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Calgary, May 8, 2018

Alberta Securities Commission  
Suite 600, 250-5<sup>th</sup> Street SW  
Calgary, Alberta  
T2P 0R4

Subject: Refiling of Pulse Seismic Inc. Q1 2018 Management Discussion and Analysis on SEDAR

To whom it may concern,

The Pulse Seismic Inc. Q1 2018 MD&A was filed on SEDAR on May 7, 2018.

It was subsequently noted that the colors on the legend for two graphs on page 5 (Sales Type Breakdown) and on page 6 (Sales Breakdown 2D/3D (%)) of the MD&A were reversed.

The corrected document is attached.

Regards,

A handwritten signature in blue ink that reads 'Pamela Wicks'.

Pamela Wicks, VP Finance and CFO  
Pulse Seismic Inc.

## SELECTED FINANCIAL AND OPERATING INFORMATION

(thousands of dollars except per share data, numbers of shares and kilometres of seismic data)	Three months ended March 31,		Year ended
	<b>2018</b>	2017	December 31,
	(unaudited)		2017
Revenue - Data library sales	<b>2,328</b>	2,719	43,525
Amortization of seismic data library	<b>1,878</b>	4,635	15,870
Net earnings (loss)	<b>(696)</b>	(2,502)	15,087
Per share basic and diluted	<b>(0.01)</b>	(0.04)	0.27
Cash provided by (used in) operating activities	<b>(8,592)</b>	3,298	38,755
Per share basic and diluted	<b>(0.16)</b>	0.06	0.70
Cash EBITDA <sup>(a)</sup>	<b>934</b>	1,330	37,070
Per share basic and diluted <sup>(a)</sup>	<b>0.02</b>	0.02	0.67
Shareholder free cash flow <sup>(a)</sup>	<b>880</b>	1,254	29,729
Per share basic and diluted <sup>(a)</sup>	<b>0.02</b>	0.02	0.54
Capital expenditures			
Seismic data purchase, digitization and related costs	<b>62</b>	65	1,575
Property and equipment	<b>2</b>	27	48
Total capital expenditures	<b>64</b>	92	1,623
Special dividend	-	-	10,915
Weighted average shares outstanding			
Basic and diluted	<b>53,887,280</b>	55,743,767	55,135,035
Shares outstanding at period-end	<b>53,850,917</b>	55,337,560	54,020,817
Seismic library			
2D in kilometres	<b>450,000</b>	447,000	447,000
3D in square kilometres	<b>28,956</b>	28,647	28,956

## FINANCIAL POSITION AND RATIO

(thousands of dollars except ratio)	March 31,	March 31,	December 31,
	<b>2018</b>	2017	2017
Working capital	<b>22,216</b>	10,427	22,486
Working capital ratio	<b>13.5:1</b>	11.1:1	3.1:1
Cash and cash equivalents	<b>18,232</b>	7,647	27,422
Total assets	<b>41,218</b>	39,873	51,693
Shareholders' equity	<b>36,656</b>	34,843	37,810

(a) These non-GAAP financial measures are defined, calculated and reconciled to the nearest GAAP financial measures in the Management's Discussion and Analysis.

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

THREE MONTHS ENDED MARCH 31, 2018

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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 three months ended March 31, 2018 was prepared taking into consideration information available to May 7, 2018 and should be read with the unaudited condensed consolidated interim financial statements and related notes for the three months ended March 31, 2018. This MD&A is supplemental to the MD&A, audited consolidated financial statements and related notes for the year ended December 31, 2017.

The consolidated interim financial statements were prepared in accordance with International Financial Reporting Standards (IFRS) with comparative figures for the prior year's first quarter. The consolidated interim financial statements and the MD&A were reviewed by Pulse's Audit and Risk 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".

## 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 28,956 net square kilometres of 3D seismic and 450,000 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.

### 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.

## KEY PERFORMANCE INDICATORS

The key performance indicators used by Pulse's management to analyze business results are seismic data library sales, net earnings, cash EBITDA and shareholder free cash flow. The definitions, calculations and reconciliations of cash EBITDA and shareholder free cash flow to the nearest GAAP financial measures are provided in "Non-GAAP Financial Measures and Reconciliations".

Results for the key performance indicators for the three months ended March 31, 2018, with comparative figures for 2017, are set out in the following table:

(thousands of dollars except per share data)	Three months ended March 31,		
	2018	2017	Variance
Revenue - Data library sales	<b>2,328</b>	2,719	(391)
Net loss	<b>(696)</b>	(2,502)	1,806
Per share basic and diluted	<b>(0.01)</b>	(0.04)	0.03
Cash EBITDA	<b>934</b>	1,330	(396)
Per share basic and diluted	<b>0.02</b>	0.02	0.00
Shareholder free cash flow	<b>880</b>	1,254	(374)
Per share basic and diluted	<b>0.02</b>	0.02	0.00

In the first quarter of 2018 the Company continued to experience low traditional data library sales, as it has since the end of 2014, due to the ongoing low level of capital spending in the energy-producing sector. The slight reduction in data library sales during the three months ended March 31, 2018 from the first quarter of 2017 is the main factor contributing to the period-over-period decline in most of the Company's key performance metrics. The first quarter's net loss, however, is lower than for the same period in 2017 mainly because of the significant decrease in the seismic data library's non-cash amortization expense.

## SEISMIC REVENUE FLUCTUATIONS

Revenue fluctuations are a normal part of the seismic data library business, and data library sales can vary significantly year-over-year.

Traditional data library sales can occur at any time. This is due to the nearly continual changes in oil and natural gas industry conditions, sudden or increased demand for seismic data covering a specific area or play, and the timing of public offerings of petroleum and natural gas rights (land sales). Pulse no longer sees any patterns in traditional sales by quarter or by season.

Transaction-based sales can also occur at any time. This is due to corporate merger and acquisition, joint venture and asset disposition activity involving Pulse's clients, which is unpredictable.

Participation survey revenue can also vary significantly from year to year. 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. The number and size of participation surveys undertaken from 2014 through 2018 have been considerably less than historical averages. The most recent survey was conducted in the first quarter of 2015.

## OUTLOOK

Pulse started the year with slightly lower quarterly sales than in 2017, and looks ahead cautiously to the rest of the year. Visibility as to Pulse's traditional sales remains poor and transaction-based sales are innately unpredictable.

At present, traditional industry indicators are somewhat contradictory. Among these are:

- Crude oil prices have strengthened, with benchmark West Texas Intermediate closing at US\$69.19 per bbl on April 18, the highest price since the steep decline of world crude oil prices in late 2014;
- The average Canada-U.S. oil price differential is higher than in 2017 and is forecast to remain relatively high, which reduces revenue for Canadian producers;
- Alberta natural gas prices, despite a long and cold winter, remain extremely low, with the AECO benchmark barely breaking \$2 per gigajoule during March and closing at only \$1.36 per gigajoule on April 17, according to GasAlberta Inc. data;
- Amidst continuing growth in production and an active U.S. drilling count that exceeded 1,000 rigs in early April, according to Baker Hughes, U.S. natural gas prices also remain low. Following several spikes earlier in the winter, the benchmark Henry Hub price has been typically in the range of US\$2.50-US\$2.90 per million Btu over the past two months, according to EIA data;
- Withdrawals from U.S. natural gas storage set near-record volumes in winter 2017-2018, according to the Energy Information Administration, with net withdrawals continuing into April, resulting in very low storage levels;
- U.S. exports of liquefied natural gas (LNG) remain on an upward track, with the country's second major LNG export facility recently commencing commercial operations;
- Mineral lease auctions or "land sales" in Western Canada to date in 2018 are down slightly from the comparable period of 2017 but remain much stronger than in 2016 and 2015;
- Capital spending in Western Canada's energy-producing sector, forecast as of early February at \$29.01 billion for 2018, according to the Daily Oil Bulletin database, is moderately positive;
- Expectations remain within the industry for significant and potentially greater merger-and-acquisition activity, which could trigger transaction-based seismic data library sales, but activity to date in 2018 remains inconclusive;
- The Canadian Association of Oilwell Drilling Contractors' drilling forecast for 2018 remains unchanged at 6,138 wells, up slightly from 2017. To date in 2018, rig utilization and total drilling days are roughly comparable to 2017; and
- The Petroleum Services Association of Canada is forecasting 7,400 wells across Canada this year, up from 7,100 last year.

Not surprisingly given these inconclusive indicators, full recovery from an extremely difficult, three-year-long downturn is proving a major struggle for Western Canada's oil and gas producing sector. Although activity is picking up, the industry has not benefited from the virtually across-the-board strengths driving U.S. industry activity. Pulse anticipates this slower recovery will continue.

Further barriers to accelerated field activity are ongoing takeaway pipeline constraints, weak intra-Alberta gas demand, strong productivity from newly drilled wells in the Montney, Duvernay, Deep Basin and other unconventional plays, fluctuating gas exports to the U.S., and Canada's failure to move forward with large LNG export projects. These are significant handicaps for a gas-focused supply basin.

Government policies at all levels in Canada remain, on balance, less supportive of oil and gas industry capital investment than in the past (or in the U.S. at present). The intensifying nationwide controversy over the politically-driven holdup of the National Energy Board-approved expansion of the Trans-Mountain Pipeline from Alberta to tidewater in Burnaby, B.C., is an example.

Fortunately, Pulse's business has been grown, enlarged and fine-tuned to be resilient against industry volatility and negative market forces. The Company's strong balance sheet, with effectively zero cash financing costs, its low cash operating costs and the absence of other spending commitments make Pulse cash-flow positive at annual revenue of just \$6 million. Pulse's lowest annual sales in the depths of the energy industry's downturn were \$14.3 million. Even with weaker first-quarter sales, Pulse generated positive cash EBITDA and shareholder free cash flow.

For 2018, Pulse is cautious about its expectations for traditional sales. Large or small transaction-based sales can occur at any time, creating potential upside to Pulse's quarterly and annual revenues. The strength or weakness of transaction-based sales will determine whether 2018 financial results exceed or underperform 2017.

## DISCUSSION OF OPERATING RESULTS

SUMMARY FOR THE THREE MONTHS ENDED MARCH 31, 2018

### LOSS BEFORE INCOME TAXES

For the three months ended March 31, 2018, the Company incurred a loss before income taxes of \$957,000 (\$0.02 per share basic and diluted) compared to a loss before income taxes of \$3.4 million (\$0.06 per share basic and diluted) for the comparable period of 2017.

### REVENUE

Total revenue, comprised only of data library sales (no participation survey revenue for 2018 or 2017), for the three months ended March 31, 2018 was \$2.3 million compared to \$2.7 million for the three months ended March 31, 2017.

### DISAGGREGATED DATA LIBRARY SALES BREAKDOWN

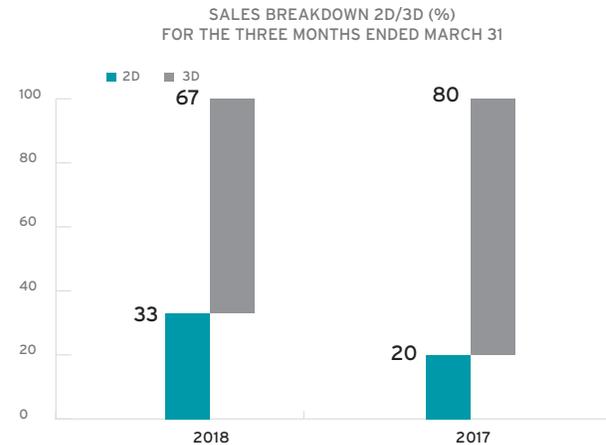
Pulse uses three categories for analyzing data library sales. The following graphs illustrate the comparative first quarters of 2018 and 2017 by category.

The first category, transaction type, separates sales between traditional and transaction-based sales. There is great fluctuation between these two types of sales from period to period and year to year. An eight-year historical breakdown is provided in the 2018 Investment Guide.

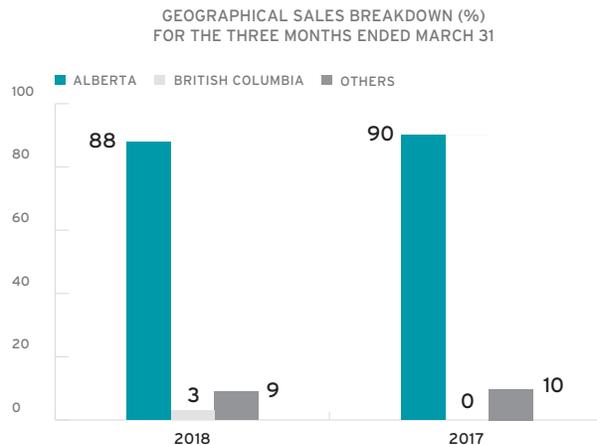
SALES TYPE BREAKDOWN  
TRADITIONAL/TRANSACTION-BASED SALES (%)  
FOR THE THREE MONTHS ENDED MARCH 31



The second category is data type, meaning sales of 2D and 3D seismic data. 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.



The third category is geographical. The largest proportion of data sales comes from data in Alberta, as that is where the majority of Pulse's data and industry activity are.



#### AMORTIZATION OF SEISMIC DATA LIBRARY

For the three months ended March 31, 2018, seismic data library amortization expense was \$1.9 million compared to \$4.6 million in the comparable period of 2017. The significant decrease is due to data acquired in previous years becoming fully amortized by the end of the third quarter of 2017.

Amortization of the seismic data library is described further under "Critical Accounting Estimates" in the Company's MD&A for the year ended December 31, 2017.

#### SALARIES, INTERNAL COMMISSIONS AND BENEFITS (SCB)

SCB for the three months ended March 31, 2018 was \$934,000 compared to \$918,000 in the comparable period of 2017. The slight change is mainly attributable to an increase in salaries for 2018, as well as increased benefit program costs.

#### OTHER SELLING, GENERAL AND ADMINISTRATIVE COSTS (SG&A)

SG&A for the three months ended March 31, 2018 was \$551,000 compared to \$558,000 for the three months ended March 31, 2017. The small decrease includes a combination of reduced rent expense, partially offset by minor differences in other general office expenses.

#### NET FINANCING COSTS (INCOME)

For the three months ended March 31, 2018, the Company generated net financing income of \$95,000 compared to \$6,000 of net financing costs for the same period in 2017. For both periods, financing expenses consisted of stand-by fees on the unused long-term debt facility. The interest income increased due to having a higher cash surplus which was earning higher rates of interest through investments in term deposits. Additionally, the Company's discounted accounts receivable from clients benefiting from extended payment terms, nearly doubled and resulted in \$40,000 being reallocated from data library sales to interest income, compared to \$21,000 for the same period last year.

## INCOME TAXES

The income tax reduction for the three months ended March 31, 2018 was \$261,000, reflecting an effective tax rate of 27.3 percent, compared to an income tax reduction of \$931,000 and an effective tax rate of 27.1 percent for the comparable 2017 period. The federal-provincial corporate income tax rate for 2018 and 2017 was 27 percent. The effective rate for the three months ended March 31, 2018 was slightly higher than the enacted income tax rate as a result of the change in valuation allowance related to future resource deductions and non-deductible expenditures.

## REVIEW OF FINANCIAL POSITION

AS AT MARCH 31, 2018

### CURRENT TAX ASSETS

Included in current tax assets are the income tax instalments paid for the fiscal year 2018, offset by the current tax expense for the first quarter of 2018.

### SEISMIC DATA LIBRARY

The Company's business model includes seismic data library growth as a priority. 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 in return for their contribution to the capital costs of the survey.

On January 16, 2018 the Company closed a small acquisition, adding approximately 2,489 net kilometres of 2D seismic data to the library. The total amount capitalized for the data and its digitization was \$62,000.

At March 31, 2018, the Company considered indicators of impairment for each of its cash-generating units, and, based on that review, no impairment tests were performed.

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

### LONG-TERM TRADE RECEIVABLES

Included in the long-term trade receivables are the amounts due from one customer with payment terms. The payments are due in April and July 2019.

### 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 March 31,	
	2018	2017
Weighted average shares outstanding: basic and diluted	<b>53,887,280</b>	55,743,767
Shares outstanding at period-end	<b>53,850,917</b>	55,337,560
Shares outstanding at May 7, 2018	<b>53,850,917</b>	

## DILUTED EARNINGS PER SHARE RECONCILIATION

The Company does not have any dilutive securities.

## LONG-TERM INCENTIVE PLAN (LTIP)

The Company has an 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, 2018, 169,152 RSUs and 218,419 PSUs were eligible to vest. Based on the Company's performance in 2017 and the predetermined performance measures, 30 percent or 65,526 of the eligible PSUs vested. RSUs vest automatically based upon time and, consequently, all of the eligible RSUs vested automatically on March 31, 2018.

To satisfy its obligation, in April 2018 the Company provided \$423,000 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, 2018. The related payroll taxes of \$308,000 will be paid in May 2018 to settle the fully accrued cash-settled portion of the share-based payment liabilities.

At March 31, 2018 and May 7, 2018 there were 704,672 RSUs and 760,903 PSUs outstanding.

## DEFICIT

On March 31, 2018 the Company had a deficit of \$40.6 million, compared to \$39.6 million at December 31, 2017. Contributing to the deficit is the net loss for the period of \$696,000 and the reduction of \$299,000 to retained earnings due to 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 normal course issuer bid (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 November 1, 2017, following the record \$29.5 million sale, the Company declared a special dividend of \$0.20 per common share. The dividend of \$10.9 million was paid on December 8, 2017 to shareholders of record at the close of business on November 16, 2017.

Pulse confirms that all dividends paid to shareholders in 2017 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.

In November 2015, with lower period-over-period seismic data library sales and the strong possibility of an extended downturn, Pulse's Board of Directors suspended the Company's quarterly dividend of \$0.02 per share. Suspension of the dividend helped the Company maintain a strong financial position and remain well positioned for future opportunities. The quarterly dividend remains suspended indefinitely.

## DEFERRED TAX LIABILITY

The deferred income tax liability was \$2.5 million at March 31, 2018 compared to \$2.9 million at December 31, 2017. The decrease in the deferred income tax liability is mainly due to the decrease in the difference between the tax base of the seismic data library and the carrying amount on the statement of financial position.

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.

## FINANCIAL SUMMARY OF QUARTERLY RESULTS

(thousands of dollars, except per share data)	2018	2017				2016		
	Q1	Q4	Q3	Q2	Q1	Q4	Q3	Q2
Data library sales	<b>2,328</b>	5,449	32,428	2,929	2,719	4,176	5,613	2,779
Amortization of seismic data library	<b>1,878</b>	1,958	4,639	4,638	4,635	4,657	4,701	4,706
Net earnings (loss)	<b>(696)</b>	1,311	18,704	(2,426)	(2,502)	(1,253)	(302)	(2,441)
Per share - basic and diluted	<b>(0.01)</b>	0.02	0.34	(0.04)	(0.04)	(0.02)	(0.01)	(0.04)

The revenue streams generated by Pulse's operations are data library sales and participation surveys revenue. Data library sales consist of traditional sales and transaction-based sales, as described under "Traditional Sales vs. Transaction-based Sales: Eight-Year History" in the Company's MD&A for the year ended December 31, 2017. See also "Seismic Revenue Fluctuations".

During the second and third quarters of 2017 and 2016, transaction-based sales contributed to data library sales to varying degrees, especially in the third quarter of 2017, when the record \$29.5 million transaction-based sale contributed greatly to revenues.

Very little transaction-based sales revenue was generated in the other quarters depicted in the table above.

Pulse has not conducted any participation surveys since the first quarter of 2015, therefore, there has been no participation revenue to report in these last eight quarters.

The significant decrease in amortization expense in the first quarter of 2018 and the fourth quarter of 2017 from the prior quarters depicted above is due to a large seismic data library asset acquired in 2010 becoming completely amortized by the end of the third quarter of 2017. 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 quarters, the fluctuations in net earnings or loss have largely been a function of the corresponding quarterly fluctuations in revenue. For the first quarter of 2018 and the fourth quarter of 2017, the reduced amortization expense also positively affected the net result.

Increases in data library sales have a highly positive impact on earnings, as the operating costs associated with licensing seismic data from the library fluctuates very little from period to period.

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

## CONTRACTUAL OBLIGATIONS

There have been no material changes to Pulse's contractual obligations from those discussed in the Company's MD&A for the year ended December 31, 2017.

## LIQUIDITY, CAPITAL RESOURCES AND CAPITAL REQUIREMENTS

At March 31, 2018 Pulse had working capital of \$22.2 million and a working capital ratio of 13.5:1.

In the first quarter of 2018 the Company used \$8.6 million of cash from operating activities compared to generating \$3.3 million for the same period in 2017. The main difference consisted of paying the income tax for fiscal 2017 and the income tax instalments paid in the first quarter for fiscal 2018.

In the first quarter of 2018 the Company also utilized cash for the following outlays:

- › Purchase and cancellation of 169,900 common shares through its NCIB, for a total of \$534,000 (at an average price of \$3.15 per common share including commissions);
- › Investing activities of \$62,000, for additions to the seismic data library;
- › Additions of property and equipment for \$2,000.

The cash balance at March 31, 2018 was \$18.2 million.

The Company has a three-year extendible revolving credit facility of \$30.0 million with a syndicate of two banks. Up to \$5.0 million of the revolving facility remains available as an operating line of credit.

On an annual basis, the Company has the option to extend the maturity for one additional year with the lenders' approval. On December 19, 2017, the Company extended the maturity date to February 13, 2021.

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 March 31, 2018 and May 7, 2018 the Company had no balance owing on the revolving credit facility and \$30 million 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 12-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 for the trailing twelve-month period. When there is no outstanding balance owing on the credit facility, the interest expense includes stand-by fees only for purposes of this calculation.

The total debt to adjusted EBITDA ratio was zero as there was no debt outstanding at March 31, 2018.

The interest coverage ratio was 346:1 at March 31, 2018. Adjusted EBITDA was \$36.7 million and interest expense was \$106,000.

The Company was therefore in compliance with the credit facility's covenants at March 31, 2018.

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 March 31, 2018 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 by 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.

On December 19, 2017, the Company renewed its NCIB. The Company may purchase, for cancellation, up to a maximum of 3,053,815 common shares, equal to 10 percent of the public float of 30,538,152 common shares as at December 15, 2017. The Company is limited under the NCIB to purchasing up to 8,494 common shares in any one day, subject to the block purchase exemption under TSX rules. The NCIB will continue until December 20, 2018. 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.

From January 1, 2018 to March 31, 2018, the Company purchased 169,900 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.

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 2018. The Company anticipates that future capital expenditures will be financed through cash on hand, available credit facilities, funds from operations and customer pre-funding. The Company has a \$30.0 million revolving credit facility for future draws in 2018, 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 internal measures such as the long-term debt to 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. At March 31, 2018, both ratios were 0.00:1. Pulse's management considers the current capital structure appropriate.

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 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, may not be comparable to similar measures used and disclosed by other companies. As IFRS have been incorporated into Canadian generally accepted accounting principles (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

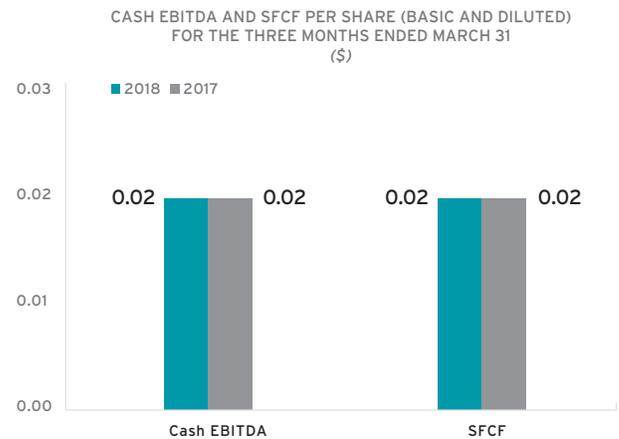
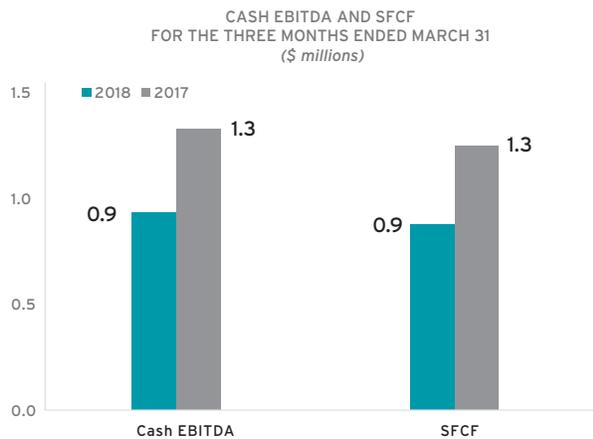
Cash EBITDA represents the capital available to invest in growing the Company's 2D and 3D seismic data library, to pay interest and principal on its long-term debt, to purchase its common shares, to pay taxes and to pay dividends.

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, 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 loss to EBITDA, cash EBITDA and shareholder free cash flow follows:

	Three months ended March 31,	
(thousands of dollars, except per share data)	<b>2018</b>	2017
<b>Net loss</b>	<b>(696)</b>	(2,502)
Add:		
Amortization of seismic data library	<b>1,878</b>	4,635
Net financing costs (income)	<b>(95)</b>	6
Income tax reduction	<b>(261)</b>	(931)
Depreciation	<b>17</b>	35
<b>EBITDA</b>	<b>843</b>	1,243
Deduct:		
Participation survey revenue	-	-
Add:		
Non-cash expenses	<b>91</b>	87
Non-recurring expenses	-	-
<b>Cash EBITDA</b>	<b>934</b>	1,330
Deduct:		
Net financing costs (income)	<b>(95)</b>	6
Current income tax expense	<b>149</b>	70
Add:		
Non-cash deferred financing charges	-	-
Current income tax reduction	-	-
<b>Shareholder free cash flow (SFCF)</b>	<b>880</b>	1,254
Cash EBITDA per share (basic and diluted)	<b>0.02</b>	0.02
SFCF per share (basic and diluted)	<b>0.02</b>	0.02



## 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

There have been no significant changes in Pulse's credit risk as disclosed in the Company's MD&A for the year ended December 31, 2017.

At March 31, 2018, 84 percent of the total accounts receivable were due from three customers. They are expected to be collected subsequent to quarter-end.

### LIQUIDITY RISK

There have been no significant changes in Pulse's liquidity risk as disclosed in the Company's MD&A for the year ended December 31, 2017.

### 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 to standards and interpretations have been issued by the International Accounting Standards Board (IASB) but were not yet effective for the year ending December 31, 2018. Accordingly, they were not applied in preparing the condensed consolidated interim financial statements. None is expected to have a significant effect on the consolidated financial statements, except for:

- › 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 which, therefore, remains unknown at this time.

## CRITICAL ACCOUNTING ESTIMATES

There have been no significant changes in Pulse's critical accounting estimates as disclosed in the Company's MD&A for the year ended December 31, 2017.

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

The Company applies the COSO Internal Control – Integrated Framework (2013 Framework). There were no changes in the ICFR that occurred during the period beginning on January 1, 2018 and ending on March 31, 2018 that materially affected, or are reasonably likely to materially affect, the Company's ICFR. No material weaknesses relating to the design of the ICFR were identified. As well, there were no limitations on the scope of the design of the DC&P or the ICFR.

## RISK FACTORS

There have been no significant changes in Pulse's risk factors as described in the Company's MD&A for the year ended December 31, 2017.

## 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 looks ahead cautiously to the rest of the year;
- › For 2018, Pulse anticipates continuing moderate recovery in its traditional sales, providing a reasonable revenue base for the year;
- › 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 2018;
- › 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;
- > The demand for seismic data and participation surveys;
- > The pricing of data library licence sales;
- > Cybersecurity;
- > Relicensing (change-of-control) fees and partner copy sales;
- > The level of pre-funding of participation surveys, and the Company's ability to make subsequent data library sales from such participation surveys;
- > The Company's ability to complete participation surveys on time and within budget;
- > Environmental, health and safety risks;
- > 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;
- > Protection of intellectual property rights;
- > The introduction of new products; and
- > Climate change.

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.

# 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 28,956 net square kilometres of 3D seismic and 450,000 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

### **Patrick Burgess**

Corporate Secretary

## BOARD OF DIRECTORS

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

Chair

### **Karen El-Tawil** <sup>(2) (4)</sup>

Director

### **Paul Crilly** <sup>(1) (3) (4)</sup>

Director

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

Director

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

Director

### **Neal Coleman**

Director

(1) *Member of the Audit and Risk 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*

## 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 WLG  
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)**