING (ICFR)**

### **DC&P**

Management has evaluated the effectiveness of its DC&P (as defined in National Instrument 52-109), under the supervision of its CEO and CFO, at December 31, 2015. Based on this evaluation, the CEO and CFO have concluded that the DC&P were effective at December 31, 2015.

### **ICFR**

Management under the supervision of its CEO and CFO evaluated the effectiveness of ICFR (as defined in National Instrument 52-109) at December 31, 2015, in accordance with Internal Control - Integrated Framework, issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and the Control Objectives for Information and Related

Technology Framework (COBIT). Based on this evaluation, Pulse's CEO and CFO have concluded that the ICFR were effective at December 31, 2015.

No changes were made to ICFR during the period beginning on October 1, 2015 and ending on December 31, 2015 that have materially affected, or are reasonably likely to materially affect, Pulse's ICFR.

In May 2013, the COSO released an updated Internal Control - Integrated Framework which it required companies to use for officers' certificates filed after December 15, 2014. Pulse early-adopted the new framework in 2013, without any significant impact to the internal controls testing or documentation.

## **RISK FACTORS**

### **OIL AND NATURAL GAS PRICES**

Pulse's customers are oil and natural gas exploration and development companies. Oil and natural gas prices are volatile and directly affect the capital budgets, drilling activity, and access to capital and credit by Pulse's customers, which in turn directly affect the demand by such customers for seismic data. In response to the collapse of oil prices, Pulse's customers have dramatically slashed their 2016 capital budgets.

### **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. Data library sales can 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 merger-and-acquisition, joint venture and asset disposition activity by Pulse's clients.

Participation survey revenue also varies significantly from quarter to quarter. The majority of new 3D seismic data is acquired under frozen ground from November to March. Summer seismic programs can only be completed in certain areas that have drier ground conditions and can be easily accessed without environmental harm. In addition, the size and pre-funding levels of individual participation surveys can vary significantly.

### **DEMAND FOR SEISMIC DATA AND PARTICIPATION SURVEYS**

Pulse's ability to generate revenue, cash EBITDA, shareholder free cash flow and earnings and to grow its seismic data library depends on the demand for seismic data and participation surveys from its oil and natural gas customers over geological plays and areas that such customers focus on in a given period. Activity in such plays and areas depends on commodity prices, customers' budgets, geological understanding and advances in drilling technology, all of which are beyond Pulse's control. The Company endeavours to grow its high-quality proprietary data library, to expand and maintain its customer base, and to provide good customer service with short delivery time and broad data coverage in prospective locations.

### **PRICING OF DATA LIBRARY LICENCE SALES**

Pulse's ability to generate revenue, cash EBITDA, shareholder free cash flow and earnings and to grow its data library depends on its ability to market data library licences and on the pricing of these licences. Pulse prices its data competitively while endeavouring to maintain the integrity of the database.

### **RELICENSING (CHANGE-OF-CONTROL) FEES AND PARTNER COPY SALES**

Data library licences are generally not transferable. Under Pulse's current standard-form licence agreement, upon a change of control of the licensee in a merger or acquisition transaction, a change-of-control fee is generally payable. Under Pulse's current standard-form licence agreement, a licensee generally may not give the licensed data to a joint interest partner in the oil and natural gas lands. If the joint interest partner wishes to view or interpret the seismic data, it must purchase an additional copy directly from Pulse.



The precise terms of individual licence agreements (including those historically used by Pulse and its predecessors and those assumed by Pulse on data acquisitions) can vary greatly. Relicensing (change-of-control) fees may not always be payable and joint interest partners may not always wish to or have to purchase an additional licensed copy.

In addition, merger-and-acquisition and joint venture activity in the oil and gas industry is unpredictable.

#### **PRE-FUNDING OF PARTICIPATION SURVEYS AND SUBSEQUENT DATA LIBRARY LICENCE SALES**

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 on 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.

Pulse's ability to generate revenue, cash EBITDA, shareholder free cash flow and earnings and to grow the data library depends on its ability to obtain targeted levels of pre-funding for participation surveys, and to make subsequent seismic data library sales from such surveys.

#### **COMPLETION OF PARTICIPATION SURVEYS**

Pulse obtains presales of licences for participation surveys based on its budgeted costs and program schedule. Pulse's ability to generate revenues, cash EBITDA, shareholder free cash flow and earnings depends on its ability to complete committed participation surveys on time and within budget. Cost overruns are generally absorbed by Pulse and effectively reduce the percentage of pre-funding. The Company endeavours to manage this risk through the use of a dedicated survey project team with extensive experience.

#### **ENVIRONMENTAL, HEALTH AND SAFETY RISKS**

Pulse's field operations for participation surveys are subject to laws and regulations relating to environmental protection and occupational health and safety. A breach of these laws and regulations could result in material fines and civil lawsuits, as well as reputational damage. Pulse endeavours to reduce this risk by employing seasoned specialists who provide comprehensive training, field supervision and monitoring, and by working with a network of trusted sub-contractors who operate to high standards. In March 2015, Pulse received the renewal of its three-year Certificate of Recognition (COR) issued by Enform and the Government of Alberta, with a score of 96 percent, higher than in its initial 2009 certification and in its September 2012 re-certification. The COR program recognizes employers in the Alberta oil and natural gas industry having a health and safety management system that meets provincial standards.

#### **EFFECT OF SEASONALITY AND WEATHER CONDITIONS ON PARTICIPATION SURVEYS**

Seismic surveys are often completed in the winter season when frozen ground permits the movement and operation of heavy equipment in the northern areas of Alberta and British Columbia. 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 survey programs on time and within budget.

Seismic surveys may also be completed in the summer months under drier conditions. If there is unseasonably cold or wet weather, Pulse may not be able to complete its summer seismic survey programs on time and within budget.

Pulse endeavors to manage this risk by scheduling sufficient time for each participation survey to allow flexibility to complete the survey on time and within budget.

## **LAWS AND REGULATIONS**

Pulse's oil and natural gas customers are subject to federal and provincial laws and regulations, including those pertaining to taxation, royalty rates, environmental protection and safety. Compliance with these laws and regulations, and changes in these laws and regulations, may affect oil and natural gas exploration and development activities and the demand for seismic data licenses and participation surveys by such customers.

Pulse's field operations for participation surveys are subject to federal and provincial laws and regulations, including laws and regulations relating to safety and environmental protection. Pulse and its contractors are required to invest financial and managerial resources to comply with such laws and related permit requirements in their operations. Although such expenditures historically have not been material to Pulse, such laws and regulations are subject to change and, accordingly, it is impossible for the Company to predict the cost or impact of such laws and regulations on its future operations.

The Company is aware that the Canada Revenue Agency (CRA) may revise the way it assesses the income tax amortization of certain seismic data library costs. No policy document has been issued by the CRA and, therefore, the Company is not able to estimate the impact this change will have on its income tax calculations, carry-forward balances or consolidated financial statements.

## **COMPETITION**

The western Canadian geophysical services industry in which Pulse operates is highly competitive and price-sensitive. Pulse competes with 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. Pulse 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. Pulse also competes against oil and natural gas companies that may choose to license their own proprietary seismic data to customers. To mitigate this risk, Pulse's management continuously evaluates its marketing plan and marketing efforts. In addition, the Company owns high-quality data with extensive coverage in the WCSB. In general, there is little overlap between 3D databases, due to the high costs of overshooting existing 3D seismic surveys, and there is little direct competition between specific 3D datasets. Seismic data library companies and individual oil and gas companies may, however, elect to overshoot an existing 3D dataset if it is not of the desired quality or specifications.

## **DEPENDENCE ON QUALIFIED SEISMIC CONTRACTORS**

Pulse depends on qualified seismic acquisition contractors to complete its seismic surveys on time and within budget. Pulse endeavors to enter into master service agreements and to establish relationships with its key contractors.

## **KEY MANAGEMENT, OPERATIONS AND MARKETING PERSONNEL**

Pulse depends on certain key management, operations and marketing personnel for the success of its seismic acquisition, marketing and licensing business. Pulse endeavors to obtain written employment agreements with such personnel containing confidentiality and non-competition provisions where appropriate. Personnel risk is further mitigated by providing compensation packages designed to support Pulse's business philosophy and which are both market-driven and performance-based. This includes short- and long-term incentive programs which are directly tied to shareholder free cash flow per share, which the Board of Directors believes is the key financial metric for the long-term increase in the value of Pulse. Pulse also has a succession plan to provide adequate training and education to its future leaders, which is reviewed annually by the Board of Directors.

## **LOSS OF SEISMIC DATA**

Pulse's largest asset and source of revenue is the seismic data library. The safety and security of the data library asset is imperative to the Company's success. The physical data is stored in a secure location managed by a data storage company. All physical data has been digitized and back-up digital copies are kept in separate secure locations.

## **CYBERSECURITY THREATS**

Pulse faces cybersecurity threats to gain unauthorized access to its confidential seismic data bases and systems. Cybersecurity attacks are becoming more sophisticated and could lead to unauthorized access and release of confidential seismic data and disruption in operating systems.

## **PROTECTION OF INTELLECTUAL PROPERTY**

Pulse relies on a combination of licence agreements, copyright and other intellectual property rights to protect its ownership rights and copyright in its seismic data. Despite Pulse's efforts to enforce its licence agreements and copyright, there is a risk that unauthorized parties might improperly obtain, copy or use Pulse's seismic data without Pulse's knowledge or permission. The cost of litigation necessary to enforce Pulse's ownership rights and copyright could be prohibitive.

## **NEW PRODUCTS**

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. There are currently no other products that compete directly against seismic data for such purposes. Should a new product or method be introduced that was technically and/or economically comparable or superior to seismic data, Pulse's data library sales and/or the pricing thereof could be adversely affected.

## **ADDITIONAL INFORMATION**

You may find additional information relating to Pulse, including the Company's Annual Information Form, on SEDAR at [www.sedar.com](http://www.sedar.com).

## **FORWARD-LOOKING INFORMATION**

This document contains information that constitutes "forward-looking information" or "forward-looking statements" (collectively, "forward-looking information") within the meaning of applicable securities legislation.

The Outlook and the Liquidity, Capital Resources and Capital Requirements sections contain forward-looking information which includes, among other things, statements regarding:

- / Pulse's short-term outlook is more cautious than one year ago;
- / The Company's first quarter seismic data library sales are likely to be weaker than last year's very low level, and traditional sales for the year could well be lower than in 2015;
- / More M&A activity will create favorable conditions for additional transaction-based sales;
- / The unpredictability of transaction-based sales means that Pulse will continue to lack visibility as to its 2016 revenues;
- / Pulse's long-term goal is to become Western Canada's largest licensable data library;
- / Pulse's management believes that the Company's capital resources will be sufficient to finance future operations and carry out the necessary capital expenditures through 2016;
- / Pulse's capital allocation strategy;
- / Pulse's dividend policy;
- / Oil and natural gas prices;
- / Oil and natural gas drilling activity and land sales activity;
- / Oil and natural gas company capital budgets;
- / Future demand for seismic data;

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

Sources for the forecasts and the material assumptions underlying this forward-looking information are, where applicable, noted in the relevant sections of this MD&A.

Undue reliance should not be placed on forward-looking information. Forward-looking information is based on current expectations, estimates and projections that involve a number of risks and uncertainties, which could cause actual results to vary and in some instances to differ materially from those anticipated in the forward-looking information. Pulse does not publish specific financial goals or otherwise provide guidance, due to the inherently poor visibility of seismic revenue.

The material risk factors include, without limitation:

- / 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, partner copy sales and asset disposition-related 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 Company's ability 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 on qualified seismic field contractors;
- / Dependence on key management, operations and marketing personnel;
- / The loss of seismic data;
- / Cybersecurity threats;
- / Protection of intellectual property rights; and
- / The introduction of new products.

The foregoing list is not exhaustive. Additional information on these risks and other factors which could affect the Company's operations and financial results is included under "Risk Factors". Forward-looking information is based on the assumptions, expectations, estimates and opinions of the Company's management at the time the information is presented.

# INDEPENDENT AUDITORS' REPORT

## TO THE SHAREHOLDERS OF PULSE SEISMIC INC.

We have audited the accompanying consolidated financial statements of Pulse Seismic Inc., which comprise the consolidated statements of financial position as at December 31, 2015 and 2014, the consolidated statements of comprehensive income (loss), changes in equity and cash flows for the years then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

### **MANAGEMENT'S RESPONSIBILITY FOR THE CONSOLIDATED FINANCIAL STATEMENTS**

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with International Financial Reporting Standards and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

### **AUDITORS' RESPONSIBILITY**

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained in our audits is sufficient and appropriate to provide a basis for our audit opinion.

### **OPINION**

In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of Pulse Seismic Inc. as at December 31, 2015 and 2014 and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with International Financial Reporting Standards.



Chartered Professional Accountants

March 2, 2016

Calgary, Canada



# CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

(thousands of Canadian dollars)

As at	Note	December 31, 2015	December 31, 2014
<b>Assets</b>			
Cash and cash equivalents		-	901
Trade and other receivables	5	6,158	7,083
Prepaid expenses		292	275
Total current assets		6,450	8,259
Participation surveys in progress	6	-	36
Seismic data library	7	47,623	66,468
Property and equipment		489	663
Other		56	56
Total non-current assets		48,168	67,223
Total assets		54,618	75,482
<b>Liabilities and Shareholders' Equity</b>			
Operating line of credit	8	222	-
Accounts payable and accrued liabilities		809	1,772
Deferred revenue		423	1,191
Total current liabilities		1,454	2,963
Long-term debt	8	-	5,367
Deferred income tax liabilities	9	7,699	8,574
Other long-term payable		76	177
Total non-current liabilities		7,775	14,118
Total liabilities		9,229	17,081
<b>Shareholders' Equity</b>			
Share capital	10	76,504	78,782
Contributed surplus		2,184	2,399
Deficit		(33,299)	(22,780)
Total shareholders' equity		45,389	58,401
Total liabilities and shareholders' equity		54,618	75,482

See accompanying notes to consolidated financial statements.



On behalf of the Board: Robert Robotti  
Chair of the Board



Daphne Corbett  
Audit Committee Chair

# CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

(thousands of Canadian dollars, except per share data)  
For the years ended December 31

	Note	2015	2014
<b>Revenue</b>			
Data library sales		21,214	35,743
Participation surveys		3,220	-
Total revenue		24,434	35,743
<b>Operating expenses</b>			
Amortization of seismic data library	7	22,836	22,507
Impairment loss	7	937	-
Salaries, internal commissions and benefits	13	3,989	4,772
Other selling, general and administrative costs	14	2,327	2,735
Depreciation		185	248
Total operating expenses		30,274	30,262
Results from operating activities		(5,840)	5,481
<b>Financing costs</b>			
Financing expenses		495	889
Interest income		(1)	(14)
Net financing costs		494	875
<b>Earnings (loss) before income taxes</b>		(6,334)	4,606
Current income tax		-	-
Deferred income tax (reduction)	9	(1,026)	1,128
Income tax expense (reduction)		(1,026)	1,128
<b>Net earnings (loss) and comprehensive income (loss)</b>		(5,308)	3,478
<b>Net earnings (loss) per share, basic and diluted</b>	12	(0.09)	0.06

See accompanying notes to consolidated financial statements.

# CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

<i>(thousands of Canadian dollars, except number of shares)</i>	Note	Number of shares issued (repurchased)	Share capital	Contributed surplus	Deficit	Total equity
Balance at January 1, 2014		59,349,120	81,673	2,399	(18,110)	65,962
Net earnings for the year		-	-	-	3,478	3,478
Share-based compensation		-	-	377	-	377
Settlement of vested long-term incentive plan award		-	-	(397)	-	(397)
Tax effect of equity-settled share-based compensation		-	-	20	-	20
Normal course issuer bid		(2,101,277)	(2,891)	-	(3,436)	(6,327)
Dividends paid	10	-	-	-	(4,712)	(4,712)
Balance at December 31, 2014		57,247,843	78,782	2,399	(22,780)	58,401

	Note	Number of shares issued (repurchased)	Share capital	Contributed surplus	Deficit	Total equity
Balance at January 1, 2015		<b>57,247,843</b>	<b>78,782</b>	<b>2,399</b>	<b>(22,780)</b>	<b>58,401</b>
Net loss for the year		-	-	-	(5,308)	(5,308)
Share-based compensation		-	-	220	-	220
Settlement of vested long-term incentive plan award		-	-	(325)	-	(325)
Tax effect of equity-settled share-based compensation		-	-	(151)	-	(151)
Normal course issuer bid		<b>(1,625,400)</b>	<b>(2,237)</b>	-	<b>(1,831)</b>	<b>(4,068)</b>
Shares cancelled and related dividends		<b>(29,754)</b>	<b>(41)</b>	<b>41</b>	<b>28</b>	<b>28</b>
Dividends paid	10	-	-	-	(3,408)	(3,408)
Balance at December 31, 2015		<b>55,592,689</b>	<b>76,504</b>	<b>2,184</b>	<b>(33,299)</b>	<b>45,389</b>

See accompanying notes to consolidated financial statements.

# CONSOLIDATED STATEMENTS OF CASH FLOWS

(thousands of Canadian dollars)

For the years ended December 31

	Note	2015	2014
<b>Cash flows provided by (used in):</b>			
<b>Operating:</b>			
Net earnings (loss) and comprehensive income (loss)		(5,308)	3,478
Adjustment for:			
Amortization of seismic data library		22,836	22,507
Impairment loss		937	-
Depreciation		185	248
Loss on disposition of capital assets		3	2
Income tax expense (reduction)		(1,026)	1,128
Equity-settled share-based compensation		220	377
Net financing costs		494	875
Interest paid		(297)	(625)
Interest received		1	14
Income tax received		-	3,576
		18,045	31,580
Net change in non-cash working capital	15	(951)	(3,595)
Cash provided by operating activities		17,094	27,985
<b>Financing:</b>			
Normal course issuer bid		(4,068)	(6,327)
Shares purchased for equity-settled share-based compensation		(325)	(393)
Repayment of long-term debt		(5,500)	(16,600)
Dividends paid		(3,408)	(4,712)
Dividend recovery from share cancellation		28	-
Cash used in financing activities		(13,273)	(28,032)
<b>Investing:</b>			
Additions to seismic data library through participation surveys		(3,959)	(36)
Seismic data purchases, digitization and related cost		(933)	(733)
Additions to property and equipment		(14)	(64)
Net change in non-cash working capital		(38)	36
Cash used in investing activities		(4,944)	(797)
Decrease in cash and cash equivalents		(1,123)	(844)
Cash and cash equivalents, beginning of year		901	1,745
Cash and cash equivalents (operating line of credit), end of year		(222)	901

See accompanying notes to consolidated financial statements.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Information as at December 31, 2015 and 2014 and for the years ended December 2015 and 2014.

(Tabular amounts in thousands of Canadian dollars, except per share data, numbers of shares and other exceptions as indicated)

## 1 | REPORTING ENTITY

Pulse Seismic Inc. (the Company) was incorporated under the Canada Business Corporations Act and is a publicly-listed company on the Toronto Stock Exchange (TSX) trading under the symbol PSD and on the OTCQX International trading under the symbol PLSDF. The Company's registered office is in Calgary, Alberta. The Company is a provider of seismic data to the energy sector in western Canada.

## 2 | BASIS OF PREPARATION

### A) STATEMENT OF COMPLIANCE

The consolidated financial statements were prepared in accordance with International Financial Reporting Standards (IFRS).

The consolidated financial statements were prepared by the Company's management and were approved by the Board of Directors on March 2, 2016.

### B) BASIS OF PRESENTATION

The consolidated financial statements include the accounts of the Company's wholly-owned subsidiaries.

### C) BASIS OF MEASUREMENT

The consolidated financial statements were prepared on the historical cost basis.

### D) FUNCTIONAL AND PRESENTATION CURRENCY

The consolidated financial statements are presented in Canadian dollars, which is the Company's functional currency. All financial information presented in Canadian dollars has been rounded to the nearest thousand, except per share data, number of shares and other exceptions as indicated.

### E) BASIS OF CONSOLIDATION

#### i) *Joint operations*

Certain of the Company's seismic data library assets are jointly owned with others. The consolidated financial statements include the Company's share in the joint assets, joint liabilities, expenses incurred and income earned from the joint operations.

#### ii) *Transactions eliminated on consolidation*

Intra-group balances and transactions, and any unrealized income and expenses arising from intra-group transactions, are eliminated in preparing the consolidated financial statements.

### F) USE OF ESTIMATES AND JUDGEMENTS

Preparing the consolidated financial statements in accordance with IFRS required management to make estimates and judgements that affected the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the consolidated financial statements, and the amounts of revenue and expenses attributed to the reporting period. Actual results could differ from those estimates.



Management discussed the Company's critical accounting principles and estimates and the application of such principles and estimates with the Audit Committee of the Board of Directors. Estimates and underlying assumptions are reviewed at a minimum annually, as required by IFRS. Changes to accounting estimates are recognized in the year in which the estimates are revised and in any future years affected.

The following note provides information about critical judgements in applying accounting policies that have the most significant effect on the amounts recognized in the consolidated financial statements:

- / Note 3(g) - The Company uses judgement in determining its cash-generating units (CGUs) for purposes of impairment testing. The determination was based on management's judgement in regards to the smallest identifiable group of seismic data that generates cash flows largely independent of the cash inflows from other data. Changes in the determination of CGUs could have a significant impact on the carrying value of the assets and could result in additional impairment charges or reversal of impairment in future periods.

The following notes provide information about assumptions and estimation uncertainties that pose a significant risk of a material adjustment within the next financial year:

- / Note 3(a) (ii) - Participation survey revenue is recognized in the financial statements in proportion to the stage of project completion. Participation survey revenue is recognized when the total contract revenue, total contract costs, contract costs to completion and the stage of completion at the balance sheet date can be measured reliably, requiring management to make judgments regarding the total contract costs, contract costs to completion and stage of completion. These estimates are subject to uncertainty as they require assumptions about field conditions and are reviewed by management on a monthly basis. There was one participation survey completed in 2015 and none in 2014.
- / Note 3(e) - Amortization of seismic data library is based on management's estimates of expected future sales, expected useful lives, market developments and experience. These estimates may change due to changes in market conditions, potential prospects, exploration licence periods, exploration and development in certain areas, government regulations and general economic conditions. Because of the inherent difficulty in estimating market developments and future sales, the amortization rates might not accurately reflect the useful life of the data library. The amortization rates are adjusted if it is determined that estimated useful lives have changed.
- / Note 3(g) - Impairment tests, if required, involve the estimation of future cash flows, requiring management to make judgments regarding long-term forecasts of future revenues and costs related to the seismic data library and residual values. These forecasts are subject to uncertainty as they require assumptions about demand for seismic data and future market conditions. Significant changes in these assumptions could require a provision for impairment in a future period.
- / Note 3(h) - Deferred tax assets are recognized for all unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilized. Significant management judgment is required to determine the amount of deferred tax assets that can be recognized, based upon the likely timing and level of future taxable profits. The estimates of projected future taxable profits are based on a variety of factors and assumptions, many of which are subjective and are outside of the Company's control. Accordingly, these estimates could differ significantly from year to year, and the Company might end up realizing more or less of the deferred tax assets than it has recognized in the consolidated financial statements.

The Company is aware that the Canada Revenue Agency (CRA) may revise the way it assesses the income tax amortization of certain seismic data library costs. No policy document has been issued by the CRA and, therefore, the Company is not able to estimate the impact this change will have on its income tax calculations, carry-forward balances or consolidated financial statements.

- / Note 3(k) - The number of Performance Share Units (PSUs) expected to vest is based on management's estimates of expected future results and vesting criteria in subsequent years. These forecasts are uncertain as they require assumptions about future market conditions, revenues, expenses and vesting criteria. Significant changes in the assumptions could require an adjustment to the amount of share-based compensation recognized.

### G) NEW IFRS PRONOUNCEMENTS THAT APPLY TO THE COMPANY

A number of new standards, amendments to standards and interpretations have been issued by the IASB and are not yet effective for the year ended December 31, 2015. The new standards, amendments to standards and interpretations have not been applied in preparing these consolidated financial statements. None of these are expected to have a significant effect on the consolidated financial statements, except for:

/ IFRS 15, *Revenue from Contracts with Customers*, which provides guidance on revenue recognition and relevant disclosures. The standard provides a single, principles-based five-step model to be applied to all contracts with customers. IFRS 15 was issued in May 2014 and applies to annual reporting periods beginning on or after January 1, 2018, with early adoption permitted. The new standard enhances revenue disclosure.

After review, Pulse's management concluded that IFRS 15 would affect the Company's policy for recognizing participation survey revenue. Pulse currently recognizes revenue on participation surveys based on percentage of completion. With the amended standard, participation survey revenue can only be recognized in the financial statements when the survey is complete in all respects, meaning the risks and rewards of the final product have been passed on to the customer. Pulse will therefore have to adjust its revenue recognition policy accordingly and may choose to adopt the standard before January 2018. With this adjustment, the lag between the progressive recognition of participation survey revenue and initial amortization upon survey completion will disappear.

/ IFRS 16, *Leases*. IFRS 16 was issued in January 2016, significantly revising the way in which companies account for leases by requiring almost all leases to be included on the balance sheet of lessees. The standard provides a single lessee accounting model, requiring lessees to recognize assets and liabilities for all leases unless the lease term is 12 months or less or the underlying asset has a low value. IFRS 16 is effective for annual periods beginning on or after January 1, 2019, with early adoption permitted for companies that also apply IFRS 15, *Revenue from Contracts with Customers*. The Company continues to evaluate the potential impact of IFRS 16 on the financial statements and, therefore, the impact is unknown.

## 3 | SIGNIFICANT ACCOUNTING POLICIES

The accounting policies set out below have been applied consistently to all periods presented in these consolidated financial statements.

### A) REVENUE RECOGNITION

Revenue is measured at the fair value of the consideration received or receivable, net of discounts and volume rebates.

#### i) *Data library sales*

Revenue is recognized when the customer executes a valid licence agreement, transfer of seismic data to the customer occurs and collection is reasonably assured. If it is probable that discounts will be granted and the amount can be measured reliably, then the discount is recognized as a reduction of revenue as the sales are recognized. The Company defers the unearned portion of the contract value for which the revenue recognition requirements have not been met. Deferred revenue consists of the difference between the total contract value and the amount of seismic data delivered.

#### ii) *Participation surveys*

The Company participates with customers in 3D seismic participation surveys from which the Company retains proprietary rights to the collected data, and from which participating customers receive a non-transferable licensed copy. Customers typically can direct or influence the project specifications and access data as it is being acquired.

Participation survey revenue is recognized in the financial statements in proportion to the project's stage of completion and when the total contract revenue, total contract costs, contract costs to completion and stage of completion at the date of the statement of financial position can be measured reliably. The stage of completion is assessed by calculating the cost incurred for work performed to the date of the statement of financial position as a percentage of the estimated total contract cost. The amount of revenue recognized is equal to the total contract revenue multiplied by the percentage of completion. Deferred revenue consists of the difference between the total value billed and the amount of revenue recognized.

## **B) FINANCIAL INSTRUMENTS**

Financial assets of the Company include cash and cash equivalents and trade receivables. Financial liabilities of the Company mainly comprise trade payables and long-term debt.

Financial instruments are recognized on the consolidated statement of financial position when the Company becomes a party to the instrument's contractual obligations. All financial instruments are initially recognized at fair value. Measurement in subsequent periods depends on the instrument's classification.

Cash and cash equivalents and trade receivables are designated as loans and receivables. Accounts payable and long-term debt are designated as other financial liabilities. Loans and receivables and other financial liabilities, including related transaction costs, are measured initially at fair value and subsequently at amortized cost using the effective interest rate method, less any allowance for impairment.

A provision for impairment of loans and receivables is established when there is objective evidence that the Company will not be able to collect all amounts due according to the receivable's original terms. The amount of the provision is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the original effective interest rate. The carrying amount of the asset is reduced through the use of an allowance account and the amount of the loss is recognized in the income statement. When a receivable is uncollectible, it is written off against the allowance account. Subsequent recoveries of amounts previously written off are credited to earnings or loss.

The fair value of accounts receivable is estimated as the present value of future cash flows, discounted at the market rate of interest at the reporting date. Fair value of financial liabilities, which is determined for disclosure purposes, is calculated based on the present value of future principal and interest cash flows, discounted at the market rate of interest at the reporting date.

## **C) CASH AND CASH EQUIVALENTS**

Short-term investments with an original maturity of three months or less, net of the operating line of credit, are considered to be cash equivalents.

## **D) PARTICIPATION SURVEYS IN PROGRESS**

Participation surveys in progress include all expenditures related directly to specific projects and an allocation of variable overheads.

Accrued participation survey revenue represents the gross unbilled amount expected to be collected from customers for participation survey work performed to date and is measured at the value of the contract recognized to date, based on the percentage of completion, less progress billings. If payments received from customers exceed the related income recognized, then the difference is presented as deferred revenue on the consolidated statement of financial position.

Preliminary costs during the research phase of participation surveys are recognized in earnings as incurred. Development expenditures related to participation surveys are capitalized only once the survey project is deemed technically feasible, which usually occurs when the participation survey contract is signed. The expenditures capitalized include the cost of materials, subcontractor fees and labour costs that are directly attributable to the survey.

E) SEISMIC DATA LIBRARY

The seismic data library has a finite useful life and is measured at cost less accumulated amortization and impairment losses. Additions to the seismic data library arise in two distinct ways: (i) participation surveys and (ii) the purchase of existing data. Costs directly incurred in acquiring, processing and otherwise completing seismic surveys are capitalized to the seismic data library.

Subsequent expenditures on data library assets, such as reprocessing, are capitalized only when the expenditure increases the asset's future economic benefits. All other expenditures are recognized in earnings as incurred.

Amortization is calculated over the cost of the asset less its residual value. Costs associated with participation surveys are amortized at 50 percent immediately on the delivery of the data to the participants, with the balance amortized on a straight-line basis over the seven-year period commencing at the end of the period of exclusivity (three to six months from data delivery), if there is one.

The assumptions behind the 50 percent immediate amortization on delivery are the following. The Company's historical average and target survey prefunding percentage is 70 percent of the cost of the seismic data shoot. Also, based on historical numbers, within seven years the Company usually recovers 70 percent of the total cost of the survey by selling the data acquired by the survey. After seven years the data sales are generally expected to decline.

Based on these numbers, the total return on investment (ROI) for a participation survey historically is 140 percent of cost. The 70 percent prefunding divided by the expected ROI of 140 percent equals 50 percent. This 50 percent initial amortization represents that approximately 50 percent of the expected return has been realized with the initial licensing of the data during the shoot.

The cost of purchased data are amortized on a straight line bases over seven years.

Amortization is based on management's estimates of expected future sales, expected useful lives, market developments and experience. These estimates may change due to changes in market conditions, potential prospects, exploration licence duration, exploration and development in certain areas, government regulations and general economic conditions. Amortization methods, useful lives and residual values are reviewed at each financial year-end and adjusted if appropriate.

F) PROPERTY AND EQUIPMENT

Property and equipment are recorded at cost less accumulated depreciation and impairment losses. Cost includes expenditures that are directly attributable to the acquisition of the asset.

Depreciation is calculated over the depreciable amount, which is the cost of an asset less its residual value. Depreciation is recognized in earnings over the estimated useful life of each significant component of an item of property and equipment. The half-year rule is applied to the first year of acquisition.

Depreciation is provided using the following methods:

	Declining Balance	Straight Line
Computer hardware and software	30%	
Office equipment	20%	
Leasehold improvements		Balance of lease

G) IMPAIRMENT OF LONG-LIVED ASSETS

The carrying amounts of the seismic data library, property and equipment, and intangible assets are reviewed at each reporting date by management to determine whether there is any indication of impairment. If so, the asset's recoverable amount is estimated and impairment recorded, if any.

Factors considered important by the Company that could trigger an impairment assessment include:

- / Significant underperformance relative to expected operating results based on historical and/or projected data;
- / Significant changes in the manner of the use of the asset or the strategy of the overall business; and
- / Significant negative industry or economic trends.

The recoverable amount of tangible and intangible assets is the greater of value in use and fair value less costs to sell. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessment of the time value of money and the risks specific to the asset. For the purpose of impairment testing, assets are classified in the smallest grouping that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or groups (the CGU).

An impairment loss is recognized if the carrying amount of an asset or its CGU exceeds its estimated recoverable amount. Impairment losses are recognized in earnings or loss. Impairment losses recognized in respect of a CGU are allocated to the carrying amount of the assets in the unit on a pro-rata basis.

Impairment losses for assets recognized in prior periods are assessed at each reporting date for any indications that the loss has decreased. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount and only to the extent that the assets' carrying value does not exceed the carrying amount that would be determined, net of amortization or depreciation, if no impairment loss had been recognized.

#### **H) INCOME TAXES**

Income tax expense comprises current and deferred tax. Income tax expense is recognized in earnings or loss except to the extent that it relates to items recognized directly in equity, in which case it is recognized in equity or in other comprehensive income.

Current tax is the expected tax payable or receivable on the taxable income or loss for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to taxes payable in respect of previous years.

Deferred tax is recognized in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is measured at the tax rates expected to be applied to the temporary differences when they are reversed, based on the laws enacted or substantively enacted by the reporting date. Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets, and they relate to income taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but they intend to settle current tax liabilities and assets on a net basis or their tax assets and liabilities will be realized simultaneously.

Deferred tax is not recognized for the following differences:

- / The initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable income or loss; and
- / Differences relating to investments in subsidiaries and jointly controlled entities to the extent that it is probable they will not be reversed in the foreseeable future.

A deferred tax asset is recognized to the extent that it is probable that future taxable income will be available against which deductible temporary differences can be utilized. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable the related tax benefit will be realized.

#### **I) PER SHARE AMOUNTS**

Basic per share amounts are calculated using the weighted average number of shares outstanding during the period.



## **J) SHARE CAPITAL**

Common shares are classified as equity. When shares are sold, the consideration received, including directly attributable costs, net of any tax effect, is recognized as a change in share capital. The Company purchases shares for cancellation under its normal course issuer bid. The cost of purchasing shares for cancellation is first charged to share capital to the extent of the average carrying value of the common shares purchased and the excess is charged to retained earnings. No gain or loss is recognized in the consolidated statements of comprehensive income (loss) on the purchase, sale, issuance or cancellation of the Company's own equity instruments.

## **K) SHARE-BASED PAYMENTS**

In 2012, the Company implemented a new long-term incentive plan (LTIP) under which participants are granted restricted share units (RSUs) and performance share units (PSUs). LTIP award amounts are at the discretion of the Board of Directors. RSUs and PSUs have accompanying dividend-equivalent rights and, therefore, additional RSUs and PSUs are issued to reflect dividends declared on the common shares. The plan's trustee will purchase common shares on the open market for the after-tax number of RSUs and PSUs vested with funds provided by the Company. The RSUs and PSUs are treated as equity-settled share-based payments and the related payroll taxes are treated as cash-settled share-based payments.

The compensation expense is recognized over the vesting period. For equity-settled share-based payments, the compensation expense is based on the number of RSUs and PSUs expected to vest and the market value of a common share of the Company on the grant date, with a corresponding increase to contributed surplus. For cash-settled share-based payments, the compensation expense is measured initially at the fair market value of the Company's shares at the grant date and subsequently adjusted for the additional shares granted based on the reinvestment of notional dividends and the market value of the shares at the end of each reporting period, with a corresponding increase to liabilities.

## **L) EMPLOYEE BENEFITS**

Short-term employee benefit obligations are calculated on an undiscounted basis and are expensed as the related services are provided.

A liability is recognized for the amount expected to be paid under short-term cash bonus or profit-sharing plans if the Company has a current legal or constructive obligation to pay this amount as a result of past service provided by the employee and the obligation can be estimated reliably.

## **M) LEASES**

The determination of whether an arrangement is or contains a lease is based on the substance of the arrangement and requires an assessment of whether its fulfillment depends on the use of a specific asset or assets and the arrangement conveys a right to use the asset.

Payments made under operating leases are recognized in earnings or loss on a straight-line basis over the lease term.

## **N) NET FINANCING COSTS**

Financing expenses consist of interest expense on long-term debt and amortization of the deferred financing costs. All borrowing costs are recognized in earnings or loss using the effective interest rate method. Interest income was earned from term deposits.

## 4 | 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. 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 revenue also varies 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 can be easily accessed without environmental harm. In addition, the size and pre-funding levels of individual participation surveys can vary significantly

## 5 | TRADE AND OTHER RECEIVABLES

As at December 31,	2015	2014
Data library trade receivables	6,155	7,080
Other	3	3
	6,158	7,083

No bad debt expense was recorded in 2015 or 2014.

## 6 | PARTICIPATION SURVEYS IN PROGRESS

	2015	2014
Opening balance, January 1	36	-
Costs incurred	3,959	36
Transferred to seismic data library	(3,995)	-
Closing balance, December 31	-	36

No participation survey was in progress at December 31, 2015. At December 31, 2014, the Peco South 3D survey was in progress and was delivered during the first quarter of 2015.

## 7 | SEISMIC DATA LIBRARY

	2015	2014
<b>Cost</b>		
Opening balance, January 1	<b>434,527</b>	433,794
Acquisitions through purchases and related cost	<b>933</b>	733
Transferred from participation surveys in progress	<b>3,995</b>	-
Closing balance, December 31	<b>439,455</b>	434,527
<b>Accumulated amortization</b>		
Opening balance, January 1	<b>368,059</b>	345,552
Amortization for the year	<b>22,836</b>	22,507
Impairment loss for the year	<b>937</b>	-
Closing balance, December 31	<b>391,832</b>	368,059
Carrying amount, December 31	<b>47,623</b>	66,468

At December 31, 2015, the Company assessed its CGUs included in its seismic data library for indicators of impairment, as required under IFRS, and concluded there were such indicators. The principal indicator was the ongoing weakness of commodity prices along with uncertainty over the timing of any improvement. That indicator triggered an impairment test. As a result, the Company completed an impairment test. For the purpose of impairment testing, the recoverable amounts of the Company's CGUs is the greater of its value in use and its fair value less costs to sell. The recoverable amounts of the CGU's were determined based on a value in use calculation. The Company used the following assumptions to calculate the recoverable amount of each CGU:

- / The estimated future cash flows for the next five years net of variable and fixed costs;
- / The residual value of each CGU estimated to be 20 percent of the original cost for purchased data and 10 percent of the original cost for data shot in a participation survey;
- / A pre-tax discount rate of 9.1 percent to calculate the net present value of future cash flows, which is the weighted average cost of capital calculated at December 31, 2015; and
- / A combined federal-provincial income tax rate of 27 percent.

Based on these assumptions and the Company's calculations, an impairment loss of \$937,000 was recognized in the fourth quarter of 2015. The impairment specifically related to two CGUs, Altares 3D (\$323,000) and Simon East 3D (\$614,000), and was the result of less activity in the areas due to commodity prices and capital budgets. The total remaining net book value of Altares 3D and Simon East 3D was \$826,000 at December 31, 2015.

At December 31, 2014, no indicators of impairment were identified and accordingly, an impairment test was not required.

Subsequent to the end of the year, on January 26, 2016, the Company acquired approximately 107,000 net kilometres of 2D seismic data and 58 net square kilometres of 3D seismic data, increasing Pulse's 2D seismic data library by 31.5 percent to approximately 447,000 net kilometres. The acquisition includes data spread throughout the Western Canada Sedimentary Basin and is complementary to the Company's existing data. The purchase price of \$3.65 million was funded through the issuance of 669,643 common shares, plus \$2.15 million in cash.

## 8 | LONG-TERM DEBT

As at December 31,	2015	2014
Secured revolving bank term loan	-	5,500
Less deferred financing costs	-	133
Long-term debt, net of deferred financing costs	-	5,367

On February 15, 2013 the Company announced it had executed a new \$50.0 million three-year extendible revolving credit facility with a syndicate of banks. There are no scheduled principal payments. Voluntary prepayments are permitted in whole or part at any time without premium or penalty.

On January 18, 2016 the Company elected to reduce the facility's available borrowing amount to \$30.0 million from \$50.0 million. Up to \$5.0 million of the revolving facility is available as an operating line of credit. As at December 31, 2015, \$222,000 (December 31, 2014 - Nil) was drawn on the operating line of credit, and long term-debt was nil (December 31, 2014 - \$5.4 million). The credit facility with a syndicate of banks includes an accordion feature which allows an increase in the facility's size up to \$70.0 million with the lenders' consent. The accordion incurs no renewal or standby fees. At the same time, the Company negotiated a one year extension and the current maturity date is now February 13, 2019. On an annual basis, the Company has the option to extend the maturity date for one additional year with the lenders' approval.

Interest on the syndicated revolving bank loan is calculated based on the lender's prime rate, bankers' acceptance rate or LIBOR, plus an applicable margin based on the covenant ratio of total debt to adjusted earnings before interest, tax, depreciation and amortization (adjusted EBITDA). At December 31, 2015 the applicable interest rate on the long-term debt was 3.2 percent (December 31, 2014 - 3.5 percent).

The Company pays a standby fee based on the daily undrawn balance of the credit facility and an applicable margin based on the covenant ratio of total debt to adjusted EBITDA.

The covenants include two financial ratio tests. The first is that the total debt to adjusted EBITDA must not exceed a ratio of 2.50:1. The ratio was 0.01:1 at December 31, 2015. The second financial covenant is that the interest coverage ratio must be at least 3:1 at all times. The ratio was 51:1 at December 31, 2015. The Company was in compliance with all covenants at December 31, 2015.

The credit facility is secured by a charge on all of the assets of the Company and its material subsidiaries.

## 9 | DEFERRED TAX ASSETS AND LIABILITIES

### A) UNRECOGNIZED DEFERRED TAX ASSETS

As at December 31,	2015	2014
Foreign exploration and development expense	347	355
Capital losses	413	383
	760	738

Deferred tax assets for these items have not been recognized because utilization against future taxable profits is not probable.

## B) RECOGNIZED DEFERRED TAX ASSETS AND LIABILITIES

Deferred tax assets and liabilities are attributable to the following:

As at December 31,	2015	2014
Deferred income tax assets:		
Resource expenditures	199	194
Non-capital tax losses carried forward	2,060	1,747
Share issuance and financing cost	36	27
Long-term incentive plan	120	341
Deferred income tax asset	2,415	2,309
Deferred income tax liability:		
Seismic data library and participation surveys	10,114	10,883
Deferred income tax liability	10,114	10,883
Net deferred income tax liabilities	7,699	8,574

At December 31, 2015, the Company had non-capital tax losses of \$8.0 million available to reduce future years' income for tax purposes. These losses expire between 2033 and 2035.

## C) MOVEMENT IN TEMPORARY DIFFERENCES DURING THE YEAR

	Deferred tax liabilities (assets) January 1, 2014	Recognized in income	Recognized in equity	Deferred tax liabilities (assets) December 31, 2014
Resource expenditures	(212)	18	-	(194)
Non-capital losses	(1,549)	(198)	-	(1,747)
Share issuance and financing costs	(22)	(5)	-	(27)
Long-term incentive plan	(393)	72	(20)	(341)
Seismic data library	9,642	1,241	-	10,883
	7,466	1,128	(20)	8,574

	Deferred tax liabilities (assets) January 1, 2015	Recognized in income	Recognized in equity	Deferred tax liabilities (assets) December 31, 2015
Resource expenditures	(194)	(5)	-	(199)
Non-capital losses	(1,747)	(313)	-	(2,060)
Share issuance and financing costs	(27)	(9)	-	(36)
Long-term incentive plan	(341)	70	151	(120)
Seismic data library	10,883	(769)	-	10,114
	8,574	(1,026)	151	7,699



## D) RECONCILIATION OF EFFECTIVE TAX RATE

Income tax expense differs from the amount that would be computed by applying the basic combined federal and provincial statutory income tax rate to earnings before income taxes. The reasons for the differences are as follows:

For the years ended December 31,	2015	2014
Earnings (loss) before income tax	<b>(6,334)</b>	4,606
Combined federal and provincial income tax rate	<b>26%</b>	25%
Expected income tax expense (reduction)	<b>(1,647)</b>	1,152
Effects of differences:		
Non-deductible expenses	<b>13</b>	14
Adjustment in respect of prior years	<b>1</b>	-
Change in valuation allowance	<b>(35)</b>	(38)
Effect of change in provincial tax rate pools	<b>642</b>	-
Actual income tax expense (reduction)	<b>(1,026)</b>	1,128

On June 15, 2015 the government of Alberta announced that the general corporate income tax rate would increase from 10 percent to 12 percent effective July 1, 2015. The impact of this rate change has been recognized in the 2015 financial statements.

The deferred tax related to the equity-settled share-based compensation is recognized directly in equity, as the estimated future tax deduction exceeds the cumulative remuneration expense.

## 10 | EQUITY

### A) SHARE CAPITAL

The Company's authorized share capital consists of an unlimited number of common and an unlimited number of preferred shares, issuable in series. The shares have no stated par value. No preferred shares have been issued. All common shares are entitled to receive dividends as declared and are entitled to one vote per share at meetings of the Company.

On December 16, 2015, the Company announced the renewal of its normal course issuer bid (NCIB). The Company may purchase, for cancellation, up to a maximum of 3,509,326 common shares, equal to approximately 10 percent of the public float of 35,093,268 common shares as at December 15, 2015. The Company is also limited under the NCIB to purchasing up to 5,134 common shares in any one day, subject to the block purchase exemption under the TSX rules. The NCIB will continue until December 20, 2016. Purchases will be made on the open market through the TSX or alternative platforms at the market price of such shares. All shares purchased under the NCIB will be cancelled.

During the year ended December 31, 2015 the Company purchased, for cancellation 1,625,400, (2014 - 2,101,277) common shares pursuant to its NCIB at a weighted average price of \$2.50 (2014 - \$3.01) per share, including brokerage fees, for a total cost of \$4.1 million (2014 - \$6.3 million). The total cost paid, including fees, was first charged to share capital to the extent of the average carrying value of the common shares purchased and the excess of \$1.8 million (2014 - \$3.4 million) was charged to the deficit.

The purchase price of the \$3.65 million acquisition discussed in Note 7 has been partially funded through the issuance of 669,643 Pulse common shares valued at approximately \$2.24 per share, based on the 10-day volume-weighted average price of the shares on the Toronto Stock Exchange at close of trading on January 21, 2016.

## **B) DIVIDENDS**

Dividends paid in 2015 were \$0.06 per share (2014 - \$0.08) and totalled \$3.4 million (2014 - \$4.7 million).

On November 4, 2015, with lower period-over-period seismic data library sales and the strong possibility of an extended downturn, Pulse's Board of Directors deemed it financially prudent and in the long-term interests of shareholders to suspend the Company's quarterly dividend of \$0.02 per share.

# **11 | SHARE-BASED PAYMENTS**

In 2012, the Company's Board of Directors approved a new long-term incentive plan for employees, officers and directors designed to align the Company's long-term incentive compensation with its performance and to increase individual share ownership.

The LTIP awards consist of RSUs and PSUs, with Directors being granted RSUs only. Upon vesting, each RSU and PSU entitles the holder to one common share of the Company. RSUs and PSUs have accompanying dividend-equivalent rights and, therefore, additional RSUs and PSUs are issued to reflect dividends declared on the common shares.

On March 31, 2015 one-third of the awards which were eligible to vest were RSUs and two-thirds were PSUs. Based on the Company's performance in 2014 and the predetermined performance measures, 4 percent or 10,910 of the eligible PSUs vested. RSUs vest automatically based upon time and, consequently, all of the eligible RSUs vested automatically on March 31, 2015.

To satisfy its obligation, in April 2015 the Company provided \$350,000 to the plan's trustee to purchase common shares on the open market for the total after-tax number of cash- and equity-settled RSUs that vested on March 31, 2015. The related payroll taxes of \$211,000 were paid in May 2015 to settle fully the accrued cash-settled portion of the share-based payment liabilities.

In determining the amount of equity-settled share-based compensation related to PSUs, management makes estimates about future results and vesting criteria. It is reasonably possible that, based on current knowledge, future outcomes could differ from the estimates and require a material adjustment to the share-based compensation expense recorded in future periods. The impact of any change in the number of PSUs expected to vest is recognized in the period the estimate is revised.

During the year ended December 31, 2015, the Company recognized \$238,000 (2014 - \$358,000) in compensation expense related to the LTIP in salaries, internal commissions and benefits on the statement of comprehensive income (loss). The equity-settled portion was \$220,000 (2014 - \$377,000).

At December 31, 2015 the obligation related to the cash-settled portion of the LTIP was \$174,000 (December 31, 2014 - \$372,000) with \$98,000 (December 31, 2014 - \$195,000) included in accounts payable and accrued liabilities and \$76,000 (December 31, 2014 - \$177,000) included in other long-term liabilities.

The following summarizes activity in the Company's LTIP during the years ended December 31, 2015 and 2014:

RSUs	2015	2014
Outstanding, January 1	<b>427,359</b>	505,221
Granted	<b>133,520</b>	137,657
Dividend-equivalent share units	<b>8,930</b>	11,348
Settled	<b>(175,060)</b>	(180,640)
Cancelled or forfeited	<b>(50,020)</b>	(46,227)
Outstanding, December 31	<b>344,729</b>	427,359
PSUs	2015	2014
Outstanding, January 1	<b>658,896</b>	791,156
Granted	<b>201,950</b>	194,500
Dividend-equivalent share units	<b>13,584</b>	17,615
Settled	<b>(10,910)</b>	(1,565)
Cancelled or forfeited	<b>(364,774)</b>	(342,810)
Outstanding, December 31	<b>498,746</b>	658,896

On March 31, 2016, 121,713 RSUs will vest automatically and, based on the Company's performance in 2015 and the predetermined performance measures, none of the PSUs will vest. In April 2016, the Company will settle its obligation to deliver the common shares by providing funds to the independent LTIP trustee to purchase the shares on the open market.

## 12 | EARNINGS PER SHARE

### A) BASIC EARNINGS PER SHARE

The calculation of basic earnings per share at December 31, 2015 was based on the loss attributable to common shareholders of \$5.3 million for the year ended December 31, 2015 (2014 - earnings of \$3.5 million) and a weighted average number of common shares of 56,628,524 (2014 - 58,957,072), calculated as follows:

	2015	2014
Common shares outstanding, January 1	<b>57,247,843</b>	59,349,120
Effect of shares issued, purchased and cancelled	<b>(619,319)</b>	(392,048)
Weighted average number of common shares for the year ended December 31	<b>56,628,524</b>	58,957,072

### B) DILUTED EARNINGS PER SHARE:

The Company does not have any dilutive securities.

## 13 | SALARIES, INTERNAL COMMISSIONS AND BENEFITS

For the years ended December 31,	Note	2015	2014
Salaries and benefits		<b>3,321</b>	3,241
Internal commissions		<b>259</b>	462
Registered retirement savings plan contributions		<b>131</b>	137
Short-term incentives		<b>40</b>	574
Long-term incentives	11	<b>238</b>	358
Total salaries, internal commissions and benefits		<b>3,989</b>	4,772

## 14 | OTHER SELLING, GENERAL AND ADMINISTRATIVE COSTS

For the years ended December 31,	2015	2014
External commissions	<b>35</b>	81
Occupancy cost	<b>645</b>	673
Office and general cost	<b>421</b>	587
Information technology	<b>356</b>	394
Mapping and data storage	<b>145</b>	187
Directors' fees and corporate costs	<b>450</b>	556
Consulting fees	<b>46</b>	49
Professional fees	<b>229</b>	208
Total other selling, general and administrative costs	<b>2,327</b>	2,735

## 15 | NET CHANGE IN NON-CASH OPERATING WORKING CAPITAL

For the years ended December 31,	2015	2014
Trade and other receivables	<b>925</b>	(3,867)
Prepaid expenses	<b>(17)</b>	58
Accounts payable and accrued liabilities	<b>(963)</b>	524
Deferred revenue	<b>(768)</b>	45
Other long-term payable	<b>(101)</b>	(168)
Others	<b>(27)</b>	(187)
Net change in non-cash operating working capital	<b>(951)</b>	(3,595)

## 16 | FINANCIAL INSTRUMENTS

The Company's risk management policy objectives include the long-term management of the Company's business activities and, wherever possible, mitigation of the associated business risks. The Company has exposure to the following risks from its use of financial instruments:

- / Credit risk;
- / Liquidity risk; and
- / Market risk.

### A) RISK MANAGEMENT

The Board of Directors has overall responsibility for the establishment and oversight of the Company's risk management framework.

The Company's risk management policies are established to identify and analyze the risks faced by the Company, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. The Company, through its training and management standards and procedures, aims to develop a disciplined and constructive control environment in which all employees understand their roles and obligations.

The Audit Committee oversees how management monitors compliance with the Company's risk management policies and procedures, and reviews the adequacy of the risk management framework in relation to the risks faced by the Company. Reviews of risk management controls and procedures are performed, the results of which are reported to the Board of Directors.

### B) CREDIT RISK

Credit risk is the risk of financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Company's accounts receivable.

The Company is exposed to credit risk in connection with data sales and participation surveys with its customers. The Company's exposure to credit risk is influenced mainly by each customer's individual characteristics. The nature of the Company's customer base, including the default risk of the industry in which customers operate, has an influence on credit risk. As the Company operates to a large extent in the oil and natural gas industry, nearly all of the trade receivables relate to customers from this industry.

The effective monitoring and control of credit risk is a core competency of the Company. Each new customer is analyzed individually for creditworthiness, including credit reference checks, before payment and delivery terms and conditions such as credit limits are offered. Customer accounts are monitored and accounts receivable aging is regularly reviewed. Certain customers have signed agreements with the Company that provide for extended payment terms. The Company's credit risk increases in these arrangements due to their longer time-frame. The risk is mitigated by attempting to limit these arrangements to major oil and natural gas companies which have long operating histories and adequate resources to fulfill their commitments.

The majority of the Company's customers have been doing business with the Company for many years, and minimal losses have occurred in the past. The Company does not require customers to provide collateral.

#### *Exposure to credit risk*

The carrying amount of financial assets represents the maximum credit exposure. The maximum exposure to credit risk at the reporting date was the value of accounts receivable of \$6.2 million. The Company has a significant concentration of customers in the oil and natural gas industry, with the majority located in Alberta. At December 31, 2015, 68 percent of total accounts receivable were due from two customers. For the year ended December 31, 2015, approximately 50 percent of the Company's data library sales were attributable to three customers.

The aging of trade receivables at the reporting date was:

	2015		2014	
	Gross	Impairment	Gross	Impairment
Current	6,158	-	5,427	-
Past due 31-60 days	-	-	1,636	-
Past due 61-90 days	-	-	-	-
More than 90 days	-	-	20	-
Total	6,158	-	7,083	-

As at the reporting date, the Company believes that all accounts are collectible, based on historical payment behaviour and extensive analysis of customers' underlying credit ratings.

### C) LIQUIDITY RISK

Liquidity risk is the risk that the Company will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled in cash or another financial asset. The Company's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under normal and stressed conditions, without incurring unacceptable losses or risking damage to its reputation.

The Company regularly monitors its cash flow and funding options available in the capital markets, as well as trends in the availability and costs of such funding, with a view to maintaining financial flexibility and limiting repayment risks. The Company does not believe that it will encounter difficulty in meeting its financial obligations. Consolidated cash flow information, including a projection for the remainder of the year where applicable, is presented to the Audit Committee quarterly, which aids in planning to ensure that the Company has sufficient cash to meet expected operational expenses, including the servicing of financial obligations.

Beyond effective net working capital and cash management, at December 31, 2015 the Company had \$49.8 million available for future draws on its revolving credit facility, and a further \$20.0 million was also available subject to the banking syndicate's approval to activate an accordion feature. As described in note 8, on January 18, 2016, the Company elected to reduce the facility's available borrowing amount to \$30.0 million from \$50.0 million. As at March 2, 2016, the Company had \$30.0 million available for future draws on its revolving credit facility, and a further \$40.0 million was also available subject to the banking syndicate's approval to activate an accordion feature.

The following are the contractual maturities of financial liabilities at December 31, 2015, assuming the new credit facility is not renewed in February 2019:

	Carrying amounts	2016	2017	2018	2019 and after
Operating line of credit	222	222	-	-	-
Accounts payable	809	809	-	-	-
Long-term payable	76	-	76	-	-
Total	1,107	1,031	76	-	-



## D) MARKET RISK

Market risk is the risk that changes in market prices will affect the Company's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimizing the return.

### i) *Commodity price risk*

The Company is not directly exposed to commodity price risk as it does not have any contracts that are directly based on commodity prices. A change in commodity prices, specifically oil and natural gas prices, could have a material impact on the Company's customers' cash flows and could therefore affect the level of seismic data library sales and participation surveys. Commodity prices are affected by many factors, including supply and demand. The Company has not entered into any commodity price risk contracts. Given that this is an indirect influence, the financial impact on the Company of changing oil and natural gas prices is not reasonably determinable.

### ii) *Interest rate risk*

The Company's interest rate risk exposure is mainly related to long-term debt. The Company is exposed to interest rate cash-flow risk on its floating-rate long-term debt as described in note 8. Changes in market interest rates will cause fluctuations in future interest payments.

The Company earns minimal interest income on its cash balances.

A change of 100 basis points in interest rates for the year ended December 31, 2015 would have increased or decreased earnings by \$33,000 (2014 - \$160,000), assuming all other variables remained constant.

## E) FAIR VALUES

The fair values of cash and cash equivalents, accounts receivable and accounts payable approximate their carrying amount largely due to the short-term maturities of these instruments. The fair value of the long-term debt approximates the carrying value because interest charges under the bank loans are based on current Canadian bankers' acceptance rates.

# 17 | CAPITAL MANAGEMENT

The Company considers its capital structure to include shareholders' equity and long-term debt.

As at December 31,	2015	2014
Shareholders' equity	<b>45,389</b>	58,401
Long-term debt (before deferred financing costs)	-	5,500
<b>Total capitalization</b>	<b>45,389</b>	63,901

The Company's primary objective when managing capital is to preserve its ability to execute its long-term growth plan of significantly increasing the size of the seismic data library, so that it can maximize revenue and, ultimately, shareholder value. Sales generated from the seismic data library provide the Company with high levels of cash, and its most significant expense is non-cash amortization. Due to this, the Company is able to repay long-term debt and continue to fund data library growth.

The Company requires flexibility in managing the capital structure so that it can take advantage of opportunities to raise additional capital as opportunities for data acquisitions or participation surveys arise. The Company uses a combination of debt and equity and relies on key internal measures such as the long-term debt to TTM cash EBITDA ratio and the long-term debt to equity ratio to forecast and structure its capital requirements. From time to time the Company purchases its own shares on the market through its NCIB, the timing of which depends on market prices.

Cash EBITDA is defined by the Company as earnings before interest, taxes, depreciation and amortization less participation survey revenue, plus non-cash and non-recurring general and administrative expenses. Cash EBITDA is a measure that does not have any standardized meaning prescribed by IFRS or Canadian generally accepted accounting principles and is therefore unlikely to be comparable to similar measures presented by other issuers.

The long-term debt to TTM cash EBITDA ratio is calculated as long-term debt at the end of the period, divided by 12-month trailing cash EBITDA. This measure is substantially the same as the total debt to adjusted EBITDA ratio covenant in the Company's credit facility, with the exception that the covenant calculation under the credit facility allows for the addition of normalized cash flow from acquisitions for the months during the trailing 12 months that the Company didn't own the acquired data.

The long-term debt to TTM cash EBITDA ratio is calculated as follows:

For the years ended December 31,	2015	2014
Long-term debt (before deferred financing cost) at year-end	-	5,500
Divided by:		
Net earnings (loss)	(5,308)	3,478
Less:		
Participation survey revenue	(3,220)	-
Plus:		
Net financing costs	494	875
Income tax	(1,026)	1,128
Depreciation	185	248
Amortization of seismic data library	22,836	22,507
Impairment loss	937	-
Equity-settled share-based compensation	220	377
Loss on disposition of capital assets	3	2
TTM Cash EBITDA	15,121	28,615
Long-term debt to TTM cash EBITDA ratio	0.00:1	0.19:1

As the balance of the long-term debt was nil at December 31, 2015, the long-term debt to TTM cash EBITDA ratio was 0.00:1 at December 31, 2015.

The long-term debt to equity ratio is calculated using the long-term debt balance, excluding of debt financing costs, divided by total equity, as follows:

As at December 31,	2015	2014
Long-term debt (before deferred financing costs)	-	5,500
Divide by: total equity	45,389	58,401
Long-term debt to equity ratio	0.00:1	0.09:1

As the balance of the long-term debt was nil at December 31, 2015, the long-term debt to equity ratio was 0.00:1 at December 31, 2015.

As discussed in note 8, the Company is subject to debt covenants on its long-term debt as of December 31, 2015. The Company was in compliance with all covenants at December 31, 2015.

The Company is subject to maximum limits on the number of shares it may purchase through its NCIB.

There were no changes in the Company's approach to capital management during the year.

## 18 | OPERATING LEASES AND OTHER COMMITMENTS

The Company leases office space and office equipment under operating leases. The office space lease expires in May 2017, with a renewal option.

During the year ended December 31, 2015, \$640,000 (2014 - \$666,000) was recognized in selling, general and administrative expenses in respect of operating leases.

The following table represents expected operating lease payments and minimum payments under seismic data services contracts:

	2016	2017	2018	2019	2020 and after
Operating leases	520	226	12	-	-
Seismic data services	120	120	30	-	-
Total	640	346	42	-	-

## 19 | RELATED-PARTY TRANSACTIONS

The Company has a related-party relationship with its Board of Directors and with key management personnel.

### A) KEY MANAGEMENT PERSONNEL COMPENSATION

In addition to their salaries, the executive officers participate in the Company's short term incentive cash-bonus plan and LTIP (refer to note 11).

Key management personnel compensation comprised:

For the years ended December 31,	2015	2014
Fixed salary	994	988
Termination benefits	357	-
Short-term employee benefits	77	76
Short-term incentive plan	20	375
LTIP	74	126
	1,522	1,565

**B) TRANSACTIONS WITH DIRECTORS**

Directors also participate in the Company’s LTIP (refer to note 11).

The remuneration of the Directors is as follows:

For the years ended December 31,	2015	2014
Directors’ fees	239	225
LTIP	93	101
	332	326

# CORPORATE INFORMATION

Pulse is a market leader in the acquisition, marketing and licensing of 2D and 3D seismic data to the western Canadian energy sector. Pulse owns the second-largest licensable seismic data library in Canada, currently consisting of approximately 28,600 net square kilometres of 3D seismic and 447,000 net kilometres of 2D seismic. The library extensively covers the Western Canada Sedimentary Basin where most of Canada's oil and natural gas exploration and development occur.

## OFFICERS

Neal Coleman

*President and CEO*

Pamela Wicks

*Vice President Finance and CFO*

Trevor Meier

*Vice President*

*Sales and Marketing*

Norman Hall

*Corporate Secretary*

## BOARD OF DIRECTORS

Robert Robotti <sup>(1)</sup> <sup>(2)</sup> <sup>(3)</sup>

*Chair*

Karen El-Tawil <sup>(1)</sup> <sup>(2)</sup> <sup>(3)</sup>

*Director*

Peter Burnham <sup>(2)</sup> <sup>(3)</sup> <sup>(4)</sup>

*Director*

Daphne Corbett <sup>(1)</sup> <sup>(3)</sup> <sup>(4)</sup>

*Director*

Brent Gale <sup>(4)</sup> <sup>(5)</sup>

*Director*

Clark Zentner <sup>(2)</sup> <sup>(3)</sup>

*Director*

## BANKERS

The Toronto-Dominion Bank  
Calgary, Alberta

Alberta Treasury Branches  
Calgary, Alberta

## REGISTRAR AND TRANSFER AGENT

Computershare Trust Company  
of Canada  
Calgary, Alberta

## SOLICITORS

Gowling Lafleur Henderson LLP  
Calgary, Alberta

## AUDITORS

KPMG LLP  
Calgary, Alberta

## STOCK EXCHANGE LISTING

TSX: PSD  
OTCQX: PLSDF

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**[www.pulseseismic.com](http://www.pulseseismic.com)**

(1) Member of the  
Audit Committee

(2) Member of the  
Compensation Committee

(3) Member of the Corporate  
Governance and  
Nominating Committee

(4) Member of the Environment,  
Health and Safety Committee

(5) Non-independent Director



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