

## Management's Discussion and Analysis

This Management's Discussion and Analysis ("MD&A") provides a review by management of the financial position and consolidated results of Pieridae Energy Limited ("Pieridae", "we", "our" or the "Company") for the three and nine-month periods ended September 30, 2019, as well as information about our future prospects. This MD&A has been prepared as of November 6, 2019 and should be read in conjunction with the Company's condensed consolidated interim unaudited financial statements for the three and nine-month periods ended September 30, 2019, its audited consolidated financial statements and the accompanying notes for the years ended December 31, 2018 and 2017, and the Annual Information Form for the year ended December 31, 2018. The common shares of Pieridae trade on the Toronto Venture Exchange ("TSX") under the symbol PEA.V. Continuous disclosure materials are available on the Company's website, [www.pieridaenergy.com](http://www.pieridaenergy.com), or on SEDAR, [www.sedar.com](http://www.sedar.com). The reporting currency is the Canadian dollar. All amounts are presented in Canadian dollars unless otherwise stated.

In this MD&A, barrel of oil equivalent ("boe") amounts have been calculated using a conversion rate of six thousand cubic feet of natural gas to one barrel of oil, which represents an energy equivalency conversion method applicable at the burner tip and does not represent a value equivalency at the wellhead. While it is useful for comparative measures, it may not accurately reflect individual product values and may be misleading if used in isolation.

This MD&A contains forward-looking information and statements along with certain measures which do not have any standardized meaning prescribed by Canadian Generally Accepted Accounting Principles ("GAAP"). The terms "operating netback", "operating income", "net operating expenses", and "project investment" do not have any standardized meaning as prescribed by GAAP and therefore may not be comparable to similar measures presented by other companies where similar terminology is used. We refer you to advisory on forward-looking information and statements and a summary of our non-GAAP measures at the end of the MD&A.

## Contents

Cautionary Note Regarding Forward-Looking Information	3
Financial Results	4
<b>Consolidated Results of Operations</b>	4
Operational Update	4
<b>Background</b>	4
<b>Third Quarter Operational Highlights</b>	5
<b>Business Environment</b>	7
Operating expenses	8
Administrative expenses	8
Development expenses	9
Transportation expenses	9
Depletion and depreciation	9
Impairment	9
Share-based compensation	10
Financial income and expenses	10
<b>Segmented Information</b>	11

Upstream Segment	11
LNG Segment	14
<b>Summary of quarterly results</b>	15
Capital Resources and Liquidity	15
<b>Net Working Capital</b>	15
<b>Sources and Uses of Cash Flows</b>	16
<b>Capital resources</b>	16
Cash and cash equivalents	16
Loans and term debt	17
<b>Share Capital</b>	17
Commitments and Contingencies	18
<b>Off Balance Sheet Transactions</b>	18
Critical Accounting Policies, Estimates and Judgements	18
<b>Changes in accounting policies</b>	18
Outlook and Guidance	19
Non-IFRS Measures	19
<b>Net Operating Expense, Net Operating Income and Operating Netback</b>	19
Net Operating Expenses	20
Net Operating Income & Operating Netbacks	20
Project investment	20
<b>Net Working Capital</b>	21

## Cautionary Note Regarding Forward-Looking Information

Certain of the statements contained herein including, without limitation, management plans and assessments of future plans and operations, expected project spending, future business plan and strategy, criteria for evaluating acquisitions and other opportunities, intentions with respect to future acquisitions and other opportunities, plans and timing for development of undeveloped and probable resources, timing of when the Company may be taxable, estimated abandonment and reclamation costs, plans regarding hedging, wells to be drilled, the weighting of commodity expenses, expected production, including shut-ins, and performance of oil and natural gas properties, results and timing of projects, access to adequate pipeline capacity and third-party infrastructure, growth expectations, supply and demand for oil, natural gas liquids, and natural gas, industry conditions, government regulations and regimes, commodity prices, and capital expenditures and the nature of capital expenditures and the timing and method of financing thereof, may constitute "forward-looking statements" or "forward-looking information" within the meaning of Applicable Securities Laws (as defined herein) (collectively "forward-looking statements"). Words such as "may", "will", "should", "could", "anticipate", "believe", "expect", "intend", "plan", "potential", "continue", "shall", "estimate", "expect", "propose", "might", "project", "predict", "forecast" and similar expressions may be used to identify these forward-looking statements. These statements reflect management's current beliefs and are based on information currently available to management.

Forward-looking statements involve significant risk and uncertainties. A number of factors could cause actual results to differ materially from the results discussed in the forward-looking statements including, but not limited to, risks associated with oil and gas exploration, development, exploitation, production, marketing and transportation, loss of markets, volatility of commodity prices, currency fluctuations, imprecision of resources estimates, environmental risks, competition from other producers, incorrect assessment of the value of acquisitions, failure to realize the anticipated benefits of acquisitions, delays resulting from or inability to obtain required regulatory approvals and ability to access sufficient capital from internal and external sources and the risk factors outlined under "Risk Factors" and elsewhere herein. The recovery and resources estimate of Pieridae's reserves provided herein are estimates only and there is no guarantee that the estimated resources will be recovered. As a consequence, actual results may differ materially from those anticipated in the forward-looking statements.

Forward-looking statements are based on a number of factors and assumptions which have been used to develop such forward-looking statements, but which may prove to be incorrect. Although Pieridae believes that the expectations reflected in such forward-looking statements are reasonable, undue reliance should not be placed on forward-looking statements because Pieridae can give no assurance that such expectations will prove to be correct. In addition to other factors and assumptions which may be identified in this document, assumptions have been made regarding, among other things: the impact of increasing competition; the general stability of the economic and political environment in which Pieridae operates; the timely receipt of any required regulatory approvals; the ability of Pieridae to obtain qualified staff, equipment and services in a timely and cost efficient manner; the ability of the operator of the projects which Pieridae has an interest in, to operate the field in a safe, efficient and effective manner; the ability of Pieridae to obtain financing on acceptable terms; the ability to replace and expand oil and natural gas resources through acquisition, development and exploration; the timing and costs of pipeline, storage and facility construction and expansion and the ability of Pieridae to secure adequate product transportation; future commodity prices; currency, exchange and interest rates; the regulatory framework regarding royalties, taxes and environmental matters in the jurisdictions in which Pieridae operates; timing and amount of capital expenditures, future sources of funding, production levels, weather conditions, success of exploration and development activities, access to gathering, processing and pipeline systems, advancing technologies, and the ability of Pieridae to successfully market its oil and natural gas products.

Readers are cautioned that the foregoing list of factors is not exhaustive. Additional information on these and other factors that could affect Pieridae's operations and financial results are included in reports on file with Canadian securities regulatory authorities and may be accessed through the SEDAR website ([www.sedar.com](http://www.sedar.com)), and at Pieridae's website ([www.pieridaenergy.com](http://www.pieridaenergy.com)). Although the forward-looking statements contained herein are based upon what management believes to be reasonable assumptions, management cannot assure that actual results will be consistent with these forward-looking statements. Investors should not place undue reliance on forward-looking statements. These forward-looking

statements are made as of the date hereof and Pieridae assumes no obligation to update or review them to reflect new events or circumstances except as required by Applicable Securities Laws.

Forward-looking statements contained herein concerning the oil and gas industry and Pieridae's general expectations concerning this industry are based on estimates prepared by management using data from publicly available industry sources as well as from reserve reports, market research and industry analysis and on assumptions based on data and knowledge of this industry which Pieridae believes to be reasonable. However, this data is inherently imprecise, although generally indicative of relative market positions, market shares and performance characteristics. While Pieridae is not aware of any misstatements regarding any industry data presented herein, the industry involves risks and uncertainties and is subject to change based on various factors.

## Financial Results

### Consolidated Results of Operations

(\$000s, except where otherwise stated)	For the three months ended		For the nine months ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Net revenues <sup>(1)</sup>	\$ 13,130	\$ -	\$ 49,499	\$ -
Net loss	\$ (13,178)	\$ (20,368)	\$ (45,700)	\$ (26,021)
Net loss per common share - basic and diluted (\$/share)	\$ (0.15)	\$ (0.40)	\$ (0.55)	\$ (0.51)
Cash flow from operating activities	\$ (238)	\$ (3,171)	\$ (34,024)	\$ (7,072)
Net operating (loss) income <sup>(2)</sup>	\$ (2,732)	\$ (103)	\$ 469	\$ (427)
Total sales volumes (boe/d)	14,657	-	15,744	-
Petroleum and natural gas revenue per boe	\$ 9.40	\$ -	\$ 11.24	\$ -
Netback per boe <sup>(2)</sup>	\$ (2.03)	\$ -	\$ 0.26	\$ -
Project investment <sup>(2)</sup>	\$ 2,351	\$ 2,578	\$ 11,681	\$ 5,611

	As at		As at	
	September 30, 2019	December 31, 2018	September 30, 2019	December 31, 2018
Net working capital deficit <sup>(2)</sup>	\$ (88,430)	\$ (84,061)	\$ (88,430)	\$ (84,061)
Shareholder's equity	\$ 68,822	\$ 91,900	\$ 68,822	\$ 91,900

(1) Revenues net of royalties and losses on risk management contracts as shown in the Consolidated Statement of Loss and Comprehensive Loss

(2) Non-IFRS measure. See page 19 in this MD&A.

## Operational Update

### Background

Pieridae is a publicly traded, Canadian based Company engaged in the development of a fully integrated liquefied natural gas ("LNG") project to be built in Goldboro, Nova Scotia. See the Company's December 31, 2018 Annual Report for detailed information regarding the Goldboro LNG facility.

On December 20, 2018, Pieridae completed a plan of arrangement whereby the Company acquired, directly and indirectly, all of the issued and outstanding common shares of Ikkuma Resources Corp. ("Ikkuma"), a publicly traded company engaged in the development and production of petroleum and natural gas resources located in the foothills of Alberta and British Columbia. By virtue of this acquisition, Pieridae also became an upstream petroleum and natural gas producer and took a

large step towards meeting the supply requirements for Train 1 of the Goldboro LNG facility. For information on all of the Company's upstream assets see the December 31, 2018 Annual Report.

In February of 2019, the Nova Scotia Mi'kmaq Benefits Agreement negotiated with the Assembly of Nova Scotia Mi'kmaq Chiefs was ratified. The Benefits Agreement establishes the framework under which the Mi'kmaq of Nova Scotia will benefit economically from the development, construction and operation of the Goldboro LNG project. A Memorandum of Understanding, signed in 2013, originally outlined the relationship between Pieridae and the Mi'kmaq in Nova Scotia and this new Benefits Agreement underscores Pieridae's commitment to ongoing engagement and relationship building with the First Nations communities in Nova Scotia.

On April 1, 2019, the Company announced that it had engaged Kellogg Brown & Root Limited ("KBR") to perform a review of an amended version of the previously prepared front-end engineering and design ("FEED") study for its proposed Goldboro LNG facility. KBR will also conduct an Open Book Estimate ("OBE") necessary for entering into a lumpsum engineering, procurement and construction ("EPC") contract. Since that time \$4.7 million was incurred to progress the EPC contract with KBR.

On June 26, 2019, Pieridae announced that it had signed a purchase and sale agreement with Shell Canada Energy ("Shell") to purchase all of Shell's midstream and upstream assets in the southern Alberta Foothills for a purchase price of \$190.0 million. On signing of the purchase and sale agreement, Pieridae paid a non-refundable deposit to Shell of \$10.0 million.

Prior to the closing of the Shell asset acquisition, the Company had conducted two private placements in 2019. In February the Company completed a private placement of common shares at a price of \$2.00 per share. These efforts resulted in gross proceeds of \$19.1 million. Pieridae used the proceeds of the private placement for general corporate purposes, including further reducing the liabilities assumed in the Ikkuma acquisition. In June the Company closed a second private placement at \$0.86 per common share. Total proceeds were \$2.2 million. Proceeds were used to fund additional costs associated with the Shell asset acquisition as well as general corporate costs.

On July 11, 2019, Pieridae announced that it had negotiated extensions of the key deadlines under its 20-year agreement with German utility Uniper Global Commodities S.E. ("Uniper"). These include expected commercial deliveries of LNG to Uniper to start between November 30th, 2024 and May 31st, 2025; and the extension to September 30, 2020 of the deadline to make a positive financial investment decision for the Company's proposed Goldboro LNG facility.

On October 17, 2019, Pieridae announced that it had closed its acquisition of all of Shell's midstream and upstream assets in the southern Alberta Foothills for \$190 million. Further to the \$10 million deposit paid in June, Pieridae paid \$165 million in cash (net of adjustments) which Pieridae funded through the issuance of term debt and equity. Pieridae satisfied the balance of the purchase price by the issuance to Shell of 15.2 million common shares of the Company having an aggregate value of \$15 million.

The assets acquired from Shell align well with Pieridae's existing Central Alberta properties, providing further consolidation of the Alberta and British Columbia conventional Foothills natural gas pools. The Company also expects to capitalize on operational synergies that will be realized within the acquired areas, where consolidation of working interests in production and midstream assets complement Pieridae's existing core areas. Development of these properties is anticipated to provide most of the natural gas production required to supply the first train of its proposed Goldboro LNG facility in Nova Scotia.

### Third Quarter Operational Highlights

Production during the third quarter averaged 14,657 boe per day, comprised of 99 percent natural gas and 1 percent natural gas liquids ("NGL's") and condensate. This production resulted in Pieridae recognizing petroleum and natural gas revenue of \$12.7 million which included sulphur production revenue of \$1.6 million. Pieridae also generated other income, in the form of processing fees, totalling \$0.5 million. Year to date ("YTD") production averaged 15,744 boe per day. This production is below estimated combined field capacity and is related to voluntary well shut-ins due to low gas prices that have been prevalent over the last two quarters. Petroleum and natural gas revenue for the nine months ended September 30, 2019,

totalled \$48.3 million, including sulphur sales of \$4.4 million. Processing income for the nine months ended September 30, 2019, was \$3.2 million.

Pieridae's average realized price in Q3 2019 was \$1.22 per GJ compared to an average price of \$1.19 per GJ in Q2 2019. Year to date the Company's average realized price for natural gas was \$1.53 per GJ. In Q2 2019 the Company instituted a natural gas physical hedging program to mitigate the impact of the volatile pricing environment in Western Canada. Initial volumes placed under forward contracts under this program were 40,000 GJ per day. In Q3 2019 this program was expanded to 62,500 GJ per day which represents approximately 68% of average Q3 2019 natural gas production.

AECO pricing continued to prove challenging in Q3 2019. Average AECO prices peaked at \$1.23 per GJ in July before falling to decade lows. More recently however, AECO prices have quadrupled from their September lows. Two factors indicate that these increases might be sustainable as we head into the winter heating season. Firstly, TC Energy reversed an earlier decision to change protocols for accessing storage. These changes were supported by TC Energy, The Alberta Energy Regulator and producers more broadly. It is hoped that these new transport protocols will generate a more stable and economical natural gas pricing environment in Alberta. Secondly, storage levels in Alberta are 27 percent below their five-year average, and the market is anticipating that the situation will become worse before it gets better due to an expectation of colder-than-normal winter temperatures.

Despite the lower price environment in Q3, the Company was still able to generate net operating income of \$469 thousand in the first nine months of 2019. This was down \$2.7 million from the six months ended June 30, 2019; however, it highlights the ability of Pieridae's upstream operations to generate positive results in one of the most challenging price environments. This bodes well for the synergies that are expected to evolve from consolidation of much of the Alberta Foothills gas production.

NGL pricing did not vary greatly in Q3 2019. The Company realized an average price of \$42.45 per bbl versus \$41.83 per bbl in Q2 2019. The year-to-date average price for NGL sales was \$43.22 per bbl.

In Q3 2019 the Company reported a net loss of \$13.2 million. This compares to a net loss of \$19.6 million in Q2 2019. A deliberate pause in spending on the proposed Goldboro LNG facility was responsible for much of this improvement, as the Company focused its efforts on closing the Shell asset acquisition.

The poor pricing environment continues to force the Company to limit its capital investment to sustaining production, as opposed to growing production. Consequently, exploration and development expenditures in the quarter were \$1.9 million. Year to date expenditures totalled \$3.2 million.

## Business Environment

(3-month average)	For the three months ended			For the nine months ended		
	September 30, 2019	September 30, 2018		September 30, 2019	September 30, 2018	
Dated Brent benchmark price (USD\$/bbl)	\$ 61.67	\$ 75.93		\$ 64.63	\$ 69.29	
WCS heavy differential from WTI (USD\$/bbl)	\$ 13.67	\$ 29.68		\$ 13.21	\$ 23.88	
Condensate benchmark price (USD\$/bbl)	\$ 52.31	\$ 68.97		\$ 53.18	\$ 62.93	
NYMEX benchmark price (USD\$/MMBTU)	\$ 2.13	\$ 2.89		\$ 2.81	\$ 2.87	
AECO benchmark price (CAD\$/GJ)	\$ 1.17	\$ 1.03		\$ 1.53	\$ 1.44	
NBP UK natural gas benchmark price (USD\$/MMBtu)	\$ 4.15	\$ 8.07		\$ 5.65	\$ 7.41	
US/Canadian dollar average exchange rate (USD\$)	\$ 0.7574	\$ 0.7652		\$ 0.7524	\$ 0.7769	
US/Canadian dollar period end exchange rate (USD\$)	\$ 0.7551	\$ 0.7725		\$ 0.7551	\$ 0.7725	

Once the Goldboro facility is operational, substantially all of the Company's production is expected to be sold based on NBP and TTF, which are European LNG benchmark prices. International natural gas prices closely correlate to Brent indices. Canadian natural gas pricing is primarily based on Alberta AECO reference pricing, which is derived from the NYMEX reference pricing and adjusted for its basis or location differential to the NYMEX delivery point at Henry Hub. The Company's realized prices can be sensitive to fluctuations in market prices and foreign exchange rates.

## Revenues

(\$000s, except where otherwise stated)	For the three months ended			For the nine months ended		
	September 30, 2019	September 30, 2018		September 30, 2019	September 30, 2018	
Petroleum and natural gas revenue, net of royalties <sup>(1)</sup>	\$ 12,638	\$ -		\$ 46,929	\$ -	
Project management	\$ 33	\$ 215		\$ 63	\$ 297	
Other income	\$ 459	\$ -		\$ 3,163	\$ -	
Loss on risk management contracts	\$ -	\$ -		\$ (656)	\$ -	
<b>Total</b>	\$ 13,130	\$ 215		\$ 49,499	\$ 297	

(1) Revenues net of royalties as shown in the Consolidated Statement of Loss and Comprehensive Loss

Petroleum and natural gas revenues, net of royalties for the three months ended September 30, 2019 were \$12.7 million. This represents roughly a 3 percent increase from Q2 2019. This modest improvement can be attributed to slightly higher realized gas prices in Q3 offsetting the reduced production resulting from the Company's decision to shut-in production in Q2 due to the poor pricing environment in Western Canada. These shut-ins caused average production to be lower in Q3 2019, decreasing 4.6 percent to 14,657 boe per day from 15,368 boe per day in Q2 2019. Some of this volume decline was mitigated by modestly higher average realized prices. The Company's realized natural gas price increased by 2.5 percent from an average of \$1.19 per GJ in Q2 to an average of \$1.22 per GJ in Q3. However, this was still much lower than the \$2.11 per GJ realized in Q1; although Q1 traditionally has higher pricing due to higher demand.

Natural gas production also declined 4.5 percent in Q3 to an average of 86,884 Mcf per day due to voluntary production shut-ins. While these volumes were down from Q2, they were actually higher than the 81,368 Mcf per day produced in June, which

was the lowest monthly volume produced to date. Monthly averages were 87,148, 87,925 and 85,534, respectively in July, August and September. The Company has since restored virtually all of the production shut-in in Q2 and Q3.

The Company earned other income in the form of transportation and processing fees totalling \$459 thousand in Q3 2019. This represents third-party natural gas volumes transported through, and processed at, pipelines and facilities in which Pieridae has an ownership interest. This compares to \$1.4 million in Q2 2019. This large decline is due to full effect of other third-party volumes also being shut-in, being realized in Q3. In the nine-month period ended September 30, 2019, the Company had petroleum and natural gas revenues, net of royalties, of \$46.9 million and transportation and processing income of \$3.2 million. There were no comparable revenues in 2018.

Project management revenues are management fees invoiced by the Company as a project operator for site restoration work in Quebec.

### Operating expenses

(\$000s, except where otherwise stated)	For the three months ended			For the nine months ended		
	September 30, 2019	September 30, 2018		September 30, 2019	September 30, 2018	
Engineering and consulting	\$ 68	\$ -	\$	\$ 286	\$ -	\$
Production expenses	\$ 9,458	\$ -	\$	\$ 32,042	\$ -	\$
Land Improvements	\$ 132	\$ -	\$	\$ 1,365	\$ -	\$
Salaries and benefits	\$ 3,051	\$ 87	\$	\$ 7,424	\$ 332	\$
Other	\$ 1,656	\$ 16	\$	\$ 2,970	\$ 95	\$
<b>Total</b>	<b>\$ 14,365</b>	<b>\$ 103</b>	<b>\$</b>	<b>\$ 44,087</b>	<b>\$ 427</b>	<b>\$</b>

Operating expense variances for the three and nine-month periods ended September 30, 2019, are \$14.3 million and \$43.7 million, respectively, compared to the equivalent periods in 2018. The increases reflect the operating costs associated with the Company's upstream operations in Western Canada. Most of the increase is attributable to the \$9.5 million (Q3 2019) and \$32.0 million (YTD) increases in production expenses related to the petroleum and natural gas assets acquired from Ikkuma in late 2018. The Ikkuma acquisition also resulted in a higher employee headcount which increased salaries and benefits by \$3.0 million (Q3 2019) and \$7.1 million (YTD). Land lease costs contributed to a \$0.9 million (Q3 2019) and \$2.5 million (YTD) increases in other expenses year over year.

### Administrative expenses

(\$000s, except where otherwise stated)	For the three months ended			For the nine months ended		
	September 30, 2019	September 30, 2018		September 30, 2019	September 30, 2018	
Salaries and benefits	\$ 1,615	\$ 764	\$	\$ 5,989	\$ 2,011	\$
Professional fees	\$ 1,212	\$ 196	\$	\$ 2,902	\$ 245	\$
Other	\$ 849	\$ 63	\$	\$ 2,555	\$ 280	\$
<b>Total</b>	<b>\$ 3,676</b>	<b>\$ 1,023</b>	<b>\$</b>	<b>\$ 11,446</b>	<b>\$ 2,536</b>	<b>\$</b>

Administrative expenses for the three and nine-month periods ended September 30, 2019, increased by \$2.7 million (Q3 2019) and \$8.9 million (YTD), respectively compared to the same periods in 2018. The additional employees from the Ikkuma acquisition contributed to increases of \$0.9 million (Q3 2019) and \$4.0 million (YTD) in salaries and benefits. The increase in professional fees is due to legal and financial advisory costs related to due diligence for the Shell asset acquisition, and efforts to secure the financing associated with the Shell asset acquisition. The balance of the increase was attributable to increases in insurance, licensing costs and public company costs.

## Development expenses

(\$000s, except where otherwise stated)	For the three months ended		For the nine months ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Professional fees	\$ 504	\$ 2,346	\$ 8,109	\$ 4,319
Other	\$ -	\$ 8	\$ 236	\$ 295
<b>Total</b>	<b>\$ 504</b>	<b>\$ 2,354</b>	<b>\$ 8,345</b>	<b>\$ 4,614</b>

Development expenses capture the direct costs associated with the proposed Goldboro LNG facility. These expenditures represent the variety of engineering, environmental and design activities being undertaken by the Company as it works to complete its OBE. Since the Company has not reached a final investment decision for its proposed LNG facility in Nova Scotia, these costs are expensed as opposed to being capitalized. The \$1.9 million decrease (Q3 2019) in development expenses, compared to Q3 2018, reflects curtailment of LNG spending, during the Shell asset acquisition period. The \$3.7 million increase (YTD) versus 2018, is indicative of the engagement of KBR in Q2 2019 to review the previously prepared FEED and to commence work on the OBE.

## Transportation expenses

(\$000s, except where otherwise stated)	For the three months ended		For the nine months ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Transportation expense	\$ 1,464	\$ -	\$ 4,880	\$ -
<b>Total</b>	<b>\$ 1,464</b>	<b>\$ -</b>	<b>\$ 4,880</b>	<b>\$ -</b>

The Company's transportation expense for the three and nine-month periods ended September 30, 2019 were \$1.5 million and \$4.9 million, respectively. Q3 2019 transportation expenses were \$0.3 million less than Q2 2019 due to the well shut-ins that occurred in Q2. There were no comparable costs in the same periods in 2018.

## Depletion and depreciation

(\$000s, except where otherwise stated)	For the three months ended		For the nine months ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Depletion and depreciation	\$ 3,599	\$ 18	\$ 11,942	\$ 49
<b>Total</b>	<b>\$ 3,599</b>	<b>\$ 18</b>	<b>\$ 11,942</b>	<b>\$ 49</b>

Depletion and depreciation for the three and nine-month periods ended September 30, 2019, were \$3.6 million and \$11.9 million, respectively. Q3 2019 depletion and depreciation was \$0.4 million less than Q2 2019, again due to the declining production brought about by the Company's decision to commence shutting-in certain high cost properties in Q2 2019.

## Impairment

(\$000s, except where otherwise stated)	For the three months ended		For the nine months ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Impairment	\$ -	\$ 16,985	\$ 7,859	\$ 16,985
<b>Total</b>	<b>\$ -</b>	<b>\$ 16,985</b>	<b>\$ 7,859</b>	<b>\$ 16,985</b>

In Q1 2019 management elected not to renew certain licenses in Quebec. It was concluded that due to the continuing challenges facing oil and gas companies in Quebec, that retaining these licenses was too costly, compared to other opportunities available to the Company. Certain licenses also carried an exploration and development risk that exceeded the Company's internal thresholds for deploying capital. Consequently, the Company relinquished a portion of its licenses in Quebec, and the associated capitalized costs were impaired. Management concluded that there were no indicators of impairment for its petroleum and natural gas properties in Q3 2019.

## Share-based compensation

(\$000s, except where otherwise stated)	For the three months ended		For the nine months ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Share-based compensation	\$ 577	\$ 227	\$ 844	\$ 2,128
<b>Total</b>	<b>\$ 577</b>	<b>\$ 227</b>	<b>\$ 844</b>	<b>\$ 2,128</b>

Share-based compensation for the three months ended September 30, 2019, increased by \$350 thousand from the same period in 2018. The increase in Q3 2019 versus Q3 2018 is due to an option grant that occurred in Q3 2019. In July the Company granted 3,149,341 options to its employees and directors, at an exercise price of \$0.89 per share. These stock options will expire on July 3, 2024. On a year to date basis, share-based compensation decreased by \$1.3 million. The \$1.3 million decrease is due to the 1 million options that were granted in January 2018. These options accounted for \$1.7 million of expense in the nine months ended September 2018, but only \$324 thousand in the nine months ended September 2019.

## Financial income and expenses

(\$000s, except where otherwise stated)	For the three months ended		For the nine months ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Interest expense	\$ 1,458	\$ 2	\$ 3,873	\$ 30
Interest income	\$ (46)	\$ (72)	\$ (153)	\$ (169)
Accretion	\$ 721	\$ 13	\$ 2,142	\$ 40
Net financial expense (income)	\$ 2,133	\$ (57)	\$ 5,862	\$ (99)

The \$2.2 million increase in financial income and expenses for the three months ended September 30, 2019, is attributable to interest expense of \$1.5 million related to Pieridae's term debt and convertible loan with AIMCo, plus \$721 thousand of accretion associated with its provision for site restoration. These same factors are behind the year to date increase of \$6.0 million.

## Segmented Information

With the acquisition of Ikkuma, the Company has active upstream operations. Therefore, management now evaluates its operations in two segments: Upstream and LNG. Upstream is represented predominantly by the properties acquired from Ikkuma in 2018. However, it also includes the Company's upstream operations in Quebec and New Brunswick. Segmented determinations are based on the operations of the separate subsidiaries involved in these activities. Upstream is currently the only segment generating operating revenues. LNG is based on the operations and activities associated with the development of the Company's Goldboro LNG facility and corporate overhead costs.

(\$000s, except where otherwise stated)	For the three months ended		For the nine months ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Revenue				
Upstream	\$ 13,130	\$ 215	\$ 49,499	\$ 297
LNG	\$ -	\$ -	\$ -	\$ -
Expenses				
Upstream	\$ 23,206	\$ 17,750	\$ 79,131	\$ 20,615
LNG	\$ 3,104	\$ 2,824	\$ 16,074	\$ 5,746
Net loss before taxes				
Upstream	\$ (10,076)	\$ (17,535)	\$ (29,632)	\$ (20,318)
LNG	\$ (3,104)	\$ (2,824)	\$ (16,074)	\$ (5,746)

(\$000s, except where otherwise stated)	As at	
	September 30, 2019	December 31, 2018
Upstream assets	\$ 350,783	\$ 357,287
LNG assets	\$ 13,311	\$ 13,386
Total consolidated assets	\$ 364,094	\$ 370,673

## Upstream Segment

The upstream segment includes the operations and assets in Western Canada, primarily in Alberta, as well as Quebec and New Brunswick. Due to ongoing regulatory restrictions on exploration and development activities in certain jurisdictions, the Company currently only has active operations in Western Canada.

## Summary of Results

(\$000s, except where otherwise stated)	For the three months ended		For the nine months ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Net revenue <sup>(1)</sup>	\$ 13,130	\$ 215	\$ 49,499	\$ 297
Expenses	\$ 23,206	\$ 17,750	\$ 79,131	\$ 20,615
Net loss	\$ (10,076)	\$ (17,531)	\$ (29,632)	\$ (20,298)
Net operating expenses <sup>(2)</sup>	\$ 13,906	\$ 103	\$ 40,924	\$ 427
Net operating (loss) income <sup>(2)</sup>	\$ (2,732)	\$ 103	\$ 469	\$ 427
Operating netback <sup>(2)</sup> (per boe)	\$ (2.03)	\$ -	\$ 0.26	\$ -

(1) Revenues net of royalties and losses on risk management contracts as shown in the Consolidated Statement of Loss and Comprehensive Loss

(2) Non-IFRS measure. See page 19 in this MD&A.

Pieridae's net operating expenses totalled \$13.9 million for the three months ended September 30, 2019. This was \$1.8 million higher than in Q2 2019. Most of this increase attributable to the \$1.0 million decrease in processing income in Q3 2019. Pieridae incurred a net operating loss for its upstream petroleum and natural gas assets of \$2.7 million for the three months ended September 30, 2019. However, despite the poor pricing environment in Q2 and Q3, and associated shut-in

production, YTD, upstream operations continue to have positive net operating income of \$469 thousand. Reduced sales volumes due to well shut-ins, coupled with certain fixed costs not varying with production, and the reduction of third-party processing, all contributed to the Q3 loss. Consequently, the Company's operating netback was negative \$2.03 per boe, down from negative \$1.37 in Q2 2019. The Company continues to take measures to mitigate losses, including reducing operating costs, shutting in production and entering forward contracts for its natural gas sales. Shut-in activities varied in Q3 2019. The average volume shut-in was 15 percent of productive capacity, however this ranged between 7 percent and 25 percent within the quarter. Most production has now been restored. Production outages will continue to be higher than normal, however, because certain operators of the Company's non-operated properties have reduced transport maintenance costs and are experiencing an increased frequency of equipment failures. Natural gas volumes averaged of 86,884 mcf/d in the third quarter compared to 102,221 mcf/d in the first quarter and 90,942 in the second quarter. As a result of the forward contract hedging program, the realized natural gas price for the third quarter was \$1.22 per GJ as compared to the AECO benchmark price of \$0.86 per GJ.

## Revenue

(\$000s, except where otherwise stated)	For the three months ended		For the nine months ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Natural gas, net of royalties	\$ 10,412	\$ -	\$ 40,207	\$ -
NGL's	\$ 674	\$ -	\$ 2,294	\$ -
Sulphur	\$ 1,552	\$ -	\$ 4,428	\$ -
Petroleum and natural gas revenue, net of royalties	\$ 12,638	\$ -	\$ 46,929	\$ -
Project management	\$ 33	\$ 215	\$ 63	\$ 297
Other income	\$ 459	\$ -	\$ 3,163	\$ -
Revenue before risk management contracts	\$ 13,130	\$ 215	\$ 50,155	\$ 297
Petroleum and natural gas revenue per boe	\$ 9.40	\$ -	\$ 11.24	\$ -

Petroleum and natural gas revenues, net of royalties, for the three months ended September 30, 2019, were \$12.6 million. This represents a \$0.7 million increase over Q2 2019. An increase in natural gas revenues from \$10.0 million in Q2 2019 to \$10.4 million in Q3 2019 accounted for much of the improvement. This increase is due to a 2.5 percent increase in realized natural gas prices. Pieridae's realized price for natural gas in Q3 2019 averaged \$1.22 per GJ. This was also 41 percent higher than the average AECO price for Q3 2019, and speaks to the value of the recently implemented physical hedging program. The Company also earned other income in the form of transportation and processing fees totalling \$0.5 million. This represents third-party natural gas volumes transported through, and processed at, pipelines and facilities in which Pieridae has an ownership interest. It was down roughly \$1.0 million from Q2 2019 due to many other producers shutting-in volumes of their own. Revenue per boe was \$9.40 in Q3 2019. This is approximately 6.8 percent higher than Q2 2019. The increase is likely due to a \$0.4 million increase in sulphur revenues during a period of falling production.

## Production

(\$000s, except where otherwise stated)	For the three months ended		For the nine months ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Natural gas (mcf/d)	86,884	-	93,293	-
NGL's (bbl/d)	167	-	193	-
Total boe/d <sup>(1)</sup>	14,657	-	15,744	-

(1) Excludes sulphur production

Average production for the three months ended September 30, 2019 was 14,657 boe per day. This is down from 15,368 boe day in Q2 2019. Well shut-ins due to the poor pricing environment are responsible for most of the decrease, but corporate

production declines typically average 10 percent per year as well. Quarterly gas production was associated with 24,730 tonnes of sulphur versus 18,573 in Q2 2019.

### Royalties

(\$000s, except where otherwise stated)	For the three months ended		For the nine months ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Royalties	\$ 35	\$ -	\$ 1,368	\$ -
Per boe	\$ 0.03	\$ -	\$ 0.32	\$ -
Percentage of revenue	% 0.27	% -	% 2.83	% -

Royalties averaged \$0.03 per boe in the third quarter of 2019, and 0.3 percent of revenues. This compares to \$0.32 and 2.9 percent in Q2 2019. Gas cost allowance adjustments were responsible for the reduction in royalties in Q3 2019.

### Expenses

(\$000s, except where otherwise stated)	For the three months ended		For the nine months ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Operating Expenses	\$ 14,365	\$ 103	\$ 44,087	\$ 427
Administrative expenses	\$ 1,557	\$ 610	\$ 4,415	\$ 1,381
Transportation	\$ 1,464	\$ -	\$ 4,880	\$ -
Impairment of assets	\$ -	\$ 16,985	\$ 7,859	\$ 16,985
Share-based compensation	\$ 96	\$ 31	\$ 148	\$ 1,764
Loss (gain) on foreign exchange	\$ 1	\$ -	\$ (4)	\$ -
Depletion and depreciation	\$ 3,599	\$ 18	\$ 11,942	\$ 49
Financial expenses (income)	\$ 2,133	\$ -	\$ 5,862	\$ -
Share of net loss of associate	\$ 3	\$ 3	\$ 9	\$ 9

Operating expenses for the three and nine-month periods ended September 30, 2019, increased by \$14.2 million and \$43.7 million, respectively, compared to equivalent periods in 2018. The increases were almost entirely attributable to the recognition of operating expenses related to the former Ikkuma assets. Operating costs were \$13.5 million in Q2 2019. The \$0.9 million increase in operating costs from Q2 2019 to Q3 2019 was related to prior period equalizations for production adjustments which were recorded in the quarter.

Administrative expenses for the three and nine-month periods ended September 30, 2019, increased by \$0.9 million and \$3.0 million, respectively, compared to the same periods in 2018. These increases are due primarily to the increasing headcount from the Ikkuma acquisition.

Transportation expenses reflect transportation costs for production in the three and nine-month periods ended September 30, 2019. These costs did decrease by \$0.3 million from Q2 2019 to Q3 2019 due to the shut-in production.

In Q3 2018 the Company recognized an impairment of \$17.0 million related to its properties in Quebec. New legislation enacted in Quebec, severely limited the Company's ability to develop many licenses that it held there. Consequently management did a detailed assessment of the impact of the new legislation, and which unaffected properties held the most promise, and relinquished the licenses for all properties no longer eligible or economical for development. A similar exercise was conducted in Q1 2019 which resulted in the relinquishment of additional licenses, and the recognition of \$7.9 million of impairment. Management concluded that there were no indicators of impairment for those assets in Q3 2019.

Depletion and depreciation for the three and nine-month periods ended September 30, 2019, reflect the depletion related to its production of petroleum and natural gas.

The finance expenses relate to the interest on the term debt used to partially fund the Ikkuma acquisition and convertible loan used to fund the Shell asset acquisition down payment. It also includes accretion on the Company's provision for site restoration.

### Assets

(\$000s, except per share amounts)	As at			
		September 30, 2019		December 31, 2018
Petroleum and natural gas properties and equipment	\$	292,370	\$	301,603
Exploration and evaluation assets	\$	20,005	\$	27,573
Other assets	\$	38,408	\$	28,111
	\$	350,783	\$	357,287

The decrease in assets since December reflects a \$5.5 million reduction in restricted cash set aside for the settlement of Ikkuma hedges which occurred prior to close, and the \$7.9 million impairment recorded in Q1 2019. These are offset by the \$10.0 million deposit for the Shell asset acquisition included in other assets.

### LNG Segment

The LNG segment includes the development activities related to the Company's proposed Goldboro LNG facility. It also reflects general corporate costs. As this segment is in the developmental stage, there is no revenue being generated and all costs are expensed. Once the Company declares a final investment decision, costs will be eligible for capitalization.

### Expenses

(\$000s, except where otherwise stated)	For the three months ended		For the nine months ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Administrative expenses	\$ 2,119	\$ 413	\$ 7,031	\$ 1,155
Development expenses	\$ 504	\$ 2,354	\$ 8,345	\$ 4,614
Share-based compensation	\$ 481	\$ 196	\$ 696	\$ 364
(Gain) loss on foreign exchange	\$ -	\$ (82)	\$ 2	\$ (288)
Financial income	\$ -	\$ (57)	\$ -	\$ (99)
<b>Total</b>	<b>\$ 3,104</b>	<b>\$ 2,824</b>	<b>\$ 16,074</b>	<b>\$ 5,746</b>

Administrative expenses increased \$1.7 million and \$5.9 million, respectively, in the three and nine month periods ended September 30, 2019, versus the same period in 2018. These increases reflect the acquisition of Ikkuma in December 2018. Financing and due diligence efforts also continued to grow on a quarterly and YTD basis, and the Company added accounting, finance and operational staff in order to help with the due diligence process, and the anticipated increased workload following the Shell asset acquisition.

Development expenses are related specifically to the Company's activities associated with its proposed Goldboro LNG facility. Activity was muted in Q3 2019 as the Company scaled back spending to allow it to focus on the Shell asset acquisition.

## Summary of quarterly results

The Company's quarterly results may fluctuate significantly from quarter to quarter owing to the fact that the Company's activities have been primarily in the development stage.

(\$000s, except per share amounts)	Q3 2019	Q2 2019	Q1 2019	Q4 2018	Q3 2018	Q2 2018	Q1 2018	Q4 2017
Revenues	\$ 13,130	13,387	22,982	2,432	215	66	16	90
Operating expenses	\$ 14,365	13,528	16,194	5,093	2,018	1,575	1,013	2,493
Administrative expenses	\$ 3,676	3,738	4,032	3,971	1,707	1,759	1,682	1,063
Net loss attributable to equity holders	\$ (13,178)	(19,530)	(12,996)	(8,848)	(20,368)	(2,711)	(2,942)	(3,091)
Net loss per share attributable to equity holders (basic)	\$ (0.15)	(0.23)	(0.17)	(0.17)	(0.04)	(0.06)	(0.06)	(0.06)

Prior to Q4 2017, Pieridae was solely involved in the development of the proposed Goldboro LNG facility. In Q4 2017, Pieridae acquired Quebec based Petrolia which had primarily undeveloped upstream properties. It also assumed the operating and administrative costs related to those activities. In Q3 2018, Pieridae recognized an impairment on some of those Quebec assets which resulted in an increase in the net loss. In Q4 2018, Pieridae acquired upstream producer, Ikkuma, which resulted in eleven days of revenue and costs being recognized for that operation in 2018. Q1 2019 represents the first full quarter of operations following the merger with Ikkuma. The Company also recorded an impairment of \$7.9 million related to its Quebec licenses. Q2 2019 represents upstream operations in a depressed pricing environment, coupled with increased spending on the proposed LNG facility. In many ways, Q3 2019 mirrored Q2 2019. Volumes continued to decline due to voluntary shut-ins. Prices essentially remained low in Q3 and were comparable to those in Q2. Due to the continuing growth of the organization, historical results are not indicative of, and should not be relied upon to estimate, future financial results.

## Capital Resources and Liquidity

### Net Working Capital

(\$000s)	As at	
	September 30, 2019	December 31, 2018
Net working capital (deficit) <sup>(1)(2)</sup>	\$ (88,430)	\$ (84,061)

(1) Non-IFRS measure. See page 19 in this MD&A.

(2) The net working capital deficit includes the \$50 million term debt and \$10 million convertible loan. The \$50 million term loan was repaid on October 16, 2019, with the close of the Shell asset acquisition. The \$10 million convertible loan was converted to common shares of the Company at a deemed price of \$0.86 per share, also concurrent with the close of the Shell asset acquisition.

As at September 30, 2019, Pieridae had consolidated cash and cash equivalents of \$8.3 million compared to cash and cash equivalents of \$9.1 million as at December 31, 2018. The working capital deficit was \$88.4 million compared to a working capital deficit of \$84.1 million at December 31, 2018. The \$4.4 million increase in the working capital deficit is primarily attributable to a \$4.5 million decrease in restricted cash. Once the Ikkuma acquisition closed, Pieridae closed out all of the Ikkuma hedge positions. This allowed it to recover cash pledged to support the hedges.

The Company will assume \$156 million of incremental debt as part of the Shell asset acquisition. It will also require significant additional financing to advance expansion of its upstream operations and to ultimately fund the construction of its proposed LNG facility. The Company is actively working with its financial advisors for additional funding to allow it to proceed with construction of the Goldboro LNG facility once a final investment decision has been made. Although there is no guarantee that it will be successful, management believes the Company presents a compelling opportunity to potential lenders and investors. The Shell asset acquisition will significantly expand the Company's natural gas, NGL and condensate production and allow it to capitalize on economies of scale. There is also a midstream business that could be expanded such that third-

party revenue would grow, while reducing costs related to current gas and liquids processing. On the LNG side, due to the status of approvals for the project, the German government loan guarantees, and the current production mix of sulphur, condensate, gas and NGL's, management believes that Pieridae is a compelling investment.

Pieridae's capital and business strategies are aligned, and management focuses on adequate liquidity for funding of ongoing operations and LNG project development. Pieridae's principal sources of liquidity are cash flow generated from the newly acquired and consolidated upstream assets, equity, and debt. The Company will continue to tap into these sources, as necessary, to execute on its strategy to become an integrated LNG producer. At September 30, 2019, our capital structure was comprised of share capital, working capital, convertible loans and term debt.

### Sources and Uses of Cash Flows

(\$000s, except where otherwise stated)	For the three months ended		For the nine months ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Cash flows related to operating activities	\$ (238)	\$ (3,171)	\$ (34,024)	\$ (7,072)
Cash Flows related to investing activities	\$ (1,914)	\$ (224)	\$ (3,403)	\$ (997)
Cash flows related to financing activities	\$ (152)	\$ (2)	\$ 35,611	\$ (391)

Cash flows used in operating activities were flat in the third quarter of 2019. This reflects the \$10.4 million increase in accounts payable and accrued liabilities in Q3 offsetting much of the quarterly loss. Year to date cash flows used in operating activities were negative \$34.0 million, reflecting costs of the OBE. These costs will no longer be expensed once the final investment decision is attained. This use of cash is also representative of the reduction of accounts payable assumed in the Ikkuma acquisition which occurred earlier in the year.

Cash flows used for investing activities was \$1.9 million in the third quarter of 2019, and \$3.2 million for the nine months ended September 30, 2019. The modest spending reflects the Company's decision to limit capital expenditures on its upstream assets due to low gas prices.

Cash flows received from new financing activities were nil in Q3 2019. Year-to-date cash flows received from financing activities were \$35.6 million. The increase is due primarily to the \$10.0 million convertible loan, \$20.5 million in private placement proceeds and the repatriation of restricted cash mentioned earlier.

### Capital resources

Our capital structure is composed of total shareholders' equity, loans and term debt, and convertible loans, less cash and cash equivalents. The following table summarizes our capital structure at September 30, 2019.

### Cash and cash equivalents

(\$000s)	As at	
	September 30, 2019	December 31, 2018
Cash and cash equivalents	\$ 6,843	\$ 7,651
Cash and cash equivalents held for exploration purposes	\$ 1,461	\$ 1,461
Less: loans and term debt	\$ (50,002)	\$ (50,007)
convertible loan	\$ (10,000)	\$ -
Net debt	\$ (51,698)	\$ (40,895)
Shareholders' equity	\$ 68,822	\$ 91,900

The balance of \$8.3 million in cash and cash equivalents at September 30, 2019 does not include \$4.1 million pledged as security for various Letters of Credit ("LC's") required to be posted with provincial agencies and other companies, to facilitate

the Company's ongoing operations. These LC's have varying maturities. Restricted cash of \$5.5 million related to Ikkuma's former hedging program was still outstanding at December 31, 2018. These funds settled in January. LC's worth \$2.5 million renew automatically every anniversary date. LC's worth \$1.6 million mature within one year.

An additional \$0.7 million of the cash and cash equivalents are held for exploration purposes related to flow-through shares, representing the unexpended proceeds of a flow-through share financing. According to restrictions imposed under financing arrangement, the Company was required to spend these funds on the exploration of oil and gas properties in Quebec. The Company also holds \$0.7 million related to the Bourque project in Quebec. This represents the remaining cash from partner advances which must be spent on exploration work on the Bourque property. The net cash and cash equivalents not restricted is \$6.8 million.

### Loans and term debt

On December 20, 2018, the Company entered into a Senior Secured Credit Agreement for a \$50.0 million non-revolving, term credit facility (the "AIMCo Term Loan"). The facility is secured by a fixed and floating debenture over all the assets of the Company. It bears interest at 9.5%, which is payable upon maturity. The facility was repayable on September 30, 2019. The Company used the proceeds to fund the repayment of Ikkuma's outstanding debt facilities of \$65.7 million on the close of the acquisition.

On July 2, 2019, the Company closed a non-brokered private placement of a secured convertible debenture of the Company for aggregate gross proceeds of \$10.0 million. The convertible debenture was due on the earliest of (i) September 30, 2019 and (ii) the day which an acceleration notice is delivered or deemed to be delivered by the lender.

On September 30, 2019, the Company announced that it had received extensions to the maturity dates for both the senior secured term loan and convertible debenture. The new maturities aligned with the closing date of the Shell asset acquisition.

In conjunction with the closing of the Shell asset acquisition, Pieridae announced it had executed a credit agreement with Third Eye Capital Corporation, as agent on behalf of certain lenders (the "Agent") providing for a senior secured non-revolving term loan facility in the aggregate amount of \$206 million (the "Term Loan"). The Term Loan bears interest at a fixed rate of 12% per annum from the date of issue, accrued daily and payable quarterly in cash. Additional interest of 3% per annum is payable quarterly in cash, or at the option of the Company and subject to the Agent's approval, payable in kind by way of accruing to the principal outstanding.

Pieridae used the net proceeds of the Term Loan to: (i) partially fund the purchase price payable for the Shell asset acquisition, (ii) repay the AIMCo Term Loan, (iii) fund letters of credit required for existing and purchased assets and, (iv) satisfy all fees and expenses associated with the Term Loan and the acquisition.

Also upon closing, the convertible debenture, plus all accrued interest, was converted into common shares of the Company at a deemed priced of \$0.86 per common share. The Company also issued 4,624,561 shares to AIMCo to satisfy the interest due and payable on the AIMCo Term Loan.

### Share Capital

During the nine months ended September 30, 2019, the Company issued 44,865 common shares under its share-based compensation plan and 44,115 through the exercise of stock options. It also issued 12,108,139 common shares via private placements. As of September 30, 2019, the Company had 86,713,713 common shares outstanding (December 31, 2018: 74,516,594). At November 5, 2019, 157,459,584 common shares were outstanding.

On October 11, 2019, Pieridae announced that it had closed the first tranche of its brokered private placement of subscription receipts (the "Brokered Offering") for gross proceeds of \$12.8 million and a non-brokered private placement of subscription receipts for gross proceeds of \$0.6 million. The second and last tranche of the Brokered Offering closed concurrently with the closing of the Shell asset acquisition, with Pieridae issuing 23,255,813 common shares at a price of \$0.86 per common share for gross proceeds of \$20.0 million.

## Commitments and Contingencies

The Company has a number of financial obligations that are incurred in the ordinary course of business. On April 1, 2019, the Company announced that it had engaged KBR to perform a review of an amended version of the previously prepared FEED study for its proposed Goldboro LNG facility. KBR will also conduct an OBE necessary for entering into a lumpsum EPC contract. The total commitment for this contract is \$13.0 million. Most of these payments will come due in 2020.

In June 2019 the Company committed a certain portion of its natural gas volumes to fixed forward price contracts. Under these commitments, the Company is required to deliver 62,500 GJ per day of natural gas for remainder of 2019.

As of September 30, 2019, Pieridae's cumulative commitments, and the expected timing of these obligations, are detailed below:

(\$000s)		2019	2020	2021	2022	Thereafter	Total
Firm transportation	\$	1,747	6,045	2,108	1,131	3,414	14,445
Engineering costs (KBR)	\$	2,635	5,151	-	-	-	7,786
Leases	\$	914	764	638	209	184	2,709
Quebec license fees	\$	-	46	46	-	-	92
Interest on debt	\$	3,943	-	-	-	-	3,943
<b>Total</b>	<b>\$</b>	<b>9,239</b>	<b>12,006</b>	<b>2,792</b>	<b>1,340</b>	<b>3,598</b>	<b>28,975</b>

The Company is financed in part by the issuance of flow-through shares. However, although it has taken all the necessary measures in this regard, there is no guarantee that the funds spent by the Company regarding these shares will be deemed eligible by tax authorities in the event of an audit. Refusal of certain expenses by the tax authorities would have a negative tax impact for investors. As at September 30, 2019, the balance of eligible expenses to be incurred amounted to \$0.5 million (December 31, 2018: \$0.5 million). The eligible expenses were to be incurred no later than December 31, 2018. However, due to the moratorium on exploration and development activity in the province of Quebec, Pieridae was not able to fulfill its obligations.

### Off Balance Sheet Transactions

We do not have any financial arrangements that are excluded from the consolidated financial statements as at September 30, 2019, nor are any such arrangements outstanding as of the date of this MD&A.

## Critical Accounting Policies, Estimates and Judgements

There have been no changes in our critical accounting estimates in the three months ended September 30, 2019 except for the adoption of IFRS 16, as discussed further below. Additional information regarding our critical accounting policies and estimates can be found in the notes to our audited consolidated financial statements and MD&A for the year ended December 31, 2018.

### Changes in accounting policies

Pieridae adopted IFRS 16 Leases on January 1, 2019, using the modified retrospective approach. The modified retrospective approach does not require restatement of comparative financial information as it recognizes the cumulative effect on transition as an adjustment to opening retained earnings and applies the standard prospectively. Comparative information in the Company's consolidated statements of financial position, consolidated statements of loss and comprehensive loss, consolidated statements of changes in equity, and consolidated statements of cash flows has not been restated. The cumulative effect of initial application of the standard was to recognize a \$2.7 million increase to right-of-use assets ("lease assets") and an \$2.7 million increase to lease obligations. Initial measurement of the lease obligation was determined based on the remaining lease payments at January 1, 2019, using a variety of incremental borrowing rates specific to the respective assets. The lease assets were initially recognized at an amount equal to the lease obligations. The lease assets and lease obligations recognized largely relate to the Company's head office lease in Calgary.

The adoption of IFRS 16 using the modified retrospective approach allowed the Company to use the following practical expedients in determining the opening transition adjustment:

- leases with a term of less than 12 months as at January 1, 2019 were accounted for as short-term leases;
- leases with an underlying asset of low value are recorded as an expense and not recognized as a lease asset; and
- leases with similar characteristics were accounted for as a portfolio using a single discount rate.

The Company's accounting policy for leases effective January 1, 2019 is set forth below. The Company applied IFRS 16 using the modified retrospective approach. Comparative information continues to be accounted for in accordance with the Company's previous accounting policy found in the December 31, 2018 audited financial statements.

A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. A lease obligation, and corresponding lease asset, are recognized at the commencement of the lease. The present value of the lease obligation is based on the future lease payments and is discounted using the Company's incremental borrowing rate when the rate implicit in the lease is not readily available. The Company uses a single discount rate for a portfolio of lease with similar characteristics. The lease asset is recognized at the amount of the lease obligation, adjusted for lease incentives received and initial direct costs, on commencement of the lease. Depreciation is recognized on the lease asset over the shorter of the estimated useful life of the asset or the lease term. Lease payments are allocated between the liability and interest expense. Interest expense is recognized on the lease obligations using the effective interest rate method and payments are applied against the lease obligation.

The preparation of the consolidated financial statements in accordance with IFRS requires management to make judgments, estimates, and assumptions that affect the reported amount of assets, liabilities, income, and expenses. Actual results could differ significantly from these estimates. Management has made the following judgments, estimates, and assumptions related to the accounting for leases. The carrying amounts of the right-of-use assets, lease obligations, and the resulting interest and depletion and depreciation expense are based on the implicit interest rate within the lease arrangement or, if this information is unavailable, the incremental borrowing rate. Incremental borrowing rates are based on judgments including economic environment, term, and the underlying risk inherent to the asset.

## Outlook and Guidance

There will be no significant capital expenditures in Q4 2019. Consistent with prior guidance provided, with the closing of the Shell asset acquisition, management is expecting an increase in production to between 40,000 and 50,000 boe per day effective at the close of the Shell asset acquisition, and for the remainder of the year. This represents an increase of between 230 to 290 percent over Q3 2019 exit production of 17,300 boe per day.

## Non-IFRS Measures

### Net Operating Expense, Net Operating Income and Operating Netback

With the new operational activities undertaken with the Ikkuma acquisition, management has identified certain industry benchmarks such as operating netback and net operating expense, as derived from the netback, to analyze financial and operating performance. These benchmarks, as presented, do not have any standardized meanings prescribed by IFRS and therefore may not be comparable with the calculation of similar measures for other entities. Operating netback equals petroleum and natural gas revenue including realized gains and losses on commodity risk management contracts less royalties, net operating expenses and transportation expenses calculated on a per boe basis. Management considers operating netback an important measure to evaluate the Company's operational performance as it demonstrates Pieridae's field level profitability relative to current commodity prices. Net operating expense is a non-IFRS measure calculated as operating expenses less other income. Other income includes gas processing income earned from fees charged to third parties at facilities where Pieridae has an ownership interest.

## Net Operating Expenses

Upstream segment	For the three months ended			For the nine months ended		
(\$000s, except where otherwise stated)	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Operating expense	\$ 14,365	\$ 103	\$ 44,087	\$ 427		
Other income	\$ (459)	\$ -	\$ (3,163)	\$ -		
Net operating expense	\$ 13,906	\$ 103	\$ 40,924	\$ 427		
Net operating expense per boe	\$ 10.31	\$ -	\$ 9.52	\$ -		

## Net Operating Income & Operating Netbacks

### Net Operating Income

Upstream segment	For the three months ended			For the nine months ended		
(\$000s, except where otherwise stated)	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Revenue (net of royalties)	\$ 12,638	\$ -	\$ 46,929	\$ -		
Realized loss on risk management contracts	\$ -	\$ -	\$ (656)	\$ -		
Net operating expenses	\$ (13,906)	\$ (103)	\$ (40,924)	\$ (427)		
Transportation expense	\$ (1,464)	\$ -	\$ (4,880)	\$ -		
Net operating (loss) income	\$ (2,732)	\$ (103)	\$ 469	\$ (427)		

### Operating Netback

	For the three months ended			For the nine months ended		
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Petroleum and natural gas revenue per boe	\$ 9.40	\$ -	\$ 11.24	\$ -		
Royalties	\$ (0.03)	\$ -	\$ (0.32)	\$ -		
Net operating expenses	\$ (10.31)	\$ -	\$ (9.52)	\$ -		
Transportation expenses	\$ (1.09)	\$ -	\$ (1.14)	\$ -		
Operating netback per boe	\$ (2.03)	\$ -	\$ 0.26	\$ -		

## Project investment

Project investment represents total capital expenditures included in the financial statements plus development expenses. This information is important as it shows Pieridae's total spending on key long-term initiatives.

	For the three months ended			For the nine months ended		
(\$000s, except where otherwise stated)	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Capex	\$ 1,847	\$ 224	\$ 3,336	\$ 997		
Development expenses	\$ 504	\$ 2,354	\$ 8,345	\$ 4,614		
<b>Total project investment</b>	<b>\$ 2,351</b>	<b>\$ 2,578</b>	<b>\$ 11,681</b>	<b>\$ 5,611</b>		

Capex relates to the Company's upstream spending. Development expenses relate to costs to keep the proposed Goldboro LNG project on schedule, including the OBE.

## Net Working Capital

	(\$000s)	As at	
		September 30, 2019	December 31, 2018
Cash and cash equivalents	\$	6,843	\$ 7,651
Cash and cash equivalents held for exploration purposes	\$	1,461	\$ 1,461
Restricted cash	\$	4,119	\$ 8,626
Accounts receivable	\$	15,978	\$ 16,187
Prepaid expenses	\$	12,256	\$ 2,250
Trade and other payables	\$	(59,250)	\$ (60,922)
Current portion of deferred lease inducements	\$	(17)	\$ (20)
Current portion of term debt	\$	(50,002)	\$ (50,007)
Partner advances for planned exploration work	\$	(624)	\$ (624)
Convertible loan	\$	(10,000)	\$ -
Provision for contingent liability	\$	(530)	\$ (530)
Flow-through shares premium	\$	(82)	\$ (82)
Current portion of lease liabilities	\$	(807)	\$ -
Deferred accounts payable	\$	(7,775)	\$ (8,051)
<b>Net working capital (deficit)</b>	\$	<b>(88,430)</b>	\$ <b>(84,061)</b>