



MANAGEMENT'S DISCUSSION & ANALYSIS

FOR THE THREE MONTHS AND YEAR ENDED DECEMBER 31, 2015



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This Management's Discussion and Analysis of financial condition and results of operations ("MD&A") is based on information available to April 21, 2016 and should be read in conjunction with Madalena Energy Inc.'s ("Madalena" or the "Company") audited consolidated financial statements ("consolidated financial statements") for the years ended December 31, 2015 and 2014 and the accompanying notes. This MD&A contains forward-looking information about our 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 our 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 our quarterly condensed interim consolidated financial statements and the Annual Information Form ("AIF"), is available on SEDAR at www.sedar.com and on the Company's website at www.madalenaenergy.com.

Basis of Presentation

This MD&A and the consolidated financial statements and comparative information have been prepared in United States dollars ("USD"), except where another currency has been indicated and have been prepared in accordance with International Financial Reporting Standards ("IFRS" or "GAAP") as issued by the International Accounting Standards Board ("IASB"). Sales volumes are presented on a before royalties basis.

Prior to December 31, 2015, the Company had presented its consolidated financial statements using the Canadian dollar ("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.

The functional currency of the parent company (Madalena) is CAD. The USD is the functional currency of all subsidiaries. The Argentine peso ("ARS") was the functional currency of Madalena Austral S.A. up to June 30, 2014, at which time it was changed to USD.

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 reconciliation of each non-GAAP measure is presented in the relevant sections of this MD&A.

The reconciliation between cash flow from operating activities and funds flow from operations can be found in the MD&A. Funds flow from operations per share is calculated using the same basic and diluted weighted average number of shares for the period, consistent with the calculations of 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, Argentina focused, upstream oil and gas company.

Madalena holds approximately 950,000 net acres in four provinces of Argentina where it is focused on the delineation of large shale and unconventional resources in the Vaca Muerta shale, Lower Agrio shale, and Loma Montosa oil plays. The Company is implementing horizontal drilling and completions technology to develop both its conventional and resource plays.

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

All information disclosed below for the year ended December 31, 2015 includes the results of the 2014 acquisition of the Argentine business unit of Gran Tierra Energy Inc. (the "Acquisition"), whereas the comparable year ended December 31, 2014 only includes the results of operations from the Acquisition on June 25, 2014.

Unless otherwise indicated, all dollar amounts are in USD.

Outlook for 2016

Argentina

On November 22, 2015, Mauricio Macri, the former mayor of Buenos Aires, won the presidential election and was sworn in as President of Argentina on December 10, 2015. Although Mr. Macri ran on a platform that included revitalizing Argentina's economy by implementing free market reforms and improving foreign relations to, among other things, attract foreign investment and gain access to international credit markets, the Company is unable to predict with certainty what, if any, reforms the new government will be able to implement.

Mr. Macri appointed Juan Jose Aranguren, the former CEO of Shell's Argentine branch, as Minister of Energy and Mines.

Consistent with the government's campaign platform, currency controls were relaxed in December 2015 and concurrently the ARS underwent a devaluation, reflecting its purchasing power in the global economy. A portion of Company's operating costs and general and administrative expenses incurred in Argentina are denominated in ARS. As a result, the Company's operating costs per BOE and general and administrative expenses are expected to initially decrease in USD equivalent terms until such time as the ARS costs increase, as a result of anticipated inflationary pressure.

The newly elected government has also reached tentative agreements with hold-out creditors who had refused to restructure certain of Argentina's bond debt after Argentina defaulted on their debt conditions in 2001. In order to regain access to international capital markets, Argentina's congress and senate has approved the agreements and lifted certain restrictions, which prevented Argentina from paying creditors who had rejected settlement offers in 2005 and 2010. If the bond crisis is resolved, Argentina is expected to regain access to international capital markets. Subsequent to year end, congress has approved the agreements.

It is anticipated that the Macri government will work to improve the current business climate in order to encourage investment in Argentina. Management also expects that the Macri government will implement a plan to gradually deregulate domestic energy pricing. The timing of such changes is currently unknown. These expected measures plus others yet to be announced will be evaluated by the Company within the context of the government's new economic program, in order to assess the impact on the energy industry and Madalena.



Canada

On February 8, 2016, First Mountain Exploration Inc. ("First Mountain"), Point Loma Energy Ltd. ("Point Loma") and Madalena entered into a non-binding letter of intent pursuant to which, among other things, it is proposed that Point Loma will acquire Madalena's non-core Canadian oil and gas assets (the "Non-Core Canadian Assets") for a deemed aggregate purchase price of approximately \$4.0 million (CAD \$5.5 million).

It is anticipated that the Company will sign the asset purchase and sale agreement ("PSA") within the next two weeks. Proceeds will consist of 14,522,823 common shares of Point Loma, with a deemed value of \$1.8 million (CAD \$2.5 million), as well as a five-year \$2.2 million (CAD \$3 million) secured convertible debenture, bearing interest at 3% per annum, payable at the end of the debenture term. The effective date of this PSA is expected to be May 1, 2016, with closing expected on or about May 31, 2016, subject to certain terms and conditions, including the completion of a financing by the purchaser, as well as the successful acquisition (the "Acquisition") of Point Loma by First Mountain. The Acquisition will involve an exchange of publicly traded First Mountain common shares (TSX: FMX) for all of the outstanding common shares of Point Loma including those received by Madalena as proceeds of the PSA.

Going Concern and Capital Commitments

The consolidated financial statements have been prepared on the basis that the Company is a going concern and will continue to realize its assets and discharge its liabilities in the normal course of operations for the foreseeable future. Although the Company generated significant cash flows from operating activities in 2015, these cash flows were, in part, the result of a number of one-time positive events that will not be repeated in 2016 as outlined in the Argentina Oil Price Incentives section of this MD&A. As at December 31, 2015, the Company had working capital of approximately \$0.5 million and anticipates significant capital commitments in 2016 and 2017 to develop its properties. Further, in January 2016 the Argentina government reduced the benchmark oil price by 10% from \$75.00 to \$67.50 per barrel. Forecasted cash flows from operating activities will not be sufficient to meet the anticipated 2016 and 2017 capital commitments as outlined in the Commitments and Contingencies section of this MD&A.

The Company's business is capital intensive and additional capital is required on a periodic basis. As part of its business plan, the Company regularly evaluates sources of funding. In 2015, particular emphasis was placed on accessing debt financing. During the last eight months of 2015, the Company was involved in discussions regarding a potential source of debt financing. The Company was unsuccessful in securing this funding as the terms and conditions of the facility were ultimately unacceptable to the Company. The current world-wide economic environment relating to the oil and gas industry has made access to capital challenging for many companies, Madalena included. As a result, although the Company exited 2015 with a largely unleveraged balance sheet (positive working capital of \$0.5 million and a before tax, NPV10 proved plus probable reserves value of \$127.2 million, with \$2.0 of long-term bank debt and \$1.6 million of other long-term liabilities), the Company continues to face liquidity challenges.

The ability of the Company to continue as a going concern is dependent upon the Company's ability to access additional funding to meet its anticipated 2016 and 2017 capital commitments or opportunities to monetize its assets. Potential additional sources of capital include: (i) credit facilities on acceptable terms (ii) proceeds from sale of non-core assets; (iii) proceeds from equalization payments, if any, received from a possible partner at Curamhuele; and (iv) the issuance of equity on acceptable terms. There is no certainty that these and other strategies will be sufficient to permit the Company to continue as a going concern.

The need to raise capital to fund ongoing operations creates a material uncertainty that may cast significant doubt over the Company's ability to continue as a going concern. The consolidated financial statements do not reflect adjustments in the carrying values of the assets and liabilities, expenses and the consolidated statements of



financial position classifications that would be necessary if the going concern assumption were not appropriate. Such adjustments could be material.

Foreign Exchange Fluctuations

The table below provides various exchange rates that illustrate the quarterly foreign exchange fluctuations between the USD, CAD and the ARS. The table illustrates the strengthening of the USD against the CAD, which impacts the Company's Canadian operating results and the foreign currency translation adjustment as recorded in the consolidated statements of loss and comprehensive loss and in the accumulated other comprehensive loss. Further, the continuing devaluation of the ARS against the USD as well as the sharp devaluation that took place in December 2015 impacts foreign exchange gains and losses as recorded in finance (income) and expenses on the consolidated statements of loss and comprehensive loss.

USD	Three months ended			Year ended		
	December 31		%	December 31		%
	2015	2014	Change	2015	2014	Change
Average USD to CAD	1.335	1.136	17.5%	1.279	1.105	15.7%
Average USD to ARS	9.98	8.53	(17.0%)	9.19	8.10	(13.5%)
Period end USD to CAD				1.384	1.160	19.3%
Period end USD to ARS				12.95	8.55	(51.5%)

Argentina Oil Price Incentives

Petroleo Plus Settlement Bonds

On November 25, 2008, the government of Argentina introduced the Petroleo Plus program to reward producers who materially increase oil reserves and production through drilling and development by issuing export tax incentive credits. These credits were transferable and could be sold for cash to other domestic oil exporters. Madalena had not previously recognized the credits as revenue due to the uncertainty of the ability to sell the credits. On July 13, 2015, the government terminated the Petroleo Plus program effective December 31, 2014 and granted eligible companies the right to receive Argentina issued government bonds as full settlement of any outstanding export tax incentive credits, subject to certain conditions.

In September 2015, the Company received par value \$11.1 million Argentina issued government bonds for settlement of these accumulated credits. Two different bonds, which are traded on the Buenos Aires Stock Exchange, were received in equal amounts – the BONAD 2018 and the BONAR 2024. The BONAD 2018 is denominated in USD, bears interest at 2.4%, matures in 2018 and has no selling restrictions. The BONAR 2024 is also denominated in USD, bears interest at 8.75% and matures in 2024. Until December 31, 2016, a maximum of 2% per month of the total received BONAR 2024 may be sold, after which no selling restrictions apply. In the event more than 2% per month is sold prior to this date, a penalty payment equal to 10% of the then market value of the bonds received will be incurred.

As no receivable or revenue had previously been recorded in the Company's consolidated financial statements, the benefits from the settlement of the Petroleo Plus program incentive credits were first recognized in the September 30, 2015 condensed interim consolidated financial statements. Upon receipt, the fair value of the bonds was determined based on quoted market prices, net of anticipated penalties and costs to dispose.

For the year ended December 31, 2015, revenue of \$13.9 million related to the Petroleo Plus credits was recorded in the consolidated statements of loss and comprehensive loss under the caption other income.

As these bonds are available for sale financial instruments, they are re-valued to fair value each reporting period with gains/losses recorded through other comprehensive loss on the consolidated statements of loss and



comprehensive loss. These bonds are classified as level 1 in the fair value hierarchy. At December 31, 2015, \$7.1 million of these bonds had been disposed of and the fair value of the available for sale securities was \$5.4 million, resulting in a gain of \$0.1 million which was booked to other comprehensive loss for the year ended December 31, 2015. The Company recorded a \$1.4 million foreign exchange loss in 2015, included in finance income and expenses on the consolidated statements of loss and comprehensive loss.

Interest received on the bonds in 2015 of \$0.3 million has been recorded in finance income and expenses in the consolidated statements of loss and comprehensive loss. Interest is recorded as revenue upon receipt due to the uncertainty that the Company will be holding the bonds on the interest payment date.

Subsequent to December 31, 2015, the Company liquidated approximately 94% of the remaining bonds for proceeds of \$5.3 million.

USD 3.00 per Barrel Oil Incentive

On February 2, 2015, the Government of Argentina announced a new oil incentive program, effective January 1, 2015. This new program was effective for all of 2015 but was not extended beyond 2015. To stimulate production, the Government of Argentina established a \$3.00 per barrel royalty free bonus payment to be paid on all oil production for each company that increases its oil production or maintains it at greater than 95% of Q4-2014 volumes. This \$3.00 per barrel incentive was incremental to the regulated oil price per barrel received in Argentina's domestic oil market.

The Company has recorded \$0.7 million and \$2.9 million in oil and natural gas revenues for the three months ended and for the year ended December 31, 2015 (the "Quarter" and "YTD" or the "Year"), respectively, pursuant to this incentive program and is recorded as part of oil and natural gas revenues on the statements of loss and comprehensive loss. The oil incentive of \$0.7 million is recorded in accounts receivable at December 31, 2015 and is expected to be received in bonds issued by the government of Argentina during the second quarter of 2016.

Sales Volumes

	Three months ended December 31		Year ended December 31	
	2015	2014	2015	2014
Argentina				
Crude oil (bbls/d)	2,549	2,653	2,749	1,634
Natural gas (mcf/d)	3,363	4,541	3,887	2,470
Total daily sales (boe/d)	3,110	3,410	3,397	2,045
% oil	82%	78%	81%	80%
Canada				
Crude oil and NGLs (bbls/d)	122	338	130	402
Natural gas (mcf/d)	251	1,964	300	2,614
Total daily sales (boe/d)	164	665	180	837
% oil	74%	51%	72%	48%
Corporate				
Total daily sales (boe/d)	3,274	4,075	3,577	2,883

Argentina

Madalena's primary producing concessions are at El Surubi, Rinconada-Puesto Morales and Coiron Amargo. Other producing concessions include El Chivil, El Vinalar and Palmar Largo. All concessions produce oil and Rinconada-Puesto Morales and Coiron Amargo also produce natural gas. Approximately 86% of Madalena's current production comes from El Surubi, Rinconada-Puesto Morales and Coiron Amargo.



Crude oil sales volumes for the Quarter decreased to 2,549 bbls/d from 2,653 bbls/d in the three months ended December 31, 2014 (“Q4-2014”). Production additions from drilling at Rinconada-Puesto Morales (one 100% WI well) and Coiron Amargo (two 35% WI wells) were offset by natural production declines. Natural gas sales volumes for the Quarter decreased to 3,363 mcf/d from 4,541 mcf/d in Q4-2014, primarily due to lower natural gas sales at Rinconada-Puesto Morales resulting from natural production declines.

Sales volumes for the Year increased to 3,397 bbls/d from 2,045 bbls/d in the year ended December 31, 2014 (the “Year-2014” or “YTD-2014”), primarily as a result of the Acquisition from June 25, 2014 and partially offset by natural production declines.

Madalena expects the three months ended March 31, 2016 (“Q1-2016”) sales volumes to average approximately 3,000 boe/d.

Canada

Sales volumes during the Quarter decreased 75% to 164 boe/d from 665 boe/d in Q4 – 2014. Decreased production was due to the shut-down of the Keyera Paddle River gas plant, which began on February 1, 2015.

Sales volumes for the Year decreased 78% to 180 boe/d from 837 boe/d in the Year-2014, due to the shut-down of the Keyera Paddle River gas plant as described above.

Madalena expects Q1-2016 sales volumes to average approximately 150 boe/d. As described in the Outlook section, the Company anticipates the sale of the Canadian assets during the second quarter of 2016.

Average Realized Prices

USD	Three months ended December 31		Year ended December 31	
	2015	2014	2015	2014
Argentina				
Crude oil and NGLs – \$/bbl	70.65	80.52	74.60	79.72
Natural gas – \$/mcf	4.31	4.30	4.84	4.87
Total – \$/boe	62.58	68.37	65.91	69.56
Canada				
Crude oil and NGLs – \$/bbl	31.92	49.49	35.44	67.89
Natural gas – \$/mcf	1.85	3.20	2.17	4.31
Total - \$/boe	26.61	34.58	29.21	46.02
Corporate				
Crude oil and NGLs – \$/bbl	68.88	77.01	72.83	77.38
Natural gas – \$/mcf	4.14	3.97	4.64	4.58
Total - \$/boe	60.77	62.85	64.06	62.72

Argentina

The Government of Argentina sets the benchmark (Medanito) price for oil. The Medanito crude quality oil posting averaged \$75.00/bbl for the Quarter (Q4-2014 - \$83.60) and \$75.92/bbl for the Year (Year-2014 - \$80.35). The Company’s average discount to this posting is approximately \$4.00/bbl for quality and transportation differentials.

The average price the Company received for oil for the Quarter was \$70.65/bbl, lower than the \$80.52/bbl realized in Q4-2014 mainly as a result of the combination of the lower Medanito pricing partially offset by the \$3.00 oil incentive program. The price received for the YTD was \$74.60/bbl, lower than the \$79.72/bbl realized YTD-2014 also mainly as a result of lower Medanito pricing partially offset by the \$3.00 incentive payment.

Gas prices in Argentina are subject to seasonal demand and are negotiated between the producer and the



buyer. Summer prices have been set at \$4.20/mmbtu for the period October 2015 to April 2016. For the period May to September 2016, which is the Argentine winter, the price has yet to be published. Winter prices in 2015 were \$5.30/mmbtu.

The average total price received for the Quarter was \$62.58/boe, lower than the \$68.37/boe realized in Q4-2014 mainly as a result of the combination of the lower Medanito pricing which was partially offset by the oil price incentive program. The total price received for the YTD was \$65.91/boe, lower than the \$69.56/boe realized YTD-2014 mainly as a result of lower Medanito pricing and partially offset by the incentive payments.

In early 2016, the government regulator in Argentina advised that 2016 oil pricing is expected to be set at approximately \$67.50 per barrel for Medanito crude quality oil; however, there can be no certainty that the oil price will not be adjusted within the year. Medanito oil prices averaged \$67.50 during the first quarter of 2016.

The Company anticipates realized Argentina prices to average \$56.00 per boe during Q1 – 2016.

Canada

For the Quarter, realized commodity prices for oil and gas declined by 36% and 42%, respectively. The percentage of oil sales increased to 74% from 51% and the decrease in realized price per boe was 23%.

For the Year, realized commodity prices for oil and gas declined by 48% and 50%, respectively. The percentage of oil sales increased to 72% from 48% and the decrease in realized price per boe was 37%.

The Company anticipates realized Canadian prices to average approximately \$25 per boe during Q1 – 2016.

Oil and Natural Gas Revenue

USD 000s, except per boe	Three months ended December 31		Year ended December 31	
	2015	2014	2015	2014
Argentina				
Crude oil	16,568	19,535	74,864	47,420
Natural gas	1,334	1,795	6,862	4,390
	17,902	21,330	81,726	51,810
Canada				
Crude oil and NGLs	359	1,538	1,685	9,953
Natural gas	43	578	237	4,110
	402	2,116	1,922	14,063
Corporate Total				
Corporate - \$/boe	60.77	62.54	64.06	62.61

Argentina

Oil and gas revenues were \$17.9 million for the Quarter compared to \$21.3 million for Q4 – 2014 due to lower sales volumes of 9% and an 8% decrease in prices per boe. The 9% decrease in sales volumes was a result of natural production declines.

For the Year, oil and gas revenues were \$81.7 million compared to \$51.8 million for the Year-2014 due to a full year of sales from the Acquisition assets, as well as the \$3/boe oil incentive as previously described under the heading “Argentina Oil Price Incentives”.

Canada

Oil and gas revenue decreased 81% to \$0.4 million in the Quarter compared to \$2.1 million in Q4–2014 due to a



75% decline in boe sales volumes resulting from the shut-down of the Keyera Paddle River gas plant and a 23% decrease in per boe prices.

Oil and gas sales decreased 86% to \$1.9 million for the Year compared to \$14.1 million for the Year-2014, due to a 78% decline in boe sales volumes resulting from the shut-down of the Keyera Paddle River gas plant and a 37% decrease in per boe prices.

Royalties

USD 000s, except per boe	Three months ended December 31		Year ended December 31	
	2015	2014	2015	2014
Argentina				
Royalties	2,767	3,178	13,217	7,575
As % of revenue from Argentina	15%	15%	16%	15%
\$/boe	9.67	10.13	10.66	10.15
Canada				
Royalties	119	255	434	1,661
As % of revenue from Canada	30%	12%	23%	12%
\$/boe	7.85	4.18	6.59	5.43
Corporate total	2,886	3,433	13,651	9,236
Corporate - \$/boe	9.58	9.16	10.45	8.78

Argentina

Royalty expenses, which also include turnover taxes varying between 1.5 and 3%, were \$2.8 million for the Quarter and \$13.2 million YTD compared to \$3.2 million in Q4-2014 and \$7.6 million YTD-2014, respectively. Royalties for the Quarter were \$0.4 million lower than Q4-2014 due to lower volumes. Royalties as a % of revenue in the Quarter were consistent with the comparable period in 2014 at 15%. Higher YTD volumes as a result of the Acquisition and the settlement of a pre-acquisition dispute over royalties relating to the years 2007 – 2011 of \$1.3 million, resulted in a significant increase in royalties YTD as compared to YTD-2014, and increased royalties as a % of revenue to 16% compared to 15% in YTD-2014.

The Company expects royalty rates in 2016 to approximate 15%.

Canada

Royalty expenses were \$0.1 million for the Quarter compared to \$0.3 million in Q4 – 2014 and \$0.4 million YTD compared to \$1.7 million YTD-2014 due to the decline in oil and gas volumes. The increase in royalties for both the Quarter and YTD as a % of revenue was a result of the expiry of the 5% reduced crown royalty incentive rate on one of the Company's Paddle River Ostracod horizontal oil wells.

The Company expects royalty rates in 2016 to be consistent with 2015.



Operating Costs

USD 000s, except per boe	Three months ended December 31		Year ended December 31	
	2015	2014	2015	2014
Argentina				
Compensation costs	1,172	1,195	5,000	2,460
Transportation and processing	3,196	2,686	10,865	6,137
Maintenance, work overs and other	4,167	5,261	17,429	11,487
	8,535	9,142	33,294	20,084
\$/boe	29.83	29.14	26.85	26.90
Canada				
Transportation and processing	155	826	1,037	3,427
Maintenance, work overs and other	381	1,220	1,675	3,319
	536	2,046	2,712	6,746
\$/boe	35.48	33.44	41.21	22.08
Corporate total	9,071	11,188	36,006	26,830
Corporate - \$/boe	30.12	29.84	27.54	25.50

Argentina

Operating costs during the Quarter decreased to \$8.5 million from \$9.1 million in Q4 – 2014 as a result of lower sales volumes. On a per boe basis, operating costs for the Quarter increased 2% to \$29.83 per boe from \$29.14 per boe in Q4 – 2014.

Operating costs during the Year increased to \$33.3 million from \$20.1 million in Year – 2014 as a result of the Acquisition. On a per boe basis, operating costs for the Year stayed consistent with Year – 2014.

Management expects operating costs to average approximately \$22.00 – \$24.00 per boe in Q1 – 2016, primarily as a result of the ARS devaluation in December 2015 and certain initiatives undertaken to reduce costs. Per boe costs are expected to increase during the balance of 2016 as a result of continued inflationary pressures, which will be partially offset by ongoing initiatives to reduce operating costs.

Canada

Operating costs during the Quarter decreased to \$0.5 million from \$2.0 million in Q4 – 2014 as a result of lower sales volumes offset by higher per unit costs. On a per boe basis, operating costs for the Quarter increased to \$35.48 per boe from \$33.44 per boe in Q4 – 2014.

Operating costs during the Year decreased to \$2.7 million from \$6.7 million in Year – 2014 as a result of lower sales volumes offset by higher per unit costs. On a per boe basis, operating costs for the Year increased 87% to \$41.21 per boe from \$22.08 per boe in Year – 2014, primarily as result of fixed costs being allocated over a reduced production base.

Management expects operating costs to average \$35.00 per boe in Q1 - 2016.



Netbacks ⁽¹⁾

USD/ boe	Three months ended December 31		Year ended December 31	
	2015	2014	2015	2014
Argentina				
Oil and gas revenue	62.58	68.37	65.91	69.56
Royalties	(9.67)	(10.13)	(10.66)	(10.15)
Operating expenses	(29.83)	(29.14)	(26.85)	(26.90)
Netbacks	23.08	29.10	28.40	32.51
Canada ⁽²⁾				
Oil and gas revenue	26.61	34.58	29.21	46.02
Royalties	(7.85)	(4.18)	(6.59)	(5.43)
Operating expenses	(35.48)	(33.44)	(41.21)	(22.08)
Netbacks	(16.72)	(3.04)	(18.59)	18.51
Corporate total				
Oil and gas revenue	60.77	62.54	64.06	62.61
Royalties	(9.58)	(9.16)	(10.45)	(8.78)
Operating expenses	(30.12)	(29.84)	(27.54)	(25.50)
Netbacks	21.07	23.54	26.07	28.33

(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.

(2) The majority of the Canadian production has been shut-in since February 1, 2015.



General and Administration (“G&A”) Expenses

USD 000s	Three months ended December 31		Year ended December 31	
	2015	2014	2015	2014
Argentina				
Gross G&A				
Compensation costs	1,050	1,303	4,891	2,896
Other	672	544	2,648	1,750
	1,722	1,847	7,539	4,646
Capitalized	(255)	(451)	(1,234)	(563)
	1,467	1,396	6,305	4,083
Canada				
Gross G&A				
Compensation costs	142	596	1,728	2,661
Other	989	933	3,297	2,776
	1,131	1,529	5,025	5,437
Capitalized	(190)	-	(713)	-
	941	1,529	4,312	5,437
Consolidated				
Net G&A total	2,408	2,925	10,617	9,520

Argentina

Gross G&A expenses for the Quarter and YTD were \$1.7 million and \$7.5 million compared to \$1.8 million and \$4.6 million in Q4–2014 and YTD-2014, respectively. The 7% decrease for the Quarter from Q4-2014 was primarily a result of the ARS devaluation in December lowering salaries and benefits. The increase for the YTD was mainly due to the Acquisition made in June 2014, offset slightly by the ARS devaluation in December. To prudently manage the business in the current energy market environment, the Company implemented a hiring freeze in Argentina in December 2014. In addition, attrition has been addressed by consolidating roles and responsibilities without adding personnel wherever possible.

During the Quarter and YTD, \$0.3 million (Q4-2014 – \$0.5 million) and \$1.2 million (YTD-2014 – \$0.5 million) of directly attributable G&A costs were capitalized to property, plant and equipment.

G&A expenses for Q1-2016 for Argentina, net of amounts capitalized, are estimated at approximately \$0.9 million.

Canada

Gross G&A expenses for the Quarter and YTD were \$1.1 million and \$5.0 million compared to \$1.5 million and \$5.4 million in Q4–2014 and YTD-2014, respectively.

The majority of the Canadian general and administrative expenses relates to managing a public company involved in a foreign jurisdiction. All employees in Canada, with the exception of one full-time employee and one part-time consultant, are dedicated full time to managing the Company’s corporate business and Argentine business unit.

The increased Argentine operations that commenced with the Acquisition in June 2014 resulted in increased Canadian costs for the last six months of 2014 and the 2015 Year as a result of additional employees required in financial reporting, additional technical services, added professional fees and increased office expenses.



The Company has reduced its Canadian staff since the end of 2014 as a result of lower Canadian operations activity as the focus of the Company has shifted to Argentina where a higher commodity price market exists and the majority of the Company's assets are located.

During the Quarter and YTD, \$0.2 million and \$0.7 million, respectively, of directly attributable G&A costs were capitalized to property, plant and equipment in Argentina (Q4-2014 and YTD-2014 – nil).

G&A expenses for Q1-2016 for Canada, net of amounts capitalized, are estimated at approximately \$0.9 million.

Finance Income and Expenses

USD 000s	Three months ended December 31		Year ended December 31	
	2015	2014	2015	2014
Argentina				
Bank charges and fees	440	358	2,084	1,506
Foreign exchange (gain) loss - unrealized	(185)	426	14	564
Accretion	66	79	265	160
Interest and other (income)/expenses	(514)	(90)	276	(198)
	(193)	773	2,639	2,032
Canada				
Foreign exchange gain - realized	-	-	-	(2,010)
Foreign exchange gain - unrealized	(628)	-	(3,936)	-
Accretion	20	26	82	106
Interest and other expenses	3	-	46	-
	(605)	26	(3,808)	(1,904)
Consolidated	(798)	799	(1,169)	128

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 and Q4-2014 were both \$0.4 million and increased from \$1.5 million YTD-2014 to \$2.1 million YTD as a result of increased transaction activity associated with the companies acquired in the Acquisition.

Bank charges for Q1–2016 are estimated at approximately \$0.3 million.

Foreign exchange (gain) loss – unrealized

During the Quarter, as a result of transaction activity, the Company recorded a foreign exchange gain of \$0.2 million compared to a loss of \$0.4 million for Q4 – 2014. YTD, the foreign exchange loss was \$14,000 compared to a loss of \$0.6 million YTD-2014.

The increase in unrealized gain/decrease in unrealized losses is due to ARS to USD fluctuations in the net assets of the subsidiaries.

Accretion

Accretion expense was \$0.1 million for the Quarter (Q4-2014 – \$0.1 million) and \$0.3 million for the YTD (YTD-2014 – \$0.2 million).



Interest and other expense

Interest and other expense relates to interest on the Argentine ICBC loan (see heading “Credit Facilities”) and an interest gain on the settlement of a contingency.

Had the Buenos Aires Deposits of Large Amount Rate (“BADLAR”) interest rate associated with the Argentine ICBC loan increased by 5%, associated interest expense would have increased by \$0.5 million for the year ended December 31, 2015. A decrease of 5% on BADLAR would result in a decrease in associated interest expense of \$0.1 million for the year ended December 31, 2015. The change amounts vary due to the fact that certain amounts in the interest rate formula are fixed. A similar calculation was not completed for the Canadian operating facility, as it was paid in full and closed in October 2015.

Canada

Foreign exchange (gain) loss

During the Quarter and YTD-2015, the Company recorded an unrealized foreign exchange gain of \$0.6 million and \$3.9 million respectively, as a result of the impact of translation associated with the intercompany loans due from the Argentine subsidiaries and held in Canada that are not treated as part of the net investment in these subsidiaries.

In 2015, there were no realized foreign exchange gains or losses compared to a \$2.0 million realized gain recorded YTD-2014. The realized gain for YTD-2014 was the result of beneficial exchange rates between ARS and the CAD that existed in the market at the time of Canada funding the Argentina exploration and development program, where the functional currency of the subsidiary involved was ARS.

As a result of the December 31, 2015 change in presentation currency from CAD to USD, exchange fluctuations between the USD and CAD will only impact other comprehensive loss for Canadian operations subsequent to that date. Foreign exchange gains and losses that impact finance income and expenses will be triggered in future by ARS to USD fluctuations, as well as foreign exchange on intercompany loans that are not treated as net investment in the subsidiary.

Accretion

Accretion expense was \$20,000 for the Quarter (Q4-2014 – \$26,000) and \$82,000 for the YTD (YTD-2014 – \$106,000).

Business Combination Expenses

Business combination expenses relating to the Acquisition were \$1.7 million for the YTD-2014, consisting primarily of legal and financial advisory fees. There were no business combination expenses in 2015.

Share-based Compensation

Under the Company’s stock option plan, directors, officers, employees and certain consultants are eligible to receive options to acquire common stock of the Company. During the Quarter and YTD, nil and 16.0 million options were granted to directors, officers and employees (Q4-2014 and YTD-2014 – 0.8 and 7.0 million, respectively). Share based compensation was \$0.4 million in the Quarter and \$1.3 million YTD, of which \$0.1 million in the Quarter and \$0.2 million YTD, was capitalized. Share based compensation was \$0.4 million for Q4-2014 and \$1.5 million YTD-2014. There was no share based compensation capitalized in 2014.



Depletion and Depreciation (“D&D”)

USD 000s, except per boe	Three months ended December 31		Year ended December 31	
	2015	2014	2015	2014
Argentina	6,330	6,235	25,578	14,948
\$/boe	22.13	19.88	20.63	20.02
Canada	163	1,363	740	4,601
\$/boe	10.76	22.27	11.24	15.06
Consolidated	6,493	7,598	26,318	19,549
\$/boe	21.56	20.27	20.15	18.58

Argentina

D&D increased to \$6.3 million in the Quarter compared to \$6.2 million in Q4-2014 as a result of higher depletion rates, which were partially offset by lower production. The increase on a per boe basis for the Quarter to \$22.13 per boe from \$19.88 per boe in Q4 – 2014 was primarily a result of increased future development costs.

D&D increased from \$14.9 million in YTD-2014 to \$25.6 million for YTD as a result of the Acquisition. On a per boe basis, D&D for the YTD increased slightly to \$20.63 per boe from \$20.02 per boe in YTD–2014.

Canada

D&D expenses for the Quarter and YTD decreased to \$0.2 million and \$0.7 million from \$1.4 million and \$4.6 million, respectively, due to a combination of lower production and lower depletion rates per boe as a result of the impairment charges.

On a per boe basis, unit costs for D&D for the Quarter and the Year decreased from \$22.27 and \$15.06 to \$10.76 and \$11.24 respectively, due to the impairment charges recorded during 2015.

Impairment

Property, Plant and Equipment

Argentina

At December 31, 2015, Madalena determined that indicators of impairment existed in each of its Argentine CGUs. These indicators of impairment were a result of a decline in oil prices resulting in lower netbacks in certain CGUs in addition to the increase in discount rate to be applied in the CGU impairment calculations due to the increased country risk identified as at December 31, 2015. As a result, an impairment test was performed for each CGU. As at December 31, 2015, one of the three Argentine CGUs was determined to be impaired as the estimated recoverable amount was lower than the carrying amount. The recoverable amount, calculated as \$32.0 million, resulted in a pre-tax impairment charge of \$8.4 million for the Quarter and the Year. There were no indicators of impairment in any of the Argentine CGUs in 2014 and accordingly, no impairment was recorded.

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 proved plus probable reserves from the externally prepared December 31, 2015 reserve report using a pre-tax discount rate ranging from 22% to 28% depending on the category of reserves, and the following forward commodity price estimates:



	Oil Price	Natural Gas Price
Year	(USD/bbl)	(USD/mcf)
2016	65.23	4.95
2017	65.55	4.95
2018	65.63	5.05
2019	65.63	5.15
2020	65.54	5.26
2021	67.29	5.36
2022	72.04	5.47
2023	76.76	5.58
2024	79.99	5.69
2025	81.86	5.80
2026	82.14	5.91
2027	88.48	6.03

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 year ended December 31, 2015.

In early January 2016, there was a 10% oil price decrease in Argentina, which has been reflected in the pricing estimates above. An additional 1% decrease in the price deck would have resulted in a further impairment charge of \$1.0 for the year ended December 31, 2015.

Canada

In assessing its Canadian CGU for impairment at December 31, 2015, the Company concluded that triggers for impairment existed due to the continued significant reduction in both short and long-term forward Canadian petroleum and natural gas prices. The Company's testing of its Canadian CGU recoverable value, established as fair value less costs to sell, relative to its carrying value, amounted to \$1.8 million, and revealed a pre-tax impairment charge of \$3.3 million (2014- \$22.9 million), of which \$2.0 million had been recorded as at September 30, 2015. The recoverable amount was determined based on the amount that would be obtained for the sale of the CGU in an arm's length transaction between knowledgeable and willing parties.

At December 31, 2014, the Company observed indicators of impairment due to the decline in current and forward commodity prices for oil and natural gas. The Company's testing of its Canadian CGU recoverable value, determined to be value in use, relative to its carrying value, amounting to \$33.8 million, revealed a pre-tax impairment charge of \$22.9 million. The impairment test was based on proved plus probable reserves, using a pre-tax discount rate of 15% and forward commodity price estimates escalating from CAD \$60.98/bbl to \$109.49/bbl from 2015 to 2029.

Exploration and Evaluation Assets

E&E assets consist of the Company's intangible exploration projects in Argentina and Canada with pending determination of proven or probable reserves. Additions represent the Company's share of costs incurred on E&E assets during the period. E&E assets are not depreciated or depleted.



Argentina

No triggers for impairment were identified and as a result no impairment of E&E was booked on the Argentine operations in 2015 or 2014.

Canada

The Company's testing of its Canadian E&E assets' recoverable value, established as fair value less costs to sell, relative to its carrying value, amounted to \$2.2 million, and revealed a pre-tax impairment charge of \$2.1 million (2014 - \$4.7 million), of which \$2.0 million had been recorded by September 30, 2015. The impairment was due to continued depressed commodity prices and continued decrease in crown land prices in its undeveloped land holdings in relation to current prices in the area.

Income Tax Expense (Recovery)

USD 000s	Three months ended December 31		Year ended December 31	
	2015	2014	2015	2014
Argentina				
Current	(438)	1,671	5,359	2,776
Deferred	2,365	(957)	5,593	(709)
Canada				
Deferred	-	(18)	-	(352)
Consolidated				
Current	(438)	1,671	5,359	2,776
Deferred	2,365	(975)	5,593	(1,061)

Argentina

The income tax rate in Argentina is 35%. In the event a company is not taxable, the company will be subject to minimum tax of approximately 1% of net assets. Madalena has four legal entities in Argentina, two of which had taxable income in the current year and two incurred minimum tax.

Current income tax recovery for the Quarter (including minimum tax) was \$0.4 million compared to an expense of \$1.7 million for Q4-2014. Current income tax expense for the YTD (including minimum tax) was \$5.4 million compared to \$2.8 million for YTD-2014. Current income tax expense associated with other income was approximately \$3.4 million and together with a full year of activity from the Acquisition, offset by non-capital loss carry-forwards and minimum notional income taxes utilized which reduced current tax by \$1.9 million, accounts for the significant increase in current tax for the year.

The Company booked a deferred income tax expense of \$2.4 million during the Quarter (Q4-2014 – recovery of \$1.0 million) and \$5.6 million YTD (YTD-2014 - \$1.0 million recovery). The increase primarily resulted from the weakening of the ARS relative to the USD, which resulted in an increase in taxable temporary differences associated with the Company's Argentine property, plant and equipment and oil and gas interests.

Current income taxes for Q1 – 2016 are estimated at approximately \$0.8 million.

Canada

As at December 31, 2015, the Company has cumulative income tax deductions of approximately \$66 million (2014 - \$82 million). Accordingly, the Company does not anticipate the Canadian operations being taxable in the foreseeable future.



Reconciliation of Cash Flow from Operating Activities and Funds Flow from 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 operations may differ from that of other companies, and accordingly, may not be comparable to measures used by other companies. Funds flow from operations is calculated as cash flow from operating activities before decommissioning obligations settled, changes in non-cash working capital, and changes in non-current assets.

USD 000s	Three months ended December 31		Year ended December 31	
	2015	2014	2015	2014
Cash flow from operating activities	12,370	4,173	21,837	20,478
Change in non-cash working capital	(8,492)	535	5,468	(4,590)
Change in other non-current assets	(189)	(942)	492	384
Decommissioning obligations settled	4	152	4	203
Funds flow from operations	3,693	3,918	27,801	16,475

Funds flow from Operations, Net Loss and Comprehensive Loss

USD 000s (except per share amounts)	Three months ended December 31		Year ended December 31	
	2015	2014	2015	2014
Funds flow from operations	3,693	3,918	27,801	16,475
Per share - basic & diluted	0.01	0.01	0.05	0.04
Net loss	(13,761)	(28,273)	(13,705)	(31,832)
Per share – basic & diluted	(0.03)	(0.05)	(0.03)	(0.07)
Comprehensive loss	(14,389)	(28,899)	(18,718)	(42,281)

Madalena's funds flow from operations for the Quarter decreased slightly to \$3.7 million from \$3.9 million in Q4-2014. Included in funds flow from operations for the Quarter was a one-time pre-tax amount of \$0.7 million from the \$3.00 per barrel oil price incentive, which was offset by lower sales volumes and commodity prices.

Madalena's funds flow from operations for the YTD increased to \$27.8 million from \$16.5 million in Year-2014. The increase in funds flow from operations for the Year was primarily a result of one-time pre-tax amounts totaling \$16.8 million from the settlement of past Petroleo Plus program incentive credits, the \$3.00 per barrel oil price incentive, the results of the Acquisition for a full year, offset by lower sales volumes and oil prices in the last six months of 2015 as compared to the comparable period in 2014 in both Argentina and Canada.

The net loss for the Quarter was \$13.8 million (Q4-2014 –\$28.3 million), with the change due predominately to increased revenue, offset by increased expenses and increased taxes. The loss for the YTD was \$13.7 million (Year-2014 –\$31.8 million). The change was due to increased revenue, reduced expenses partially offset by increased income taxes.

For the Quarter and the Year, the net loss was heavily influenced by the Argentina pre-tax impairment charges of \$8.4 million for the Quarter and the Year. The net loss for 2014 for both Q4-2014 and YTD-2014 were predominately a result of Canadian pre-tax impairment charges of \$24.7 million and \$27.6 million, respectively.

On December 31, 2015, the presentation currency was changed from CAD to USD due to the continued reduction in Canadian based operations, together with the continued erosion in CAD relative to the USD. See discussion below under Accounting Changes for details.



A summary of foreign exchange impact of translating the entities with functional currencies other than USD (Parent) to presentation currency of USD follows:

USD 000s	Three months ended December 31		Year ended December 31	
	2015	2014	2015	2014
Foreign currency translation adjustment	(836)	(626)	(5,081)	(10,449)

At December 31, 2015, the USD exchange rate relative to CAD increased by 3.7% compared with September 30, 2015, causing a \$0.8 million exchange loss for the Quarter on the translation of the parent company from its functional currency of CAD to the presentation currency of USD. The December 31, 2015 USD period end exchange rate to the CAD, as compared to the December 31, 2014 period end exchange rate, increased by 19.3%, causing a \$1.2 million YTD exchange loss for the YTD on the translation of the parent company from its functional currency of CAD to the presentation currency of USD. The balance of the \$5.1 million YTD loss is due to the unrealized foreign exchange on the intercompany loans from Canada to Argentina which are not considered part of the net investment in the subsidiary, and amount to \$3.9 million.

Capital Expenditures

USD 000s	Three Months ended December 31		Year ended December 31	
	2015	2014	2015	2014
Argentina				
Land and associated renewal fees	589	-	9,770	14
Geological and geophysical	352	192	1,651	1,900
Drilling and completions	10,275	4,451	24,010	12,645
Well equipment and facilities	1,276	1,422	2,989	2,607
Other	187	(14)	2,479	607
Argentina Total	12,679	6,051	40,899	17,773
Canada				
Land and associated renewal fees	-	97	-	165
Geological and geophysical	-	9	-	14
Drilling and completions	5	4,699	392	14,038
Well equipment and facilities	23	150	82	2,590
Other	-	536	44	1,525
Canada total	28	5,491	518	18,332
Consolidated	12,707	11,542	41,417	36,105

Argentina

Capital expenditures for the Quarter were primarily related to drilling and completions at Coiron Amargo and Curamhuele and concession extension fees at Curamhuele.

During the Year, the Company drilled 5 wells (3.05 net) – three horizontal wells at Coiron Amargo (CAN-16(h), CAN-19(h) and CAN-20(h)), a horizontal multi-frac well at Rinconada-Puesto Morales (PMS-1135), and a re-entry at Curamhuele (Yapai.x- 1001). The CAN-16(h) was placed on production March 15, 2015 while the PMS-1135 started producing oil on April 2, 2015 with solution gas conservation commencing on April 9, 2015. The CAN-19(h) went on-stream in early October 2015. The CAN-20(h) well spud in September 2015 and started producing on November 9, 2015. At Coiron Amargo, the CAN-6(h) well was spud in December 2015 and completed in Q1- 2016. In addition,



the Rinconada-Puesto Morales concession was renewed, seismic activities were conducted at Coiron Amargo, Curamhuele and Rinconada-Puesto Morales and facility and production optimizations were completed at El Surubi.

Canada

There was virtually no activity in Canada during the Quarter or YTD as a result of the Company’s focus being redirected to Argentina in response to reduced commodity prices realized in Canada. In 2014, activity for Q4-2014 and YTD-2014 was primarily directed to oil projects.

Business Combination

The Company did not complete any business combinations in 2015.

On June 25, 2014, the Company acquired all of the outstanding shares of the Argentine business unit of Gran Tierra Energy Inc. for cash consideration of \$55.4 million (including cash of \$10.4 million) and 29,831,537 common shares at a fair value of CAD \$0.51 per common share (the “Acquisition”). The Acquisition significantly increased Madalena’s Argentine reserves, production and undeveloped land position and added a fully functional independent business unit in Argentina, with an experienced technical and operational team. Corporate sales volume for the year ended December 31, 2015 was approximately 3,577 boe/d, of which approximately 95% was from Argentina.

Prior to the Acquisition, the Company’s existing Argentine operations included production of approximately 400 boe/d and three concessions / blocks focused on strategic unconventional shale positions within the Neuquén basin. At December 31, 2015, Madalena has 11 concessions and a portfolio of attractive resource plays and strategic unconventional assets in the Lower Agrio and Vaca Muerta shales.

Transactions with Related Parties

A director of the Company is a partner of a law firm that provides legal services to the Company. During the Quarter and the Year, the Company incurred fees of \$40,000 (Q4-2014 - \$59,000) and \$295,000 (2014 - \$551,000), respectively from this firm for legal fees related to legal matters of which \$40,000 (2014 – \$58,000) is included in trade and other payables at December 31, 2015. The costs were expensed in G&A in the consolidated statements of loss and comprehensive loss.

A director of one of the Company’s subsidiaries provides legal services to the Company. During the Quarter and Year, the Company incurred fees of nil (2014 - \$31,000) and nil (2014 - \$36,000), respectively for legal fees related to legal matters, of which nil (2014 - \$30,000) was included in trade and other payables at December 31, 2015. The costs were expensed in G&A in the consolidated statements of loss and comprehensive loss.

The transactions arose during the normal course of business and have been recorded at the exchange amounts, which are the amounts agreed upon by the related parties. The terms and conditions of these transactions were no more favourable than those available, or which might reasonably be expected to be available in similar transactions with arm’s length third parties.

FINANCIAL POSITION, LIQUIDITY AND CAPITAL RESOURCES

Liquidity, working capital and shareholders’ equity

USD 000s	December 31 2015	December 31 2014
Working capital – Total	462	10,151
Working capital – Argentina	(415)	12,342
Working capital – Canada	877	(2,191)
Long-term bank debt	1,972	-
Shareholders’ equity	100,093	117,016



The Company is exposed to various risks that arise from its business environment and the financial instruments it holds. The Board of Directors has overall responsibility for the establishment and oversight of the Company's risk management framework, policies and procedures. The following outlines the Company's risk exposures and explains how these risks and its capital structure are managed.

Credit Facilities

Argentina

On May 28, 2015, Madalena Energy Argentina S.R.L (Argentina) ("MEA"), obtained an ARS 90 million credit facility with Industrial and Commercial Bank of China (Argentina) S.A. ("ICBC"). The ARS 90 million converted to USD \$10 million using the ARS to USD exchange rate on May 28, 2015. These funds were utilized on an as needed basis to provide Madalena's Argentine business unit the necessary liquidity to execute its 2015 capital budget. The loan bears interest at the variable rate of BADLAR plus 8%, resulting in a current borrowing rate of approximately 37%. The loan is repayable in seven equal quarterly instalments of ARS 12.9 million, which began on November 30, 2015, and at which time was equivalent to \$1.3 million using the exchange rate on that date. It is equivalent to \$1.0 million using the December 31, 2015 exchange rate.

The working capital balance noted above includes \$3.9 million in current bank debt associated with this facility with the remaining balance of \$2.0 million included in long-term debt.

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 is calculated on a four quarter rolling basis. At December 31, 2015, MEA was in compliance with this covenant, and is expected to be for the coming year.

Canada

As of September 30, 2015, Madalena had a credit facility in place against its Canadian based assets that included the availability of a CAD \$3.5 million operating demand loan and a CAD \$3.0 million acquisition/development demand loan, of which CAD \$2.9 million was drawn on the operating demand loan while the acquisition/development demand loan was unutilized. During the fourth quarter of 2015, the operating demand loan in the amount of CAD \$2.9 million was fully settled and the credit facility was closed. This facility was treated as a cash equivalent during the year.

Capital management

The Company's policy is to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business. The Company manages its capital structure and makes adjustments to it in the light of changes in economic conditions and the risk characteristics of the underlying oil and natural gas assets. The Company considers its capital structure to include shareholders' equity, existing credit facilities and working capital. In order to maintain or adjust the capital structure, the Company may obtain new credit facilities, adjust its capital spending to manage current and projected debt levels, farm-out existing opportunities or issue shares.

In order to facilitate the management of its capital structure, the Company prepares annual capital expenditure budgets, which are updated throughout the year depending on varying factors including current and forecast prices, actual capital deployment and general industry conditions, if necessary. The Company's capital management is currently focused on completion of existing exploration commitments and providing for the Company's share of any development programs.

The Company has not paid or declared any dividends since the date of incorporation, nor are any contemplated in the next twelve months.



Liquidity risk

The Company evaluates its ability to meet its future obligations on a regular basis. Budgets are reviewed monthly and updated as necessary depending on varying factors including current and forecast prices, actual capital deployment and general industry conditions. The Company's business is capital intensive and additional capital is required on a periodic basis. As part of its business plan, the Company regularly evaluates sources of funding. In 2015, particular emphasis was placed on accessing debt financing. During the last eight months of 2015, the Company was involved in discussions regarding a potential source of debt financing. These efforts were unsuccessful in securing this funding on terms acceptable to the Company. The current world-wide economic environment relating to the oil and gas industry has made access to capital challenging for many companies, Madalena included. As a result, although the Company exited 2015 with a largely unleveraged balance sheet, (positive working capital of \$0.5 million and a before tax, NPV10 proved plus probable reserves value of \$127.2 million, with \$2.0 of long-term bank debt and \$1.6 million of other long-term liabilities), the Company continues to face liquidity challenges.

Unless the Company is able to raise additional capital or renegotiate its commitments, it does not anticipate meeting all of its anticipated 2016 and 2017 capital commitments. The Company is examining alternative sources of capital, including potential debt and equity financing and ways to monetize its assets, including, without limitation, asset sales or swaps, joint ventures or other transactions with industry partners, all with a view to enhancing liquidity and meeting commitments.

In January 2016 the Argentina government reduced the benchmark oil price by 10% from \$75.00 to \$67.50 per barrel. Capital commitments in 2016 and 2017 are expected to exceed anticipated future funds from operations and, accordingly, the Company has included a note on going concern uncertainty in the consolidated financial statements. In the event the Company cannot access the required funding and certain work commitments are not fulfilled prior to the commitment deadlines, the Company will attempt to extend its commitments with the regulators. There is no certainty that any extensions will occur in the future and failure to obtain such extensions may result in the loss of concessions and the rights attached to them.

However, the recent changes in Argentina being the election of a new president, the subsequent ARS devaluation and the lifting of foreign currency controls, the settlement with the bondholders and additional clarity on future oil prices in Argentina, have all contributed to a more positive outlook for Argentina and potentially, the Company's ability to access additional financing. During 2016, the Company is continuing its efforts on accessing additional capital.

At December 31, 2015, \$2.1 million, or 54%, of Madalena's cash and cash equivalents was deposited with banks in Argentina (December 31, 2014 - \$7.8 million or 67%) and held in ARS.

At December 31, 2015, the consolidated working capital position of the Company was \$0.5 million (December 31, 2014 - \$10.2million), consisting of a working capital deficiency of \$0.4 million (December 31, 2014 - \$10.8 million) in Argentina and a working capital of \$0.9 million (December 31, 2014 – working capital deficiency of \$0.6 million) in Canada.

Argentine Foreign Currency Restrictions

Depending on the amount of inflows and outflows of cash, the Company may have surplus funds on hand in Argentina. As part of the Company's cash management plan, these surplus funds may be repatriated to Canada. Until December 16, 2015, the Company's ability to repatriate funds from Argentina was controlled by the Argentina government through the Central Bank. 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, a number of measures were implemented by the newly elected government that relaxed existing currency controls and allowed for easier movement of funds abroad. Currently, there are no restrictions on the repayment of debt.



Since this date, the Company has not repatriated any additional funds to Canada.

During the Quarter and YTD, the Company repatriated \$3.2 million and \$7.8 million of registered intercompany debt, respectively. The Company anticipates additional funds may be repatriated during 2016, subject to surplus funds being on hand in Argentina.

Share Capital Issued and Options Granted

Outstanding Share Capital

There were no common shares issued during the Quarter and a total of 2.3 million were issued during 2015, all of them pursuant to the exercise of stock options for cash proceeds of \$0.5 million. There were no stock option grants during the Quarter, with a total of 15.6 million were granted to directors, officers, and employees of the Company during 2015.

As at April 21, 2016, the Company had 542.1 million shares and 37.9 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, current portion of long-term debt, trade and other payables, taxes payable and long-term debt the carrying values of which approximate their fair values due to their short-term nature and in the case of the long-term debt, as a result of the variable interest rate. Commodity contracts (held for trading) and available for sale securities are recorded at fair value through the statements of loss and other comprehensive loss, respectively.

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 business combination in Argentina added a significant number of producing wells and with this expanded operating portfolio, the Company expects the decommissioning obligations for its Argentina portfolio 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 December 31, 2015, inflation rates of 1% and 2% were used in Argentina and Canada, respectively (December 31, 2014 – 1% and 2%). The risk free rate used to discount the liability at December 31, 2015 was 2.7% (December 31, 2014 – 2.5%) in Argentina and a range of 0.5-2.0% (December 31, 2014 – 1.6-3.0%) in Canada.

Commitments and Contingencies

Development and Exploration Commitments

Coiron Amarqo Block (35% working interest - non-operated)

USD 000s	2016	2017	Beyond
Concession commitments	-	17,500	nil



On April 16, 2015, the Company received a three year evaluation phase contract from the Province of Neuquén for Coiron Amargo Sur. The Company’s share of the work commitment is \$17.5 million and must be incurred by November 8, 2017. Following this three year evaluation phase contract, Madalena is eligible to enter into a further exploitation (development) concession and/or enter into additional evaluation phase periods to further explore and appraise the Coiron Amargo Sur block. There is no work commitment on the northern portion (Coiron Amargo Norte) which is one of the Company’s conventional producing assets representing 10-15% of the corporate production.

Curamhuele Block (90% working interest - operated)

The Curamhuele Block is operated by Madalena. In September 2013, the second exploration period was extended until November 2014 by the Province of Neuquén. In December 2014, the Province granted an extension to September 2015 to satisfy the remaining work commitments on the block.

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

At December 31, 2015, the remaining work commitment relating to the existing Curamhuele block concession agreement was to complete the Yapai.x-1001 well in the Mulichinco and Lower Agrio shale. Subsequent to the year-end, the Company fulfilled this remaining work obligation, through the expenditure of approximately \$2.8 million.

Madalena expects to convert certain areas of the acreage into an exploitation (development) concession and/or extend the exploration period and/or enter into an unconventional evaluation phase to further appraise the Curamhuele block.

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.

Cortadera Block (38% working interest - non-operated)

On January 15, 2014, Madalena and its working interest partner signed an amended contract agreement for the extension of the initial exploration period and the definition of subsequent exploration periods.

In 2014, Madalena and its working interest partner satisfied the remaining commitments related to the first exploration period on the block and have the option to enter into a second exploration period extending to October 25, 2018 and potentially a third exploration period extending to October 25, 2021.

Madalena and its partner have submitted an application to the province of Neuquén requesting that the block pass into the second exploration period with the relinquishment of approximately 50% of the block and a commitment to shoot 3D seismic on a portion of the remainder of the block. As of April 21, 2016, Madalena has not received confirmation of approval of this application.

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

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

Madalena is the operator and holds a 100% working interest pursuant to a 10 year exploitation concession based on an agreement dated June 5, 2015 with the Province of Rio Negro that has received the requisite government approvals. As part of the terms and conditions of the 10 year extension, the Company has agreed to capital commitments of \$40.3 million on the block over a 10 year period, which includes the drilling of new wells, re-entry activities and contract renewal fees. As of December 31, 2015, capital expenditures of



approximately \$7.8 million have qualified towards this commitment. The majority of the remaining commitment of \$32.5 million in capital commitments is anticipated to be scheduled over the next four years, including \$4.4 million in 2016. The majority of capital spending is expected to be incurred on drilling, completing and equipping in the development of the Loma Montosa formation.

Santa Victoria Block (100% working interest - operated)

During the first quarter of 2015, with the second exploration phase expiring in April 2015, the Company submitted an application for a three year extension. Negotiations have continued throughout 2015 and are currently ongoing with the Province to reach a multi-year extension agreement.

As at December 31, 2015, the second exploration phase required additional work commitments of \$3.75 million of which no qualifying expenditures had been made.

Other Commitments and Contingencies

Leased Office Premises

The Company is responsible for the following rental commitments over the next 5 year period, as follows:

USD 000s	2016	2017	2018	2019	2020
Leased office premises	672	472	340	347	355

Contingencies - Other long-term liabilities

Other long-term liabilities primarily relate to a number of contingencies acquired with the Acquisition, which are considered by management to be in the normal course of business. The expected timeline for resolution is not known at this time, although all are expected to take more than one year to settle and all have been outstanding for over one year. As new information is obtained, amounts are adjusted to reflect management's best estimate of the amounts to be settled. During 2015, other long-term liabilities were reduced by \$1.8 million as a result of the settlement of one of the contingencies.

Certain legal claims made against the Company are currently awaiting court ruling. At this time, management believes it is not more likely than not that these contingent liabilities have an existing present obligation. Accordingly, no provision has been recorded at December 31, 2015. The current exposure is estimated to be up to \$0.7 million.

ANNUAL AND QUARTERLY FINANCIAL RESULTS

Annual Financial Results

As at December 31	2015	2014	2013
USD 000s, unless otherwise noted			
Oil and natural gas revenues	83,648	65,873	17,445
Other income	13,857	-	-
Net loss	(13,705)	(31,832)	(22,771)
Shares outstanding – millions	542.1	539.8	364.0
Net loss per share – basic and diluted	(0.03)	(0.07)	(0.06)
Total assets	163,917	169,521	90,486
Shareholder equity	100,093	117,016	74,243

The increase in oil and gas revenues in 2015 was a result of a full year of production from the Acquisition, offset by the reduction of Canadian activity due to the decline in the Canadian market, as well as reduced production in Argentina due primarily to natural declines in the second half of 2015 compared to 2014. Oil and gas revenues in



2014 increased as a result of the Acquisition that closed in June 2014. The Company recorded a pre-tax impairment charge in 2015 and 2014 of \$13.8 million and \$27.6 million, respectively, impacting the net loss recognized. Other income of \$13.9 million was recorded in 2015 due to Petroleo Plus credit income.

Quarterly Financial Results

	Q4	Q3	Q2	Q1
USD 000s, unless otherwise noted	2015	2015	2015	2015
Oil and natural gas revenues	18,304	21,200	24,699	19,445
Other income	-	13,857	-	-
Net income (loss)	(13,761)	5,479	(5,876)	453
Shares outstanding – millions	542.1	542.1	541.0	540.3
Net income (loss) per share – basic and diluted	(0.03)	0.01	(0.01)	(0.00)

	Q4	Q3	Q2	Q1
USD 000s, unless otherwise noted	2014	2014	2014	2014
Oil and natural gas revenues	23,446	28,327	8,397	5,703
Other income	-	-	-	-
Net income (loss)	(28,273)	(635)	(3,019)	95
Shares outstanding – millions	539.8	539.8	525.0	396.9
Net income (loss) per share – basic and diluted	(0.05)	(0.00)	(0.01)	0.00

The Company's decrease in oil and gas revenues during the Quarter and Q3-2015 can be attributed to lower sales volumes due to natural declines. Q2-2015 increases were favourably impacted by successful horizontal drilling in Argentina, the \$3.00 per barrel oil incentive and increased production in Argentina resulting from the Acquisition.

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

The Company recorded pre-tax impairment charges of \$1.3 million, \$2.1 million and \$2.0 million in Canada in Q4-2015, Q3-2015 and Q2-2015, respectively, and \$8.4 million in Argentina in Q4-2015. The Company recorded pre-tax impairment charges of \$24.7 million, \$0.5 million, \$1.8 million, \$0.6 million and \$18.8 million in Q4-2014, Q3-2014, Q2-2014, Q1-2014 and Q4-2013, respectively, impacting the net income (loss) recognized in those periods. The Company also incurred \$1.6 million and \$0.1 million of business combination costs relating to the Acquisition in Q2-2014 and Q3-2014, respectively.

The Company issued 14.7 million shares for gross proceeds of \$7.0 million during Q3-2014, 98.1 million shares for gross proceeds of \$46.7 million during Q2-2014, 29.8 million shares as partial consideration for the Acquisition totalling \$14 million during Q2-2014 and 32.9 million shares for gross proceeds of \$20.8 million during Q1-2014.

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 judgments, estimates and assumptions and those differences may be material. The judgments, 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. For 2015, there have been 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.

The functional currency of the parent company (Madalena) is CAD. The USD is the functional currency of all subsidiaries. Prior to July 1, 2014, the Company had assessed that the functional currency of its sole Argentine subsidiary at the time, Madalena Austral S.A. ("MASA"), was the ARS. Upon completion of the acquisition of the Argentine business unit of Gran Tierra Energy Inc. on June 24, 2014, the Company reassessed the functional currency of each of its Argentine subsidiaries, including MASA, and concluded that the factors impacting the determination of the entities' functional currency had, on balance, changed to support the USD as the functional currency rather than the ARS. Accordingly, effective July 1, 2014, the functional currency of MASA was changed on a prospective basis from the ARS to the USD.

Judgments made in making this change are disclosed in note 2 of the consolidated financial statements. The International Accounting Standards Board ("IASB") issued International Financial Reporting Interpretations Committee Interpretation ("IFRIC") 21, "Levies" which was adopted by the Company on January 1, 2014. The IFRIC clarifies that an entity should recognize a liability for a levy when the activity that triggers payment occurs. The adoption of this interpretation did not impact the consolidated financial statements. Effective January 1, 2014, the Company adopted, as required, amendments to IAS 32, "Financial Instruments: Presentation" ("IAS 32"). The amendments clarify that the right to offset financial assets and liabilities must be available on the current date and cannot be contingent on a future event. IAS 32 did not impact the consolidated financial statements.



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, there will no longer be a classification test between finance and operating 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 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, except as noted below. For a further and more in-depth discussion of our 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 our 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 Company's reporting currency is 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