

The following Management's Discussion and Analysis ("MD&A") is dated March 20, 2018 and should be read in conjunction with the audited consolidated financial statements and accompanying notes of Alvo Petro Energy Ltd. ("Alvo Petro" or the "Company") as at and for the years ended December 31, 2017 and 2016. Additional information for the Company, including the Annual Information Form ("AIF"), can be found on SEDAR at www.sedar.com or at 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 for and the acquisition, development and production of, hydrocarbons in the Recôncavo and Camamu-Almada basins onshore Brazil. Alvo Petro holds interests in three producing fields and 11 exploration blocks comprising 73,473 gross acres (63,460 net acres) onshore Brazil.

Strategy

Alvo Petro's vision is to become a leading independent oil and natural gas operator in Brazil. Our strategy is to unlock the onshore natural gas potential in the state of Bahia in Brazil, building off the development of our Caburé natural gas field and the construction of strategic midstream infrastructure. Our efforts in the near-term are concentrated on concurrently finalizing a long-term natural gas sales contract and a mandatory unitization process.

SELECTED QUARTERLY RESULTS

	Three months ended December 31,		Twelve months ended December 31,	
	2017	2016	2017	2016
Financial				
(\$000s, except where noted)				
Oil sales	85	208	462	561
Net loss	(2,079)	(371)	(7,117)	(12,578)
Per share – basic and diluted (\$) ⁽¹⁾	(0.02)	-	(0.08)	(0.15)
Funds flow from operations ⁽²⁾	(775)	(1,006)	(3,254)	(4,695)
Per share – basic and diluted (\$) ⁽¹⁾	(0.01)	(0.01)	(0.04)	(0.06)
Capital expenditures ⁽³⁾	434	708	5,432	8,394
Total assets	68,715	77,052	68,715	77,052
Debt	-	-	-	-
Net working capital surplus ^{(2) (4)}	8,762	16,977	8,762	16,977
Common shares outstanding, end of year (000s)				
Basic	85,167	85,167	85,167	85,167
Diluted ⁽¹⁾	91,706	92,041	91,706	92,041
Operations				
Operating netback (\$/bbl) ⁽²⁾				
Brent benchmark price	61.53	51.13	54.83	45.04
Discount	(6.48)	(8.82)	(6.36)	(8.64)
Sales price	55.05	42.31	48.47	36.40
Transportation expenses	(2.59)	(2.24)	(2.41)	(2.14)
Realized sales price	52.46	40.07	46.06	34.26
Royalties and production taxes	(6.48)	(4.48)	(5.35)	(3.83)
Production expenses	(112.05)	(34.58)	(86.45)	(74.82)
Operating netback	(66.07)	1.01	(45.74)	(44.39)
Average daily crude oil production (bopd)	17	53	26	42

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 \$0.4 million in the twelve months ended December 31, 2017 (December 31, 2016 - \$nil)
- (4) Includes current restricted cash of \$0.1 million (December 31, 2016 - \$0.1 million) and assets held for sale of \$0.2 million (December 31, 2016 - \$0.4 million).

HIGHLIGHTS AND SIGNIFICANT TRANSACTIONS FOR THE FOURTH QUARTER OF 2017

- We reported a net loss of \$2.1 million in the fourth quarter, which included total impairment charges of \$1.3 million as a result of impairments booked on our Mãe-da-lua field of \$0.5 million and an additional \$0.8 million on Blocks 169 and 255 and other E&E assets. Negative funds flow from operations improved to \$0.8 million in the fourth quarter due to reduced G&A and E&E expenses.
- In the fourth quarter of 2017, our production decreased to 17 bopd, a 39% decrease from the third quarter of 2017 as our Bom Lugar well was offline for much of the quarter due to a downhole pump failure.
- Capital expenditures of \$0.4 million in the fourth quarter included capitalized G&A of \$0.2 million, letter of credit (“LC”) fees on our exploration work commitments and other recurring costs.
- Our cash, restricted cash and working capital resources total \$8.8 million, including cash and cash equivalents of \$9.2 million.

ADDITIONAL HIGHLIGHTS AND SIGNIFICANT TRANSACTIONS FOR 2017

- Capital expenditures decreased to \$5.4 million in 2017 compared to \$8.4 million in 2016. During the year the Company drilled and tested the 198(A1) well and the 177(A1) well, incurring costs of \$2.4 million and \$1.1 million respectively. Additional capital expenditures included preliminary surveying and planning work on our Caburé gas field, capitalized G&A, LC fees and other recurring capital costs.
- The net loss for the year ended December 31, 2017 was \$7.1 million and included \$3.7 million of impairment charges, due to the \$2.4 million impairment recognized on Block 177 in the third quarter and the fourth quarter impairment of \$1.3 million.

RECENT HIGHLIGHTS

- In 2017, the National Agency of Petroleum, Natural Gas and Biofuels of Brazil (“ANP”) was engaged to arbitrate the terms of the unitization of our Caburé natural gas field (the 197(2) and 198(A1) wells) with the adjacent resource owners. In January 2018, the ANP completed its technical review and determined the initial working interest share for each resource owner, allocating Alvo Petro a 49.1% interest. The ANP is arbitrating the decision on Unit Operator and as necessary they will make the remaining determinations required to finalize the unitization, including the joint development plan and all related agreements.
- In February 2018, we completed testing three separate intervals of our 183(1) well. The 183(1) well was originally drilled in 2014 to a total depth of 3,550 metres. Over the six-hour and 34-hour test periods for the first and second intervals, the well flowed natural gas, on an unstimulated basis at an average rate of 240 Mcfpd and 92 Mcfpd, respectively. During the second interval, 12 barrels of 61° API condensate was also recovered. The third interval produced formation water and no material hydrocarbons. We are analysing fluid composition and pressure data to predict productivity of this well on a stimulated basis.

PETROLEUM AND NATURAL GAS PROPERTIES AND OUTLOOK

As at December 31, 2017, Alvo Petro held interests in three producing fields and 13 exploration blocks comprising 127,539 gross acres (110,343 net acres) onshore Brazil. Subsequent to December 31, 2017, Alvo Petro relinquished Block 177 and exchanged its 5% participating interest in Block 107 for a 5% gross overriding royalty on Block 107 and an adjacent block, subject to the approval of ANP. The current assets of Alvo Petro consist of 11 exploration blocks (the Caburé natural gas field and Blocks 182, 183, 197, 106, 169, 255, 57, 62, 71, and 145) in the Recôncavo Basin and three producing fields (Bom Lugar and Mãe-da-lua in the Recôncavo basin and Jiribatuba in the Camamu-Almada basin), comprising 73,473 gross acres (63,460 net acres).

Exploration and evaluation ("E&E") assets

Block	Gross Acres	Working Interest	Current Phase Expiry	E&E balance December 31, 2017 (\$000's)	Estimated Commitment ⁽¹⁾ (\$000's)	Letter of Credit Support ⁽²⁾ (\$000's)
Caburé ⁽³⁾	4,826	100%	December 5, 2043 and May 12, 2044	15,268	-	-
182	4,807	100%	Suspension in place	842	-	-
183	7,740	100%	October 1, 2018 ⁽⁴⁾	12,436	1,008	1,233
197	3,484	100%	Suspension in place	22,029	-	-
106	7,759	100%	July 21, 2018	176	345	463
169	5,280	100%	Suspension in place	118	1,149	1,543
255	7,734	100%	Suspension in place	82	1,375	1,847
57	7,752	65%	January 24, 2019	118	45	279
62	7,715	65%	January 24, 2019	100	45	279
71	5,409	65%	January 24, 2019	103	38	191
145	7,734	65%	January 24, 2019	76	45	279
Subtotal – work to be completed on E&E assets				51,348	4,050	6,114
107	-	-		279	-	3,086
177	-	-		-	1,263	2,919
Subtotal – work completed/farmed out on E&E assets				279	1,263	6,005
GRAND TOTAL – ALL EXPLORATION BLOCKS⁽⁵⁾				51,627	5,313	12,119

- (1) The estimated commitments expressed above are based on costs to complete work units ("UTs") which represent the minimum work to be carried out under the terms of the existing exploration phase of the concession contracts. UTs may be satisfied through, among other things, drilling exploration wells and shooting or reprocessing seismic. UTs are not applicable in the Development Assessment Plan ("PAD") phase; however, the Company must notify the ANP of its work plan to be completed during this phase. Blocks 182, 197 and a portion of Block 183 are currently in the PAD phase, as discussed in further detail below.
- (2) Letters of Credit ("LCs") 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) References to Caburé or the Caburé natural gas field throughout this MD&A refer collectively to the Caburé field (our 197(2) well) and Caburé Leste field (our 198(A1) well). Both fields are in the Development and Production Phase with expiry dates of December 5, 2043 and May 12, 2044 respectively.
- (4) A portion of Block 183 is currently in the PAD phase with an expiry date of October 1, 2018. The remainder of the block is in exploration Phase II and is currently in suspension due to a lack of environmental permits.
- (5) The total E&E balance reflected in the table above excludes \$2.9 million of equipment inventory and \$0.1 million of other assets classified as E&E as at December 31, 2017.

Caburé Natural Gas Field:

Alvopetro discovered its Caburé gas field with the 197(2) well which was drilled in 2014 and tested in 2015. The 197(2) well was previously part of Block 197, awarded in the 9th Brazil Bid Round. Alvopetro filed a declaration of commerciality for the 197(2) gas discovery commencing the Development and Production Phase, which extends to December 5, 2043, and "ring-fenced" the gas discovery from the remainder of Block 197. In early 2017, Alvopetro drilled and tested the 198(A1) well on Block 198, a 12th Brazil Bid Round Block, which is adjacent to the Caburé field and forms part of this gas discovery. Alvopetro also filed a declaration of commerciality with respect to this well and this portion of the field was named Caburé Leste. The Caburé Leste field is also in the Development and Production Phase with an expiry date of May 12, 2044. The remaining acreage of Block 198 was relinquished to the ANP in May 2017. The Caburé and Caburé Leste Fields are collectively referred to as the Caburé field or the Caburé natural gas field throughout this MD&A. In addition to costs associated with drilling and testing the 197(2) and 198(A1) wells, costs incurred to date on the Caburé field include a portion of historical costs associated with Block 197 including bid round bonuses and seismic work as well as all historical costs incurred on Block 198.

An independent contingent resource report of the Caburé gas natural field was completed by DeGolyer and MacNaughton ("D&M"), quantifying Alvopetro's contingent resources at June 30, 2015 with a "low estimate" (1C) of 3.4 million barrels of oil equivalent ("mmboe"), a "best estimate" (2C) of 5.8 mmboe, a "high estimate" (3C) of 8.1 mmboe and 10% discounted net present value (NPV10) of \$61.9 million (1C), \$91.3 million (2C) and \$137.1 million (3C). The Caburé natural gas field also extends across two adjacent blocks owned by third parties. Under Brazilian legislation, petroleum accumulations straddling two or more

licensed blocks must undergo unitization in order to promote efficient exploration and development. The contingent resources estimated in the D&M report are assumed to be developed under unitization but do not reflect participation interests determined by the ANP in January 2018, as discussed in further detail below.

In 2017, the ANP was engaged to arbitrate the terms of the unitization. In January 2018, the ANP completed its review of all technical data and determined the initial working interest share for each resource owner as follows:

	<u>%</u>	<u>Gas in Place¹ mmboe (Bcf)</u>
Alvopetro	49.1%	10.40 (62.4)
Imetame Energia Ltda.	36.1%	7.65 (45.9)
Orteng Óleo & Gas S.A.	14.8%	<u>3.13 (18.8)</u>
		21.18 (127.1)

¹ Gas in place estimates published by the ANP following the review of all technical information submitted by Alvopetro and Imetame. Gas in place estimates represent ANP's high resource in place estimate, have not been reviewed by Alvopetro's external reserve evaluators and do not reflect recoverable reserves.

Based on the initial working interest as determined by the ANP and well results from the 198(A1) well, Alvopetro's internal management estimates of the Contingent Recoverable Resources from our share of the Caburé Field are expected to be between the D&M 1C and 2C Contingent Recoverable Resources estimates. The ANP is arbitrating the decision on Unit Operator and as necessary they will make the remaining determinations required to finalize the unitization, including the joint development plan and all related agreements. Alvopetro expects to complete a reserves evaluation of this field following completion of the unitization and execution of a gas sales agreement.

Block 182:

Block 182 was awarded in the 9th Brazil Bid Round and is currently in the PAD phase. Under the terms of the PAD, Alvopetro plans to drill one of two identified prospects on the block. In August 2017, Alvopetro requested a suspension of the PAD deadline due to the lack of an environmental permit. This suspension was approved by the ANP subsequent to December 31, 2017. The block will remain in suspension until receipt of the environmental permit at which point Alvopetro will have 278 days until the new PAD expiry date.

Block 183:

Block 183 is a 9th Brazil Bid Round Block and was acquired through a farm-in agreement signed in May 2013. Alvopetro drilled one well, 183(1), on this block in October 2014. In June 2015, Alvopetro elected to continue to the second exploration phase of this block and, in June 2017, filed a request with the ANP to transfer the 183(1) well to the PAD phase with a firm commitment to test the 183(1) well and a contingent activity to perform a stimulation of the well. The remainder of the block would remain in the second exploration phase but under suspension due to the lack of an environmental permit to drill the well commitment associated with this phase. The ANP approved both of these requests and, in 2018, the Company tested three separate intervals of the 183(1) well. Based on initial test results, the first interval, in the Gomo Member of the Candeias Formation, flowed natural gas, on an unstimulated basis, at an average rate of 6,800 m³/d (240 Mcfpd or 40 boepd) over the six hour test period. The second interval, in the Caruaçu Member of the Maracangalha Formation, flowed natural gas, on an unstimulated basis, at a final stable rate of 2,600 m³/d (92 Mcfpd or 15 boepd) and an additional 12 barrels of 61° API condensate were recovered in the 34 hour test. The third interval produced formation water and no material quantities of hydrocarbons. The Company is currently analyzing fluid composition data from the second interval and pressure data from both the first and second intervals to predict productivity on a stimulated basis.

Block 197:

On Block 197, Alvopetro discovered the Caburé natural gas field as discussed above. Costs to date on the remainder of the block include drilling and testing the 197(1) well in 2014, as well as historical costs on the block including seismic costs associated with 5.9 km² of 3D seismic and 122.3 km of 2D seismic incurred prior to 2014 and prior acquisition costs including bid round bonuses.

This block is currently in the PAD phase. Work outstanding under the PAD includes a stimulation of the 197(1) well. In 2017, the ANP approved the suspension of the PAD due to the lack of an environmental permit for stimulation of the 197(1) well.

Block 106:

Block 106 is adjacent to Alvo Petro's Bom Lugar oil field and was awarded in the 11th Brazil Bid Round. In 2017, the ANP granted a suspension to the phase expiry of the Block due to the lack of an environmental permit; however, in January 2018, Alvo Petro requested that the suspension be lifted to begin preliminary work in satisfaction of a portion of the UTs outstanding. The current phase expiry is now July 21, 2018.

Blocks 169 and 255:

Blocks 169 and 255 were awarded to Alvo Petro in the 12th Brazil Bid Round and contracts were executed in May 2014. In November 2014, an injunction was issued by a Brazilian Federal Court as part of a legal proceeding filed by the Federal Prosecutor's Office against the ANP, the Federal Government and all operators of 12th Bid Round concession contracts, including Alvo Petro. This injunction was aimed at preventing the ANP and operators from conducting unconventional operations on blocks acquired in ANP's 12th Brazil Bid Round until further studies are carried out by the ANP of the possible environmental impact of drilling of unconventional resources. Alvo Petro filed a successful petition with the Brazilian Federal Court, and as result, in January 2015, the Brazilian Federal Court clarified that Alvo Petro could carry out all conventional activities relating to its 12th Brazil Bid Round Blocks. However, any unconventional operations continue to be prohibited on these blocks.

Given the current injunction against unconventional operations and the lack of regulations for hydraulic fracturing, in December 2017, Alvo Petro filed a request with the ANP to cancel these concession contracts and the associated work commitments and refund the original bid round bonuses paid. As a result of this request, Alvo Petro has impaired all costs incurred to date on these blocks other than the bid round bonuses paid in 2014. The E&E balance at December 31, 2017 included in the table above reflects only the bid round bonus amounts requested to be returned pursuant to the December 2017 request. The Company is currently awaiting the decision of the ANP with respect to this request. The blocks are currently in suspension until the ANP's decision on this matter.

13th Brazil Bid Round (Blocks 57, 62, 71, and 145)

Alvo Petro is operator and has a 65% participating interest in Blocks 57, 62, 71 and 145 awarded in the 13th Brazil Bid Round. Costs incurred to date on these blocks include seismic reprocessing costs and permitting costs. Alvo Petro has identified prospects on these blocks and is currently working with its partner to advance development plans.

Block 107:

Block 107 is adjacent to Alvo Petro's Bom Lugar oil field. In 2016, Alvo Petro entered into a farmout agreement with an independent third party (the "Farmee") to transfer a 95% interest in Block 107. Pursuant to the terms of the agreement, the Farmee drilled a well in 2017, satisfying all outstanding work commitments on the block. In February 2018, Alvo Petro sold its remaining 5% participating interest in Block 107 for a 5% gross-overriding royalty on Block 107 and an adjacent block held by the Farmee. The Farmee tested the well in early 2018 and Alvo Petro is currently awaiting all technical details from the Farmee for evaluation of the well results.

Block 177:

As at December 31, 2017, the Company held Block 177 located on the edges of the Tucano and Recôncavo Basins. In 2017, Alvo Petro drilled the 177(A1) well incurring costs of \$1.1 million and completed other work in satisfaction of the work commitment on this Block. As a result of the lack of a commercial discovery on the 177(A1) well and limited additional prospects, the Company recognized an impairment of \$2.4 million in the third quarter of 2017 to reduce the carrying value of the block to \$nil. The Company notified the ANP of its intention to relinquish this block in February 2018.

Property, plant and equipment (“PP&E”) Assets

Field	Gross Acres	Working Interest	Current Phase Expiry	PP&E at December 31, 2017 (\$000's)	Commitment (\$000's) ⁽¹⁾
Bom Lugar	2,238	100%	July 10, 2023	3,482	106
Mãe-da-lua	432	100%	February 22, 2044	-	-
Jiribatuba	563	100%	March 2, 2024	384	106
GRAND TOTAL – ALL PP&E FIELDS⁽²⁾				3,866	212

(1) The Company is required to post abandonment guarantees with respect to the mature producing fields. The Company has not yet been required to post an abandonment guarantee for the Mãe-da-lua field. The abandonment guarantees are posted locally in Brazil. Under the terms of the agreement, the Company was required to post 50% of cash in satisfaction of each of the Bom Lugar and Jiribatuba guarantees. There is a total of \$0.1 million of restricted cash with respect to these abandonment guarantees as at December 31, 2017.

(2) The total PP&E balance reflected in the table above excludes \$0.4 million of corporate assets, including office furniture and fixtures, computer equipment, and operational equipment for use on future exploration and development projects.

Bom Lugar field

The mature Bom Lugar field had average daily production for the year ended December 31, 2017 of 12 bopd (December 31, 2016 – 19 bopd). Production in 2017 was impacted by downtime for workovers required for downhole pump failures and routine maintenance. The field consists of one producing well, one suspended well, and one active water disposal (injector) well. The field has a production battery which is equipped with testing, water separation and trucking facilities. The battery is connected to the producing well, the suspended well, and the injection well. The Company has one oil development prospect on this field which is expected to be drilled in 2020, as well as two additional exploration prospects. The Company is currently in the Development and Production Phase on this field which extends to 2023.

Mãe-da-lua field

The 182(B1) well on the Mãe-da-lua field averaged 14 bopd for the year ended December 31, 2017 (December 31, 2016 – 21 bopd). Production in 2017 was reduced due to natural declines on this well. The field has a production battery which is equipped with testing, water separation and trucking facilities. The battery is located at the producing well. In 2017, no proved or probable reserve volumes were assigned to this field and the Company recorded an impairment of \$0.5 million in the fourth quarter to reduce the carrying value to \$nil. Despite the lack of reserves, ongoing production from this field contributes revenues to cover fixed costs. The Company continues to operate this field and is reviewing alternatives for cost reductions. The Company is currently in the Development and Production Phase on this field which extends to 2044.

Jiribatuba field

Alvopetro holds interests in the Camamu-Almada Basin in the Jiribatuba mature field. The Jiribatuba mature field, consisting of two shut-in wells and one active water disposal (injector) well, produced from the Sergi formation. The shut-in wells and injector are flow line connected to a production battery which is equipped with testing, water separation and trucking facilities. There was no production from the Jiribatuba field for the year-ended December 31, 2017 (December 31, 2016 – 2 bopd) as the field had been shut in since May 2016, awaiting pump repair. In 2018, the Company completed the pump repair and sales from this field are expected to resume in April 2018. The Company has one oil development prospect on this field and expects to drill this well in 2020, subject to the receipt of regulatory and environmental approvals. The Company is currently in the Development and Production Phase on this field which extends to 2024.

FINANCIAL AND OPERATING REVIEW

Average Daily Production

	Three Months Ended December 31,		Year Ended December 31,	
	2017	2016	2017	2016
Total production (bbls)	1,544	4,916	9,532	15,411
Daily production (bopd)	17	53	26	42

Average daily production decreased in both the current quarter and for the year ended December 31, 2017 compared to the same periods in 2016. The decrease relative to 2016 was attributable to reductions at both the Mãe-da-lua and Bom Lugar fields. Mãe-da-lua field production was reduced due to natural declines on the well. The Bom Lugar field was offline for much of the fourth quarter due to a downhole pump failure and was also offline earlier in 2017 due to workovers and other maintenance.

Oil Sales

	Three months ended December 31,		Year ended December 31,	
	2017	2016	2017	2016
Brent (\$/bbl)	61.53	51.13	54.83	45.04
Discount (\$/bbl)	(6.48)	(8.82)	(6.36)	(8.64)
Sales Price (\$/bbl)	55.05	42.31	48.47	36.40
Sales price discount as a % of Brent	11%	17%	12%	19%
Oil Sales	85	208	462	561
Transportation	(4)	(11)	(23)	(33)
Total sales, net of transportation expense	81	197	439	528
Realized price (\$/bbl)	52.46	40.07	46.06	34.26

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 decreased in the second quarter of 2017 resulting in higher sales prices per barrel compared to prior periods.

Oil sales decreased 59% in the fourth quarter of 2017 and 18% on a year-to-basis compared to the same periods in 2016. Despite a 68% and 38% reduction in daily production, respectively, the reduced sales discounts along with increasing Brent prices partially offset the declines from production.

Royalties and Production Taxes

	Three months ended December 31,		Year ended December 31,	
	2017	2016	2017	2016
Royalties and production taxes	10	22	51	59
Percentage of sales (%)	11.8	10.6	11.0	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 according to 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 (including production from the Caburé field attributable to this block).

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 months ended December 31,		Year ended December 31,	
	2017	2016	2017	2016
Production expenses by type:				
Personnel costs	85	81	359	347
Production facilities rental	-	-	-	277
Other fixed costs	52	60	230	238
Variable costs	20	29	111	165
Workover costs	16	-	124	126
Total production expenses	173	170	824	1,153
Production expenses per barrel:				
Personnel costs	55.06	16.47	37.67	22.52
Production facilities rental	-	-	-	17.97
Other fixed costs	33.68	12.21	24.13	15.44
Variable costs	12.95	5.90	11.64	10.71
Workover costs	10.36	-	13.01	8.18
Total production expenses per bbl (\$)	112.05	34.58	86.45	74.82

Production expenses for the fourth quarter were consistent with the fourth quarter of 2016 despite the 68% reduction in daily production due to workover and maintenance costs associated with our Bom Lugar well. For the year ended December 31, 2017, costs decreased \$0.3 million largely due to reduced production facilities rental costs. On a per barrel basis, costs increased due to the decline in production levels.

General and Administrative (“G&A”) Expenses

	Three months ended December 31,		Year ended December 31,	
	2017	2016	2017	2016
G&A Expenses, by type:				
Personnel	534	651	2,493	2,937
Travel	16	40	104	169
Office and IT costs	89	103	368	457
Professional fees	125	148	522	633
General corporate costs	79	92	214	451
Gross G&A	843	1,034	3,701	4,647
Capitalized G&A	(207)	(246)	(1,094)	(1,124)
G&A expenses	636	788	2,607	3,523

The majority of the Company’s G&A expenses relate to personnel costs. General corporate costs include public company costs, directors’ fees and insurance. The Company’s Gross G&A declined \$0.2 million in the fourth quarter of 2017 and \$0.9 million in the year ended December 31, 2017 compared to the same periods in 2016 as the Company implemented additional cost savings initiatives to reduce costs largely with respect to personnel, travel, office and IT costs.

Funds Flow from Operations

	Three Months Ended December 31,		Year Ended December 31,	
	2017	2016	2017	2016
Funds flow from operations	(775)	(1,006)	(3,254)	(4,695)

As a result of reduced G&A expenses and E&E expenses, the Company's funds flow from operations improved \$0.2 million and \$1.4 million in the fourth quarter of 2017 and the year ended December 31, 2017, respectively, compared to the same periods in 2016. Alvo Petro funds the Company's current capital and operating activities from existing cash balances on hand. The Company expects that financing will be required for future capital expenditures associated with our Caburé field as well as our other exploration assets and producing fields.

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 BRLs 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:

	December 31, 2017	As at		% Change in Period	
		September 30, 2017	December 31, 2016	Q4 2017	2017
Rate at end of period:					
U.S. dollar / Brazilian real	3.308	3.168	3.259	4.4	1.5
U.S. dollar / Canadian dollar	1.255	1.248	1.343	0.6	(6.6)

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 exchange (loss) gain on translation of foreign operations in our consolidated statements of operations and comprehensive loss. The BRL depreciated 4% and 2% relative to the USD in the three and twelve months ended December 31, 2017, resulting in a comprehensive loss of \$1.5 million and \$0.6 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 costs in the future. In the fourth quarter of 2017, the BRL averaged 3.25 compared to 3.30 in the same period in 2016 and, on a year-to-date basis, the BRL averaged 3.19 compared to 3.48 in 2016. The 2% and 8% appreciation of the average BRL rate relative to the USD in these periods results in higher USD equivalent production expenses, G&A expenses and capital expenditures.

Share-Based Compensation Expense (Recovery)

	Three months ended December 31,		Year ended December 31,	
	2017	2016	2017	2016
Share based compensation expense (recovery)	19	(9)	85	80

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 6.5 million stock options outstanding at December 31, 2017 compared to 6.9 million stock options at December 31, 2016. Despite a reduced number of stock options outstanding, share-based compensation expense increased in both the fourth quarter of 2017 and on a year-to-date basis compared to 2016 due to higher forfeitures and cancellations in the prior periods.

Depletion, Depreciation and Accretion

	Three months ended December 31,		Year ended December 31,	
	2017	2016	2017	2016
Depletion and depreciation (DD&A)	22	104	205	416
Accretion on decommissioning liabilities	9	9	37	28
Total	31	113	242	444

Included in the depletion computation for our producing assets was \$6.5 million (December 31, 2016 - \$7.5 million) of estimated future development costs for undeveloped proved plus probable reserves. The decrease in depletion expense in the three and twelve months ended December 31, 2017 compared to the same periods in 2016 is due to a decrease in production in 2017 as well as the depletable base, primarily as a result of the reduction in future development costs. The increase in accretion expense for the year-ended December 31, 2017 is as a result of new wells drilled in 2017.

Impairment

	Three months ended December 31,		Year ended December 31,	
	2017	2016	2017	2016
Impairment losses – PP&E				
Mãe-da-lua	472	292	472	292
Total PP&E impairment loss	472	292	472	292
Impairment losses – E&E				
Block 177	-	-	2,384	-
Block 169	269	-	269	-
Block 255	337	-	337	-
Block 170	-	-	-	2,975
Block 256	-	-	-	4,392
Other	199	51	199	164
Total E&E impairment loss	805	51	3,189	7,531
Total Impairment loss	1,277	343	3,661	7,823

The Company recognized a \$1.3 million impairment loss in the fourth quarter of 2017, including \$0.5 million on the Mãe-da-lua field and \$0.8 million on E&E assets. With respect to Mãe-da-lua, no proved or probable reserves were assigned as at December 31, 2017 and, as a result, the Company wrote down the carrying value of this field to \$nil, resulting in an impairment charge of \$0.5 million. On Blocks 169 and 255, due to the current injunction against unconventional activities on all 12th Bid Round Blocks, in December 2017, the Company filed a request with the ANP to cancel the concession contracts and the associated minimum work commitments and return the bid round bonuses paid. As a result, the Company has recognized an impairment to reduce the carrying value of these blocks to include only the bid round bonuses requested to be returned pursuant to the December 2017 filing with the ANP. Other impairment charges in the fourth quarter of 2017 relate primarily to equipment inventory write-downs.

In the third quarter of 2017, the Company recorded an impairment to Block 177 of \$2.4 million, as a result of the lack of a commercial discovery at the 177(A1) well and the Company's intention to relinquish the block. The impairment reduced the carrying value of the block to \$nil and included 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 LCs, retention fees and capitalized G&A. In the third quarter of 2017, the Company also recorded an additional \$0.1 million as exploration and evaluation expenditures in respect of costs to fulfill the remaining commitment on this block. In February 2018, the Company relinquished this block to the ANP.

2016 impairment charges included \$0.3 million on the Mãe-da-lua field, \$3.0 million on Block 170 and \$4.4 million on Block 256. As a result of capital spending on the Mãe-da-lua field in 2016 and a reduction in forecasted production rates and commodity prices, the impairment charge was recorded to reduce the carrying value to the estimated recoverable amount. With respect to Blocks 170 and 256, the 2016 impairment charges were recognized following drilling results from wells drilled on these blocks in

2016 and the lack of additional prospects on the blocks. Both blocks were relinquished to the ANP in 2016 and 2017 respectively. Other impairment charges in 2016 relate primarily to equipment inventory write-downs.

Determining the recognition and the amount of any impairment requires significant judgment with respect to various factors including, but not limited to, forecasted commodity prices, future development costs, future production rates, future operating costs, timing of future expenditures, capital constraints and development plans. Changes in these judgments, estimates and assumptions may result in a material change in the impairment recognized.

Taxes

	Three months ended December 31,		Year ended December 31,	
	2017	2016	2017	2016
Current income tax expense	-	-	-	-
Deferred income tax recovery	-	(1,061)	-	(330)
Total income tax recovery	-	(1,061)	-	(330)

The statutory corporate tax rate in Brazil is 34%. This is comprised of a basic 15% corporate income tax, plus 10% surtax and a 9% social contribution tax. As the Company recognized a net loss in all periods, no current tax expense was recognized in 2016 or 2017.

The Company has a deferred tax asset of \$11.6 million at December 31, 2017 (December 31, 2016 - \$10.1 million), the benefit of which has not been recognized for accounting purposes at December 31, 2017 or December 31, 2016. As a result, there is no deferred tax expense or recovery recognized in 2017. The deferred tax recovery recognized in both the three months and year ended December 31, 2016 was largely as a result of foreign currency fluctuations.

Net Loss

	Three Months Ended December 31,		Year Ended December 31,	
	2017	2016	2017	2016
Net loss	(2,079)	(371)	(7,117)	(12,578)

Net loss in the current quarter increased compared to the fourth quarter of 2016 due to increased impairment charges in the fourth quarter of 2017 of \$1.3 million, compared to \$0.3 million in 2016 which also was positively impacted by a deferred tax recovery of \$1.1 million. Net loss for the year ended December 31, 2017 has decreased compared to 2016, primarily due to reduced impairment charges in 2017 compared to 2016 as well as reduced G&A expenses and E&E expenses.

Capital Expenditures

Capital Expenditures by Type	Three months ended December 31,		Year ended December 31,	
	2017	2016	2017	2016
E&E				
Drilling and completions ⁽¹⁾	55	261	3,757	6,059
Inventory purchases	14	17	72	80
Facility & equipment	3	-	50	2
Land, lease, and similar payments	108	33	349	247
Capitalized G&A	207	232	1,062	983
Other	11	122	65	254
Total E&E	398	665	5,355	7,625
PP&E				
Drilling and completions	-	14	-	196
Facility & equipment	33	15	40	415
Land, lease, and similar payments	-	-	-	3
Furniture, fixtures, and equipment	-	-	8	8
Capitalized G&A	-	14	32	141
Other	3	-	(3)	6
Total PP&E	36	43	77	769
Total capital expenditures by type	434	708	5,432	8,394

Capital Expenditures by Property	Three months ended December 31,		Year ended December 31,	
	2017	2016	2017	2016
E&E				
Caburé	120	459	3,124	610
9 th Brazil Bid Round blocks (Blocks 182, 183, 197)	150	34	330	2,823
11 th Brazil Bid Round blocks (Blocks 106, 107, 177)	46	50	1,636	213
12 th Brazil Bid Round blocks (Blocks 169, 255, 256)	64	22	157	3,767
13 th Brazil Bid Round blocks (Blocks 57, 62, 71)	4	89	36	132
Inventory	14	17	72	80
Costs to be allocated to blocks	-	(6)	-	-
Total E&E	398	665	5,355	7,625
PP&E				
Bom Lugar	-	3	14	20
Jiribatuba	3	-	10	1
Mãe-da-lua	33	40	45	718
Corporate	-	-	8	30
Total PP&E	36	43	77	769
Total capital expenditures by property	434	708	5,432	8,394

⁽¹⁾Includes non-cash capital expenditures of \$0.4 million in the year ended December 31, 2017 (December 31, 2016 - \$nil).

Capital expenditures in the fourth quarter of 2017 include capitalized G&A, LC fees and other recurring costs. For the year-ended December 31, 2017, capital expenditures were largely attributable to drilling and testing costs on the 198(A1) well on the Caburé natural gas field and drilling costs on the 177(A1) well, as well as capitalized G&A and other recurring land and lease costs.

Summary of Annual Results

	2017	2016	2015
Financial			
Oil sales	462	561	535
Net loss	(7,117)	(12,578)	(12,424)
Per share – basic & diluted (\$)	(0.08)	(0.15)	(0.15)
Funds flow from operations ⁽¹⁾	(3,254)	(4,695)	(4,966)
Per share – basic & diluted (\$)	(0.04)	(0.06)	(0.06)
Total assets	68,715	77,052	84,284
Total liabilities	2,575	3,277	3,552
Debt	-	-	-
Average daily crude oil production (bopd)	26	42	34

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

The Company’s oil sales decreased in 2017 compared to 2016 and 2015 due to the decrease in average daily production, partially offset by increasing commodity prices. Brent averaged \$54.83 per barrel in 2017 compared to \$45.04 in 2016 and \$53.64 in 2015. The decline in production in 2017 was primarily due to reduced production from the Bom Lugar field due to downtime for workovers required for downhole pump failures as well as reduced production from the Mãe-da-lua field due to natural declines. The net loss improved in 2017 relative to both 2016 and 2015 largely due to reduced impairment charges on the Company’s PP&E and E&E assets (2015 - \$13.0 million, 2016 - \$7.8 million, 2017 - \$3.7 million). The Company generated negative funds flow from operations in all three years due to minimal cash flows from oil sales relative to production expenses and G&A expenses.

Total assets have decreased 18% since 2015 primarily due to impairments on both E&E and PP&E, offset by increases in USD equivalent balances of BRL denominated assets as the BRL appreciated relative to the USD from a rate of 3.904 at December 31, 2015 to 3.259 at December 31, 2016 and 3.308 at December 31, 2017.

Summary of Quarterly Results

	Q4 2017	Q3 2017	Q2 2017	Q1 2017	Q4 2016	Q3 2016	Q2 2016	Q1 2016
Financial								
Oil sales	85	120	86	171	208	74	126	153
Net loss	(2,079)	(3,331)	(814)	(893)	(371)	(5,692)	(2,000)	(4,515)
Per share – basic & diluted (\$)	(0.02)	(0.04)	(0.01)	(0.01)	-	(0.07)	(0.02)	(0.05)
Funds flow from operations ⁽¹⁾	(775)	(959)	(723)	(797)	(1,006)	(1,155)	(1,309)	(1,225)
Per share – basic & diluted (\$)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)
Capital and other asset expenditures ⁽²⁾	434	1,663	566	2,769	708	3,785	835	3,066
Operations								
Operating netback (\$/bbl) ⁽¹⁾								
Brent benchmark price	61.53	52.18	50.92	54.67	51.13	46.98	46.97	35.08
Sales price	55.05	46.91	43.77	49.35	42.31	38.60	38.47	28.85
Transportation expenses	(2.59)	(2.35)	(2.04)	(2.60)	(2.24)	(2.09)	(2.44)	(1.89)
Realized sales price	52.46	44.56	41.73	46.75	40.07	36.51	36.03	26.96
Royalties and production taxes	(6.48)	(4.69)	(6.11)	(4.91)	(4.48)	(4.17)	(3.36)	(3.39)
Production expenses	(112.05)	(72.71)	(127.23)	(62.05)	(34.58)	(137.72)	(109.92)	(67.70)
Operating netback	(66.07)	(32.84)	(91.61)	(20.21)	1.01	(105.38)	(77.25)	(44.13)
Average daily crude oil production (bopd)	17	28	22	39	53	21	36	58

Notes:

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

(2) Q3 2017 and Q1 2017 capital expenditures include non-cash expenditures of \$0.05 million and \$0.4 million, respectively.

Q4 2017 – The Company’s average daily production decreased 39% to 17 bopd due to reduced production from the Bom Lugar well which was impacted by downhole pump problems and other maintenance. The Company recognized total impairment charges of \$1.3 million in the quarter on Block 169 (\$0.3 million), Block 255 (\$0.3 million), equipment inventory (\$0.2 million) as well as on the Mãe-da-lua field (\$0.5 million). Funds flow from operations improved \$0.2 million due to reduced G&A and E&E expenses in the quarter. Capital expenditures of \$0.4 million were primarily attributable to recurring costs, including capitalized G&A of \$0.2 million.

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.

Commitments and Contingencies

The following is a summary of Alvo Petro's contractual commitments as at December 31, 2017:

Commitments	< 1 Year	1-3 Years	Thereafter	Total
Minimum work commitments ⁽¹⁾				
<i>Minimum work commitments to be completed</i>				
Block 183 ⁽²⁾	-	1,008	-	1,008
Block 106	345	-	-	345
Block 169 ⁽³⁾	1,149	-	-	1,149
Block 255 ⁽³⁾	1,375	-	-	1,375
Block 57 ⁽⁴⁾	-	45	-	45
Block 62 ⁽⁴⁾	-	45	-	45
Block 71 ⁽⁴⁾	-	38	-	38
Block 145 ⁽⁴⁾	-	45	-	45
Bom Lugar	-	-	106	106
Jiribatuba	-	-	106	106
Minimum work commitments to be completed	2,869	1,181	212	4,262
<i>Minimum work commitments completed</i>				
Block 177 ⁽⁵⁾	1,263	-	-	1,263
Minimum work commitments completed	1,263	-	-	1,263
Total minimum work commitments	4,132	1,181	212	5,525
Office leases⁽⁶⁾	184	26	-	210
Total commitments	4,316	1,207	212	5,735

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) In February 2018, the ANP approved a suspension to the portion of Block 183 currently in the second exploration phase to which the above commitment is applicable. The Company will have 517 days from receipt of the environmental permit for the well to be drilled to meet the required work commitment.
- (3) Due to an ongoing injunction against unconventional activities on all 12th Brazil Bid Round Blocks, in December 2017 the Company filed a request with the ANP to cancel the Block 169 and 255 concession contracts, including the commitment noted in the table above, and return the bid round bonuses paid.
- (4) 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. During 2017, the Company re-evaluated its cost estimates with respect to these commitments given changes in cost structures. As a result of these reviews, the estimates were reduced from a total of \$1.0 million on these four blocks to \$0.2 million.
- (5) In 2017, the Company drilled the 177(A1) well and performed other work in satisfaction the work commitment on Block 177, all of which was approved by the ANP subsequent to December 31, 2017.
- (6) The Company is committed to future minimum payments for office space in Canada and Brazil.

The Company has a credit support facility (the "Facility") with a Canadian bank which allows for the issuance of LCs 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 associated with its exploration blocks. Letters of credit and letters of guarantee issued under the Facility may be supported by either cash collateral posted by Alvo Petro or through an Account Performance Security Guarantee from Export Development Canada ("EDC"). Work commitments for the Bom Lugar and Jiribatuba fields relate to abandonment guarantees and are supported by cash collateral posted by Alvo Petro and classified as current restricted cash.

As at December 31, 2017, the total amount of LCs issued under the Facility was \$12.1 million (December 31, 2016 - \$14.1 million), the full balance of which was satisfied by EDC. LCs supported by EDC at December 31, 2017 include \$6.0 million for commitments which have now been met. This includes a \$3.1 million LC for Block 107 which was met by the Farmee in 2017 under the terms of a farmout agreement entered into in 2016. This commitment was approved by the ANP in December 2017. There is an additional \$2.9 million LC outstanding for Block 177, and all work commitments on this block were completed in 2017 and approved by the ANP subsequent to December 31, 2017. Alvo Petro is currently awaiting release of the LCs for Blocks 107 and 177 by all involved banks.

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 Alvo Petro within Brazil. To the extent EDC coverage is limited in the future for any new LCs or for any existing LCs requiring extension to the expiry date, the Company would be required to post cash collateral to support existing work commitments in 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 December 31, 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 December 31, 2017, Alvo Petro's cash and cash equivalents of \$9.2 million and its restricted cash of \$0.1 million were held as follows:

	Total	U.S. Dollar	CAD Dollar ⁽¹⁾	Brazil Real ⁽¹⁾
Cash held in Canada	8,997	8,895	102	-
Cash held in Brazil	192	-	-	192
Restricted cash - current	106	-	-	106
Total	9,295	8,895	102	298

Notes:

(1) Amounts in the table above denote the U.S. dollar equivalent as at December 31, 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 December 31, 2017, the Company's working capital surplus of \$8.8 million exceeded estimated outstanding commitments of \$4.3 million by \$4.5 million. Exploration work commitments in Brazil are supported by total LCs of \$12.1 million as at December 31, 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 would impact its ability to fund future capital and operational expenditures.

Our 2018 near-term capital plan includes:

- Testing our 183(1) well to demonstrate the Goma resource potential on Block 183 and the adjacent Block 197 (which includes our 197(1) well). This work was completed in the first quarter and, based on field cost estimates, a total of \$0.8 million of costs were incurred;
- Initial engineering and permitting work associated with the development of our Caburé natural gas field at an estimated cost of \$0.3 million; and
- Work in satisfaction of our commitment on Block 106, estimated at \$0.3 million.

These initial capital projects will be funded with existing cash balances on hand. 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. Future capital expenditures associated with Alvopetro's work commitments on its other exploration blocks as well as development prospects on the Bom Lugar and Jiribatuba field may also require financing. With respect to the Caburé development, we are targeting the completion of a gas sales agreement concurrent with the conclusion of the unitization process, at which point the Company plans to undertake a reserves evaluation of the field and initiate one or more financing alternatives for the development. In addition, the Company may explore asset sales or farmouts to assist with funding of both the Caburé development and the Company's other development plans. If we are unable to execute a financing arrangement or a financing arrangement on terms acceptable to Alvopetro and are unable to generate funds from asset sales or farmouts, the Company's current cash balances will be insufficient to fund the Caburé development and the Company's plans and commitments on its other exploration blocks and mature fields.

The liability for decommissioning obligations of Alvopetro was \$1.5 million as at December 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 December 31, 2017 the Company had \$2.9 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 March 20, 2018 was 91,705,807 (common shares – 85,166,871, stock options – 6,538,936). There are no preferred shares outstanding.

RISKS AND UNCERTAINTIES

Alvopetro is exposed to a variety of risks including, but not limited to: a) liquidity and financing risks; b) legal and regulatory risks; c) exploration risk; d) competitive risks within the oil and gas industry; e) operational risks; f) foreign operations risk; and g) market risk.

This section presents information about the Company's exposure to each of the above risks, the Company's objectives, policies and processes for measuring and managing risk, and the Company's management of capital. Further quantitative disclosures are included throughout the consolidated financial statements. Investors should carefully consider the following risk factors and 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.

A. Liquidity and Financing Risk

The Company has funded all capital and operational expenditures to date with cash balances on hand. The Company's existing properties do not have significant production and the Company has a history of operating losses. Significant capital expenditures will be required for the development of the Company's Caburé field, to meet outstanding exploration work commitments and for future development of the Company's Bom Lugar and Jiribatuba fields. These capital expenditures along with the Company's ongoing general and administrative costs and operational expenditures are in excess of current cash balances. Moreover, to the extent EDC coverage were limited in the future, existing cash balances may be required in support of LCs for current or future work commitments.

There can be no assurance that debt or equity financing, a bank loan facility or cash generated from operations will be available or sufficient to meet these requirements or for other corporate purposes or, if debt or equity financing is available, that it will be on terms acceptable to Alvopetro. The inability of Alvopetro to access sufficient capital for its operations could have a material adverse effect on Alvopetro's business, financial condition, results of operations and prospects, and could result in the delay or indefinite postponement of further exploration, evaluation and development of Alvopetro's properties.

B. Legal and Regulatory Risks

Alvopetro's Caburé natural gas field requires unitization with the adjacent resource owner as well as government approval of the unitization agreement, associated agreements, and the development plan. Future discoveries may also require unitization. To the extent the Company is unable to negotiate a unitization agreement under acceptable terms or is unable to obtain government approval for the unitization, the Company may be unable to commercialize the discovery which may significantly impact the Company's ability to generate future cash flows and could result in a delay or indefinite postponement of the exploration, evaluation and development of Alvopetro's properties.

The Company is subject to extensive governmental and environmental approvals and regulations Brazil. Delays in obtaining regulatory approvals could result in project delays and our inability to meet contractual obligations and commitments. Changes to these regulations could increase the costs of conducting business. Environmental risks inherent in the oil and gas industry are subject to increasingly stringent legislation and regulation. The Company operates in accordance with all relevant environmental legislation and strives to minimize the environmental impact of its operations by providing for safety and environmental issues in all of its business plans.

The expanded use of hydraulic fracturing as a recovery technique employed in oil and natural gas drilling has given rise to increased public scrutiny of its environmental aspects, particularly with respect to its potential impact on local aquifers. Alvopetro may need to utilize hydraulic fracturing in the wells it drills and completes. Alvopetro believes that the hydraulic fracturing that we may conduct, given the depth and location of the wells and our consistent utilization of good oilfield practices, will be environmentally sound and would not give rise to concerns raised respecting local aquifers. Alvopetro anticipates that there will be a trend towards changing and increased regulatory requirements concerning hydraulic fracturing in the future, in Brazil and internationally. Changes to, and the increase of, regulatory requirements may impact our business. Specifically, unconventional activities are currently prohibited on Alvopetro's blocks acquired in the 12th Brazil Bid Round as a result of an injunction issued by a Brazilian Federal Court in November 2014. Alvopetro has two blocks for which has not yet fulfilled the required minimum work commitments and, as a result, may adversely be affected if the injunction continues and Alvopetro is unsuccessful with its request with the ANP to return these blocks, cancel the commitments outstanding and refund the bid bonuses paid.

Alvopetro must fulfill certain minimum work commitments on projects in Brazil. There are no assurances that all of these commitments will be fulfilled within the time frames permitted. As such, Alvopetro may lose certain exploration rights on the blocks affected and may be subject to certain financial penalties that would be levied by the applicable governmental authority. From time to time Alvopetro may request extensions or suspensions to the timeframe allotted for work commitments. Alvopetro has requested suspensions on certain blocks with upcoming expiries and has requested the cancellation of certain contracts without financial penalties applied. There is no assurance that these requests will be granted. To the extent these requests are not approved, acreage positions may be lost and fines or penalties may be applied.

C. Exploration Risk

The Company is exposed to a high level of exploration risk. The business of exploring for, developing or acquiring reserves is capital intensive and is subject to numerous estimates and interpretations of geological and geophysical data. There can be no assurance that Alvopetro will be able to generate and sustain revenue or net income in the future or that the Company's future exploration, development and acquisition activities will result in proved reserves. To manage this risk, Alvopetro employs highly experienced geoscientists, uses technology and 3D seismic as primary exploration tools and focuses exploration efforts in known hydrocarbon producing basins. The long-term commercial success of Alvopetro depends on its ability to find, acquire, develop and commercially produce and sell petroleum reserves. To date, the activities relating to the majority of Alvopetro's assets have been exploratory only, which increases the degree of risk substantially as compared to projects in the production stage. The value of Alvopetro's assets will be dependent on discovering hydrocarbon deposits with commercial potential and the ability to market its discoveries. Alvopetro will have nominal earnings to support its ongoing operations and future exploration and development should its properties prove not to be commercially viable or if it is unable to negotiate sales contracts or unable to negotiate sale contracts on terms that are acceptable to Alvopetro.

D. Competitive Risks within the Oil and Gas Industry

The oil and gas industry is highly competitive. Competition is particularly intense in the acquisition of prospective oil and gas properties and reserves. Alvopetro's competitive position depends on its geoscience and engineering expertise, its financial

resources and its ability to efficiently acquire and develop its reserves. Alvo Petro competes with a substantial number of other companies having larger technical staffs and greater financial and operational resources. In Brazil particularly, *Petróleo Brasileiro SA* (“Petrobras”) dominates the majority of the industry, including all aspects of oil and gas exploration, development, transportation and sales. Petrobras, and many other companies in Brazil, not only engage in the acquisition, exploration, development and production of oil and gas reserves, but also carry on refining operations and market refined products. Alvo Petro competes with Petrobras and other major and independent oil companies and other industries supplying energy and fuel in the marketing and sale of oil and gas to transporters, distributors and end users, including industrial, commercial and individual consumers. Due to Petrobras’ position in all aspects of Brazil’s energy market, Alvo Petro may encounter challenges with respect to transporting and marketing crude oil and natural gas. Access to pipelines and other transportation infrastructure may be limited and/or the terms on which such access is provided may not be favourable to the Company.

Alvo Petro also competes with other oil and gas companies in attempting to secure drilling rigs and other equipment necessary for drilling and completion of wells. Such equipment may be in short supply from time to time or may not meet the technical specifications required by Alvo Petro in its operations. In addition, equipment and other materials necessary to construct production and transmission facilities may be in short supply. Local content requirements in Brazil greatly reduce the control the Company has with respect to choice of service providers for its exploration and development activities. Finally, companies not previously investing in the oil and gas industry may choose to acquire reserves providing additional competition for Alvo Petro.

E. Operational Risk

Alvo Petro is exposed to a number of operational risks inherent in the industry including accidents, well blowouts, uncontrolled flows, labour strikes and environmental risks. Operational risks are managed using prudent field operating procedures. The Company has an emergency response plan to deal with potential incidents and maintains a comprehensive insurance program to reduce the risk of significant economic loss; however, not all risks can be eliminated. Losses resulting from the occurrence of these risks could have a material adverse impact on the Company’s operations.

F. Foreign Operations Risk

Alvo Petro currently has operations in Brazil and from time to time may evaluate additional projects internationally, consequently Alvo Petro will be subject to certain risks, including currency fluctuations and possible political or economic instability. Alvo Petro believes that the state and federal governments in Brazil support the exploration and development of its oil and gas properties by foreign companies. Nevertheless, there is no assurance that future political conditions will not result in the state or federal governments adopting different policies respecting foreign development and ownership of oil and gas, environmental protection and labour relations. Exploration and production activities may be affected in varying degrees by political stability and government regulations relating to the industry.

To help mitigate the risks associated with operating in foreign jurisdictions, the Company seeks to operate in regions where the petroleum industry is a key component of the economy. Alvo Petro believes that management’s experience operating in other international jurisdictions helps reduce these risks. Brazil has a long history of democracy and an established legal framework that, in Alvo Petro’s opinion, minimizes political risks.

G. Market Risk

The Company is exposed to normal financial risks inherent within the oil and gas industry, including commodity price risk, exchange rate risk, interest rate risk and credit risk. Crude oil and natural gas prices are influenced by global supply and demand, OPEC policy and worldwide political events. Fluctuations in crude oil and natural gas prices not only affect the Company’s cash flows, but may also affect the ability and capacity of future financings for the Company. Management believes it is neither appropriate nor possible to eliminate 100 percent of the Company’s exposure to fluctuations in crude oil and natural gas prices. The Company monitors market conditions and may selectively use derivative instruments to reduce exposure to commodity price movements. As the Company is in the early stage of its operations and has cash on hand, it does not depend on its cash flows from oil sales and fluctuations in the price of crude oil are not currently significant to the Company.

Cash and cash equivalents consist of balances on deposit at banks and short term deposits maturing in less than 90 days. Restricted cash consists of cash and cash equivalents and short-term deposits maturing in one year or less. Alvo Petro manages credit risk related to short term deposits by investing only in term deposits of investment grade credit rating, and therefore the Company

considers these assets to have negligible credit risk. Management believes it is neither appropriate nor possible to eliminate 100 percent of the Company's exposure to these risks. The Board of Directors periodically reviews the results of all risk management activities and all outstanding positions.

All of Alvo Petro's expenditures are subject to the effects of inflation and foreign currency fluctuations. Alvo Petro is exposed to exchange rate risk as a significant portion of the Company's expenditures will be paid in foreign currencies. Should such foreign currencies strengthen relative to the USD or should the inflation rates increase within Canada or Brazil, Alvo Petro could experience a material decrease in its funds flow.

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 new and revised accounting pronouncements that have been issued but are not yet effective and determined that the following may have an impact on 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	Based on management's assessment of its oil sales contracts this standard will not 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 the 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 this MD&A and in our 2017 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:

m ³	=	cubic metre
m ³ /d	=	cubic metre per day
Mcf	=	thousand cubic feet
Mcfpd	=	thousand cubic feet per day
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 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 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.