

SELECTED FINANCIAL AND OPERATING INFORMATION

	Three months ended September 30, (unaudited)		Nine months ended September 30, (unaudited)		Year ended December 31, 2018
(thousands of dollars except per share data, numbers of shares and kilometres of seismic data)	2019	2018	2019	2018	2018
Revenue					
Data library sales	2,460	1,596	18,354	5,790	10,076
Other revenue	127	10	437	85	112
Total revenue	2,587	1,606	18,791	5,875	10,188
Amortization of seismic data library	3,557	1,812	10,700	5,526	7,337
Net loss	(2,861)	(1,042)	(2,652)	(2,754)	(1,730)
Per share basic and diluted	(0.05)	(0.02)	(0.05)	(0.05)	(0.03)
Cash provided by operating activities	(1,609)	2,672	7,478	(5,707)	(3,250)
Per share basic and diluted	(0.03)	0.05	0.14	(0.11)	(0.06)
Cash EBITDA ^(a)	1,325	412	13,678	1,828	5,037
Per share – basic and diluted ^(a)	0.02	0.01	0.25	0.03	0.09
Shareholder free cash flow ^(a)	1,072	545	10,624	2,055	4,671
Per share – basic and diluted ^(a)	0.02	0.01	0.20	0.04	0.09
Capital expenditures					
Seismic data purchases, digitization and related costs	–	–	61,029	62	62
Property and equipment	–	5	398	9	18
Total capital expenditures	–	5	61,427	71	80
Weighted average shares outstanding					
Basic and diluted	53,793,317	53,822,117	53,793,317	53,853,199	53,838,106
Shares outstanding at period-end			53,793,317	53,793,317	53,793,317
Seismic library					
2D in kilometres			829,207	450,000	450,000
3D in square kilometres			65,310	28,956	28,956

FINANCIAL POSITION AND RATIOS

(thousands of dollars except ratios)	September 30, 2019	September 30, 2018	December 31, 2018
Working capital	579	23,291	25,804
Working capital ratio	1.1:1	14.9:1	15:1
Cash and cash equivalents	814	20,568	23,016
Total assets	70,994	37,916	38,847
Long-term debt	31,854	–	–
Shareholders' equity	32,674	34,183	35,238
Long-term debt to equity ratio	0.97	0.00	0.00

(a) This non-GAAP financial measure is 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 AND NINE MONTHS ENDED SEPTEMBER 30, 2019

CONTENTS			
		Non-Capital Resources	14
Overview	2	Non-GAAP Financial Measures and Reconciliations	14
Key Performance Indicators	2	Financial Instruments	16
Seismic Revenue Fluctuations	3	New IFRS Standards	16
Outlook	3	Critical Accounting Estimates	17
Discussion of Operating Results	5	Disclosure Controls and Procedures (DC&P) and	
Review of Financial Position	8	Internal Controls over Financial Reporting (ICFR)	17
Financial Summary of Quarterly Results	10	Risk Factors	17
Contractual Obligations	11	Additional Information	17
Liquidity, Capital Resources and Capital Requirements	11	Forward-Looking Information	17

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 and nine months ended September 30, 2019 was prepared taking into consideration information available to November 5, 2019 and should be read with the unaudited condensed consolidated interim financial statements and related notes for the three and nine months ended September 30, 2019. This MD&A is supplemental to the MD&A, audited consolidated financial statements and related notes for the year ended December 31, 2018.

The consolidated interim financial statements were prepared in accordance with International Financial Reporting Standards (IFRS) with comparative figures for the prior year's periods. 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 largest licensable seismic data library in Canada, currently consisting of approximately 65,310 net square kilometres of 3D seismic and 829,207 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 natural 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 and nine months ended September 30, 2019, with comparative figures for 2018, are set out in the following table:

(thousands of dollars except per share data)	Three months ended September 30,			Nine months ended September 30,		
	2019	2018	Variance	2019	2018	Variance
Data library sales	2,460	1,596	864	18,354	5,790	12,564
Other revenue	127	10	117	437	85	352
Total revenue	2,587	1,606	981	18,791	5,875	12,916
Net loss	(2,861)	(1,042)	(1,819)	(2,652)	(2,754)	102
Per share basic and diluted	(0.05)	(0.02)	(0.03)	(0.05)	(0.05)	0.00
Cash EBITDA	1,325	412	913	13,678	1,828	11,850
Per share basic and diluted	0.02	0.01	0.01	0.25	0.03	0.22
Shareholder free cash flow	1,072	545	527	10,624	2,055	8,569
Per share basic and diluted	0.02	0.01	0.01	0.20	0.04	0.16

In the first quarter of 2019, Pulse acquired 100 percent of the shares of Seitel Canada Ltd. (Seitel), a seismic data library company. For the three months ended September 30, 2019, Pulse generated \$2.6 million of revenue, including \$964,000 from the data library acquired from Seitel, compared to \$1.6 million for the same period in 2018. For the nine months ended September 30, 2019, Pulse generated \$18.8 million of revenue, including \$11.5 million from the data library acquired from Seitel, compared to \$5.9 million for the same period in 2018, an increase of 220 percent period-over-period. In addition to

data library sales, Pulse has other revenue included in total revenue. This includes revenue from client services consisting of copy and reproduction charges, as well as data storage fees related to the leased warehouse that was acquired with the Seitel purchase.

For the nine months ended September 30, 2019, traditional data library sales increased by 194 percent to \$14.3 million from \$4.9 million for the same period in 2018. Since the end of 2014, and prior to the second quarter of 2019, the Company experienced low traditional data library sales, due to the ongoing low level of capital spending in the energy-producing sector. Traditional data sales in 2019 were increased through the additional data acquired early in the year.

The increase in data library sales resulting from the recent acquisition is the main factor contributing to the period-over-period improvements in the Company's key performance metrics of cash EBITDA and shareholder free cash flow. The difference between cash EBITDA and shareholder free cash flow in both of the 2019 periods is explained primarily by the Company's debt servicing obligations due to the borrowing incurred for the recent acquisition, and to its exposure to income tax during periods in which it generates earnings.

The second quarter's revenue included a \$7.0 million sale to an intermediate oil and natural gas producer.

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. As stated, the increased amount of data available for licensing since the 2019 acquisition affects the year-over-year results in this case.

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).

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. Pulse has not been active in conducting participation surveys since the industry downturn began at the end of 2014. The most recent survey was conducted in the first quarter of 2015.

OUTLOOK

Pulse experienced a reasonable first nine months of the year. Seismic data sales of \$18.4 million were equivalent to 180 percent of Pulse's full-year 2018 sales and 127 percent of full-year 2018 sales from both the Pulse and Seitel datasets. The third quarter was not stellar, but results for the year to date continue to provide confidence that the Seitel acquisition is capable of doubling Pulse's baseline seismic data library sales (all other things being equal).

Pulse is maintaining a cautious outlook for the rest of 2019 and the opening quarters of 2020. While most industry indicators remain weak or unresolved, there have also been some positives, with progress for a liquified natural gas (LNG) export industry in British Columbia (B.C.) being one of the most significant news items of the quarter.

Key items:

- Domestic natural gas prices have been very low throughout the year, with an AECO index price of only Cdn\$1.20 per gigajoule (GJ) in September and daily spot prices falling as low as or even below Cdn\$0.20 per GJ. In October however, AECO pricing has increased somewhat, supported in part by recent regulatory changes that have impacted the ability to move gas through pipelines during maintenance periods and is projected to remove some of the price volatility going forward;

- There has been significant progress to create an LNG export industry in B.C. Construction of the landmark LNG Canada facility at the port of Kitimat is well underway. The \$1.6 billion Woodfibre LNG project at the port of Squamish, B.C., received key provincial approval in July, opening the way to construction. The proposed Chevron-Woodside Kitimat LNG project also appears to be progressing, with the project partners applying to nearly double the project's size to 18 million tonnes per year in export capacity. Combined, the three projects would move a material proportion of Western Canada's natural gas production to global markets;
- The domestic oil price benchmark, Western Canada Select (WCS), is maintaining a reasonable range. This is a combination of the North American benchmark, WTI, generally tracking around US\$50-\$55 per barrel and the WTI-WCS differential remaining within reasonable bounds of about US\$12 per barrel in recent months. This in turn is partly a function of the recently elected Government of Alberta deciding to extend the policy of oil production curtailment, which holds down the price differential by preventing excessive oil storage buildup caused by lack of export capacity;
- Oil and natural gas well drilling and rig utilization remained low in the summer, and forecasts for the year are diverging. In October the Petroleum Services Association of Canada (PSAC) decreased its 2019 forecast slightly to 5,000 wells to be drilled, from its July forecast of 5,100. Additionally, PSAC announced its 2020 forecast of 4,500 wells to be drilled;
- Proceeds from mineral lease auctions or "land sales" in Western Canada have remained very weak, with B.C. recording only \$11.9 million and Alberta only \$96.1 million to the end of September, far below 2017 and 2018 sales;
- While court challenges may continue for the Trans Mountain Pipeline expansion project, the recently re-elected Liberal federal government has stated its support for the project. At the end of October Trans Mountain announced that it was preparing to resume construction and expects to have 4,200 workers on the job in various communities by the end of the year. The expansion is critical for accessing Pacific Rim crude oil markets and its delay is, therefore, dampening oil drilling in Western Canada;
- The Keystone XL pipeline project into the U.S. Midwest continues to move forward, in late August receiving a favourable court ruling critical to its routing through Nebraska;
- U.S. LNG exports continue to grow, having reached the range of 5-6 bcf per day over the summer, with numerous additional facilities in commissioning, under construction or in regulatory processes. The U.S. export boom supports domestic natural gas prices in the U.S. and is positive for Canadian natural gas exports to that market, while the global LNG boom adds impetus to Canadian LNG projects; and
- The Alberta government continues to move expeditiously to enact business-friendly policies, including reducing Alberta's corporate income tax rate by 33 percent in phases, reducing the regulatory burden on industries including oil and natural gas, vigorously promoting energy development, and pushing back against the international campaign to "landlock" Alberta's energy production.

Western Canada's oil and natural gas sector faces continuing economic headwinds and uncertainty. The Company is, accordingly, prepared for additional quarters of weak traditional sales while also noting there is no visibility as to transaction-based sales. Pulse's management team remains pleased with the Company's cost structure and financial position. The Company is confident in its ability to pay down debt at the schedule and rate specified, underpinned by its ongoing reasonable level of seismic data sales and the favourable financing structure of the Seitel acquisition.

The Company has been structured to survive and even grow through all phases of the industry cycle. Over the coming quarters Pulse intends to pay down debt, continue to manage costs conservatively and remain stringent in assessing potential new opportunities. Pulse has unused borrowing capacity of up to a further \$22.1 million if needed.

The low cost structure of Pulse's business model facilitates significant synergies on future sales.

As Canada's largest pure-play seismic data library provider, Pulse's sales are highly scalable without either capital investment or higher operating costs, and a transaction-based sale of any size could occur at any time. The broad coverage of its seismic database make Pulse's revenue, cash margin and shareholder free cash flow highly levered to any uptick in industry field activity and demand for seismic data.

DISCUSSION OF OPERATING RESULTS

SUMMARY FOR THE THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2019

LOSS BEFORE INCOME TAXES

For the three months ended September 30, 2019, the Company incurred a loss before income taxes of \$3.2 million (\$0.06 per share basic and diluted) compared to a loss before income taxes of \$1.4 million (\$0.03 per share basic and diluted) for the comparable period of 2018.

For the nine months ended September 30, 2019, the Company incurred a loss before income taxes of \$1.8 million (\$0.03 per share basic and diluted) compared to a loss before income taxes of \$3.8 million (\$0.07 per share basic and diluted) for the comparable period of 2018.

DATA LIBRARY SALES REVENUE

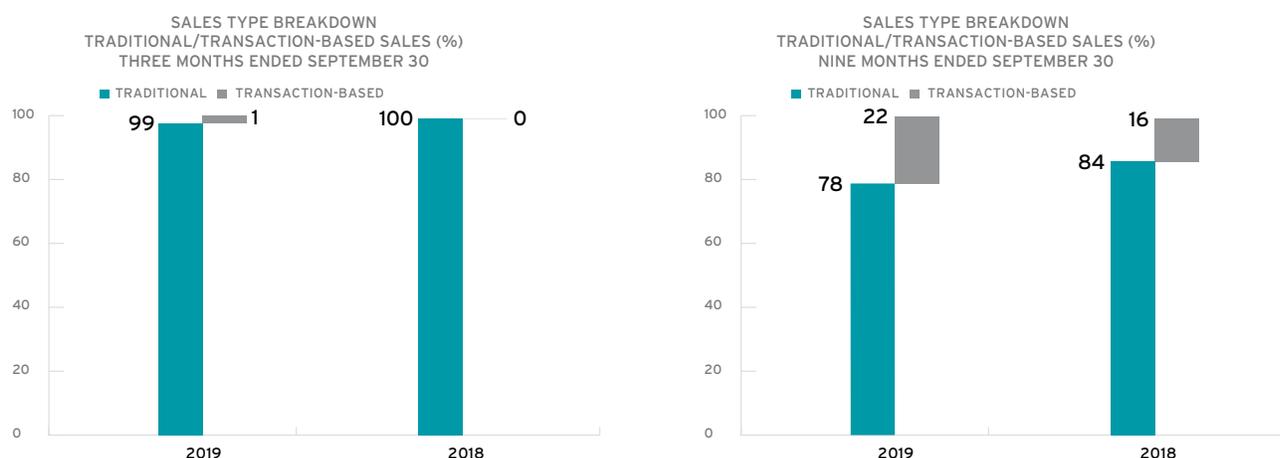
Data library sales revenue was \$2.5 million for the three months ended September 30, 2019 compared to \$1.6 million for the three months ended September 30, 2018.

Data library sales revenue was \$18.4 million for the nine months ended September 30, 2019 compared to \$5.8 million for the nine months ended September 30, 2018. Actual data sales for the nine-month period were \$18.6 million, but sales revenue of approximately \$183,000 was reallocated and deferred as a result of the extended payment terms for a portion of the \$7.0 million sale recorded in the second quarter of 2019. The \$183,000 will be recorded as interest income between the date of the sale and the collection of the final payment in January 2021.

DISAGGREGATED DATA LIBRARY SALES

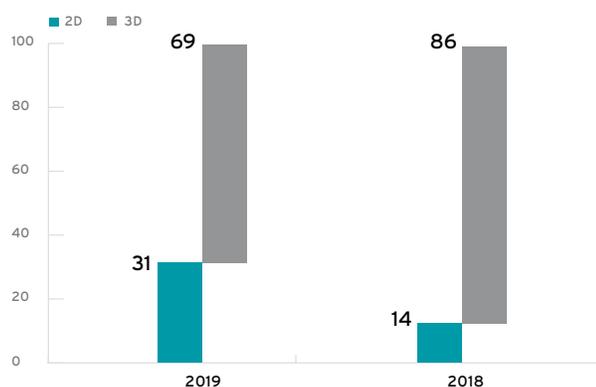
Pulse uses three categories for analyzing data library sales. The following graphs illustrate the three forms of sales disaggregation for the three- and nine-month periods ended September 30, 2019 and 2018.

The first category, transaction type, separates sales between traditional and transaction-based sales. There can be great fluctuation between these two types of sales from period to period and year to year. In the third quarter of both 2019 and 2018 Pulse generated minimal transaction-based sales. An eight-year historical breakdown is also provided in the MD&A for the year ended December 31, 2018.

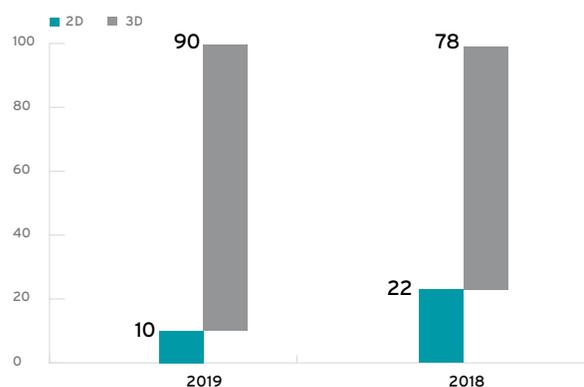


The second category is data type, meaning sales of 2D versus 3D seismic data. As 3D seismic sale contracts are generally larger than 2D seismic sale contracts, the percentage of seismic data library revenues generated from 2D and 3D seismic data fluctuates significantly depending on the number of 3D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

SALES BREAKDOWN 2D/3D (%)
THREE MONTHS ENDED SEPTEMBER 30

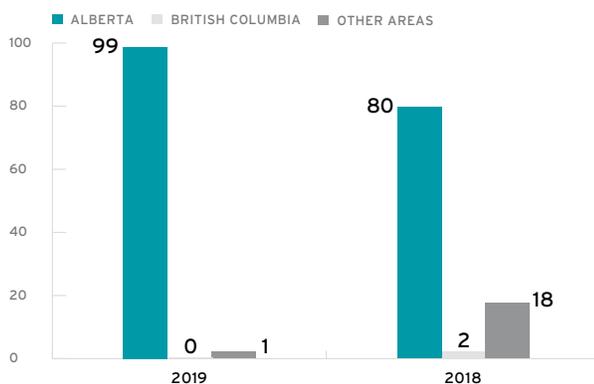


SALES BREAKDOWN 2D/3D (%)
NINE MONTHS ENDED SEPTEMBER 30

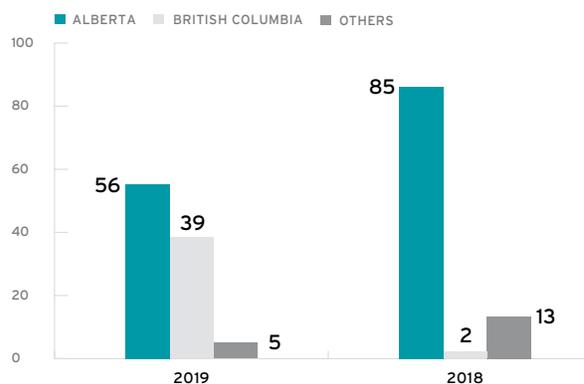


The third category is geographical representation. The largest proportion of data sales usually comes from data located in Alberta, as that is where the majority of Pulse's seismic data and industry activity are. The \$7.0 million deal in the second quarter of 2019 was for data located in British Columbia.

GEOGRAPHICAL SALES BREAKDOWN (%)
THREE MONTHS ENDED SEPTEMBER 30



GEOGRAPHICAL SALES BREAKDOWN (%)
NINE MONTHS ENDED SEPTEMBER 30



AMORTIZATION OF SEISMIC DATA LIBRARY

For the three months ended September 30, 2019, seismic data library amortization expense was \$3.6 million compared to \$1.8 million in the comparable period of 2018. For the nine months ended September 30, 2019, seismic data library amortization expense was \$10.7 million compared to \$5.5 million in the comparable period of 2018. The significant increase is due to the amortization expense related to the data library acquired in January 2019.

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, 2018.

SALARIES, INTERNAL COMMISSIONS AND BENEFITS (SCB)

SCB for the three months ended September 30, 2019 was \$751,000 compared to \$794,000 in the comparable period of 2018. SCB for the nine months ended September 30, 2019 was \$3.5 million compared to \$2.8 million in the comparable period of 2018. The significant increase is due to the acquisition bonus of \$700,000 paid to the Pulse employees for the completion of the acquisition and integration of Seitel, as well as to an increase in the sales commissions due to higher sales and, finally, to the increase in the accounting expense related to the employee long-term incentive plan resulting from the increase in the share price between January 1 and September 30, 2019.

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

SG&A for the three months ended September 30, 2019 was \$457,000 compared to \$491,000 for the three months ended September 30, 2018. SG&A for the nine months ended September 30, 2019 was \$1.5 million compared to \$1.6 million for the nine months ended September 30, 2018. The small change was mainly a result of the accounting change due to IFRS 16, Leases, that results in the operating cost portion of rent on the office lease only being classified as expenses in SG&A, while the basic rent component is reflected as a combination of interest expense and depreciation.

RESTRUCTURING COSTS

Included in restructuring costs is \$1.5 million of severance payments related to the acquired company in January 2019, the audit fees related to regulatory reporting of the Seitel acquisition, expenses related to the warehouse lease acquired with Seitel, increased marketing costs by way of the assumption of the contract for a suite at the Scotiabank Saddledome, and other minor SG&A expenses related to Seitel integration. These additional costs have been categorized as restructuring costs and make up part of the expected \$4.2 million in future liabilities as outlined in previous disclosure of the acquisition.

NET FINANCING COSTS (INCOME)

For the three months ended September 30, 2019, the Company's net financing costs were \$602,000 compared to \$76,000 of net financing income for the same period in 2018. For the nine months ended September 30, 2019, the Company's net financing costs were \$1.9 million compared to \$246,000 of net financing income for the same period in 2018. The increase is related to the debt utilized to fund the acquisition. In January 2019, in connection with the acquisition, Pulse amended and restated its syndicated credit agreement with the Toronto-Dominion Bank and ATB Financial. The credit facility is comprised of \$15 million in term debt, all of which was utilized for the acquisition, and a \$30 million revolving facility, of which \$8 million was also drawn for that purpose.

Pulse also entered into a five-year subordinated debt agreement with Edgepoint Investment Group Inc., a non-arm's-length party, for \$10 million. The agreement has no requirement to repay the principal prior to the end of term. For the nine months ended September 30, 2019, the interest expense related to the syndicated credit agreement was \$1.9 million and the interest expense related to the subordinated debt agreement was \$663,000. Also included in the financing expenses is the interest related to the lease liabilities following the implementation of IFRS 16, Leases, in the first quarter of 2019.

In the third quarter of 2018, there was zero long-term debt owing and the Company incurred only standby fees on its syndicated credit agreement.

INCOME TAXES

The income tax reduction for the three months ended September 30, 2019 was \$359,000, reflecting an effective tax rate for accounting of 11.1 percent, compared to an income tax reduction of \$391,000 and an effective tax rate for accounting of 27.3 percent for the comparable 2018 period. The income tax expense for the nine months ended September 30, 2019 was \$899,000, even though the Company incurred a loss before income tax of \$1.8 million. The main factor affecting the tax rate calculation is the permanent difference between the tax basis and the accounting value of the data library acquired in January 2019. For the same period in 2018, the Company recorded an income tax reduction of \$1.0 million and had an effective tax rate for accounting of 27.3 percent. A reconciliation of the income tax expense or reduction is included in note 8 of the condensed consolidated interim financial statements.

The federal-provincial enacted corporate income tax rate was 27 percent in 2018 and will be an average of 26.5 percent in 2019, due to phased reductions to the corporate income tax rate levied by the Province of Alberta. The effective tax rate for accounting for the three and nine months ended September 30, 2019 was different from the enacted income tax rate as a result of the permanent difference between the tax basis of the data library acquired in 2019 and its cost. The change in valuation allowance related to future resource deductions and non-deductible expenditures also contributed slightly to the variance between the effective and the enacted income tax rate.

REVIEW OF FINANCIAL POSITION

AS AT SEPTEMBER 30, 2019

TRADE AND OTHER RECEIVABLES

In June 2019 the Company closed a \$7.0 million seismic data sale. It had payment terms with \$3.0 million due and collected in July 2019, \$2.0 million due in January 2020 and \$2.0 million in January 2021. The payment due in January 2021 is presented as a long-term receivable in the statement of financial position. For this reason, that payment was discounted and \$183,000 of the data library sale will be recognized as interest income until the payment is received in January 2021.

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 it finds appropriate opportunities, and it also has conducted a large number of participation surveys in prior years. For a participation survey, Pulse partners with customers to acquire new data and 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. Pulse has not conducted a participation survey since the first quarter of 2015.

On January 15, 2019 the Company increased its seismic data library by approximately 36,354 net square kilometres of 3D data and 379,207 net kilometres of 2D data through the Seitel acquisition. The total amount allocated to the seismic data through the purchase price allocation was \$61.0 million.

At September 30, 2019, the Company considered indicators of impairment for each of its cash-generating units and, based on that review, no impairment tests were performed.

RIGHT-OF-USE (ROU) ASSETS

Included in the ROU assets are the present values of the basic rent related to Pulse's office lease agreement and the warehouse lease agreement which was assumed through the acquisition. The present values were calculated using an incremental borrowing rate of 6.7 percent. The operating costs associated with the lease agreements were not included as those costs are not fixed or based on an index or rate.

The office lease agreement terminates in March 2023 and the warehouse lease agreement terminates in April 2022.

As stated above, no fair value was allocated to the ROU asset related to the former Seitel office space. This office was not required for business by Pulse and was immediately marketed for sublease. The office lease agreement terminates in November 2022. Given market conditions for commercial office space in downtown Calgary at the time of acquisition, the probability of a sub-lease was considered low. Since that time, in the third quarter of 2019 a sub-lease for the remainder of the term of the acquired office space was finalized, which will lead to a recovery of a portion of the monthly lease costs.

LONG-TERM DEBT

As described in "Net Financing Costs (Income)" above, the acquisition of Seitel was partially funded through debt. A total of \$23.0 million was borrowed from Pulse's syndicated credit facility and a \$10.0 million subordinated debt facility was arranged.

Additionally, Pulse agreed to pay the vendor a potential deferred payment of up to \$5.0 million, to be paid at a rate representing 50 percent of the sales revenue generated from the former Seitel database until December 31, 2020. Based on sales in the first quarter of 2019, \$1.1 million of this amount was reallocated from long-term debt to accounts payable by March 31, 2019 and paid in April 2019. Based on sales in the second quarter of 2019, the remaining \$3.9 million of the \$5.0 million was paid in July 2019. The obligation has thereby been fully satisfied.

The current portion of long-term debt consists of the annual mandatory principal repayment of \$1.5 million related to the syndicated credit facility.

The non-current portion of the long-term debt is offset by deferred financing charges to be amortized over three years.

LEASE LIABILITIES

Included in lease liabilities are the present values of the basic rent related to Pulse's office lease agreement, the lease agreement for Seitel's former office space and the warehouse lease agreement, all calculated using an incremental borrowing rate of 6.7 percent. The operating costs included in the lease agreements were not included in the lease liabilities as these costs are not fixed or based on an index or rate.

CURRENT TAX LIABILITIES

Included in current tax liabilities is the income tax payable for fiscal year 2019, less the tax instalments paid during 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 details the Company's outstanding share capital:

	Three months ended September 30,		Nine months ended September 30,	
	2019	2018	2019	2018
Weighted average shares outstanding:				
Basic and diluted	53,793,317	53,822,117	53,793,317	53,853,199
Shares outstanding at period-end			53,793,317	53,793,317
Shares outstanding at November 5, 2019			53,793,317	

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, 2019 184,657 RSUs and 248,296 PSUs were eligible to vest. Corporate financial performance in 2018 did not meet the predetermined performance benchmarks and, consequently, no PSUs vested on March 31, 2019. RSUs vest automatically based upon time and, consequently, all the eligible RSUs vested on March 31, 2019.

To satisfy its obligation, in April 2019 the Company provided \$266,000 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, 2019. The related withholding taxes of \$191,000 were paid in May 2019 to settle fully the accrued cash-settled portion of the share-based payment liabilities.

At September 30, 2019 and July 18, 2019 there were 553,575 RSUs and 704,962 PSUs outstanding.

DEFICIT

On September 30, 2019 the Company had a deficit of \$44.3 million, compared to \$41.7 million at December 31, 2018. Included in the deficit are the net loss for the period of \$2.7 million and the IFRS 16, *Leases* adjustment of \$110,000 following the implementation of the new standard effective January 1, 2019.

DEFERRED TAX LIABILITY

The deferred income tax liability was \$1.2 million at September 30, 2019 compared to \$1.7 million at December 31, 2018. 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)	2019				2018			2017	
	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4	
Data library sales	2,460	10,617	5,277	4,287	1,597	1,905	2,289	5,413	
Other revenue	127	167	143	26	9	36	39	36	
Total revenue	2,587	10,784	5,420	4,313	1,606	1,941	2,328	5,449	
Amortization of seismic data library	3,557	3,577	3,566	1,811	1,812	1,836	1,878	1,958	
Net earnings (loss)	(2,861)	2,880	(2,671)	1,024	(1,042)	(1,016)	(696)	1,311	
Per share – basic and diluted	(0.05)	0.05	(0.05)	0.02	(0.02)	(0.02)	(0.01)	0.02	

The revenue streams generated by Pulse's operations are data library sales and other revenue. Other revenue includes revenue from client services consisting of copy and reproduction charges, as well as data storage fees related to the leased warehouse that was acquired with the Seitel purchase.

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, 2018. See also "Seismic Revenue Fluctuations".

During 2018, transaction-based sales contributed to data library sales to varying degrees. The second quarter of 2019 included \$4.0 million in transaction-based sales.

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 and, therefore, there has been no participation revenue to report in the last eight quarters.

The significant increase in quarterly amortization expense in the first three quarters of 2019 over the preceding five quarters is due to the acquisition in January 2019. As amortization is a non-cash expense, the Company continues to generate positive 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 each quarter in 2018 and for 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 fluctuate vary 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 adopted IFRS.

CONTRACTUAL OBLIGATIONS

Pulse's known contractual obligations at September 30, 2019 are comprised of lease liabilities for office and warehouse space, minimum payments under seismic data services contracts and accounts payable and accrued liabilities. The following table reflects the Company's anticipated payment of contractual obligations:

Contractual Obligations (thousands of dollars)	Total	Payments due by period			
		Less than 1 year	1 – 3 years	4 – 5 years	After 5 years
Long-term debt – capital	32,150	1,500	20,650	10,000	–
Long-term debt – interest	6,678	2,041	3,345	1,292	–
Lease liabilities	4,188	1,372	2,556	260	–
Seismic data services contracts	148	148	–	–	–
Accounts payable and accrued liabilities	1,111	1,006	105	–	–
Total contractual obligations	44,275	6,067	26,656	11,552	–

Obligations in the category of seismic data services contracts include data storage.

LIQUIDITY, CAPITAL RESOURCES AND CAPITAL REQUIREMENTS

At September 30, 2019 Pulse had working capital of \$579,000 and a working capital ratio of 1.11:1. Current liabilities include deferred revenue, a non-cash liability, of \$1.8 million which relates to data to be delivered to customers over a contractually specified period.

In the first nine months of 2019 the Company had \$7.5 million of cash provided by operating activities compared to \$5.7 million of cash used in operating activities in the comparable period of 2018. The main contributors to the difference between the two periods are the significantly increased data sales in 2019, the restructuring costs paid in 2019, the lower cash income tax paid in 2019 than in 2018, the higher interest paid in 2019 than in 2018, and the decrease in the net change in non-cash working capital in 2019 from 2018.

To fund the acquisition in January 2019, the Company borrowed a total of \$33.0 million and subsequently borrowed another \$2.5 million on the revolving credit facility. Of total borrowing, \$3.4 million had been repaid as of September 30.

The Company utilized cash for the following outlays:

- Seismic data purchases and associated cost of \$61.0 million;
- Long-term debt repayments of \$3.4 million;
- Capital lease principal repayments of \$465,000;
- Deferred financing charges of \$387,000;
- Additions of property and equipment for \$398,000; and
- Shares purchased for equity-settles share-based payments of \$266,000.

The cash balance at September 30, 2019 was \$814,000.

The credit facilities are comprised of \$15 million in term debt and a \$30.0 million revolving facility, of which \$7.9 million is drawn at this date. Up to \$5.0 million of the revolving facility remains available as an operating line of credit. The facility has repayment terms, interest rates and financial covenants that are described below.

Significant terms of the credit facility are:

- Interest on the term debt and the revolving facility is based on the lead lender's prime rate plus 0.25 percent to 2.75 percent, following an eight-tier margin structure based on the Company's total debt to adjusted EBITDA ratio as described below;
- An accordion feature allowing the Company to increase the facility's size by up to an additional \$25 million, subject to the lenders' consent;
- \$1.5 million aggregate annual principal payments on the term debt and the facility, with voluntary prepayments permitted in whole or part at any time, without premium or penalty; and
- Three-year term until January 15, 2022, with an extension of up to one year available on January 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 September 30, 2019 the Company had \$14.2 million of term debt and a \$7.9 million balance on the revolving credit facility, with \$22.1 million available for future draws. At September 30, 2019 the applicable interest rate on the long-term debt was 4.7 percent (September 30, 2018 - 4.2 percent).

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

The credit facility also includes the following two financial covenants:

1) MAXIMUM SENIOR DEBT TO ADJUSTED EBITDA RATIO

The senior debt to adjusted EBITDA ratio shall not be greater than 3.75:1 on September 30, 2019 and shall decrease in steps to 3:1 for fiscal quarters ending December 31, 2020 and thereafter.

2) MINIMUM INTEREST COVERAGE RATIO

On any date on which the senior debt to adjusted EBITDA ratio has been lower than 2:1 for two consecutive quarters, the minimum interest coverage ratio, defined as the ratio of adjusted EBITDA to interest expense, shall not be less than 3:1.

On any date on which the senior debt to adjusted EBITDA ratio is equal to or higher than 2:1 for two consecutive quarters, the fixed charge coverage ratio replaces the interest coverage ratio.

The fixed charge coverage ratio is equal to adjusted EBITDA less unfunded capital expenditures, cash taxes and permitted cash distributions divided by the sum of scheduled principal repayments and interest expense paid in cash and shall not be less than 1.2:1.

Senior debt is total debt less subordinated debt. Total debt also includes the potential deferred payment on the acquisition and is determined on a consolidated basis and in accordance with IFRS.

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.

At September 30, 2019 the senior debt to adjusted EBITDA ratio was 1.3:1 and the fixed charge coverage ratio was 3.8:1.

The Company was therefore in compliance with the credit facility's covenants at September 30, 2019.

The Company pays interest and a standby fee based on the daily undrawn balance of the credit facility and its total debt to adjusted EBITDA ratio. Interest and standby fees on the syndicated revolving bank loan are calculated based on the syndicate lead 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, income taxes, depreciation and amortization (adjusted EBITDA). The total debt to adjusted EBITDA ratio at September 30, 2019 was 1.86:1 and the applicable margin and standby fee will be set at the third-level rates specified in the facility.

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.

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	0.25%	1.50%	0.3000%
Greater than 1:1 but less than or equal to 1.5:1	0.50%	1.75%	0.3500%
Greater than 1.5:1 but less than or equal to 2:1	0.75%	2.00%	0.4000%
Greater than 2:1 but less than or equal to 2.5:1	1.00%	2.25%	0.5063%
Greater than 2.5:1 but less than or equal to 3:1	1.25%	2.50%	0.5625%
Greater than 3:1 but less than or equal to 3.5:1	1.75%	3.00%	0.7500%
Greater than 3.5:1 but less than or equal to 4:1	2.25%	3.50%	0.8750%
Greater than 4:1	2.75%	4.00%	1.0000%

The Company has not had an active normal course issuer bid (NCIB) since December 2018.

Toronto Stock Exchange (TSX) rules determine the number of shares the Company is permitted to purchase through its NCIB.

From January 1, 2018 to December 20, 2018, the Company purchased 227,500 common shares under the NCIB. All 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 2019. The Company anticipates that future capital expenditures will be financed through cash on hand, available credit facilities, and funds from operations, as well as customer pre-funding in the case of participation surveys. The Company has a \$30.0 million revolving credit facility with \$22.1 million undrawn, and an accordion feature allowing Pulse to increase the facility's size by up to \$25.0 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 growth initiatives, and it continues to rely on internal measures such as the long-term debt to equity ratio to structure and forecast its capital requirements. Long-term debt is defined as long-term debt net of deferred financing costs. At September 30, 2019, the long-term debt to equity ratio was 0.97:1. 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, they 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 set forth in 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 income 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.

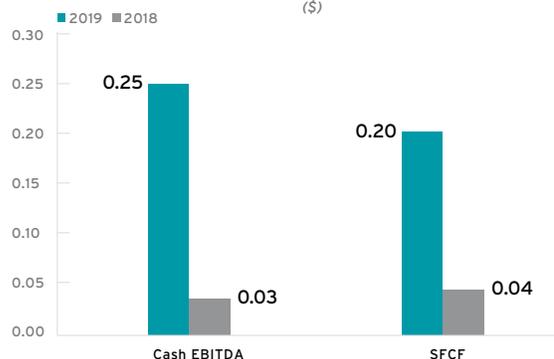
A reconciliation of net loss to EBITDA, cash EBITDA and shareholder free cash flow follows:

(thousands of dollars, except per share data)	Three months ended September 30,		Nine months ended September 30,	
	2019	2018	2019	2018
Net loss	(2,861)	(1,042)	(2,652)	(2,754)
Add:				
Amortization of seismic data library	3,557	1,812	10,700	5,526
Net financing costs	602	(76)	1,926	(246)
Income tax expense (reduction)	(359)	(391)	899	(1,033)
Depreciation	165	18	480	53
EBITDA	1,104	321	11,353	1,546
Deduct:				
Lease payments treated as capital lease	21	–	64	–
Warehouse rental revenue	96	–	350	–
Add:				
Non-cash expenses	63	91	221	282
Restructuring costs	275	–	2,518	–
Cash EBITDA	1,325	412	13,678	1,828
Deduct:				
Net financing costs	602	(76)	1,926	(246)
Current income tax expense	–	–	1,335	19
Add:				
Non-cash deferred financing charges	32	–	91	–
Current income tax reduction	279	57	0	–
Interest paid (capital lease)	38	–	116	–
Shareholder free cash flow (SFCF)	1,072	545	10,624	2,055
Cash EBITDA per share – basic and diluted	0.02	0.01	0.25	0.03
SFCF per share – basic and diluted	0.02	0.01	0.20	0.04

CASH EBITDA AND SFCF
NINE MONTHS ENDED SEPTEMBER 30
(\$ millions)



CASH EBITDA AND SFCF PER SHARE (BASIC AND DILUTED)
NINE MONTHS ENDED SEPTEMBER 30
(\$)



As reported in previous filings concerning the Seitel acquisition, in addition to the purchase price of \$58.6 million, Pulse assumed various future liabilities viewed by the Company as being part of the total cost of the acquisition. These estimated \$4.2 million of costs are being expensed over time and categorized as restructuring costs, with a large percentage occurring in the first year, including \$2.5 million in the first nine months of 2019. Because these expenses are expected to be non-recurring, they are being excluded from the Company's calculation of cash EBITDA and shareholder free cash flow. Also deducted from the cash EBITDA calculation is the rental revenue received for the use of a portion of the warehouse by a third party.

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, 2018.

At September 30, 2019, 83 percent of the total accounts receivable were due from three customers. They are expected to be collected subsequent to quarter-end. As mentioned above, one of the three customers is benefiting from payment terms with one payment due in January 2020 and one in January 2021.

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, 2018.

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 are not yet effective for the year ending December 31, 2019. 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.

Effective January 1, 2019 the Company adopted IFRS 16, *Leases*. The most significant effect of the new standard will be the lessee's recognition of the initial present value of unavoidable future lease payments as ROU lease assets and lease liabilities on the statement of financial position, including those for most leases that were accounted for as operating leases.

Actual cash flows will be unaffected in applying the new standard. The results are that the lessee's statement of cash flows will reflect increases in cash flows from operating activities (depreciation expense) offset by decreases in cash flows from financing activities (capital lease cash payment for principal). This is the result of the presentation of the payments of the "principal" component of the lease liability that were accounted for as operating leases as a cash flow used in financing activities under the new standard.

Pulse elected to apply the modified retrospective approach and adjusted its retained earnings. An adjustment of \$110,000 was made on January 1, 2019. Pulse used an incremental borrowing rate of 6.7 percent to calculate the initial present value of the ROU and lease liability.

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, 2018.

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 July 1, 2019 and ending on September 30, 2019 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, 2018.

ADDITIONAL INFORMATION

You may find additional information relating to Pulse, including the Company's Annual Information Form, on SEDAR at 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 is maintaining a cautious outlook for the rest of 2019 and the opening quarters of 2020;
- Pulse is prepared for additional quarters of weak traditional sales while also cautioning that there is no visibility as to transaction-based 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 2019;
- 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" in the MD&A for the year ended December 31, 2018. 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 largest licensable seismic data library in Canada, currently consisting of approximately 65,310 net square kilometres of 3D seismic and 829,207 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

Catherine Samuel

Corporate Secretary

BOARD OF DIRECTORS

Robert Robotti ^{(1) (2) (3)}

Chair

Karen El-Tawil ^{(2) (4)}

Director

Paul Crilly ^{(1) (3)}

Director

Dallas Droppo ^{(1) (2) (3)}

Director

Grant Grimsrud ^{(1) (4)}

Director

Neal Coleman ⁽⁴⁾

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

McCarthy Tétrault LLP
Calgary, Alberta

AUDITORS

KPMG LLP
Calgary, Alberta

STOCK EXCHANGE LISTING

TSX: PSD
OTCQX: PLSDF

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