



**MANAGEMENT'S DISCUSSION & ANALYSIS**

**FOR THE THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2016**



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*(Unless otherwise indicated, all dollar amounts are in United States dollars ("USD"))*

*This Management's Discussion and Analysis of financial condition and results of operations ("MD&A") is based on information available to November 22, 2016 and should be read in conjunction with Madalena Energy Inc.'s ("Madalena" or the "Company") unaudited condensed interim consolidated financial statements for the three and nine months ended September 30, 2016 and the accompanying notes as well as the audited consolidated financial statements for the year ended December 31, 2015 and the accompanying notes. This MD&A contains forward-looking information about the Company's current expectations, estimates, projections and assumptions. See the Advisory for information on the risk factors that could cause actual results to differ materially and the assumptions underlying the Company's forward-looking information. Madalena's Management prepared the MD&A, while the Audit Committee of the Madalena Board of Directors (the "Board") reviewed and recommended its approval by the Board. Additional information relevant to the Company's activities contained in its continuous disclosure documents, including quarterly condensed interim consolidated financial statements and the Annual Information Form ("AIF"), is available on SEDAR at [www.sedar.com](http://www.sedar.com) and on the Company's website at [www.madalenaenergy.com](http://www.madalenaenergy.com).*

#### **Basis of Presentation**

*This MD&A and the unaudited condensed interim consolidated financial statements and comparative information have been prepared in accordance with International Financial Reporting Standards ("IFRS" or "GAAP") as issued by the International Accounting Standards Board ("IASB") applying IAS 34. Unless otherwise indicated, all dollar amounts are in USD. Sales volumes are presented on a before royalties basis.*

#### **Non-GAAP Measures**

*Certain financial measures in this document do not have a standardized meaning as prescribed by IFRS, such as funds flow from operations and netbacks and therefore are considered non-GAAP measures. These measures may not be comparable to similar measures presented by other issuers. These measures have been described and presented in order to provide shareholders and potential investors with additional measures for analyzing the Company's ability to generate funds to finance its operations and information regarding its liquidity. The additional information should not be considered in isolation or as a substitute for measures prepared in accordance with IFRS. The definition and/or reconciliation of each non-GAAP measure is presented in the Netbacks and Reconciliation of Cash Flow from Operating Activities and Funds Flow from Continuing Operations sections of this MD&A.*

*Funds flow from continuing operations per share is calculated using the same basic and diluted weighted average number of shares for the period, consistent with the calculations of income (loss) per share.*

*The term barrels of oil equivalent ("boe") may be misleading, particularly if used in isolation. Per boe amounts have been calculated using a conversion rate of six thousand cubic feet of natural gas to one barrel of oil. This equivalence is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead.*



## **Introduction**

Madalena is an independent, Canadian headquartered oil and gas company with operations in four provinces of Argentina where it is focused on the delineation of unconventional resources in the Vaca Muerta shale, Lower Agrio shale and Loma Montosa tight oil plays. The Company is implementing horizontal drilling and completions technology to develop both its conventional and unconventional resource plays.

Madalena trades on the TSX Venture Exchange under the symbol MVN and on the OTCQX under the symbol MDLNF.

## **Recent Developments**

As at September 30, 2016, the Company had a working capital deficit of approximately \$3.8 million and continued to face significant liquidity challenges. Of that amount, approximately \$2 million relates to overdue amounts payable to the operator at Coiron Amargo-Norte ("CA-Norte"). This payable is fully recorded as part of trade and other payables in the condensed interim consolidated statements of financial position at September 30, 2016.

Madalena has received a notice from this operator relating to Madalena's overdue payable and has been advised that Madalena's share of oil and gas sales are being applied against the outstanding payable. The Company is in discussions with the operator to satisfy the outstanding payable. Should the matter not be resolved prior to April 21, 2017, a potential outcome is the ultimate forfeiture of Madalena's working interest at CA-Norte.

While the Argentine government has not announced adjustments to regulated Medanito pricing, the Company was advised by the refineries to which it delivers its oil production that the oil price it will receive for November and December 2016 oil production will be reduced by approximately 30%, bringing prices to be received in those months in line with international levels. The Company received an average oil price per barrel during the third quarter of \$61.65.

The Company is undertaking a review of its operating assets in order to determine the extent of the financial impact caused by lower oil prices. While this analysis is not complete, it is clear that the reduction in oil prices communicated to the Company by the refiners will have a significant negative impact.

## **Strategic Alternatives Update**

The strategic alternatives process previously announced continues. The Company, along with its financial advisor, Evercore Group LLC, is actively involved in negotiations with a number of parties who have expressed interest in various transactions with Madalena. There can be no assurance that such transactions will be consummated.

## **Outlook**

The current year-to-date losses, current working capital deficiency, the expectation of reduced near term cash flow resulting from lower oil prices in Argentina, as well as the capital commitments in 2016 and 2017 are expected to result in cash outflows that exceed anticipated future funds from operations. The Company continues to include a note of going concern uncertainty in the condensed interim consolidated financial statements. Without an infusion of capital and/or a successful outcome from the strategic alternatives process in the near term, Madalena may not be able to continue as a going concern.

## **Continuing Operations**

Madalena's Argentina upstream oil and gas operations as well as the corporate segment are discussed in the "Continuing Argentina Operations and Corporate Segments" section of this MD&A. Unless specifically noted, all current and comparative reporting periods' operating and financial disclosures and discussion are in reference to our continuing Argentina operations and corporate segments.



### Foreign Exchange Fluctuations

The table below provides various exchange rates that illustrate the quarterly foreign exchange fluctuations between the USD, the Argentine Peso ("ARS"), and the Canadian dollar ("CAD"). The table illustrates the impact of both the ARS and CAD changes relative to the USD in the three and nine months ended September 30, 2016 compared to the three and nine months ended September 30, 2015. Foreign exchange changes in ARS impact the unrealized foreign exchange gains and losses recorded in the condensed interim consolidated statements of income (loss) and comprehensive income (loss). Foreign exchange changes in CAD are reflected through the foreign currency translation adjustment in accumulated other comprehensive income (loss), as shown in shareholders' equity and on the condensed interim consolidated statements of comprehensive income (loss).

	Three months ended September 30			Nine months ended September 30		
	2016	2015	% Change <sup>(1)</sup>	2016	2015	% Change <sup>(1)</sup>
USD						
Average CAD to USD	<b>0.77</b>	0.76	0.3%	<b>0.76</b>	0.79	(4.7%)
Average ARS to USD	<b>0.07</b>	0.11	(38.1)%	<b>0.07</b>	0.11	(38.3%)
Period end CAD to USD				<b>0.76</b>	0.75	1.7%
Period end ARS to USD				<b>0.07</b>	0.11	(38.5%)

(1) Differences calculated from the numbers within the table are due to rounding.

### Continuing Argentina Operations and Corporate Segments

#### Sales Volumes

	Three months ended September 30		Nine months ended September 30	
	2016	2015	2016	2015
Crude oil and NGLs (bbls/d)	<b>1,853</b>	2,705	<b>2,114</b>	2,817
Natural gas (mcf/d)	<b>2,368</b>	3,843	<b>2,659</b>	4,064
Total daily sales (boe/d)	<b>2,247</b>	3,346	<b>2,557</b>	3,494
% oil	<b>82%</b>	81%	<b>83%</b>	81%

Madalena's primary producing concessions are at Surubi, Rinconada - Puesto Morales and Coiron Amargo-Norte ("CA-Norte"). Other producing concessions include El Chivil, El Vinalar and Palmar Largo. All concessions produce oil and Rinconada-Puesto Morales and CA-Norte also produce natural gas. Approximately 75% of Madalena's current production comes from Surubi, Rinconada-Puesto Morales, and CA-Norte.

Crude oil and NGL sales volumes for the three months ended September 30, 2016 ("the Quarter" or "Q3-2016") decreased to 1,853 boe/d from 2,705 boe/d for the three months ended September 30, 2015 ("Q3-2015"). The change compared to Q3-2015, can be attributed to production declines at both Surubi and Rinconada - Puesto Morales. Natural gas sales volumes for the Quarter of 2,368 mcf/d, decreased compared to 3,843 mcf/d for Q3-2015 due to lower production at Rinconada - Puesto Morales and CA-Norte.

For the nine months ended September 30, 2016 ("YTD"), crude oil and NGL sales volumes decreased to 2,114 boe/d from 2,817 boe/d for the nine months ended September 30, 2015 ("YTD-2015"), primarily due to production declines in Surubi and operations downtime at both CA-Norte and Rinconada - Puesto Morales. Natural gas sales volumes YTD decreased to 2,659 mcf/d from 4,064 mcf/d due to production declines in Rinconada - Puesto Morales.



While the decrease at Rinconada - Puesto Morales was from natural declines, the Surubi decline was a function of the delay in remedial work. Subsequent to September 30, 2016, the remedial work program at Surubi commenced and is currently ongoing. The Company believes that the remedial work program will allow incremental production to be brought back on line.

Madalena expects Q4-2016 sales volumes to average approximately 2,300 boe/d (85% oil and NGLs).

#### Average Realized Prices

USD	Three months ended September 30		Nine months ended September 30	
	2016	2015	2016	2015
Crude oil and NGLs - \$/bbl	61.65	75.76	62.10	75.81
Natural gas - \$/mcf	5.60	5.54	4.99	4.98
Total - \$/boe	56.72	67.62	56.53	66.91

The Government of Argentina sets the benchmark (Medanito) price for oil. The Medanito crude quality oil posting averaged \$67.50/bbl for the Quarter (Q3-2015 - \$75.00/bbl). The Company's average discount to this posting is approximately \$4.00 - \$5.00/bbl for quality and transportation differentials. The official Medanito crude quality oil posting for October 2016 remained at \$67.50/bbl.

The average price the Company received for oil for the Quarter was \$61.65/bbl, lower than the \$75.76/bbl realized in Q3-2015 mainly as a result of the lower Medanito pricing, together with the fact that the \$3/bbl oil incentive program in place in 2015, ended on January 1, 2016.

The average price received for oil YTD was \$62.10/bbl, lower than the \$75.81/bbl realized YTD-2016 for the same reasons as noted for the Quarter.

Gas prices in Argentina are subject to seasonal demand and are negotiated between the producer and the buyer. For the period May to September 2016, which is the Argentine winter, the price was set at \$5.35/mbtu. Winter prices in 2015 were \$5.30/mbtu. Summer pricing for October 2016 – April 2017 has been set at \$4.30/mbtu (October 2015 - April 2016 - \$4.20/mbtu).

The average total price received for the Quarter was \$56.72/boe, lower than the \$67.62/boe realized in Q3-2015 mainly as a result of the Medanito oil price reduction in December 2015, and the removal of the \$3/bbl oil incentive program.

The Company anticipates Argentina prices to average approximately \$47.00 per boe during Q4 – 2016. Ultimate prices realized will be dependent on refinery pricing.

#### Oil and Natural Gas Revenue

USD 000s, except boe	Three months ended September 30		Nine months ended September 30	
	2016	2015	2016	2015
Crude oil	10,508	18,856	35,975	58,296
Natural gas	1,220	1,960	3,634	5,528
	11,728	20,816	39,609	63,824
\$/boe	56.72	67.62	56.53	66.91



Oil and gas revenue was \$11.7 million for the Quarter compared to \$20.8 million for Q3-2015 due to lower sales volumes of 33% compounded with an approximate 16% decrease in prices per boe. The 33% decrease in sales volumes is primarily a result of production declines at Surubi and Rinconada - Puesto Morales.

YTD oil and gas revenues decreased to \$39.6 million compared to \$63.8 million YTD-2015, due to the same reasons as described for the Quarter.

#### Royalties

USD 000s, except boe	Three months ended September 30		Nine months ended September 30	
	2016	2015	2016	2015
Royalties	<b>1,938</b>	3,033	<b>6,254</b>	10,450
As % of revenue	<b>17%</b>	15%	<b>16%</b>	16%
\$/boe	<b>9.37</b>	9.85	<b>8.93</b>	10.95

Royalty expenses were \$1.9 million for the Quarter compared to \$3.0 million in Q3-2015 due to lower production volumes. The royalty rate increase in Q3-2016 compared to Q3-2015 is a result of the rate increase implemented in conjunction with the Rinconada - Puesto Morales block extension in late 2015. Royalty expenses YTD of \$6.3 million decreased compared to \$10.5 million YTD-2015 for the same reasons as outlined for the Quarter, as well as a one-time \$1.9 million settlement in Q2-2015 relating to a royalty dispute from 2007-2011 on certain assets acquired in June 2014.

The Company expects royalty rates for the remainder of 2016 to be consistent with this Quarter.

#### Other Income

Other Income relates primarily to Petroleum Plus Settlement Bonds (Available for Sale Securities).

#### Operating Costs

USD 000s, except boe	Three months ended September 30		Nine months ended September 30	
	2016	2015	2016	2015
Compensation costs	<b>1,103</b>	1,370	<b>2,988</b>	3,828
Transportation and processing	<b>2,107</b>	2,346	<b>5,463</b>	7,669
Maintenance, workovers and other	<b>3,019</b>	4,959	<b>8,760</b>	13,262
	<b>6,229</b>	8,675	<b>17,211</b>	24,759
\$/boe	<b>30.12</b>	28.18	<b>24.56</b>	25.96

Operating costs during the Quarter decreased to \$6.2 million from \$8.7 million in Q3-2015 mainly as a result of lower sales volumes. On a per boe basis, operating costs for the Quarter increased to \$30.12/boe from \$28.18/boe in Q3-2015.

Operating costs YTD were \$17.2 million compared to \$24.8 million YTD-2015 due to the same reasons discussed for the Quarter. On a per boe basis, YTD costs were \$24.56/boe, reduced from \$25.96/boe YTD-2015.

Management expects operating costs to average approximately \$28.00 - \$30.00 per boe in Q4-2016.



#### Netbacks <sup>(1)</sup>

	Three months ended September 30		Nine months ended September 30	
USD/boe	2016	2015	2016	2015
Oil and gas revenue	56.72	67.62	56.53	66.91
Royalties	(9.37)	(9.85)	(8.93)	(10.95)
Operating expenses	(30.12)	(28.18)	(24.56)	(25.96)
Netbacks	17.23	29.59	23.04	30.00

- (1) The term “netback” is a non-GAAP measure and may not be comparable with the calculation of other entities. Netback is calculated as the average unit sales price, less royalties and operating expenses and represents the cash margin for every barrel of oil equivalent sold. The Company uses this measure to analyze operating performance and considers netback a key measure as it demonstrates its profitability relative to current commodity prices.

#### General and Administration (“G&A”) Expenses

	Three months ended September 30		Nine months ended September 30	
USD 000s	2016	2015	2016	2015
<b>Argentina</b>				
Gross G&A				
Compensation costs	1,035	1,501	2,675	3,841
Other	696	571	1,909	1,974
	1,731	2,072	4,584	5,815
Capitalized	(344)	(386)	(786)	(979)
	1,387	1,686	3,798	4,836
<b>Corporate</b>				
Gross G&A				
Compensation costs	308	385	1,730	1,394
Other	507	665	1,856	2,213
	815	1,050	3,586	3,607
Capitalized	(43)	(149)	(343)	(522)
	772	901	3,243	3,085
<b>Consolidated</b>				
Net G&A total	2,159	2,587	7,041	7,921

#### Argentina

Gross G&A expenses for the Quarter decreased by \$0.3 million to \$1.7 million due primarily to lower salaries as a result of the ARS devaluation, as well as staff attrition. The Company currently employs 35 office employees in Argentina, a reduction of 7 since Q3-2015. The Company continues to optimize in areas where efficiencies can be realized.

During the Quarter, \$0.3 million (Q3-2015 - \$0.4 million) of directly attributable G&A costs in Argentina were capitalized to property, plant and equipment.

YTD, gross G&A costs decreased by \$1.2 million to \$4.6 million due to the same reasons noted for the Quarter. YTD, amounts capitalized were \$0.8 million compared to \$1.0 million YTD-2015.



G&A expenses for Q4-2016 for Argentina, net of amounts capitalized, are estimated at approximately \$1.4 million.

#### *Corporate*

Gross G&A expenses for the Quarter were \$0.8 million compared to \$1.0 million in Q3-2015. The decrease was due primarily to lower salaries and office expenses. Gross G&A costs were \$3.6 million both YTD and YTD-2015. In the current year increased G&A costs resulting from severance and retracted financing related costs of \$1.0 million were offset by a reduction in Canadian employees and the Company's optimization in areas where efficiencies have been realized.

During the Quarter, \$43 thousand (Q3-2015 - \$0.1 million) of directly attributable G&A costs in Canada were capitalized to property, plant and equipment in Argentina. YTD, \$0.3 million was capitalized compared to \$0.5 million YTD-2015.

G&A expenses for Q4-2016 in Canada, net of amounts capitalized, are estimated at approximately \$0.8 million.

#### **Finance (Income) and Expenses**

	<b>Three months ended September 30</b>		<b>Nine months ended September 30</b>	
USD 000s	<b>2016</b>	<b>2015</b>	<b>2016</b>	<b>2015</b>
<b>Argentina</b>				
Bank charges and fees	<b>284</b>	601	<b>960</b>	1,644
Foreign exchange loss (gain) - unrealized	<b>396</b>	95	<b>(296)</b>	198
Accretion	<b>39</b>	77	<b>160</b>	200
Interest and other expenses	<b>453</b>	490	<b>1,358</b>	790
	<b>1,172</b>	1,263	<b>2,182</b>	2,832
<b>Corporate</b>				
Foreign exchange (gain) loss - realized	<b>16</b>	-	<b>16</b>	-
Foreign exchange (gain) loss - unrealized	<b>(222)</b>	(1,533)	<b>1,034</b>	(3,307)
Accretion of debt component of convertible debentures issued	<b>14</b>	-	<b>14</b>	-
Interest and other expenses	<b>4</b>	16	<b>4</b>	42
Fair value change on equity component of convertible debentures held	<b>333</b>	-	<b>333</b>	-
	<b>145</b>	(1,517)	<b>1,401</b>	(3,265)
<b>Consolidated</b>	<b>1,317</b>	(254)	<b>3,583</b>	(433)

#### *Argentina*

##### *Bank Charges and Fees*

Bank charges and fees relate to various forms of taxation in Argentina outside of royalties and income taxes. Bank charges and fees for the Quarter were \$0.3 million and decreased from \$0.6 million in Q3-2015 as a result of lower transaction activity compared to Q3-2015.

YTD, bank charges and fees were \$1.0 million compared to \$1.6 million YTD-2015. The decrease was also due to reduced transaction activity.

Bank charges for Q4-2016 are estimated at approximately \$0.3 million.





#### Foreign exchange loss (gain) – unrealized

During the Quarter the Company recorded an unrealized foreign exchange loss of \$0.4 million compared to an unrealized loss of \$0.1 million in Q3-2015. YTD, the Company recorded a \$0.3 million gain compared to a \$0.2 million loss YTD-2015. Quarterly fluctuations in unrealized gains and losses are a result of changing foreign exchange rates and underlying movements in the net assets of the Argentine subsidiaries.

#### Accretion

Accretion expense was \$39 thousand for the Quarter (Q3-2015– \$77 thousand), and \$160 thousand YTD compared to \$200 thousand YTD-2015.

#### Interest and other expenses

Interest and other expenses relate primarily to interest on the Argentine ICBC loan (see heading “Credit Facilities”) offset by a Quarter and YTD net gain of \$nil and \$0.4 million, respectively, on the sale of Petroleo Plus bonds.

Had the Buenos Aires Deposits of Large Amount Rate (“BADLAR”) interest rate associated with the Argentine ICBC loan changed by 5%, associated interest expense would have changed by \$0.1 million YTD.

#### Corporate

##### Foreign exchange loss (gain)

During the Quarter and YTD, the Company recorded an unrealized foreign exchange gain of \$0.2 million and loss of \$1.0 million, respectively (Q3-2015 and YTD – 2015 - gain of \$1.5 million and \$3.3 million, respectively). The YTD loss of \$1.0 million and the YTD – 2015 gain of \$3.3 million relate to foreign exchange movements between the USD and CAD associated mainly with the intercompany loans held in Canada and due from the Argentine subsidiaries that are not considered part of the net investment in Argentina, and are therefore recorded through the income statement and not adjusted against other comprehensive (income) loss. The majority of the YTD loss was realized early in the year when the USD:CAD foreign exchange rate depreciated by 6.3%. QTD, the USD:CAD foreign exchange rate appreciated by 1.5%, creating the gain in the current quarter. The USD:CAD foreign exchange rate depreciated by 5.2% from December 31, 2015 to September 30, 2016 and depreciated by 15.0% from December 31, 2014 to September 30, 2015.

##### Accretion of debt component of convertible debenture issued

Accretion expense was \$14 thousand for the Quarter and YTD (Q3-2015 and YTD-2015 – nil).

##### Fair value change on equity component of convertible debentures held

During the Quarter and YTD a loss of \$0.3 million (Q3-2015 and YTD-2015 – nil) was recorded.

#### **Share-based Compensation**

The Company has issued stock options as incentive programs that allow officers, directors, consultants and certain employees to purchase shares in the Company. During the Quarter, no (2015 - nil) options were granted to directors, officers or employees and YTD, 8.7 million options were granted (YTD 2015 – 15.6 million). Share based compensation expense was \$0.4 million in the Quarter compared to \$0.3 million for Q3-2015. No share-based compensation expense was capitalized during the Quarter, however, a recovery of \$0.2 million was recorded as a result of the impact of departed officers and employees and is included in the amount expensed (Q3-2015 - \$0.1 million capitalized).

On an YTD basis, share based compensation was \$1.3 million (YTD-2015 - \$0.8 million), of which \$39 thousand (YTD-2015 - \$0.1 million) was capitalized.



#### Depletion and Depreciation ("D&D")

	Three months ended September 30		Nine months ended September 30	
USD 000s	2016	2015	2016	2015
<b>Argentina</b>	<b>4,664</b>	6,419	<b>15,827</b>	18,701
\$/boe	<b>22.56</b>	20.85	<b>22.59</b>	19.60
<b>Corporate</b>	<b>59</b>	54	<b>172</b>	157
<b>Consolidated</b>	<b>4,723</b>	6,473	<b>15,999</b>	18,858

#### Argentina

D&D decreased to \$4.7 million in the Quarter compared to \$6.4 million in Q3-2015 due to lower production. On a per boe basis, D&D for the Quarter increased to \$22.56/boe from \$20.85/boe in Q3-2015 primarily due to increased future development costs, combined with reduced production.

YTD, D&D decreased to \$15.8 million from \$18.7 million in 2015 and per boe costs went from \$19.60/boe to \$22.59/boe for the same reasons noted for the Quarter.

#### Corporate

D&D expenses for corporate relate only to depreciation on office equipment.

#### Impairment

At September 30, 2016, Madalena determined that an indicator of impairment existed in one of its Argentine CGUs due to lower than forecasted production. As a result, an impairment test was performed over that CGU and it was deemed to be impaired as the estimated recoverable amount was lower than the carrying amount. The recoverable amount, calculated as \$22.0 million, resulted in a pre-tax impairment charge of \$9.3 million for the three and nine month period ended September 30, 2016.

The impaired CGU's recoverable value was estimated using a value in use calculation based on future net cash flows expected to be derived from the CGU's proven plus probable reserves from the externally prepared December 31, 2015 reserve report using a pretax discount rate ranging from 22% to 28% depending on the category of reserves, adjusted internally for 2016 year to date production as well as estimated capital spending adjustments, using the following forward commodity price estimates:

Year	Oil Price (USD/bbl)
2016	62.09
2017	61.78
2018	61.68
2019	61.57
2020	61.44
2021	62.97
2022	67.59
2023	72.21
2024	75.30
2025	76.92
2026	78.51



Had the discount rate used been 1% higher for the range of discount rates used, an additional impairment charge of \$0.9 million would have resulted for the three and nine month period ended September 30, 2016.

At September 30, 2015, Madalena determined there were no triggers for impairment for any of its Argentine CGUs.

At September 30, 2016, Madalena determined that an impairment trigger existed related to one of its E&E assets. The Cortadera concession was relinquished to the Province of Neuquen in October 2016. As a result, the net book value of the Cortadera E&E assets of \$2.7 million was written off and recorded as part of Impairment on the condensed interim consolidated statements of income (loss) for the three and nine month period ended September 30, 2016.

At September 30, 2015, Madalena determined there were no triggers for impairment for any of its Argentine CGUs.

#### Income Tax Expense (Recovery)

	Three months ended 30	September	Nine months ended September 30	
USD 000s	2016	2015	2016	2015
Current	222	3,312	1,362	5,797
Deferred	(4,133)	2,583	(1,992)	3,230
<b>Total</b>	<b>(3,911)</b>	<b>5,895</b>	<b>(630)</b>	<b>9,027</b>

Madalena has four legal entities in Argentina, two of which had taxable income in the Quarter. The income tax rate in Argentina is 35%. The two entities that do not have taxable income are subject to minimum taxes, which are generally taxed at 1% of net assets. Current income tax expense (including minimum tax) for the Quarter was \$0.2 million compared to \$3.3 million for Q3-2015.

On a YTD basis, current income tax expense was \$1.4 million (YTD-2015 – \$5.8 million).

The Company booked a deferred income tax recovery of \$4.1 million during the Quarter (Q3-2015 – deferred income tax expense - \$2.6 million). YTD, the Company booked a deferred income tax recovery of \$2.0 million (YTD-2015 – deferred income tax expense - \$3.2 million).

The current period recovery is a result of the impairment charge recorded in one of the Company's CGUs during the Quarter and the corresponding impact to the temporary differences between tax and accounting values.

Current income taxes for Q4-2016 are estimated at approximately \$0.2 million.

#### Reconciliation of Cash Flow from Operating Activities and Funds Flow from Continuing Operations

As detailed previously in this MD&A, funds flow from operations is a term that does not have any standardized meaning under GAAP. Madalena's method of calculating funds flow from continuing operations may differ from that of other companies, and accordingly, may not be comparable to measures used by other companies. Funds flow from continuing operations is calculated as cash flow from continuing operating activities before change in non-cash working capital, and change in other long-term assets.



	Three months ended September 30		Nine months ended September 30	
USD 000s	2016	2015	2016	2015
Cash flow from operating activities	173	6,556	9,600	9,468
Cash flow from (used in) operating activities – discontinued operations	-	(436)	41	126
Change in non-cash working capital	1,013	9,148	(7,064)	13,961
Change in non-cash working capital – discontinued operations	-	716	59	1,134
Change in other long-term assets	(346)	(25)	3,185	680
Funds flow from continuing operations	840	15,959	5,821	25,369

**Funds flow from Continuing Operations, Net Income (Loss) and Comprehensive Income (Loss) from Continuing Operations**

	Three months ended September 30		Nine months ended September 30	
USD 000s	2016	2015	2016	2015
Funds flow from continuing operations	840	15,959	5,821	25,369
Per share – basic & diluted	0.00	0.03	0.01	0.05
Net income (loss) - continuing operations	(12,715)	7,939	(22,697)	6,345
Per share – basic & diluted	(0.02)	0.01	(0.04)	0.01
Comprehensive income (loss) – continuing operations	(12,981)	5,854	(21,518)	1,962

Madalena's funds flow from continuing operations for the Quarter decreased to \$0.8 million from \$16.0 million in Q3-2015. The decrease in funds flow from operations was principally due to lower sales volumes and realized commodity prices during the Quarter combined with the one-time \$13.9 million benefit from the Petroleo Plus credits that were booked in Q3-2015.

On an YTD basis, funds flow from continuing operations decreased to \$5.8 million from \$25.4 million YTD-2015 due to the same reasons noted above.

The net income (loss) from continuing operations for the Quarter was \$12.7 million (Q3-2015 - income of \$7.9 million), predominately due to lower oil and natural gas revenues as a result of lower production and lower realized commodity prices, partially offset by lower taxes in the current Quarter. The Q3-2015 income was primarily a result of the one-time \$13.9 million income from the Petroleo Plus credits.

The net income (loss) from continuing operations YTD was \$22.7 million (YTD-2015 – income of \$6.3 million), with the decrease due to the same reasons outlined for the Quarter.



A summary of the foreign exchange impact as it relates to the foreign currency translation adjustment is as follows:

USD 000s	Three months ended September 30		Nine months ended September 30	
	2016	2015	2016	2015
Foreign currency translation gain (loss)	(266)	(1,947)	1,247	(4,245)

During the Quarter, the Company recorded a foreign currency translation loss of \$0.3 million (QTD-2015 – loss of \$1.9 million). During this period the USD appreciated by 1.5% against the CAD (QTD-2015 – appreciated by 6.9%), which resulted in \$0.1 million loss on the translation of the Canadian parent into USD from continuing operations (QTD-2015 - \$0.4 million loss), in addition to the impact of the translation of the Canadian intercompany loans to Argentina that are not considered part of the net investment in the subsidiaries, which amounts to a \$0.2 million loss for the Quarter (QTD-2015 - \$1.5 million loss). On an YTD basis, the Company recorded a foreign currency translation gain of \$1.2 million (YTD-2015 – loss of \$4.2 million). This is the net result of the impact of the USD YTD foreign exchange depreciating against the CAD by 5.2% (YTD-2015 – 15% increase) which created a gain of \$0.2 million (YTD-2015 - \$0.9 million loss) on the translation of the Canadian parent into USD, plus a \$1.0 million gain (YTD-2015 – \$3.3 million loss) on the intercompany loans from Canada to Argentina, not considered part of the net investment in subsidiaries.

#### Capital Expenditures

USD 000s	Three months ended September 30		Nine months ended September 30	
	2016	2015	2016	2015
<b>Argentina</b>				
Land and associated renewal fees	-	9,181	20	9,181
Geological and geophysical	-	782	58	1,299
Drilling and completions	-	2,923	4,057	13,735
Well equipment and facilities	267	589	1,124	2,531
Other	355	968	749	1,474
Argentina total	622	14,443	6,008	28,220
<b>Corporate</b>				
Other	-	10	-	37
Corporate total	-	10	-	37
<b>Consolidated</b>	<b>622</b>	<b>14,453</b>	<b>6,008</b>	<b>28,257</b>

#### Argentina

Minimal capital spending occurred during the Quarter, however YTD, the Company completed both the vertical exploration well at Curamhuele (Yapai.x-1001) and completed and placed on-stream the horizontal well at Coiron Amargo (CAN-6).

During Q3-2015, the Rinconada - Puesto Morales concession was renewed, the re-entry at Yapail.x-1001 at Curamhuele commenced and 3D seismic was reprocessed together with drilling of one horizontal CA-Norte well. In addition, a second horizontal well at CA-Norte (CAN-20h) spudded in Q3-2015. YTD-2015 the multi-frac well at Puesto Morales was drilled and completed and two horizontal wells were drilled and one completed at CA- Norte.



### Discontinued Canadian Operations

The operating results for the discontinued Canadian operations are shown in the following table for the noted periods:

USD 000s	Three months ended September 30		Nine months ended September 30	
	2016 <sup>(1)</sup>	2015	2016 <sup>(1)</sup>	2015
Oil and natural gas revenue	-	384	<b>430</b>	1,520
Royalty (expense) recovery	-	(64)	<b>(7)</b>	(315)
Operating (costs) recovery	-	(522)	<b>(395)</b>	(2,177)
General and administrative expense	-	(78)	<b>(127)</b>	(289)
Share-based (payments) recovery	-	(9)	<b>(21)</b>	17
Depletion and depreciation	-	(88)	<b>(163)</b>	(419)
Accretion	-	(20)	<b>(23)</b>	(62)
Impairment	-	(2,063)	-	(4,015)
Loss from discontinued operations	-	(2,460)	<b>(306)</b>	(5,740)
Loss on sale of discontinued operation	-	-	<b>(18)</b>	-
Realized accumulated other comprehensive loss on disposition of Canadian operations	-	-	<b>(4,153)</b>	-
Net loss from discontinued operation	-	(2,460)	<b>(4,477)</b>	(5,740)

(1) The Canadian operations were sold with an effective date of May 1, 2016. Results are included up to this date.

During the year, oil and natural gas revenues declined to \$0.4 million from \$1.5 million YTD-2015 due to the continued shut-in of the Keyera processing plant. Royalties and operating costs decreased due to the reduced activity and the variable nature of these costs as they relate to revenue. As depletion is calculated on a unit of production basis, the reduction in sales volumes directly impacted the reduction in depletion expense.

There were no indicators of impairment on E&E assets or property, plant and equipment ("PPE") assets for the Canadian operations from January 1, 2016 – April 30, 2016. During 2015, indicators of impairment existed and an impairment test resulted in a write off of \$2.1 million and \$4.0 million for Q3-2015 and YTD-2015, respectively.

The loss on sale of the discontinued operations amounted to \$18 thousand, and was the result of total proceeds of \$4.3 million, less net assets disposed of amounting to \$4.3 million.

The realized accumulated other comprehensive loss ("OCI") on disposal of the Canadian operations in the amount of \$4.1 million YTD relates to the requirement to recycle OCI to profit and loss associated with the historical foreign exchange gains and losses on the disposed Canadian operating segment.



## FINANCIAL POSITION, LIQUIDITY AND CAPITAL RESOURCES

### Liquidity risk and going concern

USD 000s	September 30 2016	December 31 2015
Working capital (deficit) surplus		
Argentina	(1,755)	(415)
Canada	(2,084)	877
	(3,839)	462
Convertible debentures	(1,168)	-
Long-term debt	-	(1,972)
Shareholders' equity	79,889	100,093

Liquidity risk is the risk that Madalena will not be able to meet its financial obligations as they become due. Although the Company continues to have a relatively unleveraged balance sheet at September 30, 2016, it does have a working capital deficit of \$3.8 million, and continues to face liquidity challenges.

Management in Canada and Argentina have been taking measures for some time now to reduce expenses and conserve cash. Office and field personnel have been reduced in both countries, office space has been downsized in Canada and other costs saving measures have been implemented wherever possible. Cash has been preserved by deferring the payment of amounts owed to directors and management fees owed to the Interim CEO of the Company. In addition, all capital spending has been limited or deferred.

The Company's business is capital intensive and additional capital is required on a periodic basis. This is due to the declining reserve base inherent in oil and gas producing companies, in general. As a result, the Company relies on external sources of capital to support ongoing development and acquisitions to replace production and to add additional reserves.

The current year-to-date losses, current working capital deficiency, the expectation of reduced near term cash flow resulting from lower oil prices in Argentina, as well as the capital commitments in 2016 and 2017 are expected to result in cash outflows that exceed anticipated future funds from operations. The Company continues to include a note of going concern uncertainty in the condensed interim consolidated financial statements. Without an infusion of capital and/or a successful outcome from the strategic alternatives process in the near term, Madalena may not be able to continue as a going concern.

### Credit Facilities

#### *Argentina*

In May 2015, one of the Company's Argentine subsidiaries, MEA, obtained an ARS 90 million credit facility with Industrial and Commercial Bank of China (Argentina) S.A. ("ICBC"), the details of which are described in note 8 of the Company's consolidated financial statements for the year ended December 31, 2015 and in note 7 of the Company's unaudited interim condensed consolidated financial statements for the three and nine months ended September 30, 2016. The amount outstanding at September 30, 2016 was \$2.5 million and is repayable in three equal quarterly instalments of ARS 12.9 million (\$0.8 million using the September 30, 2016 exchange rate) with the next payment due on November 30, 2016. The current portion of \$2.5 million is included in the working capital balance noted above and there is no remaining balance included in long-term debt.

The loan bears interest at the variable rate of BADLAR plus approximately 14%, resulting in a current borrowing rate of 37.4%. Security for this loan is provided by the assignment of MEA's receivables that arise from the sale of crude oil. The facility includes a quarterly financial covenant, whereby MEA's ratio of debt to earnings before income taxes, depletion, interest and other non-cash items must be equal to or less than 1:1. The earnings before income taxes, depletion, interest and other non-cash items are calculated on a four quarter rolling basis. At September 30, 2016, MEA was in compliance with this covenant at 0.26.





#### *Canada*

The Company has no bank debt in Canada at September 30, 2016.

#### **Repatriation of Funds to Canada**

Madalena's corporate office is in Canada. Funds are required to enable the Company to maintain its Canadian corporate office and manage the regulatory, reporting, audit, legal and tax requirements of a TSX-V listed company. Prior to the decline in commodity prices, Canadian oil and gas revenues were sufficient to fund the corporate costs incurred. In 2015, with the majority of the Canadian production shut in, it was necessary for the Company to repatriate funds from Argentina. Effective May 1, 2016, the Canadian oil and gas operations were sold.

Until December 16, 2015, there were a number of monetary and currency exchange control measures in Argentina that included restrictions on the free disposition of funds deposited with banks and tight restrictions on transferring funds abroad, including the need to register intercompany debt to a foreign creditor. On December 16, 2015, these restrictions were lifted. During the Quarter, \$0.5 was repatriated from Argentina. During 2015, the Company repatriated \$7.8 million to Canada, of which \$4.6 million was repatriated during the nine months ended September 30, 2015.

#### **Share Capital Issued and Options Granted**

##### *Outstanding Share Capital*

During the Quarter and YTD, 1.7 million common shares were issued pursuant to the settlement of severance related costs which reduced the associated liability by \$0.2 million. During Q3-2015, 1,050,000 common shares were issued pursuant to the exercise of options for cash proceeds of \$0.2 million. YTD-2015, 2,300,000 common shares were issued pursuant to the exercise of options for cash proceeds of \$0.5 million.

YTD, 8,650,000 options were granted to certain employees and directors of the Company, at an exercise price of CAD \$0.27 per share. During Q3-2015 and YTD-2015, 15,563,158 options were granted to directors, officers and employees of the Company.

As at November 22, 2016, the Company had 543.8 million shares and 35.5 million options outstanding.

#### **Fair value of Financial Instruments**

The Company's financial instruments include cash and cash equivalents, available for sale securities, trade and other receivables, investments, other long-term assets, current portion of long-term debt, trade and other payables, taxes payable, convertible debentures issued and long-term debt, the carrying values of which approximate their fair values due to their short-term nature with the exception of: (i) investments, which are recorded at fair value through profit and loss as it relates to the convertible debenture received; (ii) long-term debt, which approximates fair value as a result of its variable interest rate; (iii) convertible debentures issued, which relates to the debt component of these instruments and are accreted up to their principal value over the term of the debenture using the effective interest rate method; (iv) available for sale securities which are recorded at fair value through the statement of other comprehensive income (loss), and recycled into the statement of income (loss) and comprehensive income (loss) when sold; and (v) other long-term assets whose calculated fair value approximates its carrying value.

#### **Decommissioning Obligations**

Decommissioning obligations result from net ownership interests in property, plant and equipment and involve critical accounting estimates. There are significant uncertainties related to the estimated costs and the timing of settlement of decommissioning obligations, and the impact on the financial statements could be material. The main factors that can cause expected decommissioning obligations to change are changes to laws and regulations, construction of new facilities, changes in reserve estimates and life, changes in technology, and discount and/or inflation rates applied.





The Company expects the decommissioning obligations for its obligation to be invoiced in USD and settled in ARS.

Changes to Madalena's estimates of decommissioning, restoration and similar liabilities are recorded directly to the related asset with a corresponding entry to the provision. Madalena's estimates are reviewed at the end of each reporting period for changes in regulatory requirements, discount rates, and effects of inflation.

At September 30, 2016, an inflation rate of 1.0% was used and is unchanged from December 31, 2015. The risk free rate used to discount the liability at September 30, 2016 was 2% (December 31, 2015 – 2.7%).

#### **Long-term Incentive Plan**

On August 25, 2016, the Board of Directors approved a long-term cash incentive plan ("LTIP"), whereby certain directors, officers, employees and consultants of the Company are provided an opportunity to benefit from the success of Madalena as a result of appreciation of the trading price of Madalena's common shares, through the potential payment of deferred cash amounts.

On August 26, 2016, 6,505,000 LTIP units ("the units") were issued to Argentina personnel at an exercise price of CAD\$0.145 per common share. The units vest one-third on each of the first, second and third anniversary dates and are exercisable for a period no later than:

- (a) December 1 of the third year in which the units vest; and
- (b) Five years from the date of the grant of the units.

The fair value of the units was calculated at \$0.08/unit using a Black-Scholes valuation model as at August 26, 2016. To the extent that the fair value changes the LTIP expense will be adjusted and is recorded as part of operating or general and administrative expense as appropriate, in the condensed interim consolidated statements of income (loss) and comprehensive income (loss). Any associated liability is recorded as part of Other long-term liabilities on the condensed interim consolidated statements of financial position to the extent it relates to a long-term repayment requirement, and as part of trade and other payables on the condensed interim consolidated statements of financial position in relation to the portion that vests within the coming one year period.

The fair value of the units calculated at August 26, 2016 used the following Black-Scholes valuation model with assumptions:

	Three months ended September 30 2016
Share price (CAD \$)	CAD \$0.145
Exercise price (CAD \$)	CAD \$0.145
Expected Volatility (%)	76%
Units life (years)	5
Risk-free interest rate (%)	0.66%

The LTIP expense recorded as part of general and administrative expenses in the condensed interim consolidated statements of income (loss) for the three and nine months ended September 30, 2016 was \$22 thousand.



## **Commitments and Contingencies**

### *Development and Exploration Commitments*

#### Coiron Amarqo ("CA") Block (CA-Sur Este 90% working interest - operated)

USD 000s	2016	2017	Beyond
Concession commitments at CA-Sur Este	-	5,000	5,000

Pursuant to definitive agreements entered into on July 11, 2016 and government approvals and an Executive Decree, which were received on October 13, 2016, the previous work commitments at CA- Sur of \$17.5 million that were required to be incurred by November 8, 2017 have been superceded by the following work commitments at CA-Sur Este:

- \$5 million before November 8, 2017 to evaluate either the Vaca Muerta or tight gas commerciality; and
- an additional \$5 million before November 8, 2019, subject to the results in the bullet above.

As a result of the above agreements, CA-Sur was divided into two evaluation lots – CA-Sur Este and CA-Sur Oeste. Madalena assigned its 35% working interest in CA-Sur Oeste in return for an additional 55% working interest at CA-Sur Este, resulting in the Company having a 90% working interest at CA-Sur Este and operatorship. Gas y Petróleo del Neuquén S.A. ("G&P"), a provincial government entity retained its 10% working interest in the block.

#### CA Block (CA-Norte 35% working interest – non-operated)

At CA-Norte, Madalena holds a non-operated 35% working interest (9,309 net acres) at September 30, 2016 with no future commitments. The Company's working capital deficit at September 30, 2016 included approximately \$2 million relating to overdue amounts payable to the operator at CA-Norte. This payable was fully recorded as part of trade and other payables in the condensed interim consolidated statements of financial position at September 30, 2016.

Madalena has received a notice from this operator relating to Madalena's overdue payable and has been advised that Madalena's share of oil and gas sales are being applied against the outstanding payable. The Company is in discussions with the operator to satisfy the outstanding payable. Should the matter not be resolved prior to April 21, 2017, a potential outcome is the ultimate forfeiture of Madalena's working interest at CA-Norte.

#### Curamhuele Block (90% working interest - operated)

In December 2015, Madalena further ratified an extension of its second exploration term with the Province of Neuquén to September 9, 2016, after which a further extension is available.

During the first quarter of 2016, the remaining work commitment relating to the existing Curamhuele block concession agreement was fulfilled by completing the Yapai.x 1001 well in the Mulichinco and Lower Agrio shale.

The Company has posted a performance bond for \$17.6 million relating to amounts committed under this exploration permit. The assets of Madalena Austral S.A., a subsidiary of the Company, are held as security for the bond. Once the province certifies that the Company has fulfilled its obligations, the Company anticipates that the bond will be cancelled.

Discussions have commenced with the Province of Neuquén to potentially enter into an evaluation period to further appraise the Curamhuele block.



Rinconada - Puesto Morales Block (100% working interest-operated)

USD 000s	2016	2017	Beyond
Concession commitments	4,400	13,300	14,800

The Company is in discussions with the Province to move the \$4.4 million of 2016 commitments to 2017.

Santa Victoria Block (100% working interest - operated)

The contract is currently in the second of three exploration phases, with the second exploration phase having expired in April 2015. An application has been submitted and negotiations continue and are currently ongoing with the province of Salta to reach a multi-year extension agreement.

As at September 30, 2016 the second exploration phase required additional work commitments of \$3.75 million of which no qualifying expenditures had been made.

El Chivil Block (100% working interest – operated)

The concession's one year extension expiry occurred on September 7, 2016 and during the quarter, the province of Formosa granted a further six month extension to negotiate a 10-year exploitation period extension. At November 22, 2016, the Company remains in discussions with the Province.

El Vinalar Block (100% working interest – operated)

Salta province granted a block extension to file an investment plan which expired on November 11, 2016. The Company has requested a further extension from the Province.

## QUARTERLY FINANCIAL RESULTS

### Continuing Operations

	Q3	Q2	Q1	Q4
USD 000s, unless otherwise noted	2016	2016	2016	2015
Oil and natural gas revenues	11,728	13,070	14,811	17,902
Net income (loss)	(12,715)	(3,491)	(6,492)	(11,961)
Shares outstanding – millions	543.8	542.1	542.1	542.1
Net income (loss) per share – basic and diluted	(0.02)	(0.00)	(0.01)	(0.02)

	Q3	Q2	Q1	Q4
USD 000s, unless otherwise noted	2015	2015	2015	2014
Oil and natural gas revenues	20,816	24,115	18,893	21,330
Other income	13,857	-	-	-
Net income (loss)	7,939	(3,209)	1,066	(1,963)
Shares outstanding – millions	542.1	541.0	540.3	539.8
Net income (loss) per share – basic and diluted	0.01	(0.01)	0.00	(0.00)

The Company's decrease in oil and gas revenues during the Quarter, Q3-2016, Q2-2016, Q1-2016, Q4-2015 and Q3-2015 can be primarily attributed to lower sales volumes at Rinconada – Puesto Morales and Surubi. The Company also experienced commodity price declines in 2016. Q2-2015 revenue increases were favourably impacted by successful horizontal drilling in Argentina and the \$3.00 per barrel oil incentive.

The Company recorded pre-tax impairment charges of \$12.0 million in Q3-2016 and \$8.4 million in Q4-2015.



The Company recorded \$13.9 million of other income as settlement of past Petroleo Plus incentive credits in Q3-2015.

### **CRITICAL ACCOUNTING JUDGMENTS, ESTIMATES AND ACCOUNTING POLICIES**

For more details regarding the Company's critical accounting judgments, estimates and accounting policies the following should be read in conjunction with the Company's consolidated financial statements for the year ended December 31, 2015.

Management is required to make judgments, estimates and assumptions in the application of accounting policies that could have a significant impact on the Company's financial results. Actual results may differ from those estimates and those differences may be material. The estimates and assumptions used are subject to updates based on experience and the application of new information. The Company's critical accounting policies and estimates are reviewed annually by the Audit Committee of the Board. Further details on the basis of presentation and significant accounting policies can be found in the Company's notes to the consolidated financial statements for the year ended December 31, 2015.

#### **Critical Accounting Judgments in Applying Accounting Policies**

Critical judgments are those judgments made by Management in the process of applying accounting policies that have the most significant effect on the amounts recognized in the Company's Consolidated Financial Statements and accompanying notes for the year ended December 31, 2015. Further information on Management's critical accounting judgments in applying accounting policies can be found in the notes to the consolidated financial statements for the year ended December 31, 2015.

#### **Critical accounting estimates**

Critical accounting estimates are those estimates that require Management to make particularly subjective or complex judgments about matters that are inherently uncertain. Estimates and underlying assumptions are reviewed on an ongoing basis and any revisions to accounting estimates are recognized in the period in which the estimates are revised. During the Quarter, there were no changes to the Company's key sources of estimation uncertainty. Further information on the Company's key sources of estimation uncertainty can be found in the notes to the consolidated financial statements for the year ended December 31, 2015.

#### **Accounting Changes**

Prior to December 31, 2015, the Company had presented its consolidated financial statements using CAD. As a result of increasing focus on the Company's Argentine operations and the reducing size of the Canadian operations over the past two years, the Company believed that changing its presentation currency effective December 31, 2015 to the USD would provide improved comparability of results period over period. The Company's Argentine operations have a USD functional currency and translating their results from USD to CAD for reporting purposes was creating significant volatility in the consolidated financial statements due to the significant changes in the CAD and USD exchange rates. For comparative purposes, historical financial statements have been recast to reflect the financial results had they always been presented using the USD. To accomplish this change, foreign denominated assets and liabilities were translated at the closing rate in effect at the end of the comparative periods; revenues, expenses and cash flows were translated at the average rate in effect for the comparative periods; and equity transactions were translated at historical rates.

#### **Future Accounting Pronouncements**

In July 2014, the IASB issued IFRS 9 "Financial Instruments" to replace International Accounting Standard ("IAS") 39 "Financial Instruments Recognition and Measurement". The new standard replaces the current multiple classification and measurement models for financial instruments with a single model that has only two classifications categories: amortized cost and fair value.



In May 2014 the IASB issued IFRS 15 “Revenue from Contracts with Customers” to replace IAS 18 “Revenue”, IAS 11 “Construction Contracts”, and related interpretations. The standard contains a single model that applies to contracts with customers and two approaches to recognizing revenue: at a point in time or over time. The model features a contract-based five-step analysis of transactions to determine whether, how much and when revenue is recognized. New estimates and judgmental thresholds have been introduced, which may affect the amount and/or timing of revenue recognized.

As of January 1, 2018, Madalena will be required to adopt the above two standards.

In January 2016, IASB issued IFRS 16 “Leases”. The goal of the standard is to bring leases on the balance sheet for lessees. There will be a single lease accounting model for all leases. As of January 1, 2019, Madalena will be required to adopt this standard.

Management is evaluating the impact these standards may have on Madalena’s condensed interim consolidated financial statements.

## **RISK MANAGEMENT**

For a full understanding of the risks that impact the Company, the following discussion should be read in conjunction with the Company’s consolidated financial statements for the year ended December 31, 2015.

The Company is exposed to a number of risks through the pursuit of its strategic objectives. Some of these risks impact the oil and gas industry as a whole and others are unique to its operations and its involvement in Argentina. Actively managing these risks improves the Company’s ability to effectively execute its business strategy. The factors that impact the Company’s exposure to liquidity risk, safety risk, capital project execution and operating risk, reserves replacement risk, environmental risk and regulatory risk has not changed substantially since December 31, 2015. For a further and more in-depth discussion of the Company’s risk management see the Company’s Consolidated Financial Statements for the year ended December 31, 2015.

A description of the risk factors and uncertainties affecting the Company can be found in the Advisory and a full discussion of the material risk factors affecting the Company can be found in the Company’s Annual Information Form for the year ended December 31, 2015.

## **ADVISORY**

### **Forward Looking Statements**

This MD&A may include forward-looking statements including opinions, assumptions, estimates and management’s assessment of future plans and operations, expected depletion, depreciation and accretion expenses, expectations as to the taxability of the Company and planned capital expenditures and the timing and funding thereof. When used in this document, the words “anticipate,” “believe,” “estimate,” “expect,” “intent,” “may,” “project,” “plan”, “should” and similar expressions are intended to be among the statements that identify forward-looking statements. Forward-looking statements are subject to a wide range of risks and uncertainties, and although the Company believes that the expectations represented by such forward-looking statements are reasonable, there can be no assurance that such expectations will be realized. Any number of important factors could cause actual results to differ materially from those in the forward-looking statements including, but not limited to, risks associated with petroleum and natural gas exploration, development, exploitation, production, marketing and transportation, the volatility of petroleum and natural gas prices, currency fluctuations, the ability to implement corporate strategies the ability to repatriate funds from Argentina, the state of domestic capital markets, the ability to obtain financing, incorrect assessment of the value of acquisitions, failure to realize the anticipated benefits of acquisitions, changes in petroleum and natural gas acquisition and drilling programs, delays resulting from inability to obtain required regulatory approvals, delays resulting from inability to obtain drilling rigs and other services, labour supply risks, environmental risks, competition from other producers, imprecision of



reserve estimates, changes in general economic conditions, ability to execute farm-in and farm-out opportunities, and other factors, all of which are more fully described from time to time in the reports and filings made by the Company with securities regulatory authorities.

Statements relating to “reserves” or “resources” are deemed to be forward looking statements, as they involve the implied assessment, based on certain estimates and assumptions, that the reserves and resources described can be profitably produced in the future.

The forward looking statements contained in this MD&A are expressly qualified by this cautionary statement. Readers are cautioned not to place undue reliance on forward-looking statements, as no assurances can be given as to future results, levels of activity or achievements. Except as required by applicable securities laws, the Company does not undertake any obligation to publicly update or revise any forward-looking statements.

#### **Reserves and Other Oil and Gas Disclosure**

Any references in this MD&A to test rates, flow rates, initial and/or final raw test or production rates, early production, test volumes behind pipe and/or "flush" production rates are useful in confirming the presence of hydrocarbons, however, such rates are not necessarily indicative of long-term performance or of ultimate recovery. Such rates may also include recovered "load" fluids used in well completion stimulation. Readers are cautioned not to place reliance on such rates in calculating the aggregate production for Madalena. In addition, the Vaca Muerta and Agrio shales are unconventional resource plays which may be subject to high initial decline rates.

#### **Analogous Information**

Certain information in this MD&A may constitute "analogous information" as defined in National Instrument 51-101 - Standards of Disclosure for Oil and Gas Activities ("NI 51-101"), including, but not limited to, information relating to areas, assets, wells, industry activity and/or operations that are in geographical proximity to or believed to be on-trend with lands held by Madalena. Such information has been obtained from public sources, government sources, regulatory agencies or other industry participants. Management of Madalena believes the information may be relevant to help define the reservoir characteristics within lands on which Madalena holds an interest and such information has been presented to help demonstrate the basis for Madalena's business plans and strategies. However, management cannot confirm whether such analogous information has been prepared in accordance with NI 51-101 and the Canadian Oil and Gas Evaluation Handbook and Madalena is unable to confirm that the analogous information was prepared by a qualified reserves evaluator or auditor. Madalena has no way of verifying the accuracy of such information. There is no certainty that the results of the analogous information or inferred thereby will be achieved by Madalena and such information should not be construed as an estimate of future production levels or the actual characteristics and quality Madalena's assets. Such information is also not an estimate of the reserves or resources attributable to lands held or to be held by Madalena and there is no certainty that such information will prove to be analogous in the future. The reader is cautioned that the data relied upon by Madalena may be in error and/or may not be analogous to such lands to be held by Madalena.

#### **Numerical Amounts**

The reporting and the measurement currency is the USD. Natural gas reserves and volumes are converted to barrels of oil equivalent (boe) on the basis of six thousand cubic feet (mcf) of gas to one barrel (bbl) of oil. Boe's may be misleading, particularly if used in isolation. A boe conversion ratio of 6 mcf to 1 bbl is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead.

This MD&A uses the term “netback” which is a term that does not have standardized meanings under GAAP and this non-GAAP measurement may not be comparable with the calculation of other entities. The Company uses this measure to analyze operating performance.



The term “netback”, which is calculated as the average unit sales price, less royalties and operating expenses, represents the cash margin for every barrel of oil equivalent sold. The Company considers this a key measure as it demonstrates its profitability relative to current commodity prices. This term does not have any standardized meaning prescribed by GAAP and, therefore, might not be comparable with the calculation of a similar measure for other companies.

## **ABBREVIATIONS**

The following is a summary of the abbreviations used in this MD&A:

### **Oil and Natural Gas Liquids**

bbl	barrel
bbls/d	barrels per day
NGLs	Natural gas liquids
boe	barrel of oil equivalent
boe/d	barrel of oil equivalent per day

### **Natural Gas**

Mcf	thousand cubic feet
WI	Working interest