

The following Management's Discussion and Analysis ("MD&A") is dated November 15, 2017 and should be read in conjunction with the unaudited interim condensed consolidated financial statements and accompanying notes of Alvo Petro Energy Ltd. ("Alvo Petro" or the "Company") as at and for the three and nine months ended September 30, 2017, MD&A for the year ended December 31, 2016 and the audited consolidated financial statements as at and 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 [www.sedar.com](http://www.sedar.com) or at [www.alvopetro.com](http://www.alvopetro.com). 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 Alvo Petro'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

Alvo Petro Energy Ltd. ("Alvo Petro" or "the Company") is engaged in the exploration, development and production of hydrocarbons in Brazil. Alvo Petro 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 Alvo Petro Energy Ltd. on November 19, 2013. Alvo Petro is engaged in the exploration for, and the acquisition, development and production of, hydrocarbons in the Recôncavo, Tucano and Camamu-Almada onshore Brazil. Alvo Petro holds interests in three producing fields and 13 exploration blocks comprising 127,539 gross acres (110,343 net acres) onshore Brazil.

#### Strategy

Alvo Petro 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 mandatory unitization process and securing a gas sales contract for our Caburé natural gas field which includes our 197(2) and 198(A1) wells.

## OPERATING AND FINANCIAL RESULTS

	Three months ended September 30,		Nine months ended September 30,	
	2017	2016	2017	2016
<b>Financial</b>				
(\$000s, except where noted)				
Oil sales	120	74	377	353
Net loss	(3,331)	(5,692)	(5,038)	(12,207)
Per share – basic and diluted (\$) <sup>(1)</sup>	(0.04)	(0.07)	(0.06)	(0.14)
Funds flow from operations <sup>(2)</sup>	(959)	(1,155)	(2,479)	(3,689)
Per share – basic and diluted (\$) <sup>(1)</sup>	(0.01)	(0.01)	(0.03)	(0.04)
Capital expenditures <sup>(3)</sup>	1,663	3,785	4,998	7,686
Total assets	73,440	80,765	73,440	80,765
Debt	-	-	-	-
Net working capital surplus <sup>(2) (4)</sup>	9,999	18,376	9,999	18,376
Common shares outstanding, end of period (000s)				
Basic	85,167	85,167	85,167	85,167
Diluted <sup>(1)</sup>	91,806	91,373	91,806	91,373
<b>Operations</b>				
Operating netback (\$/bbl) <sup>(2)</sup>				
Brent benchmark price	52.18	46.98	52.59	42.48
Discount	(5.27)	(8.38)	(5.39)	(8.84)
Sales price	46.91	38.60	47.20	33.64
Transportation expenses	(2.35)	(2.09)	(2.38)	(2.10)
Realized sales price	44.56	36.51	44.82	31.54
Royalties and production taxes	(4.69)	(4.17)	(5.13)	(3.53)
Production expenses	(72.71)	(137.72)	(81.50)	(93.66)
Operating netback	(32.84)	(105.38)	(41.81)	(65.65)
Average daily crude oil production (bopd)	28	21	29	38

### Notes:

- (1) Consists of outstanding common shares and stock options of the Company.
- (2) Non-GAAP measure. See “Non-GAAP Measures” section within this MD&A.
- (3) Includes non-cash capital expenditures of \$0.1 million and \$0.4 million, respectively, in the three and nine months ended September 30, 2017 (September 30, 2016 - \$nil).
- (4) Includes current restricted cash of \$0.1 million (September 30, 2016 - \$0.1 million) and assets held for sale of \$0.2 million (September 30, 2016 - \$nil).

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

- Our average daily production increased to 28 bopd, a 27% increase from the second quarter of 2017. Despite reduced workover activities in the quarter, our production was impacted by downtime for routine maintenance at the Bom Lugar producing well and natural declines at our Mãe-da-lua field.
- During the quarter, we drilled the 177(A1) well on Block 177, reaching a total measured depth of 1,100 metres, and did not discover commercial quantities of hydrocarbons. Capital expenditures in the quarter included \$1.1 million for drilling this well and capitalized G&A of \$0.3 million.
- We reported a net loss of \$3.3 million, primarily due to a \$2.4 million impairment booked on Block 177 as well as negative funds flow from operations of \$1.0 million. The \$2.4 million impairment booked on Block 177 included all costs incurred to date on the block, including drilling costs associated with the 177(A1) well, capitalized G&A, and past costs on the block such as bid round bonuses, retention fees and costs associated with letters of credit and performance guarantees.
- Our cash, restricted cash and working capital resources total \$10.0 million, including \$11.4 million of cash and cash equivalents.

## OUTLOOK

- Now that we are close to finalizing a gas commercialization solution, we plan to test our 183(1) well to demonstrate the potential of our discovered tight gas resource on Block 183 and the adjacent Block 197 (which includes our 197(1) well). The testing will commence upon receipt of all regulatory and environmental approvals. The 183(1) well was originally drilled in 2014 to a total depth of 3,550 metres and, based on open-hole logs, encountered 189 metres of potential net hydrocarbon pay over several separate intervals.

## PETROLEUM AND NATURAL GAS PROPERTIES

As at September 30, 2017, Alvo Petro held interests in three producing fields and 13 exploration blocks, comprising 127,539 gross acres (110,343 net acres) onshore Brazil in three hydrocarbon basins: the Recôncavo, Tucano, and Camamu-Almada. The current exploration assets consist of Blocks 182, 183, 197, 106, 107, 177, 169, 198, 255, 57, 62, 71, and 145 and three producing fields (Bom Lugar, Jiribatuba and Mãe-da-lua).

## EXPLORATION BLOCK ACTIVITY SUMMARY

Block	Gross Acres	Working Interest	Current Phase Expiry	Estimated Commitment <sup>(1)</sup> (\$000s)	Letter of Credit Support <sup>(2)</sup> (\$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%	Suspension & December 5, 2043 <sup>(5)</sup>	-	-
106	7,759	100%	Suspension in place <sup>(6)</sup>	360	463
169	5,280	100%	Suspension in place <sup>(7)</sup>	1,199	1,543
255	7,734	100%	Suspension in place <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
<b>Subtotal – work to be completed</b>				<b>5,078</b>	<b>6,114</b>
<b>Work completed or farmed out:</b>					
107	7,561	5%	September 1, 2017 <sup>(8)</sup>	2,399	3,086
198	2,503	100%	May 12, 2044 <sup>(9)</sup>	1,199	1,543
177	46,505	100%	February 22, 2018 <sup>(10)</sup>	1,319	2,919
<b>Subtotal – work completed or farmed out</b>				<b>4,917</b>	<b>7,548</b>
<b>GRAND TOTAL – ALL EXPLORATION BLOCKS</b>				<b>9,995</b>	<b>13,662</b>

- (1) The estimated commitments expressed above are based on costs to complete 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. The estimated commitment represents the USD equivalent of the minimum work commitment associated with Alvo Petro’s share of the UT’s. UT’s are not applicable in the Discovery Evaluation Plan (“PAD”) phase; however, the Corporation must notify the National Agency of Petroleum, Natural Gas and Biofuels (“ANP”) of its work plan to be completed during this phase.
- (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. Total LC’s outstanding include an additional \$0.4 million in respect of Block 256 not reflected in the table above. The block was relinquished in May, 2017 and the work commitment has been approved by the ANP, however we are awaiting release of the related LC by all banks.
- (3) A PAD was approved by the ANP on December 28, 2015 and included plans to drill one well. In August 2017, Alvo Petro requested a suspension to the PAD deadline due to lack of 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.
- (4) In June 2017, Alvo Petro filed a request with the ANP to move the 183(1) well into the PAD phase and requested a suspension for the remaining portion of the block.
- (5) The PAD for Block 197 was approved in May 2015 and includes plans to test the 197(2) well (which was completed in 2015) and additional work with respect to our 197(1) well, including obtaining an environmental license for hydraulic fracturing. In July 2017, the ANP approved the suspension of the PAD due to the lack of an environmental license for hydraulic fracturing on the 197(1) well. The Caburé field encompassing our 197(2) well is excluded from the PAD activities and the field is in the Development and Production Phase which extends to December 5, 2043.
- (6) In July 2017, the ANP approved a suspension to the phase expiry on Block 106 due to lack of an environmental license. Following receipt of the license, Alvo Petro will have 166 days until the phase expiry of the block.
- (7) In May 2017, the ANP approved a preliminary suspension of Blocks 169 and 255 effective until January 2018.
- (8) Block 107 was farmed out to a third party in 2016. Under the terms of the agreement, the Farmee was required to complete 100% of the required work commitments on Block 107 which was finished in July 2017, subject to ANP approval. Upon approval of the work commitments by the ANP, Alvo Petro will be entitled to exchange its 5% participating interest for a 5% gross-overriding royalty.
- (9) 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 extends to May 12, 2044. The remainder of the block was relinquished reducing the Company’s gross acreage on this block from 7,739 gross acres to 2,503 gross acres.
- (10) In the third quarter of 2017, Alvo Petro satisfied the commitment on Block 177, mainly through drilling the 177(A1) well, subject to ANP approval.

## FINANCIAL AND OPERATING REVIEW

### Average Daily Production

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Total production (bbls)	2,558	1,917	7,988	10,495
Daily production (bopd)	28	21	29	38

Average daily production in the third quarter of 2017 increased to 28 bopd compared to 22 bopd in the second quarter of 2017 and 21 bopd in the third quarter of 2016, as both prior periods experienced downtime due to workovers. Production decreased compared to the first quarter of 2017 as well as on a year-to-date basis in 2017 compared to 2016 due to maintenance undertaken on our Bom Lugar well and natural declines on the Mãe-da-lua field.

### Oil Sales

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Brent (\$/bbl)	52.18	46.98	52.59	42.48
Discount (\$/bbl)	(5.27)	(8.38)	(5.39)	(8.84)
Sales Price (\$/bbl)	46.91	38.60	47.20	33.64
Sales price discount as a % of Brent	10%	18%	10%	21%
Oil Sales	120	74	377	353
Transportation	(6)	(4)	(19)	(22)
Total sales, net of transportation expense	114	70	358	331
Realized price (\$/bbl)	44.56	36.51	44.82	31.54

Pursuant to the terms of Alvo Petro's oil sales 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 Mãe-da-lua contracts. The fixed discount per barrel under the Bom Lugar contract, which is amended annually, decreased in the second quarter of 2017 resulting in lower overall discounts compared to prior periods.

Overall, oil sales increased 62% in the third quarter of 2017 compared to 2016 due to the 33% increase in daily production and the 22% increase in realized sales prices. On a year-to-date basis, oil sales increased 7% despite the 24% decrease in daily production which was offset by a 42% increase in realized sales prices.

### Royalties and Production Taxes

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Royalties and production taxes	12	8	41	37
Percentage of sales (%)	10.0	10.8	10.9	10.5

The Bom Lugar and Jiribatuba fields held by Alvo Petro are subject to a base 5% government royalty plus an additional 0.5% royalty paid to landowners under applicable Brazil petroleum laws. The Mãe-da-lua field and all exploration blocks held by Alvo Petro are subject to a base 10% government royalty plus a 1% landowner royalty. There is an additional 2.5% gross-overriding royalty on the Mãe-da-lua field and Blocks 182 and 197.

All royalties are paid based on production volumes computed 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 Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Production expenses by type:				
Personnel costs	88	59	274	266
Production facilities rental	-	-	-	277
Other fixed costs	58	48	178	178
Variable costs	40	31	91	136
Workover costs	-	126	108	126
<b>Total production expenses</b>	<b>186</b>	<b>264</b>	<b>651</b>	<b>983</b>
Production expenses per barrel:				
Personnel costs	34.40	30.78	34.31	25.35
Production facilities rental	-	-	-	26.39
Other fixed costs	22.67	25.04	22.28	16.95
Variable costs	15.64	16.17	11.39	12.96
Workover costs	-	65.73	13.52	12.01
<b>Total production expenses per bbl (\$)</b>	<b>72.71</b>	<b>137.72</b>	<b>81.50</b>	<b>93.66</b>

Production expenses for the three and nine months ended September 30, 2017 decreased \$0.1 million and \$0.3 million, respectively, compared to the same periods in 2016 primarily due to reduced workover costs in the third quarter and the elimination of production facilities rental costs for the 182(B1) well on the Mãe-da-lua field since May 2016. Production expenses were also impacted by the strengthening Brazilian Real (“BRL”) relative to the USD which appreciated 3% and 10% on average in the three and nine months ended September 30, 2017 compared to the same periods in 2016.

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
<b>G&amp;A Expenses, by type:</b>				
Personnel	670	795	1,959	2,286
Travel	33	46	88	129
Office and IT costs	96	109	279	354
Professional fees	132	202	397	485
General corporate costs	66	76	135	359
<b>Gross G&amp;A</b>	<b>997</b>	<b>1,228</b>	<b>2,858</b>	<b>3,613</b>
Capitalized G&A	(328)	(374)	(887)	(878)
<b>G&amp;A expenses</b>	<b>669</b>	<b>854</b>	<b>1,971</b>	<b>2,735</b>

The majority of the Company’s G&A expenses relate to personnel costs. General corporate costs include such items as public company costs, directors’ fees and insurance. The Company’s Gross G&A has declined \$0.2 million in the third quarter of 2017 and \$0.8 million on a year-to-date basis compared to the same periods in 2016 as the Company has implemented cost savings initiatives to reduce costs largely with respect to personnel, professional fees, and office and IT costs.

## Funds Flow from Operations

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2017	2016	2017	2016
Funds flow from operations	(959)	(1,155)	(2,479)	(3,689)

As a result of reduced general and administrative expenses and production expenses, the Company's fund flow from operations improved \$0.2 million in the third quarter and \$1.2 million on a year-to-date basis, compared to the same periods in 2016. Alvo Petro funds the Company's current capital and operating plans from existing cash balances on hand.

## Cash and Cash Equivalents and Restricted Cash

	As at	
	September 30, 2017	December 31, 2016
Cash and cash equivalents	11,385	17,788
Restricted cash – current	110	108
Total cash and restricted cash	11,495	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 Alvo Petro's work commitments under the terms of its concession contracts. LC's and letters of guarantee issued under the Facility must be supported by either cash collateral posted by Alvo Petro or through an Account Performance Security Guarantee from Export Development Canada ("EDC").

As at September 30, 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 restricted cash as at September 30, 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 September 30, 2017 include \$7.9 million of LC's on commitments which have been met or farmed out, subject to ANP approval. LC's for work commitments were satisfied on Block 256 (\$0.4 million), Block 198 (\$1.5 million) and Block 177 (\$2.9 million), subject to ANP approval. The commitment for the Block 256 LC was approved by the ANP and Alvo Petro is awaiting formal release of the associated LC by the respective banks. The LC for the work commitment associated with Block 107 (\$3.1 million) was farmed out to a third party in 2016 and was met during the three months ended September 30, 2017, subject to ANP approval.

Additional LC's 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 Alvo Petro 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			% Change in Period	
	September 30, 2017	June 30, 2017	December 31, 2016	Q3 2017	YTD 2017
<b>Rate at end of period:</b>					
U.S. dollar to Brazilian real	3.168	3.308	3.259	(4.2)	(2.8)
U.S. dollar to Canadian dollar	1.248	1.298	1.343	(3.9)	(7.1)

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 Alvo Petro'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 loss in our consolidated statements of operations and comprehensive loss. The BRL appreciated 4.2% and 2.8% relative to the USD in the three and nine months ended September 30, 2017, resulting in a comprehensive gain of \$1.5 million and \$0.9 million, respectively.

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 USD costs in the future. In the third quarter of 2017, the BRL averaged 3.164 compared to 3.246 in the third quarter of 2016 and, on a year-to-date basis, the BRL averaged 3.175 in 2017 compared to 3.545 in 2016. The 3% and 10% appreciation of the average BRL rate relative to the USD in the three and nine months ended September 30, 2017 compared to 2016 resulted in higher USD equivalent production expenses, G&A expenses and capital expenditures.

#### Share-Based Compensation Expense

	Three Months Ended		Nine Months Ended	
	September 30, 2017	2016	September 30, 2017	2016
Share-based compensation	20	37	66	89

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 Alvo Petro's Stock Option Plan there were 6.6 million stock options outstanding at September 30, 2017 compared to 6.2 million outstanding at September 30, 2016. Share-based compensation expense decreased 46% in the third quarter of 2017 despite increased options outstanding due to the decline in the Company's share price which has resulted in lower estimated fair value of new stock options granted and a lower share based compensation expense as higher valued grants are vested. On a year-to-date basis, the 2017 share-based compensation expense decreased only 26% compared to 2016 as the 2016 expense 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.

#### Depletion, Depreciation, Accretion and Impairment

	Three Months Ended		Nine Months Ended	
	September 30, 2017	2016	September 30, 2017	2016
Depletion and depreciation (DD&A)	70	87	183	312
Accretion on decommissioning liabilities	10	6	28	19
Impairment	2,384	4,491	2,384	7,480
Total	2,464	4,584	2,595	7,811

Included in the depletion computation for our producing assets was \$7.5 million (September 30, 2016 - \$8.9 million) of estimated future development costs for undeveloped proved plus probable reserves. The decrease in depletion expense in the three and nine months ended September 30, 2017 compared to the same periods in 2016 is due to a decrease in the depletable base which is primarily a function of lower future development costs as well as decreased production on a year-to-date basis. The increase in



accretion expense compared to the same periods in 2016 is due to the increase in the estimated decommissioning liability for new wells drilled and facilities built since September 30, 2016.

In the three months ended September 30, 2017, the Company recorded an impairment to Block 177 of \$2.4 million. The impairment relates to all costs incurred to date on the block, including costs incurred in the third quarter on drilling the 177(A1) well and past costs on the block including bid round bonuses, costs associated with LC's, retention fees and capitalized G&A. No commercial quantities of oil or gas were discovered in this well and due to limited prospectivity on the block, the full carrying amount of the block was written off in the quarter. As at September 30, 2017, the Company has recorded an additional \$0.1 million as exploration and evaluation expenditures in respect of costs to fulfill the remaining commitment on this block. In 2016, the Company reported a total impairment in the nine months ended September 30, 2016 of \$7.5 million, \$4.4 million in respect of Block 256, \$3.0 million in respect of Block 170, and \$0.1 million on inventory balances.

## Taxes

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Current income tax expense	-	-	-	-
Deferred income tax expense	-	(68)	-	731
Total income tax expense	-	(68)	-	731

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 and nine months ended September 30, 2017 and 2016.

The Company has a deferred tax asset of \$11.8 million at September 30, 2017 (December 31, 2016 - \$10.1 million), the benefit of which has not been recognized for accounting purposes at September 30, 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 and nine months ended September 30, 2016 was largely as a result of foreign currency fluctuations.

## Net Loss

The Company reported a net loss for the three and nine months ended September 30, 2017 of \$3.3 million and \$5.0 million, respectively, compared to a loss of \$5.7 million and \$12.2 million for the same periods in 2016. The Company realized a reduced loss in 2017 compared to 2016 primarily due to reduced impairment losses as well as reduced production expenses and general and administrative expenses.

## Capital Expenditures

Capital Expenditures by Type	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
E&E expenditures				
Drilling and completions <sup>(1)</sup>	1,177	2,955	3,702	5,798
Inventory purchases	58	4	58	63
Facility & equipment	-	-	47	2
Land, lease, and similar payments	76	105	241	214
Capitalized G&A	315	302	855	751
Other	26	46	54	132
<b>Total E&amp;E expenditures</b>	<b>1,652</b>	<b>3,412</b>	<b>4,957</b>	<b>6,960</b>
PP&E expenditures				
Drilling and completions	-	175	-	182
Facility & equipment	-	118	7	400
Furniture, fixtures, and equipment	5	5	8	8
Capitalized G&A	13	72	32	127
Other	(7)	3	(6)	9
<b>Total PP&amp;E expenditures</b>	<b>11</b>	<b>373</b>	<b>41</b>	<b>726</b>
<b>Total capital expenditures by type</b>	<b>1,663</b>	<b>3,785</b>	<b>4,998</b>	<b>7,686</b>

Capital Expenditures by Area	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
E&E expenditures				
9 <sup>th</sup> Brazil Bid Round blocks	112	134	375	2,914
11 <sup>th</sup> Brazil Bid Round blocks	1,414	102	1,590	163
12 <sup>th</sup> Brazil Bid Round blocks	58	3,240	2,902	3,771
13 <sup>th</sup> Brazil Bid Round blocks	10	8	32	43
Inventory	58	4	58	63
Costs to be allocated to blocks	-	(76)	-	6
<b>Total E&amp;E expenditures<sup>(1)</sup></b>	<b>1,652</b>	<b>3,412</b>	<b>4,957</b>	<b>6,960</b>
PP&E expenditures				
Bom Lugar	2	2	14	17
Jiribatuba	2	1	7	1
Mãe-da-lua	2	364	12	678
Corporate	5	6	8	30
<b>Total PP&amp;E expenditures</b>	<b>11</b>	<b>373</b>	<b>41</b>	<b>726</b>
<b>Total capital expenditures by area</b>	<b>1,663</b>	<b>3,785</b>	<b>4,998</b>	<b>7,686</b>

### Notes:

(1) Includes non-cash capital expenditures of \$0.1 million and \$0.4 million, respectively, in the three and nine months ended September 30, 2017 (September 30, 2016 – \$nil, \$nil)

Capital expenditures of \$1.7 million in the third quarter of 2017 included \$1.1 million in drilling costs on the 177(A1) well, capitalized G&A of \$0.3 million, and recurring land and lease payments of \$0.1 million.

## Summary of Quarterly Results

	Q3 2017	Q2 2017	Q1 2017	Q4 2016	Q3 2016	Q2 2016	Q1 2016	Q4 2015
<b>Financial</b>								
Oil sales	120	86	171	208	74	126	153	116
Net loss	(3,331)	(814)	(893)	(371)	(5,692)	(2,000)	(4,515)	(9,797)
Per share – basic & diluted (\$)	(0.04)	(0.01)	(0.01)	-	(0.07)	(0.02)	(0.05)	(0.12)
Funds flow from operations <sup>(1)</sup>	(959)	(723)	(797)	(1,006)	(1,155)	(1,309)	(1,225)	(1,017)
Per share – basic & diluted (\$)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)
Capital and other asset expenditures <sup>(2)</sup>	1,663	566	2,769	708	3,785	835	3,066	1,610
<b>Operations</b>								
Operating netback (\$/bbl) <sup>(1)</sup>								
Brent benchmark price	52.18	50.92	54.67	51.13	46.98	46.97	35.08	44.71
Sales price	46.91	43.77	49.35	42.31	38.60	38.47	28.85	36.30
Transportation expenses	(2.35)	(2.04)	(2.60)	(2.24)	(2.09)	(2.44)	(1.89)	(2.50)
Realized sales price	44.56	41.73	46.75	40.07	36.51	36.03	26.96	33.80
Royalties and production taxes	(4.69)	(6.11)	(4.91)	(4.48)	(4.17)	(3.36)	(3.39)	(3.13)
Production expenses	(72.71)	(127.23)	(62.05)	(34.58)	(137.72)	(109.92)	(67.70)	(56.32)
Operating netback	(32.84)	(91.61)	(20.21)	1.01	(105.38)	(77.25)	(44.13)	(25.65)
Average daily crude oil production (bopd)	28	22	39	53	21	36	58	35

### Notes:

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

(2) Q3 2017 and Q1 2017 capital expenditures include \$0.1 million and \$0.4 million, respectively, of non-cash expenditures.

**Q3 2017** – The Company drilled the 177(A1) well on Block 177 in the quarter, incurring costs of \$1.1 million. The Company recognized an impairment loss on this block of \$2.4 million and additional exploration and evaluation expenditures of \$0.1 million for costs to complete the remaining commitments. Due to the \$2.4 million impairment to Block 177 and \$1.0 million in negative funds flow from operations, the Company realized a net loss of \$3.3 million. Average daily production increased 27% in the quarter due to reduced workover activities compared to the second quarter of 2017. As a result of the increased production and the 7% increase in realized sales prices, oil sales increased 40%.

**Q2 2017** – Average daily production decreased 44% in the quarter as the Bom Lugar producing well was offline in April and May awaiting a pump repair. As a result of the production decline and the 7% decline in Brent, oil sales decreased 50% compared to the first quarter of 2017. Increased production expenses for workover costs on the Bom Lugar well and the reduced production volumes contributed to higher production expenses per barrel and decreased operating netbacks. Funds flow from operations and net loss both improved compared to the first quarter of 2017 despite reduced oil sales and increased production expenses, largely due to a \$0.1 million decrease in general and administrative expenses. Total capital expenditures of \$0.6 million included capitalized G&A, LC fees on block extensions and suspensions approved by the ANP, preliminary surveying and planning for our upcoming Caburé development, and initial site construction costs for the 177(A1) well to be drilled in the third quarter of 2017.

**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.

## Commitments and Contingencies

The following is a summary of Alvo Petro's contractual commitments as at September 30, 2017:

Commitments	< 1 Year	1-3 Years	Thereafter	Total
Minimum work commitments <sup>(1)</sup>				
<i>Minimum work commitments to be completed</i>				
Block 183	1,052	-	-	1,052
Block 106	360	-	-	360
Block 169	1,199	-	-	1,199
Block 255	1,436	-	-	1,436
Block 57 <sup>(2)</sup>	-	280	-	280
Block 62 <sup>(2)</sup>	-	280	-	280
Block 71 <sup>(2)</sup>	-	191	-	191
Block 145 <sup>(2)</sup>	-	280	-	280
Bom Lugar	-	-	110	110
Jiribatuba	-	-	110	110
<b>Minimum work commitments to be completed</b>	<b>4,047</b>	<b>1,031</b>	<b>220</b>	<b>5,298</b>
<i>Minimum work commitments completed or farmed out</i>				
Block 107 <sup>(3)</sup>	2,399	-	-	2,399
Block 177 <sup>(4)</sup>	1,319	-	-	1,319
Block 198 <sup>(5)</sup>	1,199	-	-	1,199
<b>Minimum work commitments completed or farmed out</b>	<b>4,917</b>	<b>-</b>	<b>-</b>	<b>4,917</b>
<b>Total minimum work commitments</b>	<b>8,964</b>	<b>1,031</b>	<b>220</b>	<b>10,215</b>
<b>Office leases<sup>(6)</sup></b>	<b>207</b>	<b>62</b>	<b>-</b>	<b>269</b>
<b>Total commitments</b>	<b>9,171</b>	<b>1,093</b>	<b>220</b>	<b>10,484</b>

### Notes:

- (1) 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.
- (2) Alvo Petro holds a 65% interest in each of these blocks and the amounts provided in the table above represent Alvo Petro's share of the related commitments.
- (3) 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 commitment included in the table above. The work commitment was satisfied during the three months ended September 30, 2017, subject to ANP approval.
- (4) In the three months ended September 30, 2017, the Company drilled the 177(A1) well and performed other work in satisfaction the work commitment on Block 177, subject to ANP approval.
- (5) In the first quarter of 2017, the Company completed drilling the 198(A1) well in satisfaction of the work commitment in the table above, subject to ANP approval.
- (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.

Alvo Petro'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 September 30, 2017, the potential estimated penalty was \$0.3 million (December 31, 2016 - \$0.2 million), which is included in accounts payable and accrued liabilities.

## LIQUIDITY AND CAPITAL RESOURCES

At September 30, 2017, Alvo Petro's cash and cash equivalents of \$11.4 million was held as follows:

	Total	U.S. Dollar	CAD Dollar <sup>(1)</sup>	Brazil Real <sup>(1)</sup>
Cash held in Canada	11,199	11,100	99	-
Cash held in Brazil	186	-	-	186
<b>Total</b>	<b>11,385</b>	<b>11,100</b>	<b>99</b>	<b>186</b>

### Notes:

(1) Amounts in the table above denote the U.S. dollar equivalent as at September 30, 2017.

Alvo Petro 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 September 30, 2017, the Company's net working capital surplus of \$10.0 million exceeded the minimum work commitments to be completed of \$5.3 million by \$4.7 million. Exploration work commitments in Brazil are supported by total LC's of \$14.1 million as at September 30, 2017, the full balance of which is currently satisfied through EDC. To the extent new or revised work commitments were required to be issued in the future, EDC coverage may be limited and the Company may be required to post the requisite amount from its cash balance which may impact its ability to fund future capital and operational expenditures.

Alvo Petro's continues our focus on building a natural gas business from our Caburé field which includes both our 197(2) and 198(A1) wells. In June 2017, we officially commenced the arbitration of the terms of the unitization of our Caburé field with the adjacent resource owner. We have provided the ANP all requested documentation and are anticipating a determination in early 2018.

Our near-term capital plan includes:

- Testing our 183(1) well to demonstrate the Gomo resource potential on Block 183 and the adjacent Block 197 (which includes our 197(1) well) at an estimated cost of \$0.8 million; and
- Initial engineering and permitting work associated with the development of our Caburé natural gas field at an estimated cost of \$0.2 million.

These capital projects will be funded with existing cash balances on hand. We expect that financing will be required to execute the full development of our Caburé field which may be funded through project financing, vendor financing, other debt issuances or equity issuances. We are targeting the completion of a gas sales agreement concurrent with the conclusion of the unitization process. Future capital expenditures associated with Alvo Petro's commitments and other exploration assets and mature fields may be funded through a combination of cash on hand, assets sales, farmouts, or additional debt or equity issuances.

The liability for decommissioning obligations of Alvo Petro was \$1.5 million as at September 30, 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 September 30, 2017, the Company had \$3.2 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. Alvo Petro is continually reviewing its anticipated inventory usage in order to optimize future anticipated costs and existing financial resources. In the nine months ended September 30, 2017, the Company disposed of a total of \$0.6 million of equipment inventory, \$0.5 million classified as assets held for sale and the remainder classified as E&E.

## 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 Alvo Petro common shares and stock options outstanding at November 15, 2017 was 91,770,807 (common shares – 85,166,871, stock options – 6,603,936). There are no preferred shares outstanding.

## RISKS AND UNCERTAINTIES

There have been no significant changes in the nine months ended September 30, 2017 to the risk and uncertainties identified in the MD&A for the year ended December 31, 2016.

An investment in Alvo Petro should be considered speculative due to the nature of our activities and the stage of our development. Alvo Petro 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 [www.sedar.com](http://www.sedar.com).

## CHANGES IN ACCOUNTING POLICIES INCLUDING INITIAL ADOPTION

### New and Revised Accounting Standards

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.

### Standards issued but not yet effective

The Company has reviewed the following new and revised accounting pronouncements that have been issued but are not yet effective that have a potential impact on the consolidated financial statements of the Company.

Standard and Description	Date of Adoption	Expected Adoption Impact on Consolidated Financial Statements
IFRS 2 <i>Share-based Payment</i> – In June 2016, the IASB issued amendments to IFRS 2 to clarify the classification and measurement of share-based payment transactions.	January 1, 2018	The Company does not expect the amendments to have a material impact on the financial statements.
IFRS 15 <i>Revenue from Contracts with Customers</i> – The new standard will replace existing revenue guidance. It requires entities to recognize revenue reflective of the transfer of goods and services for the expected consideration received, upon transfer of control to the purchaser. The standard aims to report useful information to financial statement users about the nature, amount, timing and uncertainty of revenue and cash flows arising from a contract with a customer.	January 1, 2018	The Company is finalizing the assessment of its sales contracts and does not expect IFRS 15 to have a material impact on the consolidated financial statements, with the exception of expanded note disclosure that will be required to comply with this standard upon adoption.
IFRS 9 <i>Financial Instruments</i> – As of July 2015, the IASB completed the final elements of IFRS 9 which supersedes IAS 39 <i>Financial Instruments: Recognition and Measurement</i> . IFRS 9 introduces new models for classification and measurement of financial instruments, hedge accounting and impairment of financial assets.	January 1, 2018	The Company does not expect the new standard to have a material impact on the financial statements.
IFRS 16 <i>Leases</i> - IFRS 16 was issued January 2016 and replaces IAS 17 <i>Leases</i> . The standard introduces a single lessee accounting model for leases with required recognition of assets and liabilities for most leases.	January 1, 2019	The Company is assessing the effect of this future pronouncement on its financial statements.

**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 anticipated outcomes of regulatory determinations, future results from operations, projected financial results and financing requirements, future capital and operating costs, future production rates, proposed exploration and development activities, sources and availability of capital, and capital spending levels. Forward-looking statements are necessarily based upon assumptions and judgments with respect to the future including, but not limited to, regulatory requirements including the completion of the unitization of certain fields, securing gas sales agreements, the success of future drilling, completion, recompletion and development activities, the outlook for commodity markets and ability to access 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](http://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.

**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 flows from operating activities excluding changes in non-cash working capital. Management considers funds flow from operations and funds flow per share important as they help evaluate performance and demonstrate the Company's ability to 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 production 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 measures of financial performance calculated in accordance with IFRS.