The following Management's Discussion and Analysis ("MD&A") is dated May 16, 2017 and should be read in conjunction with the unaudited interim condensed consolidated financial statements and accompanying notes of Alvopetro Energy Ltd. ("Alvopetro" or the "Company") as at and for the three months ended March 31, 2017, MD&A for the year ended December 31, 2016 and the audited consolidated financial statements as at and the for the years ended December 31, 2016 and 2015. Additional information for the Company, including the Annual Information Form ("AIF"), can be found on SEDAR at <u>www.sedar.com</u> or at <u>www.alvopetro.com</u>. This MD&A contains financial terms that are not considered measures under International Financial Reporting Standards ("IFRS") and forward-looking statements. As such, the MD&A should be used in conjunction with Alvopetro's disclosure under the headings "*Non-GAAP Measures*" and "*Forward Looking Information*" at the end of this MD&A.

All amounts contained in this MD&A are in United States dollars ("USD"), unless otherwise stated and all tabular amounts are in thousands of United States dollars, except as otherwise noted.

## MANAGEMENT'S DISCUSSION AND ANALYSIS

## OVERVIEW

## **Description of Business**

Alvopetro Energy Ltd. ("Alvopetro" or "the Company") is engaged in the exploration, development and production of hydrocarbons in Brazil. Alvopetro is a publicly traded company listed on the TSX Venture Exchange and was incorporated under the *Business Corporations Act* (Alberta) on September 25, 2013 as 1774501 Alberta Ltd. and subsequently changed its name to Alvopetro Energy Ltd. on November 19, 2013. Alvopetro is engaged in the exploration for, and the acquisition, development and production of, hydrocarbons in the Recôncavo, Tucano and Camamu-Almada onshore Brazil. Alvopetro holds interests in three producing fields and 13 exploration blocks comprising 127,539 gross acres (110,343 net acres) onshore Brazil.

## Strategy

Alvopetro Energy Ltd.'s vision is to be the premier independent exploration and production company in Brazil, maximizing shareholder value by applying innovation to underexploited opportunities. Our strategy is to focus on three core opportunities including lower risk development drilling on our mature fields, shallow conventional exploration, and the development of the significant hydrocarbon potential present in our deep Gomo tight-gas resource play. Our efforts in the near-term are concentrated on building a natural gas business by finalizing a unitization agreement and securing a gas sales contract for our Caburé gas field which includes our 197(2) and 198(A1) discoveries.



## **OPERATING AND FINANCIAL RESULTS**

|   |         | Three months ended<br>March 31, |  |
|---|---------|---------------------------------|--|
|   | 2017    | 2016                            |  |
| Financial   |         |                                 |  |
| (\$000s, except where noted)                      |         |                                 |  |
| Oil sales   | 171     | 153                             |  |
| Funds flow from operations <sup>(1)</sup>         | (797)   | (1,225)                         |  |
| Per share – basic and diluted $(\$)^{(2)}$        | (0.01)  | (0.01)                          |  |
| Net loss  | (893)   | (4,515)                         |  |
| Per share – basic and diluted (\$) <sup>(2)</sup> | (0.01)  | (0.05)                          |  |
| Capital expenditures <sup>(3)</sup>               | 2,769   | 3,066                           |  |
| Total assets                                      | 77,003  | 83,722                          |  |
| Debt  | -       | -                               |  |
| Net working capital surplus <sup>(1) (4)</sup>    | 13,504  | 25,125                          |  |
| Common shares outstanding, end of year (000s)     |         |                                 |  |
| Basic   | 85,167  | 85,167                          |  |
| Diluted <sup>(2)</sup>                            | 91,762  | 91,288                          |  |
| Operations  |         |                                 |  |
| Operating netback (\$/bbl) <sup>(1)</sup>         |         |                                 |  |
| Brent benchmark price                             | 54.67   | 35.08                           |  |
| Discount  | (5.32)  | (6.23)                          |  |
| Sales price                                       | 49.35   | 28.85                           |  |
| Transportation expenses                           | (2.60)  | (1.89)                          |  |
| Realized sales price                              | 46.75   | 26.96                           |  |
| Royalties and production taxes                    | (4.91)  | (3.39)                          |  |
| Production expenses                               | (62.05) | (67.70)                         |  |
| Operating netback                                 | (20.21) | (44.13)                         |  |
| Average daily crude oil production (bopd)         | 39      | 58                              |  |

#### Notes:

(1) Non-GAAP measure. See "Non-GAAP Measures" section within this MD&A.

(2) Consists of outstanding common shares and stock options of the Company.

(3) Includes non-cash capital expenditures of \$0.4 million (March 31, 2016 - \$nil).

(4) Includes current restricted cash of \$0.1 million (March 31, 2016 - \$nil).



## HIGHLIGHTS AND SIGNIFICANT TRANSACTIONS FOR THE FIRST QUARTER OF 2017

- On January 30, 2017, Alvopetro completed drilling the 198(A1) well on Block 198. The well was drilled to a total measured depth of 1,480 metres and satisfies the work commitment associated with the first exploration phase on the block, subject to approval by the National Agency of Petroleum, Natural Gas and Biofuels ("ANP"). In February and March 2017, we tested two zones of this well. Pressure transient analysis from the first zone forecasts potential post-stimulation rates indicating deliverability of 0.84 MMcfpd (139 boepd) after three months of continuous production and 0.69 MMcfpd (116 boepd) after one year of continuous production. Pressure transient analysis from the second zone forecasts potential rates indicating deliverability of 2.06 MMcfpd (343 boepd) after three months of continuous production and 1.82 MMcfpd (303 boepd) after one year of continuous production.
- Capital expenditures of \$2.8 million in the first quarter included \$2.4 million for drilling and testing the 198(A1) well and capitalized G&A of \$0.3 million. Of our total capital expenditures on the 198(A1) well, \$0.4 million were satisfied through a sale of equipment inventory, reducing our overall cash expenditures on capital projects in the quarter to \$2.4 million.
- In the first quarter of 2017, our average daily production decreased to 39 bopd, a 26% reduction from the fourth quarter of 2016, primarily due to natural declines on the 182(B1) well and production from the Bom Lugar field being offline due to a workover in January and a pump failure in March. This well is currently offline awaiting a pump repair which is expected to be completed in the second quarter of 2017.
- We reported a net loss of \$0.9 million in the first quarter, primarily attributable to negative funds flow from operations of \$0.8 million which included \$0.1 million of E&E expenditures on relinquished blocks.
- Our cash, restricted cash and working capital resources total \$13.5 million, including \$14.6 million of cash and cash equivalents and \$0.1 million of current restricted cash.

## **RECENT HIGHLIGHTS**

In the coming months, we expect to drill our next well, 177(A1), on Block 177, subject to the receipt of environmental permits. The 177(A1) well is a shallow oil prospect targeting the Agua Grande and Sergi Formations with expected drilling costs of \$0.8 million.

## PETROLEUM AND NATURAL GAS PROPERTIES

As at March 31, 2017, Alvopetro held interests in three producing fields and 14 exploration blocks, comprising 140,509 gross acres (123,313 net acres) onshore Brazil in three hydrocarbon basins: the Recôncavo, Tucano, and Camamu-Almada. Subsequent to March 31, 2017, the Company declared commerciality with respect to its 198(A1) gas discovery on Block 198, the beginning of the 27-year Development and Production Phase, subject to ANP approval. The remainder of Block 198 was returned to the ANP, resulting in a gross acreage reduction of 5,236 acres. The Company also notified the ANP of its intention to relinquish Block 256, a total of 7,734 acres. The current exploration assets consist of Blocks 182, 183, 197, 106, 107, 169, 198, 255, 57, 62, 71, and 145 in the Recôncavo Basin and Block 177 in the Tucano Basin and three producing fields (Bom Lugar, Jiribatuba and the 182(B1) well on the Mãe-da-lua field), comprising a total of 127,539 gross acres (110,343 net acres) as of the date of this MD&A.



### **EXPLORATION BLOCK ACTIVITY SUMMARY**

| Block   | Gross Acres  | Working Interest   | Current Phase Expiry                               | Estimated<br>Commitment <sup>(1)</sup><br>(\$000s) | Letter of Credit<br>Support <sup>(2)</sup><br>(\$000s) |
|---|--|--------------------|--|--|--|
| 182   | 4,807  | 100%               | August 5, 2017 <sup>(3)</sup>                      | -  | -  |
| 183   | 7,740  | 100%               | June 11, 2017 <sup>(4)</sup>                       | 1,052  | 1,233  |
| 197   | 5,807  | 100%               | January 31, 2017 & December 5, 2043 <sup>(5)</sup> | -  | -  |
| 106   | 7,759  | 100%               | March 1, 2017 <sup>(6)</sup>                       | 360  | 463  |
| T-177   | 46,505   | 100%               | March 1, 2017 <sup>(6)</sup>                       | 2,269  | 2,919  |
| 169   | 5,280  | 100%               | May 15, 2017 <sup>(7)</sup>                        | 1,199  | 1,543  |
| 255   | 7,734  | 100%               | May 15, 2017 <sup>(7)</sup>                        | 1,436  | 1,847  |
| 57  | 7,752  | 65%                | January 24, 2019                                   | 280  | 279  |
| 62  | 7,715  | 65%                | January 24, 2019                                   | 280  | 279  |
| 71  | 5,409  | 65%                | January 24, 2019                                   | 191  | 191  |
| 145   | 7,734  | 65%                | January 24, 2019                                   | 280  | 279  |
| Subtotal – work to be completed on exploration blocks |  | 7,347              | 9,033  |  |  |
| Work complete   | ed/farmed ou   | t on exploration b | locks:   |  |  |
| 256   | -  | 100%               | May 15, 2017 <sup>(8)</sup>                        | 319  | 410  |
| 107   | 7,561  | 5%                 | September 1, 2017 <sup>(9)</sup>                   | 2,399  | 3,086  |
| 198   | 2,503  | 100%               | May 15, 2017 <sup>(10)</sup>                       | 1,199  | 1,543  |
| Subtotal – wor  | Subtotal – work completed/farmed out on exploration blocks |                    | 3,917  | 5,039  |  |
| GRAND TOTAL   | - ALL EXPLOR   | ATION BLOCKS       |  | 11,264   | 14,072   |

(1) The estimated commitments expressed above are based on work units ("UT's") which represent the minimum work to be carried out under the terms of the existing exploration phase of the concession contracts. UT's may be satisfied through, among other things, drilling exploration wells and shooting or reprocessing seismic. UT's are not applicable in the Discovery Evaluation Plan ("PAD") phase; however, the Corporation must notify the ANP of its work plan to be completed during this phase. The estimated commitment represents the USD equivalent of the minimum work commitment associated with Alvopetro's share of the UT's.

(2) Letters of Credit ("LC's") posted in satisfaction of work units may be in excess of USD equivalent amounts for the associated commitments due to foreign exchange fluctuations and foreign exchange margin requirements.

- (3) A PAD was approved by the ANP on December 28, 2015 and included plans to drill one well. In February 2017, the ANP approved an extension to the initial PAD deadline from October 31, 2016 to August 5, 2017. Alvopetro has identified prospects on the block and is currently awaiting environmental permits. The PAD activities exclude the 182(B1) well on the Mãe-da-lua field, currently in the Development and Production Phase which extends to February 22, 2044, subject to ANP approval.
- (4) In September 2016, Alvopetro requested a suspension to the current phase applicable to Block 183 until a license is obtained for hydraulic fracturing of the 183(1) well and is currently awaiting a response from the ANP.
- (5) The PAD for Block 197 was approved in May 2015. The PAD includes plans to test the 197(2) well (which was completed in the three months ended June 30, 2015) and additional analysis and other work with respect to our 197(1) well, including obtaining an environmental license for hydraulic fracturing of the well. In October 2016, Alvopetro requested an extension to the PAD expiry date or, alternately, a suspension to the PAD activities due to lack of regulations on the use of hydraulic fracturing in Brazil. The Corporation is currently awaiting a response from the ANP. The Caburé discovery at our 197(2) well is excluded from the PAD activities as the field is in the Development and Production Phase which extends to December 5, 2043.
- (6) In January 2017, Alvopetro requested a suspension to the phase expiry of each of Blocks 106 and 177 due to lack of environmental permits and is currently awaiting a response from the ANP.
- (7) In May 2017, the ANP approved a preliminary suspension of Blocks 169 and 255 as it is currently reviewing the possibility of providing a two-year extension to all 12th Bid Round Blocks.
- (8) The work commitment for Block 256 was satisfied with the drilling of the 256(A1) well in September 2016, subject to ANP approval. In May 2017, Alvopetro notified the ANP of its intention not to proceed to the second exploration phase and relinquish this block.
- (9) Block 107 was farmed out to a third party in 2016. Under the terms of the agreement, the Farmee will undertake 100% of the required work commitments on Block 107. Upon completion of the work commitments by the Farmee, Alvopetro will be entitled to exchange its 5% participating interest for a 5% gross-overriding royalty. In April 2017, the ANP granted a six-month extension to the initial phase expiry, extending the deadline to September 1, 2017.
- (10) The work commitment for Block 198 was satisfied with the drilling of the 198(A1) well in January 2017, subject to ANP approval. In May 2017, the Company declared commerciality on the 198(A1) gas discovery, beginning the Development and Production Phase which will extend 27 years, subject to approval of the ANP. The remainder of the block has been relinquished to the ANP reducing the Company's gross acreage on this block from 7,739 gross acres to 2,503 gross acres.



## FINANCIAL AND OPERATING REVIEW

#### **Average Daily Production**

|                         |       | Three Months Ended<br>March 31, |  |
|-------------------------|-------|---------------------------------|--|
|                         | 2017  | 2016                            |  |
| Total production (bbls) | 3,465 | 5,303                           |  |
| Daily production (bopd) | 39    | 58                              |  |

Average daily production in the three months ended March 31, 2017 decreased to 39 bopd compared to 53 bopd in the fourth quarter of 2016 and 58 bopd in the first quarter of 2016. The production decreases were due to natural declines on the 182(B1) well and production from the Bom Lugar field being offline due to a workover undertaken in January 2017 and a pump failure in March 2017. The Bom Lugar well is currently offline awaiting pump repair with production expected to resume late in the second quarter of 2017.

### **Oil Sales**

|  |        | Three Months Ended<br>March 31, |  |
|--|--------|---------------------------------|--|
|  | 2017   | 2016                            |  |
| Brent (\$/bbl)                             | 54.67  | 35.08                           |  |
| Discount (\$/bbl)                          | (5.32) | (6.23)                          |  |
| Sales Price (\$/bbl)                       | 49.35  | 28.85                           |  |
| Sales price discount as a % of Brent       | 10%    | 18%                             |  |
| Oil Sales                                  | 171    | 153                             |  |
| Transportation                             | (9)    | (10)                            |  |
| Total sales, net of transportation expense | 162    | 143                             |  |
| Realized price (\$/bbl)                    | 46.75  | 26.96                           |  |

Alvopetro has sales contracts for the Bom Lugar and Jiribatuba fields and the 182(B1) well on the Mãe-da-lua field. Pursuant to the terms of these contracts, a discount is applied to the average Brent price as a fixed cost per barrel under the Bom Lugar contract and a fixed percentage of Brent for the Jiribatuba and 182(B1) contracts. The sales discount of 10% in the first quarter of 2017 is lower than the first and fourth quarter of 2016 as more production was sold at lower discount rates under the contract for the 182(B1) well.

Overall, oil sales increased 12% in the first quarter of 2017 compared to the same period in 2016. Despite a 35% reduction in total production, Brent increased 56% and the sales price discount decreased, resulting in a 71% increase in the sales price per barrel.

### **Funds Flow from Operations**

|                            |       | Three Months Ended<br>March 31, |  |
|----------------------------|-------|---------------------------------|--|
|                            | 2017  | 2016                            |  |
| Funds flow from operations | (797) | (1,225)                         |  |

The Company had \$0.8 million of negative funds flow from operations in the first quarter of 2017. As a result of reduced general and administrative and production expenses, the Company's funds flow increased \$0.4 million compared to the same period in 2016. Alvopetro funds the Company's current capital and operating plans from existing cash balances on hand and is not currently dependent on cash flows from operations.



#### **Royalties and Production Taxes**

|                                | Three Mo | Three Months Ended |  |
|--------------------------------|----------|--------------------|--|
|                                | Mar      | March 31,          |  |
|                                | 2017     | 2016               |  |
| Royalties and production taxes | 17       | 18                 |  |
| Percentage of sales (%)        | 9.9      | 11.8               |  |

The mature fields held by Alvopetro are subject to a base 5% government royalty plus an additional 0.5% royalty paid to landowners according to applicable Brazil petroleum laws. All of the exploration blocks held by Alvopetro are subject to a base 10% government royalty plus a 1% landowner royalty. There is an additional 2.5% gross-overriding royalty on Block 182 (including the 182(B1) well on the Mãe-da-lua field) and Block 197.

All royalties are paid based on an ANP minimum reference price which is typically higher than the realized sales price. Royalties and production taxes include all Social Integration Program ("PIS") taxes and Social Assistance Contribution ("COFINS") paid on oil sales at a combined rate of 9.25%, offset by credits on available expenses. The Company currently has sufficient PIS and COFINS credits to offset any amounts owing.

### **Production Expenses**

|  | Three Mon | ths Ended |  |
|--|-----------|-----------|--|
|  | Marc      | March 31, |  |
|  | 2017      | 2016      |  |
| Production expenses by type:           |           |           |  |
| Personnel costs                        | 93        | 93        |  |
| Production facilities rental           | -         | 139       |  |
| Other fixed costs                      | 61        | 67        |  |
| Variable costs                         | 21        | 60        |  |
| Workover costs                         | 40        | -         |  |
| Total production expenses              | 215       | 359       |  |
| Production expenses per barrel:        |           |           |  |
| Personnel costs                        | 26.85     | 17.55     |  |
| Production facilities rental           | -         | 26.21     |  |
| Other fixed costs                      | 17.60     | 12.63     |  |
| Variable costs                         | 6.06      | 11.31     |  |
| Workover costs                         | 11.54     | -         |  |
| Total production expenses per bbl (\$) | 62.05     | 67.70     |  |

Production expenses for the first quarter of 2017 decreased \$0.1 million compared to the same period in 2016 primarily due to reduced production facilities rental costs for the 182(B1) well. The Company ended this rental contract in May 2016. Production expenses were also impacted by the strengthening Brazilian Real ("BRL") relative to the USD which averaged 19% higher in the first quarter of 2017 compared to the same period in 2016.



### General and Administrative ("G&A") Expenses

|                         |       | Three months ended<br>March 31, |  |
|-------------------------|-------|---------------------------------|--|
| G&A Expenses, by type:  | 2017  | 2016                            |  |
| Personnel               | 651   | 754                             |  |
| Travel                  | 23    | 54                              |  |
| Office and IT costs     | 91    | 115                             |  |
| Professional fees       | 125   | 132                             |  |
| General corporate costs | 84    | 160                             |  |
| Gross G&A               | 974   | 1,215                           |  |
| Capitalized G&A         | (271) | (273)                           |  |
| G&A expenses            | 703   | 942                             |  |

The majority of the Company's G&A expenses relate to personnel costs, representing over 60% of total gross G&A. General corporate costs include such items as public company costs and insurance. The Company's Gross G&A has declined \$0.2 million in the first quarter of 2017 compared to 2016. The Company has implemented cost savings initiatives to reduce costs largely with respect to personnel, travel, office and IT costs. A large portion of these savings were offset by the strengthening BRL which averaged 19% higher in the first quarter of 2017 compared to 2016, resulting in increased USD equivalent costs.

### Cash and Cash Equivalents and Restricted Cash

|                                | As a      | As at    |  |
|--------------------------------|-----------|----------|--|
|                                | March 31, | December |  |
|                                | 2017      | 31, 2016 |  |
| Cash and cash equivalents      | 14,552    | 17,788   |  |
| Restricted cash – current      | 111       | 108      |  |
| Total cash and restricted cash | 14,663    | 17,896   |  |

The Company has a credit support facility (the "Facility") with a Canadian bank which allows for the issuance of LC's and letters of guarantee in support of the financial guarantees required by the ANP for Alvopetro's work commitments under the terms of its concession contracts. Letters of credit and letters of guarantee issued under the Facility must be supported by either cash collateral posted by Alvopetro or through an Account Performance Security Guarantee from Export Development Canada ("EDC"). EDC currently supports up to \$15.5 million of Alvopetro's LC's issued under the Facility.

As at March 31, 2017, the total amount of LC's issued under the Facility was \$14.1 million (December 31, 2016 - \$14.1 million), the full balance of which was satisfied by EDC. The current restricted cash as at March 31, 2017 and December 31, 2016 relates to cash posted for abandonment guarantees for the Bom Lugar and Jiribatuba fields. These abandonment guarantees are posted locally in Brazil, are not part of the Facility and are not eligible for EDC coverage.

LC's supported by EDC at March 31, 2017 include \$5.0 million for commitments which have now been met or farmed out, subject to ANP approval. This includes a \$0.4 million LC for the work commitment on Block 256, satisfied with the 256(A1) well drilled in the third quarter of 2016, a \$3.1 million LC for the work commitment on Block 107, which was farmed out to a third party in the third quarter of 2016, and a \$1.5 million LC for the work commitment on Block 198, satisfied with the 198(A1) well drilled in the first quarter of 2017.

Additional letters of credit and letters of guarantee, and any required accompanying cash collateralization, will be issued and posted, as applicable and as required, for any additional work commitments assumed by Alvopetro within Brazil. To the extent EDC coverage is limited in the future for any new LC's or for any existing LC's requiring extension to the expiry date, the Company would be required to post cash collateral to support existing work commitments in Brazil.

### **Foreign Exchange**

The Company's reporting currency is the USD and its functional currencies are the USD and the BRL. Substantially all costs incurred in Brazil are in BRL's and the Company incurs head office costs in both USD and CAD. In each reporting period, the change in the



values of the BRL and the CAD relative to the Company's reporting currency are recognized. The period end rates used to translate the Company's BRL and CAD denominated financial statement items for the reporting periods as specified are as follows:

|                               | As at    |          |        |
|-------------------------------|----------|----------|--------|
|                               | March    | December | %      |
|                               | 31, 2017 | 31, 2016 | Change |
| Rate at end of period:        |          |          |        |
| U.S. dollar / Brazilian real  | 3.168    | 3.259    | (2.8)  |
| U.S. dollar / Canadian dollar | 1.330    | 1.343    | (1.0)  |

Head office transactions in CAD are recognized at the rates of exchange prevailing at the date of the transactions. At the end of each reporting period, monetary assets and liabilities are translated at the exchange rate in effect at the reporting period date. Non-monetary assets, liabilities, revenues and expenses are translated at transaction date exchange rates. Exchange gains or losses are included in the determination of net loss as foreign exchange gains or losses.

The assets and liabilities of Alvopetro's Brazilian subsidiaries are translated to USD at the exchange rate on the reporting period date. The income and expenses of our Brazil operations are translated to USD at the exchange rates on the date of the relevant transactions. All resulting foreign currency differences are recorded in other comprehensive income in our consolidated statements of operations and comprehensive gain (loss). The BRL appreciated 3% relative to the USD from December 31, 2016 to March 31, 2017 resulting in a \$0.9 million other comprehensive gain for the three months ended March 31, 2017.

As a significant portion of the Company's expenditures are denominated in CAD and BRL, the Company is exposed to fluctuations in these currencies relative to the USD which may have a material impact on costs in the future. In the first quarter of 2017, the BRL averaged 3.145 compared to 3.902 in the first quarter of 2016. This 19% appreciation of the average BRL rate relative to the USD resulted in increased USD equivalent production expenses and G&A expenses as well as capital expenditures.

### **Share-Based Compensation Expense**

|                          | Three mo | Three months ended |  |
|--------------------------|----------|--------------------|--|
|                          | Mar      | March 31,          |  |
|                          | 2017     | 2016               |  |
| Share-based compensation | 25       | 11                 |  |

Share-based compensation expense is a non-cash expense that is based on the fair value of stock options granted and amortized over the vesting period of the options. Under Alvopetro's Stock Option Plan there were 6.6 million stock options outstanding at March 31, 2017 compared to 6.1 million outstanding at March 31, 2016. Share-based compensation expense increased in 2017 as share-based compensation expense in the first quarter of 2016 was impacted by a cancellation of 1.5 million options, 0.7 million of which were unvested, reducing share-based compensation expense for any previously expensed amounts. There were 0.3 million options cancelled in the first quarter of 2017; however, as all of these options were vested, there was no corresponding reduction to the share-based compensation expense in the first quarter of 2017.

## **Depletion, Depreciation, Accretion and Impairment**

|  |      | Three months ended<br>March 31, |  |
|--|------|---------------------------------|--|
|  | 2017 | 2016                            |  |
| Depletion and depreciation (DD&A)        | 68   | 98                              |  |
| Accretion on decommissioning liabilities | 9    | 6                               |  |
| Impairment                               | -    | 2,989                           |  |
| Total                                    | 77   | 3,093                           |  |

Included in the depletion computation for our producing assets was \$7.5 million (March 31, 2016 - \$9.9 million) of estimated future development costs for undeveloped proved plus probable reserves. The decrease in depletion expense in the three months ended March 31, 2017 compared to the same period in 2016 is due to both a decrease in production and a decrease in the depletable base which is primarily a function of lower future development costs. The increase in accretion expense compared to the same



period in 2016 is due to the increase in the estimated decommissioning liability for new wells drilled and facilities built since March 31, 2016.

The Company recorded an impairment to Block 170 of \$3.0 million in the three months ending March 31, 2016. The impairment related to all costs incurred on the block in the first quarter of 2016, primarily on drilling the 170(B1) well. Block 170 was relinquished to the ANP on March 29, 2016 and all costs incurred subsequent to this date were recorded directly as exploration and evaluation expenditures and are included in net loss on the consolidated statements of operations and comprehensive gain (loss).

### Taxes

|                             |      | Three months ended<br>March 31, |  |
|-----------------------------|------|---------------------------------|--|
|                             | 2017 | 2016                            |  |
| Current income tax expense  | -    | -                               |  |
| Deferred income tax expense | -    | 300                             |  |
| Total income tax expense    | -    | 300                             |  |

The statutory corporate tax rate in Brazil is 34%. This is comprised of a basic 15% corporate income tax, plus 10% surtax and 9% social contribution on net profit tax. As the Company is currently in an overall loss position, no current tax expense was realized in the three months ended March 31, 2017 or March 31, 2016.

The Company has a deferred tax asset of \$10.8 million at March 31, 2017 (December 31, 2016 - \$10.1 million), the benefit of which has not been recognized for accounting purposes at March 31, 2017 or December 31, 2016. As a result, there is no deferred tax expense or recovery recognized in 2017. The deferred tax expense recognized in the three months ended March 31, 2016 was largely as a result of foreign currency fluctuations.

### Net Loss

The Company reported a net loss for the three months ended March 31, 2017 of \$0.9 million, compared to a loss of \$4.5 million for the three months ended March 31, 2016. The Company realized a higher loss in 2016 largely due to the \$3.0 million impairment recorded in the period on Block 170.



### **Capital Expenditures**

|   | Three month | ns ended |  |
|---|-------------|----------|--|
|   | March 31,   |          |  |
| Capital Expenditures by Type            | 2017        | 2016     |  |
| E&E expenditures                        |             |          |  |
| Drilling and completions <sup>(1)</sup> | 2,444       | 2,650    |  |
| Inventory purchases                     | -           | 55       |  |
| Facility & equipment                    | 8           | -        |  |
| Land, lease, and similar payments       | 31          | 45       |  |
| Capitalized G&A                         | 265         | 269      |  |
| Other                                   | 13          | 39       |  |
| Total E&E expenditures                  | 2,761       | 3,058    |  |
| PP&E expenditures                       |             |          |  |
| Facility & equipment                    | 2           | -        |  |
| Furniture, fixtures, and equipment      | -           | 2        |  |
| Capitalized G&A                         | 6           | 4        |  |
| Other                                   | -           | 2        |  |
| Total PP&E expenditures                 | 8           | 8        |  |
| Total capital expenditures by type      | 2,769       | 3,066    |  |

|   | Three mont | hs ended: |
|---|------------|-----------|
|   | March      | n 31,     |
| Capital Expenditures by Area                            | 2017       | 2016      |
| E&E expenditures  |            |           |
| 9 <sup>th</sup> Brazil Bid Round blocks                 | 81         | 2,657     |
| 11 <sup>th</sup> Brazil Bid Round blocks                | 32         | 30        |
| 12 <sup>th</sup> Brazil Bid Round blocks <sup>(1)</sup> | 2,631      | 266       |
| 13 <sup>th</sup> Brazil Bid Round blocks                | 17         | 11        |
| Inventory   | -          | 55        |
| Costs to be allocated to blocks                         | -          | 39        |
| Total E&E expenditures                                  | 2,761      | 3,058     |
| PP&E expenditures                                       |            |           |
| Bom Lugar   | 2          | -         |
| Jiribatuba  | 1          | -         |
| 182(B1) well/Mãe-da-lua field                           | 5          | 5         |
| Corporate   | -          | 3         |
| Total PP&E expenditures                                 | 8          | 8         |
| Total capital expenditures by area                      | 2,769      | 3,066     |

#### Notes:

(1) Includes non-cash capital expenditures of \$0.4 million in the three months ended March 31, 2017 (March 31, 2016 - \$nil)

In the first quarter of 2017, the Company drilled and tested the 198(A1) well incurring costs of \$2.4 million. Additional capital expenditures included capitalized G&A of \$0.3 million.

As part of the contract for drilling services for the 198(A1) well, the Company agreed to sell \$0.4 million of equipment inventory in exchange for drilling services. As a result, the Company's cash expenditures for the 198(A1) well were reduced to \$2.0 million in the quarter. This equipment inventory had been classified as assets held for sale at December 31, 2016. As the equipment inventory had been written down by \$0.1 million to the estimated recoverable amount at December 31, 2016, no gain or loss was realized on the disposition in 2017.



### **Summary of Quarterly Results**

|   | Q1 2017 | Q4 2016 | Q3 2016          | Q2 2016  | Q1 2016 | Q4 2015          | Q3 2015 | Q2 2015 |
|---|---------|---------|------------------|----------|---------|------------------|---------|---------|
| Financial   | Q1 2017 | Q12010  | 45 2010          | Q2 2010  | Q1 2010 | Q12015           | Q3 2013 | Q2 2015 |
|   |         |         |                  |          |         |                  |         |         |
| Oil sales   | 171     | 208     | 74               | 126      | 153     | 116              | 97      | 150     |
| Funds flow from operations <sup>(1)</sup>           | (797)   | (1,006) | (1,155)          | (1,309)  | (1,225) | (1,017)          | (1,240) | (1,352) |
| Per share – basic & diluted (\$)                    | (0.01)  | (0.01)  | (0.01)           | (0.02)   | (0.01)  | (0.01)           | (0.01)  | (0.02)  |
| Net loss  | (893)   | (371)   | (5 <i>,</i> 692) | (2,000)  | (4,515) | (9 <i>,</i> 797) | (84)    | (980)   |
| Per share – basic & diluted (\$)                    | (0.01)  | -       | (0.07)           | (0.02)   | (0.05)  | (0.12)           | -       | (0.01)  |
| Capital and other asset expenditures <sup>(2)</sup> | 2,769   | 708     | 3,785            | 835      | 3,066   | 1,610            | 2,636   | 6,602   |
|   |         |         |                  |          |         |                  |         |         |
| Operations  |         |         |                  |          |         |                  |         |         |
| Operating netback (\$/bbl) <sup>(1)</sup>           |         |         |                  |          |         |                  |         |         |
| Brent benchmark price                               | 54.67   | 51.13   | 46.98            | 46.97    | 35.08   | 44.71            | 51.17   | 63.50   |
| Sales price   | 49.35   | 42.31   | 38.60            | 38.47    | 28.85   | 36.30            | 38.52   | 52.14   |
| Transportation expenses                             | (2.60)  | (2.24)  | (2.09)           | (2.44)   | (1.89)  | (2.50)           | (3.18)  | (1.74)  |
| Realized sales price                                | 46.75   | 40.07   | 36.51            | 36.03    | 26.96   | 33.80            | 35.34   | 50.40   |
| Royalties and production taxes                      | (4.91)  | (4.48)  | (4.17)           | (3.36)   | (3.39)  | (3.13)           | (2.78)  | (2.09)  |
| Production expenses                                 | (62.05) | (34.58) | (137.72)         | (109.92) | (67.70) | (56.32)          | (71.49) | (91.76) |
| Operating netback                                   | (20.21) | 1.01    | (105.38)         | (77.25)  | (44.13) | (25.65)          | (38.93) | (43.45) |
| Average daily crude oil production (bopd)           | 39      | 53      | 21               | 36       | 58      | 35               | 27      | 32      |

#### Notes:

(1) Non-GAAP measure. See "Non-GAAP Measures" section within this MD&A.

(2) Q1 2017 capital expenditures include \$0.4 million of non-cash expenditures.

**Q1 2017** – The Company completed drilling and testing the 198(A1) well on Block 198 in the quarter. This well is part of our Caburé gas field. Total capital expenditures of \$2.8 million in the quarter included \$2.4 million on this well and capitalized G&A of \$0.3 million. The Company's cash expenditures on its capital projects were reduced by \$0.4 million due to equipment inventory exchanged for drilling services on the 198(A1) well. Average daily production decreased 26%, primarily due to a workover on the producing well on the Bom Lugar field in January and additional pump issues on this well in March as well as natural declines on the 182(B1) well on the Mãe-da-lua field. Despite a 7% increase in Brent, due to the reduced production volumes, oil sales declined 18%. A net loss of \$0.9 million was realized in the quarter primarily due to the negative funds flow from operations of \$0.8 million.

**Q4 2016** – The Company's average daily production increased 152% in the quarter as both the 182(B1) well on the Mãe-da-lua field and the Bom Lugar producing well were on production after being offline for much of the third quarter. As a result of the production increase and the 9% increase in Brent, oil sales increased 181% to \$0.2 million. Increased oil sales combined with reduced production expenses resulted in a positive operating netback of \$1.01 per barrel. Capital expenditures of \$0.7 million included \$0.3 million in site construction and other preparatory work for the 198(A1) well which was drilled in January 2017 and \$0.2 million in capitalized G&A costs. Despite increased oil sales and reduced production and G&A expenses, funds flow from operations increased only \$0.1 million, largely due to E&E expenditures of \$0.2 million incurred in the period on Block 170 which was relinquished in March 2016. The net loss of \$0.4 million was as a result of the negative funds flow from operations as well as a \$0.3 million impairment charge booked to PP&E in relation to the 182(B1) well, offset by a deferred tax recovery of \$1.1 million.

**Q3 2016** – The Company completed drilling the 256(A1) well in the quarter. Due to the lack of any commercial discovery of hydrocarbons on this well, the Company recognized an impairment loss on this block of \$4.4 million. Total capital expenditures of \$3.8 million in the quarter included \$2.9 million for costs associated with the 256(A1) well, \$0.3 million for workover and facilities costs on the 182(B1) well and \$0.4 million in capitalized G&A costs. The Company's average daily production decreased 42% to 21 bopd in the quarter as the 182(B1) well was shut-in for much of the quarter for facilities and workover projects and the producing well on the Bom Lugar field was offline from mid-June to mid-August for a pump replacement. As a result of the decrease in production, oil sales declined 41% in the quarter. Production expenses per barrel were impacted by reduced daily production and increased workover costs on the Bom Lugar field of \$65.73 per barrel. The net loss of \$5.7 million was largely attributable to the impairment loss booked on Block 256 and negative funds flow from operations of \$1.2 million.

**Q2 2016** – The Company's average daily production decreased 38% to 36 bopd in the quarter as the 182(B1) well was shut-in on May 11, 2016 to cancel the production facilities rental contract and replace this equipment with Company owned facilities. The Bom Lugar



field production was also reduced in the quarter due to pump issues, which resulted in the well being offline for two weeks at the end of June. As a result of the production declines, oil sales decreased 18% from the first quarter despite the 34% increase in the average Brent price in the quarter. Capital expenditures of \$0.8 million in the quarter included \$0.3 million for facilities work on the 182(B1) well, \$0.2 million for work on the 256(A1) well, and capitalized G&A totaling \$0.2 million.

**Q1 2016** – Capital expenditures of \$3.1 million in the quarter were largely attributable to the 170(B1) well. The Company incurred total costs of \$2.4 million on this well in the quarter. Due to the lack of any commercial discovery on this well and consistent with 2015, the Company recognized an impairment loss on this block of \$3.0 million, contributing to the overall net loss in the quarter of \$4.5 million. Average daily oil production increased 66% from the fourth quarter of 2015 as the 182(B1) well was on production for most of the quarter, contributing an average of 33 bopd. This production increase was partially offset by reduced production from the Bom Lugar field due to maintenance. Despite the increase in daily production, oil sales increased only 32% due to the 22% decline in Brent.

Q4 2015 – The Company realized a 30% increase in its average daily production due to the 182(B1) well, which commenced production in December 2015 contributing 4 bopd in the quarter, and the Jiribatuba field, which was brought back on production in November 2015, contributing 6 bopd in the quarter. These production increases were offset by a small decline from the Bom Lugar field as one producing well was shut-in to transfer equipment to the 182(B1) well. Despite the 30% increase in production, oil sales increased only 20% from the third quarter due to the 13% decline in Brent. Capital expenditures of \$1.6 million included \$0.5 million in site construction and rig mobilization costs for the 170(B1) well and \$0.3 million in initial facilities construction costs for the 182(B1) well. The net loss of \$9.8 million was largely as a result of the \$12.1 million impairment loss recognized on E&E and PP&E assets and negative funds flow from operations of \$1.0 million offset by a deferred tax recovery of \$3.0 million.

Q3 2015 – The Company completed testing the 182(B1) well. Total capital and other asset expenditures were \$2.6 million, including \$1.7 million for testing and facilities costs for this well and capitalized G&A of \$0.2 million. Production decreased 16% from the second quarter as the Jiribatuba well continued to be offline due to road access issues. The lack of production from the Jiribatuba field and the 19% decline in Brent from the second quarter resulted in a 35% decrease in oil sales. As a result of the continued decline in Brent prices, the Company recognized a \$1.0 million impairment loss on the Bom Lugar field. This was more than offset by the recognition of a deferred tax recovery of \$2.5 million, resulting in an overall net loss of \$0.1 million in the quarter.

**Q2 2015** – The Company completed drilling the 182(B1) well and completed testing the 197(2) well. Total capital and other asset expenditures were \$6.6 million, including \$5.2 million relating to these projects, \$0.3 million for the acquisition of the remaining working interest in Block 170, and \$0.4 million in capitalized G&A. Production decreased 24% from the first quarter of 2015 due to road access issues at the Jiribatuba field and maintenance on our Bom Lugar well, resulting in a 13% decrease in oil sales, despite the 15% increase in Brent during the quarter. This maintenance work also contributed to higher production expenses and higher production costs per barrel in the quarter.



### **Commitments and Contingencies**

The following is a summary of Alvopetro's contractual commitments as at March 31, 2017:

| Commitments                             | < 1 Year | 1-3 Years | Thereafter | Total  |
|---|----------|-----------|------------|--------|
| Minimum work commitments <sup>(1)</sup> |          |           |            |        |
| Block 183                               | 1,052    | -         | -          | 1,052  |
| Block 106                               | 360      | -         | -          | 360    |
| Block 107 <sup>(2)</sup>                | 2,399    | -         | -          | 2,399  |
| Block 177                               | 2,269    | -         | -          | 2,269  |
| Block 169                               | 1,199    | -         | -          | 1,199  |
| Block 198 <sup>(3)</sup>                | 1,199    | -         | -          | 1,199  |
| Block 255                               | 1,436    | -         | -          | 1,436  |
| Block 256 <sup>(4)</sup>                | 319      | -         | -          | 319    |
| Block 57 <sup>(5)</sup>                 | -        | 280       | -          | 280    |
| Block 62 <sup>(5)</sup>                 | -        | 280       | -          | 280    |
| Block 71 <sup>(5)</sup>                 | -        | 191       | -          | 191    |
| Block 145 <sup>(5)</sup>                | -        | 280       | -          | 280    |
| Bom Lugar                               | -        | -         | 110        | 110    |
| Jiribatuba                              | -        | -         | 110        | 110    |
| Total minimum work commitments          | 10,233   | 1,031     | 220        | 11,484 |
| Office leases <sup>(6)</sup>            | 198      | 145       | -          | 343    |
| Total commitments                       | 10,431   | 1,176     | 220        | 11,827 |

Notes:

 Under the terms of the ANP concession contracts for each of our exploration blocks, the Company has commitments which must be completed prior to the applicable phase expiry date. The Company is required to post a performance guarantee with the ANP for all commitments in the table above.
In 2016, the Company entered into a farmout agreement with respect to Block 107. Under the terms of the agreement, the Farmee is responsible

(2) In 2016, the Company entered into a farmout agreement with respect to Block 107. Under the terms of the agreement, the Farmee is responsible to satisfy the work commitments included in the table above.

(3) During the three months ended March 31, 2017, the Company completed drilling the 198(A1) well in satisfaction of the work commitment in the table above, subject to ANP approval.

(4) In 2016, the Company completed drilling the 256(A1) well in satisfaction of the work commitment in the table above, subject to ANP approval. In May 2017, the Company notified the ANP of its intention to relinquish this block.

(5) Alvopetro holds a 65% interest in each of these blocks and the amounts provided in the table above represent Alvopetro's share of the related commitments.

(6) The Company is committed to future minimum payments for office space in Canada and Brazil.

As is customary in the oil and gas industry, we may at times have work plans in place to reserve or earn certain acreage positions or wells. If we do not complete such work plans in a timely manner, the acreage positions or wells may be lost, or penalties may be applied.

The Company currently has no contingent liabilities recorded; however, in the normal course of operations, we may have disputes with industry participants for which we currently cannot determine the ultimate results. The Company has a policy to record contingent liabilities as they become determinable and the probability of loss is more likely than not.

Alvopetro's activities in Brazil are subject to minimum local content requirements with respect to materials and supplies utilized. The specific local content requirements for the exploration phase were determined during the bidding process for each particular block and are assessed at the phase expiry date. Management undertakes considerable effort to adhere to these requirements; however, there may be circumstances when it is not advantageous or reasonably possible for the Company to do so. If the Company does not meet the local content requirements for a particular phase as specified according to the respective concession contract, a penalty, which varies by concession depending on exploration phase and type of cost, will be incurred. The Company monitors its local content compliance and, as of March 31, 2017, the potential estimated penalty was \$0.2 million (December 31, 2016 - \$0.2 million), which is included in accounts payable and accrued liabilities.



# LIQUIDITY AND CAPITAL RESOURCES

|                     |        | U.S.   | CAD                   | Brazil              |
|---------------------|--------|--------|-----------------------|---------------------|
|                     | Total  | Dollar | Dollar <sup>(1)</sup> | Real <sup>(1)</sup> |
| Cash held in Canada | 14,191 | 13,918 | 273                   | -                   |
| Cash held in Brazil | 361    | -      | -                     | 361                 |
| Total               | 14,552 | 13,918 | 273                   | 361                 |

At March 31, 2017, Alvopetro's cash and cash equivalents of \$14.5 million was held as follows:

#### Notes:

(1) Amounts in the table above denote the U.S. dollar equivalent as at March 31, 2017.

Alvopetro does not currently generate positive cash flow from its operations. Capital expenditures and ongoing G&A and production expenses have been funded to date from existing cash balances. At March 31, 2017, the Company's working capital of \$13.5 million exceeded estimated outstanding commitments of \$11.8 million by \$1.7 million. This \$11.8 million commitment balance includes \$3.9 million in commitments that have been met through wells drilled, subject to ANP approval (Block 256 and 198) or farmed out (Block 107). Exploration work commitments in Brazil are supported by total LC's of \$14.1 million as at March 31, 2017, the full balance of which is currently satisfied through EDC. EDC coverage is reviewed annually and whenever amendments or extensions are required to LC's in place. To the extent some or all EDC coverage were limited in the future, the Company would be required to post the requisite amount from its cash balance which may impact its ability to fund future capital and operational expenditures.

Alvopetro's primary focus in 2017 is on building a natural gas business from our Caburé gas field which includes both our 197(2) and 198(A1) discoveries. Our \$5 million capital plan for 2017 includes:

- > Drilling and testing the 198(A1) well, the bulk of which was completed in the first quarter of 2017;
- > Drilling the 177(A1) well, subject to receipt of environmental permits; and,
- > Preliminary surveying and permitting work associated with the development of our Caburé gas field.

Our 2017 capital projects are expected to be funded with existing cash balances on hand. Alvopetro achieved significant cost reductions on drilling and testing the 198(A1) well, compared to past Alvopetro wells drilled and tested. These cost savings are expected to have a positive impact on our liquidity and capital resources going forward, providing improved financial flexibility. Future capital expenditures and commitments may be funded through a combination of cash on hand, cash flow from successful operations, assets sales, joint ventures, farmouts, debt, or equity.

The liability for decommissioning obligations of Alvopetro was \$1.5 million as at March 31, 2017. The liability is adjusted each reporting period to reflect the passage of time, with the accretion charged to earnings, and for revisions to the estimated future cash flows, if applicable.

At March 31, 2017, the Company had \$3.4 million of equipment inventory to be utilized for future operations which is included in exploration and evaluation assets in the consolidated statement of financial position.

## OUTSTANDING SHARE DATA

The Company is authorized to issue an unlimited number of common shares and preferred shares in one or more series. The aggregate number of Alvopetro common shares and stock options outstanding at May 16, 2017 was 91,769,807 (common shares – 85,166,871, stock options – 6,602,936). There are no preferred shares outstanding.

## **RISKS AND UNCERTAINTIES**

There have been no significant changes in the three months ended March 31, 2017 to the risk and uncertainties identified in the MD&A for the year ended December 31, 2016.



An investment in Alvopetro should be considered speculative due to the nature of our activities and the stage of our development. Alvopetro is exposed to a variety of risks, including but not limited to competitive, operational, political, environmental and financial risks. Investors should carefully consider the risk factors set forth under the heading "*Risk Factors*" in our Annual Information Form that can be found on SEDAR at <u>www.sedar.com</u>.

## CHANGES IN ACCOUNTING POLICIES INCLUDING INITIAL ADOPTION

On January 1, 2017, the Company adopted the changes to IAS 7, *Statement of Cash Flows,* which requires additional disclosures relating to changes in liabilities arising from financing activities, including changes arising from cash flow and non-cash changes. The adoption of these amendments had no impact on the amounts recorded in the Company's interim condensed consolidated financial statements. The Company continues to assess the impact of adopting the new and revised accounting pronouncements that have been issued but are not yet effective as described in the 2016 MD&A.

**Management's Report on Internal Control over Financial Reporting**. In connection with National Instrument 52-109 - Certification of Disclosure in Issuer's Annual and Interim Filings ("NI 52-109"), the Chief Executive Officer and Chief Financial Officer of the Company are required to file a Venture Issuer Basic Certificate with respect to the financial information contained in the unaudited interim financial statements and the audited annual financial statements and respective accompanying Management's Discussion and Analysis. The Venture Issuer Basic Certificate does not include representations relating to the establishment and maintenance of disclosure controls and procedures and internal control over financial reporting, as defined in NI 52-109.

Forward-Looking Statements. Certain information provided in this MD&A constitutes forward-looking statements. Specifically, this MD&A contains forward-looking statements relating to future results from operations, projected financial results, future capital and operating costs, future production rates, proposed exploration and development activities, sources of capital, dividend levels, and capital spending levels. Forward-looking statements are necessarily based upon assumptions and judgments with respect to the future including, but not limited to, the success of future drilling, completion, recompletion and development activities, the outlook for commodity markets and capital markets, the performance of producing wells and reservoirs, well development and operating performance, general economic and business conditions, weather and access to drilling locations, the availability and cost of labour and services, environmental regulation, including regulation relating to hydraulic fracturing and stimulation, the ability to monetize hydrocarbons discovered, the regulatory and legal environment and other risks associated with oil and gas operations. Although we believe that the expectations and assumptions on which the forward-looking statements are based are reasonable, undue reliance should not be placed on the forward looking statements because we can give no assurance that they will prove to be correct. Since forward looking statements address future events and conditions, by their very nature they involve inherent risks and uncertainties. Actual results could differ materially from those currently anticipated due to a number of factors and risks. These include, but are not limited to, risks associated with the oil and gas industry in general (e.g., operational risks in development, exploration and production; delays or changes in plans with respect to exploration or development projects or capital expenditures; the uncertainty of reserve estimates; the uncertainty of estimates and projections relating to production, costs and expenses, reliance on industry partners, availability of equipment and personnel, uncertainty surrounding timing for drilling and completion activities resulting from weather and other factors, changes in applicable regulatory regimes and health, safety and environmental risks), commodity price and exchange rate fluctuations and general economic conditions. Certain of these risks are set out in more detail in the 2016 MD&A and in our Annual Information Form which has been filed on SEDAR and can be accessed at www.sedar.com. Except as may be required by applicable securities laws, Alvopetro assumes no obligation to publicly update or revise any forward looking statements made herein or otherwise, whether as a result of new information, future events or otherwise.

**Test Results.** Any references in this MD&A to test results, production from testing and performance rates are useful in confirming the presence of hydrocarbons, however, such rates are not determinative of the rates at which such well will continue production and decline thereafter. Test results are not necessarily indicative of long-term performance of the relevant well or fields or of ultimate recovery of hydrocarbons.

### Abbreviations:

| MMcf   | = | million cubic feet                |
|--------|---|-----------------------------------|
| MMcfpd | = | million cubic feet per day        |
| Boepd  | = | barrels of oil equivalent per day |
| Bopd   | = | barrels of oil per day            |



**BOE Disclosure.** The term barrels of oil equivalent ("boe") may be misleading, particularly if used in isolation. A boe conversion ratio of six thousand cubic feet per barrel (6Mcf/bbl) of natural gas to barrels of oil 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. All boe conversions in this MD&A are derived from converting gas to oil in the ratio mix of six thousand cubic feet of gas to one barrel of oil.

**Non-GAAP Measures.** This report contains financial terms that are not considered measures under International Financial Reporting Standards ("IFRS"), such as funds flow from operations, funds flow per share, net working capital surplus and operating netback. These measures are commonly utilized in the oil and gas industry and are considered informative for management and shareholders. Specifically, funds flow from operations and funds flow per share reflect cash generated from operating activities before changes in non-cash working capital. Management considers funds flow from operations and funds flow per share reflect cash generate sufficient cash to fund future growth opportunities. Net working capital surplus includes current assets (including current restricted cash and assets held for sale) less current liabilities (excluding the current portion of decommissioning obligations) and is used to evaluate the Company's financial resources. Operating netback is determined by dividing oil sales less royalties and production taxes, transportation and operating expenses by sales volume of produced oil. Management considers operating netback important as it is a measure of profitability per barrel sold and reflects the economic quality of production. Funds flow from operations, funds flow per share, net working capital surplus and operating netbacks may not be comparable to those reported by other companies nor should they be viewed as an alternative to cash flow from operations, net income or other measures of financial performance calculated in accordance with IFRS.

