

The following Management’s Discussion and Analysis (“MD&A”) is dated March 24, 2021 and should be read in conjunction with the audited consolidated financial statements and accompanying notes of Alvopetro Energy Ltd. (“Alvopetro” or the “Company”) as at and for the years ended December 31, 2020 and 2019. 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 Alvopetro’s disclosure under the headings “*Non-GAAP Measures*” and “*Forward Looking Information*” at the end of this MD&A.

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

MANAGEMENT’S DISCUSSION AND ANALYSIS

OVERVIEW

Description of Business

Alvopetro Energy Ltd. (“Alvopetro” or “the Company”) is engaged in the exploration for and the acquisition, development and production of, natural gas and oil in the Recôncavo basin onshore Brazil. Alvopetro holds interests in the Caburé and Gomo natural gas assets, two oil fields and two other exploration assets comprising 23,527 acres (gross and net) onshore Brazil. Natural gas sales from the Caburé natural gas field, the Company’s main producing asset, commenced in the third quarter of 2020. Alvopetro’s shares are traded on the TSX Venture Exchange (TSX: ALV.V) and are also traded on the OTCQX® Best Market in the United States (OTCQX: ALVOF).

Strategy

Alvopetro’s strategy is to unlock the on-shore natural gas potential in the state of Bahia, building off the development of our Caburé and Gomo natural gas assets and our strategic midstream infrastructure. We are creating an upstream/midstream hybrid corporate vehicle to provide sustainable returns to our stakeholders while reinvesting in a disciplined manner in our high impact upstream assets. Our plan is to create a reinvestment and long-term stakeholder return model where approximately half of our cashflows are distributed to stakeholders as dividends, share repurchases, and interest and principle repayments to capital providers.

FINANCIAL & OPERATING SUMMARY

	As at and Three Months Ended		Year Ended	
	December 31,		December 31,	
	2020	2019	2020	2019
Financial				
(\$000s, except where noted)				
Natural gas, oil and condensate sales	5,887	65	11,308	240
Net income (loss)	2,754	(1,086)	5,706	(5,011)
Per share – basic (\$)	0.03	(0.01)	0.06	(0.05)
Per share – diluted (\$) ⁽¹⁾	0.03	(0.01)	0.05	(0.05)
Funds flow from operations ⁽²⁾	4,252	(713)	6,216	(2,828)
Per share – basic (\$)	0.04	(0.01)	0.06	(0.03)
Per share – diluted (\$) ⁽¹⁾	0.04	(0.01)	0.06	(0.03)
Capital expenditures ⁽³⁾	452	6,999	3,814	12,671
Total assets	80,388	71,416	80,388	71,416
Cash and cash equivalents	5,159	1,215	5,159	1,215
Net working capital surplus (deficit) ⁽²⁾	5,539	(6,701)	5,539	(6,701)
Net debt ⁽²⁾	9,884	11,728	9,884	11,728
Weighted average shares outstanding (000s)				
Basic	99,260	96,997	98,616	96,709
Diluted ⁽¹⁾	105,095	96,997	105,129	96,709
Operations				
Natural gas, crude oil and natural gas liquids sales:				
Natural gas (mcfpd)	11,163	-	5,346	-
NGLs – condensate (bopd)	89	4	44	3
Oil (bopd)	-	8	5	8
Total (boepd)	1,950	12	940	11
Average realized prices:				
Natural gas (\$/mcf)	5.36	-	5.36	-
NGL – condensate (\$/bbl)	46.97	69.14	46.57	69.58
Oil (\$/bbl)	-	51.60	36.81	52.40
Company total (\$/boe)	32.82	57.93	32.88	57.49
Operating netback (\$/boe) ⁽²⁾				
Realized sales price	32.82	57.93	32.88	57.49
Royalties	(1.51)	(8.91)	(2.15)	(8.14)
Production expenses	(3.39)	(45.45)	(3.88)	(66.11)
Operating netback	27.92	3.57	26.85	(16.76)

Notes:

- (1) In determining the weighted average number of diluted common shares outstanding for the three months ended and year ended December 31, 2019, all stock options, warrants and restricted share units (RSUs) have been excluded because the effect would be anti-dilutive.
- (2) Non-GAAP measure - see "Non-GAAP Measures" section within this MD&A.
- (3) Includes non-cash capital expenditures of \$nil and \$0.4 million for the three and twelve months ended December 31, 2020 (December 31, 2019 - \$2.6 million and \$3.2 million for the three and twelve months ended).

HIGHLIGHTS AND SIGNIFICANT TRANSACTIONS FOR THE FOURTH QUARTER OF 2020

- We averaged daily natural gas sales in the quarter of 11.2 mmcfpd with associated natural gas liquids sales from condensate of 89 boepd bringing our overall sales volumes in the quarter to 1,950 boepd, an increase of 10.5% from the third quarter.
- We had an average realized natural gas sales price of \$5.36/mcf.
- We generated natural gas and condensate revenues of \$5.9 million, with an operating netback of \$27.92 per boe, an increase of 7% from the third quarter.
- Our funds flow from operations improved to \$4.3 million (\$0.04 per basic and diluted share) in the quarter compared to \$3.6 million in the third quarter and cash outflows in prior periods.
- We reported net income of \$2.8 million in the quarter, compared to a net loss of \$1.1 million in the same period in 2019. Net income in the fourth quarter included a \$1.8 million foreign exchange gain, partially offset by a deferred tax expense of \$1.1 million. Net income was lower than third quarter net income of \$6.5 million which had included recognition of deferred income tax recovery of \$4.9 million.
- Capital expenditures of \$0.5 million were focused on our E&E assets, including \$0.3 million in civil construction for our two exploration wells to be drilled in 2021 and \$0.1 million for testing costs on our 183(1) well which is part of the Gomo natural gas project.
- As at December 31, 2020, we had a net working capital surplus of \$5.5 million, including \$5.2 million in cash and cash equivalents. A total of \$15.4 million was outstanding under our credit facility, bringing the Company's net debt to \$9.9 million at the end of the quarter, an improvement of \$3.2 million during the quarter.

ADDITIONAL HIGHLIGHTS AND SIGNIFICANT TRANSACTIONS FOR 2020

- Annual daily sales averaged 940 boepd with virtually all sales attributable to the second half of the year following commencement of natural gas deliveries from our Caburé natural gas field under our long-term gas sales agreement ("GSA") on July 5, 2020.
- We recognized net income of \$5.7 million (\$0.06 per basic share and \$0.05 per diluted share) compared to a net loss of \$5.0 million in 2019. Net income included an impairment of \$1.5 million (2019 - \$1.6 million) and a deferred tax recovery of \$3.7 million (2019 - \$nil).
- We generated an operating netback of \$26.85 per boe, compared to a loss of \$16.76 per boe in 2019. Funds flow from operations was \$6.2 million (\$0.06 per basic and diluted share), compared to an outflow of \$2.9 million in 2019.
- Capital expenditures in the first half of 2020 were focused on final construction and commissioning of our Caburé project and related midstream infrastructure with expenditures later in 2020 focused on our E&E assets. Of the total capital expenditures of \$3.8 million in 2020, \$1.6 million related to costs for Caburé, with an additional \$0.7 million in capitalized G&A, \$0.7 million in capitalized finance expense, and \$0.6 million on our E&E assets mainly for testing of our 183(1) well and civil construction of our two exploration wells to be drilled later in 2021.

RECENT HIGHLIGHTS

- Our daily sales averaged 1,923 boepd in January, increasing to 2,222 boepd in February due to increased demand from Bahiagás.
- In February 2021, we repaid \$2.5 million of principal balance outstanding under our Credit Facility bringing the balance outstanding to \$13.0 million as of February 28, 2021.
- On March 9, 2021, we announced reserves at December 31, 2020 with total proved plus probable ("2P") reserves of 9.6 mmboe and a before tax value discounted at 10% of \$195.2 million, representing an increase of 21% and a decrease of 2%, respectively, from the Company's December 31, 2019 reserves. The reserves data is based on an independent reserve assessment and evaluation prepared by GLJ Ltd. ("GLJ") dated March 8, 2021, with an effective date of December 31, 2020 (the "GLJ Report").
- On March 23, 2021, we announced the results of an independent assessment of the Company's Gomo natural gas resource prepared by GLJ dated March 23, 2021 with an effective date of December 31, 2020 (the "GLJ Resource Report"). The GLJ Resource Report includes risked best estimate contingent resource of 3.5 mmboe with a before tax net present value discounted at 10% of \$37.7 million and risked best estimate prospective resource of 12.1 mmboe with a before tax net present value discount at 10% \$144.8 million.

PETROLEUM AND NATURAL GAS PROPERTIES AND OUTLOOK

As at December 31, 2020 and the date of this MD&A, Alvo Petro held interests in the Caburé and Gomo natural gas assets, two oil fields (Bom Lugar and Mãe-da-lua), Block 183 and Block 182 in the Recôncavo basin onshore Brazil.

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

Field	Gross Acres	Current Phase Expiry	PP&E balance December 31, 2020 (\$000's)	Net Present Value of 2P Reserves ⁽¹⁾ (\$000's)	Work Commitment (\$000's) ⁽²⁾
Caburé	4,826	December 5, 2043 and May 12, 2044	24,290	146,901	-
Bom Lugar	2,238	July 10, 2023	1,461	3,840	67
Mãe-da-lua	432	February 22, 2044	-	85	67
TOTAL⁽³⁾			25,751	150,826	134

(1) See “Oil and Natural Gas Reserves” at the end of this MD&A.

(2) The work commitment amounts included above for Bom Lugar and Mãe-da-lua relate to abandonment guarantees which the Company is required to post locally in Brazil with respect to producing fields. There is a total of \$0.1 million of restricted cash relating to these abandonment guarantees as at December 31, 2020. The Company has not yet been required to post an abandonment guarantee with respect the Caburé field; however, all estimated abandonment obligations, including those with respect to Caburé, have been included in the determination of decommissioning liability and recognized on the consolidated statement of financial position.

(3) The total balance in the table above excludes \$0.1 million in other assets classified as PP&E as at December 31, 2020, largely relating to equipment, furniture and fixtures.

Exploration and evaluation (“E&E”) assets

Block	Gross Acres	Current Phase Expiry	E&E balance December 31, 2020 (\$000's)	Net Present Value of 2P Reserves ⁽¹⁾ (\$000's)	Estimated Commitment ⁽²⁾ (\$000's)	Letter of Credit Support ⁽³⁾ (\$000's)
Gomo ⁽⁴⁾	7,613	May 15, 2021 & Suspension	29,982	44,389	-	-
182 ⁽⁵⁾	4,807	November 21, 2021	687	-	-	-
183 ⁽⁶⁾	3,611	January 13, 2022	187	-	642	638
TOTAL⁽⁷⁾			30,856	44,389	642	638

(1) See “Oil and Natural Gas Reserves” at the end of this MD&A.

(2) 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.

(3) Letters of Credit (“LCs”) posted in satisfaction of work units may differ from USD equivalent amounts for the associated commitments due to foreign exchange fluctuations and foreign exchange margin requirements.

(4) References to Gomo throughout this MD&A refer to our Gomo natural gas project which extends across Block 197 and a portion of Block 183. See further discussion below. The portion of Block 183 attributable to the Gomo gas project is currently in the PAD phase with an expiry date of May 15, 2021. Block 197 is currently in the PAD phase. In 2017, the ANP approved the suspension of the PAD pending receipt of environmental permits for stimulation of the 197(1) well.

(5) Block 182 is currently in the PAD phase. Work to be completed under the PAD includes the drilling of one well in advance of the phase expiry date. Alvo Petro plans to drill the 182-C1 well on this block in 2021.

(6) The portion of Block 183 which is not part of the Gomo project is in the second exploration phase with an expiry date of January 13, 2022. Alvo Petro plans to drill the 183-B1 well in 2021 in satisfaction of this work commitment.

(7) The total E&E balance reflected in the table above excludes \$1.4 million of other assets classified as E&E as at December 31, 2020, largely relating to equipment and materials inventory available for use on future capital projects.

NATURAL GAS ASSETS:

Alvo Petro holds interests in two main natural gas assets within Brazil: the Caburé natural gas field and our Gomo natural gas project.

Caburé Natural Gas Field:

Alvo Petro’s flagship asset, the Caburé natural gas field, commenced commercial natural gas deliveries on July 5, 2020, averaging daily natural gas sales of 11.2 mmcfpd in the fourth quarter of 2020 and an average of 10.6 mmcfpd in the second half of 2020. The Caburé and Caburé Leste natural gas field, collectively referred to as the Caburé natural gas field throughout this MD&A,

extends across four blocks in the Recôncavo basin in the state of Bahia in Brazil, two of which are held by Alvo Petro (Blocks 197 and 198) and two of which are held by our partner (Blocks 211 and 212), with Alvo Petro's share of the unitized area (the "Unit") being 49.1% and our operating partner's share being 50.9%. There are seven wells in the Unit and six of these wells are tied-in to the Unit's central production facility. The field has a planned gross production plateau rate of 15.9 mmcfpd (450 10³m³/d).

Under the terms of the Unit Operating Agreement ("UOA"), each party is entitled to nominate for their working interest share of field production and for any natural gas not nominated by the other party. Once a party produces their share of 2P reserves, they will no longer be entitled to further production allocations. Under the terms of the UOA, natural gas liquids ("NGLs") production from the unit (relating to condensate production) is split based on working interest.

Natural Gas Sales:

Alvo Petro's share of natural gas from the Caburé natural gas field is shipped via our 11-kilometre Caburé transfer pipeline and processed through the natural gas processing facility (the "Facility") owned and operated by Enerflex Ltd. ("Enerflex") pursuant to our Gas Treatment Agreement. All natural gas is sold to Bahiagás, the local state distribution company, under the terms of our GSA, which provides for the sale of firm volumes and interruptible volumes. The GSA has take-or-pay provisions and ship-or-pay penalties to ensure performance by both parties which are based on the firm volumes. The original GSA provided for firm volumes of 5.3 mmcfpd (150 10³m³/d) and interruptible volumes of 12.4 mmcfpd (350 10³m³/d), adjustable by Alvo Petro annually. In May 2020, Alvo Petro and Bahiagás agreed to amend the firm volumes from the start of supply in 2020 to 10.6 mmcfpd (300 10³m³/d) for the remainder of 2020. As part of the May 2020 amendment, Bahiagás agreed to commence prepayments of natural gas effective May 1, 2020 at a rate of 120 10³m³/d. Alvo Petro agreed to a 15% discount to the contractual price during this early prepayment period. In the second quarter of 2020, Bahiagás prepaid for a total of \$1.2 million for 7.3 million m³ (259 mmcf), all of which was repaid through natural gas deliveries by the end of October 2020. During the first two months of 2021, we have been delivering firm volumes of 150 10³m³/d and an average of 185 10³m³/d on an interruptible basis for total average sales of 335 10³m³/d (11.8 mmcfpd).

Gomo Natural Gas Project:

Alvo Petro's Gomo natural gas project extends across Blocks 183 and 197 and includes the 183(1) and 197(1) wells, both of which were drilled in 2014. In late 2019, Alvo Petro commenced a stimulation and initial production test of the 183(1) well. Due to operational challenges during the initial production test, in late 2020 Alvo Petro installed a plunger lift system to remove the remaining fluids and undertake another production test. The production test was completed in early 2021 and results validate previous analysis with respect to our long-term productivity forecast of the well. Alvo Petro now plans to proceed with declaring commerciality with respect to this portion of Block 183 and plans to install a 9-kilometre Gomo transfer pipeline extension in 2021 to tie this well into our Caburé transfer pipeline. Future plans on the Gomo project include stimulation of the 197(1) well and drilling two "fit for purpose" wells from the existing 183(1) well pad.

Natural Gas Exploration Prospects (Block 182 & Block 183):

Block 182 was awarded in the 9th Brazil Bid Round and is currently in the PAD phase. Under the terms of the PAD, Alvo Petro plans to drill the 182-C1 well in 2021, one of two identified natural gas prospects on the block. Civil construction on the well commenced in the fourth quarter of 2020 and was completed in early 2021.

Block 183 is a 9th Brazil Bid Round Block and was acquired through a farm-in agreement signed in May 2013. A portion of this block is part of the Gomo natural gas project as discussed above. The remainder of the block is in the second exploration phase. Alvo Petro plans to drill the 183-B1 well in the first half of 2021 in satisfaction of the work commitment on this block.

OIL ASSETS:

Bom Lugar field:

The Company had no oil sales from the Bom Lugar field for the year ended December 31, 2019 or December 31, 2020. The Company shut-in the one producing well on this field in January 2019 and plans to abandon the well due to poor wellbore integrity. The field consists of one shut-in 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 Company is currently in the Development and Production Phase on this field which extends to 2023. The Company has two oil development prospects on

this field, the first of which is included in the 2P reserves value assigned by GLJ in the GLJ Report and is expected to be drilled in 2022, subject to future crude oil prices. We expect the phase expiry date of July 10, 2023 can be extended with this development and the anticipated future production.

Mãe-da-lua field:

The 182(B1) well on the Mãe-da-lua field averaged 5 bopd for the year ended December 31, 2020 (December 31, 2019 – 8 bopd). The field has a production battery which is equipped with testing, water separation and trucking facilities. The battery is located at the producing well. The Company has plans to stimulate this well to improve overall production, subject to future crude oil prices. This field is currently in the Development and Production Phase which extends to 2044.

OUTLOOK

Production from the Caburé natural gas field and associated natural gas sales are expected to continue at levels consistent with or above the second half of 2020. The Company anticipates average daily natural gas sales and associated condensate sales for the year-ended December 31, 2021 to be over 1,900 boepd.

At our Gomo natural gas project, we completed the production testing of our 183(1) well in early 2021 and are now proceeding with the construction of the 9-kilometre pipeline to connect the 183(1) well to our Caburé pipeline at an estimated cost, including field production facilities of \$2.4 million in 2021. Future capital plans for the Gomo project include completion and stimulation of additional net pay in our 183(1) well, stimulation of our 197(1) well and drilling additional “fit-for-purpose” Gomo development wells are planned for late 2021 or 2022.

We are planning to drill our 182-C1 and 183-B1 natural gas exploration prospects starting in the second quarter of 2021 at an estimated total cost of \$7.7 million in 2021. We have completed civil construction on both of these well sites. Future capital expenditures on these prospects will depend on drilling results.

FINANCIAL AND OPERATING REVIEW

Sales Volumes

	Three Months Ended		Year Ended	
	December 31,		December 31,	
	2020	2019	2020	2019
Total sales volumes by product:				
Natural gas (mcf)	1,026,982	-	1,956,637	-
NGLs – condensate (bbls)	8,197	405	16,148	1,236
Oil (bbls)	-	717	1,657	2,939
Total sales (boe)	179,361	1,122	343,911	4,175
Average daily sales volumes by product:				
Natural gas (mcfpd)	11,163	-	5,346	-
NGLs – condensate (bopd)	89	4	44	3
Oil (bopd)	-	8	5	8
Average daily sales (boepd)	1,950	12	940	11

Our average daily sales volumes increased significantly in 2020 compared to 2019 with the commencement of natural gas sales under Alvo Petro’s long-term GSA on July 5, 2020. Compared to the third quarter average daily sales of 1,764 boepd, the fourth quarter increased by 10.5% due to additional gas demand in December and the impact of a full quarter of production.

Average Realized Sales Prices

	Three Months Ended December 31,		Year Ended December 31,	
	2020	2019	2020	2019
Average realized prices:				
Natural gas (\$/mcf)	5.36	-	5.36	-
NGL – condensate (\$/bbl)	46.97	69.14	46.57	69.58
Oil (\$/bbl)	-	51.60	36.81	52.40
Total (\$/boe)	32.82	57.93	32.88	57.49
Average benchmark prices:				
Brent oil (\$/bbl)	45.24	62.51	43.21	64.17
Henry Hub (\$/mmbtu)	2.53	2.40	2.03	2.57
National Balancing Point (\$/mmbtu)	5.36	4.15	3.22	4.46
Average contracted natural gas price under GSA⁽¹⁾				
BRL/m ³	0.96	-	0.97	-
Average Foreign Exchange Rate (\$1 USD = BRL)	5.392	4.116	5.158	3.946

(1) Under the terms of the GSA, the volumes delivered are adjusted for heat content in the determination of the final amounts paid, representing a gross-up of approximately 7% to the contracted natural gas price, which contributes to a higher realized price overall relative to the contractual price.

The natural gas price under our long-term GSA with Bahiagas is set semi-annually (as of February 1st and August 1st) based on a trailing weighted average of USD benchmark prices for Brent, Henry Hub and National Balancing Point, incorporating both a floor and ceiling price, which were \$5.23/mmbtu and \$8.89/mmbtu, respectively, as of August 1, 2020. The natural gas price is then converted to a Brazilian real (“BRL”) denominated natural gas price based on a historical average foreign exchange rate and billed monthly in BRL at the BRL denominated natural gas price until the next price reset. As all invoices are issued in BRL, actual receipts and revenue recognized in equivalent USD will be subject to exchange rate variations. See “*Foreign Exchange*” discussion below.

As a result of the decline in the global commodity prices, Alvo Petro’s natural gas price was reset to the floor price of \$5.23/mmbtu as of August 1, 2020 and converted to a BRL denominated natural gas price of BRL 0.96/m³ (BRL 27.18/mcf). All natural gas volumes (other than take or pay volumes delivered) were sold at this new BRL price as of August 1, 2020 until the next price reset in February 2021. Volumes delivered prior to the price reset on August 1, 2020 were based on the previous BRL price of BRL 1.02/m³ (BRL 28.88/mcf). As of February 1, 2021, Alvo Petro’s natural gas price has been reset based on the new floor price of \$5.28/mmbtu and converted to a BRL denominated natural gas price of BRL 1.06/m³ (BRL 30.05/mcf).

Approximately 6% of the Company’s natural gas volumes delivered in the fourth quarter and 12% for the year-ended December 31, 2020 were attributable to repayment of take-or-pay volumes pre-sold in the second quarter of 2020. Under the terms of the prepayments, such volumes were sold at BRL 0.87/m³ (BRL 24.64/mcf) which represented a 15% discount to the contractual natural gas price at the time. For the take-or-pay volumes delivered/re-paid, such revenue is recognized based on the discounted price, contributing to lower realized prices in the quarter. As of December 31, 2020, there were no take-or-pay balances outstanding.

Condensate production from both the Caburé unit and gas processing facility is sold pursuant to contracts based on Brent plus a premium whereas oil sales from Alvo Petro’s Mãe-da-lua field is sold at a discount to the average Brent price.

Natural Gas, Oil and Condensate Sales Revenue

	Three Months Ended		Year Ended	
	December 31,		December 31,	
	2020	2019	2020	2019
Natural gas, oil and condensate revenues				
Natural gas	5,502	-	10,495	-
Condensate	385	28	752	86
Oil	-	37	61	154
Total revenues	5,887	65	11,308	240

Alvopetro generated \$5.9 million in total revenues in the quarter, an increase of 11% compared to the third quarter 2020 revenues of \$5.3 million as a result of the increased sales volumes in the fourth quarter and the appreciation in the BRL relative to the USD. All natural gas, oil and condensate sales are reflected net of sales taxes.

Royalties

	Three Months Ended		Year Ended	
	December 31,		December 31,	
	2020	2019	2020	2019
Royalties	271	10	740	34
Royalties (\$ per boe)	1.51	8.91	2.15	8.14
Royalties as a percentage of sales (%)	4.6%	15.4%	6.5%	14.2%

The Caburé natural gas field, the Mãe-da-lua field and all exploration blocks held by Alvopetro are subject to a base 10% government royalty plus a 1% landowner royalty. The Bom Lugar field is subject to a base 5% government royalty plus a 0.5% landowner royalty. There is an additional 2.5% gross-overriding royalty on the Mãe-da-lua field, Block 182 and the portion of the Caburé and Gomo natural gas assets that were previously on Block 197.

Royalties on natural gas are based on production volumes at an inherent reference price attributable to the raw natural gas produced at the wellhead (prior to midstream processing). The reference price attributable to Alvopetro's natural gas production for royalty purposes is therefore inherently lower than the sales price under our GSA, resulting in lower effective royalty rates.

Production Expenses

	Three Months Ended		Year Ended	
	December 31,		December 31,	
	2020	2019	2020	2019
Production expenses by type:				
Personnel costs	63	22	193	102
Facility and pipeline costs	311	-	573	-
Other fixed costs	214	25	519	150
Variable costs	20	4	51	24
Total production expenses	608	51	1,336	276
Production expenses per boe:				
Personnel costs	0.35	19.60	0.56	24.43
Facility and pipeline costs	1.74	-	1.67	-
Other fixed costs	1.19	22.28	1.50	35.93
Variable costs	0.11	3.57	0.15	5.75
Total production expenses per boe (\$)	3.39	45.45	3.88	66.11

The majority of the Company's production expenses are fixed in nature, including Enerflex services for operation of the Facility and the transfer pipeline and agreed unit operating costs with our partner on the Caburé upstream assets. With the commencement of natural gas deliveries in 2020, production expenses increased significantly compared to the same periods in

2019, however, on a per barrel of oil equivalent, production expenses declined relative to 2019. Compared to the third quarter production expenses decreased 6% mainly due to reductions in personnel costs.

General and Administrative (“G&A”) Expenses

G&A Expenses, by type:	Three Months Ended		Year Ended	
	December 31,		December 31,	
	2020	2019	2020	2019
Personnel	422	614	2,595	2,524
Travel	3	22	17	117
Office and IT costs	27	20	115	145
Professional fees	157	96	419	371
General corporate costs	194	234	652	621
Gross G&A	803	986	3,798	3,778
Capitalized G&A	(59)	(255)	(728)	(985)
G&A expenses	744	731	3,070	2,793
\$ per boe	4.15	651.52	8.93	668.98

Gross G&A expenses declined \$0.2 million in the fourth quarter compared to the same period in 2019 as a result of staffing reductions earlier in 2020. However, with fewer capital projects underway in the fourth quarter of 2020 compared to 2019, net G&A was relatively consistent. With lower capitalized G&A, net G&A expenses increased in the year ended December 31, 2020 compared to 2019.

Funds Flow from Operations

	Three Months Ended		Year Ended	
	December 31,		December 31,	
	2020	2019	2020	2019
Funds flow from operations	4,252	(713)	6,216	(2,828)
Per share – basic (\$)	0.04	(0.01)	0.06	(0.03)
Per share – diluted (\$)	0.04	(0.01)	0.06	(0.03)

With the commencement of natural gas sales in July 2020, the Company recognized funds flow from operations in both the three months and year ended December 31, 2020 compared to net outflows in prior periods. Relative to the third quarter of 2020, funds flow from operations improved by \$0.6 million as a result of the increase in average daily production and improved operating netback per boe.

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 and the Company incurs head office costs in both USD and Canadian dollars (“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, 2020	As at September 30, 2020	December 31, 2019	% Appreciation (Depreciation) of BRL/CAD to USD	
				Q4 2020	YTD 2020
Rate at end of period:					
\$1 USD = BRL	5.197	5.641	4.031	7.9%	(28.9%)
\$1 USD = CAD	1.273	1.334	1.299	4.6%	2.0%

	Three Months Ended December 31,		Year Ended December 31,		% Appreciation (Depreciation) of BRL/CAD to USD	
	2020	2019	2020	2019	Q4	YTD
Average rate in the period:						
\$1 USD = BRL	5.392	4.116	5.158	3.946	(31.0%)	(30.7%)
\$1 USD = CAD	1.303	1.320	1.340	1.327	1.3%	(1.0%)

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 on translation of foreign operations in our consolidated statements of operations and comprehensive income (loss). The BRL appreciated 8% from September 30, 2020 to December 31, 2020 resulting in an exchange gain recognized in other comprehensive income of \$1.9 million in the fourth quarter. However, as the BRL depreciated 29% from December 31, 2019, there was an overall exchange loss recognized in other comprehensive loss of \$8.9 million for the year ended December 31, 2020.

Foreign exchange fluctuations on intercompany amounts receivable from Alvo Petro's Brazilian subsidiaries are recorded in exchange loss on translation of foreign operations, part of other comprehensive loss, to the extent settlement is neither forecasted nor likely to occur in the foreseeable future. Where future settlement is anticipated in the foreseeable future, foreign exchange gains losses are recognized on the consolidated income statement from the date the Company determines settlement is likely to occur. The Company recorded \$1.8 million of foreign exchange gains in the three months ended December 31, 2020 with respect to fluctuations in foreign exchange on intercompany amounts anticipated to be repaid (December 31, 2019 - \$nil).

As discussed above, the Company is exposed to foreign exchange fluctuations on its natural gas revenues. When Alvo Petro's natural gas price was reset on August 1, 2020, the price determined in BRL was based on an average historical exchange rate of 4.92. In the fourth quarter of 2020, the actual average rate was 5.39 and in the second half of 2020 the average rate was 5.38, a devaluation of over 9% in both periods compared to the foreign exchange rate utilized for purposes of determining the BRL denominated natural gas price. The following table denotes the overall estimated impact on natural gas revenues of a 5% and 10% depreciation and appreciation of the BRL relative to the USD for the three and twelve months ended December 31, 2020:

	Three Months Ended December 31,		Year Ended December 31,	
	2020	2019	2020	2019
Increase (Decrease) to Natural Gas Revenues from:				
5% Appreciation of BRL to USD	275	-	525	-
10% Appreciation of BRL to USD	550	-	1,050	-
5% Depreciation of BRL to USD	(262)	-	(500)	-
10% Depreciation of BRL to USD	(500)	-	(954)	-

To manage exposure to foreign exchange volatility with respect to the BRL, the Company has entered into BRL/USD forward exchange rate contracts. In the three months ended December 31, 2020, the Company entered into a total of BRL 3,000,000 of forward exchange contracts with settlements based on fixed rates between 5.10 and 5.42 and settlement dates spanning from February to July 2021. The Company recognizes the fair value of these contracts in the statement of financial position with changes in fair value recognized as an unrealized gain or loss included in net income (loss). Realized gains or losses are recognized in the period the contracts are settled. Total losses with respect to these contracts for the year ended December 31, 2020 were \$0.01 million (2019 - \$nil), all unrealized.

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 income (loss) as foreign exchange gains or losses.

Depletion and Depreciation

	Three Months Ended December 31,		Year Ended December 31,	
	2020	2019	2020	2019
Depletion and depreciation	1,027	63	2,070	234
\$ per boe	5.73	56.15	6.02	56.05

The Company recognized depletion of \$0.8 million on the Caburé field and associated assets in the fourth quarter of 2020 and \$1.4 million for the year ended December 31, 2020. Depletion and depreciation of \$5.73 per boe in the fourth quarter was consistent with the third quarter rate of \$5.74 per boe. Depreciation in the fourth quarter also includes \$0.3 million in depreciation on the Company's right-of-use assets (December 31, 2019 - \$0.1 million), largely on the capital lease for the Facility which commenced at the end of the second quarter of 2020.

Impairment

	Three Months Ended December 31,		Year Ended December 31,	
	2020	2019	2020	2019
Bom Lugar	-	-	1,381	-
Assets held for sale	4	11	4	37
Block 57	-	39	-	1,572
Other	70	-	70	36
Total Impairment	74	50	1,455	1,645

The majority of the impairment recognized in year ended December 31, 2020 relates to the Company's Bom Lugar field. As a result of the impact of the COVID-19 pandemic and the significant decline in current and forecasted crude oil prices, the Company recognized an impairment of the Bom Lugar asset of \$1.4 million in the three months ended March 31, 2020. The impairment in the fourth quarter relates to write-downs in assets held for sale and other working capital amounts related to a disposition of assets.

The impairment in 2019 primarily relates to costs incurred on Block 57 which was written down to \$nil as the block was relinquished.

Share-Based Compensation Expense

	Three Months Ended December 31,		Year Ended December 31,	
	2020	2019	2020	2019
Share based compensation expense	101	41	242	141

Share-based compensation expense is a non-cash expense based on the fair value of stock options and restricted share units ("RSUs") granted and amortized over the respective vesting periods. At December 31, 2020, 6.8 million stock options and 900,000 RSUs were outstanding compared to 8.0 million stock options and no RSUs at December 31, 2019. Despite fewer stock options outstanding at December 31, 2020, as a result of the RSUs granted in the three months ended September 30, 2020 and higher exercise prices for new stock option grants in 2020, overall share-based compensation expense increased in 2020.

Finance Expenses

	Three Months Ended		Year Ended	
	December 31,		December 31,	
	2020	2019	2020	2019
Lease interest	350	3	706	14
Accretion on decommissioning liabilities	24	32	80	52
Amortization of deferred financing costs	176	137	650	137
Interest on Credit Facility	446	132	1,638	132
Gross finance expenses	996	304	3,074	335
Capitalized to E&E and PP&E	-	(76)	(737)	(76)
Finance expenses	996	228	2,337	259

Interest calculated on the Credit Facility includes cash interest and commitment fees paid monthly, and interest in kind (PIK) payable upon repayment of amounts drawn. The increase to finance expense in 2020 is related to interest and amortization of deferred financing costs on the Company's credit facility arrangement entered into October 2019 and also due to the commencement of the capital lease with Enerflex for our gas treatment facility.

The portion of interest on the Credit Facility and the amortization of deferred financing costs that is directly attributable to eligible PP&E and E&E activities is capitalized to those assets, with the remainder, as shown above, included in profit and loss. With the completion of all Caburé infrastructure development by the end of the second quarter of 2020, no further amounts were capitalized in the third or fourth quarters.

Deferred Income Tax Expense (Recovery)

	Three Months Ended		Year Ended	
	December 31,		December 31,	
	2020	2019	2020	2019
Deferred income tax expense (recovery)	1,148	-	(3,745)	-

Following the commencement of production and cash flows from the Caburé field, the Company recognized the benefit of a previously unrecognized deferred tax asset in Brazil, resulting in a deferred income tax recovery in the year ended December 31, 2020. As a result of prior year losses and sufficient tax deductions, no current income tax expense arose in any periods in 2019 or 2020.

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. The Company has submitted an application to tax authorities within Brazil for Supertintendência de Desenvolvimento do Nordeste ("SUDENE"), a regional tax incentive offered for qualifying projects in Bahia State. This tax incentive is expected to contribute to special deductions in future years when the Company is taxable to reduce the inherent current tax payable due to an effective rate of 15.25%.

Net Income (Loss)

	Three Months Ended		Year Ended	
	December 31,		December 31,	
	2020	2019	2020	2019
Net income (loss)	2,754	(1,086)	5,706	(5,011)
Per share – basic (\$)	0.03	(0.01)	0.06	(0.05)
Per share – diluted (\$)	0.03	(0.01)	0.05	(0.05)

As a result of improved funds flow from operations, following the commencement of natural gas deliveries in the third quarter, and a \$1.8 million foreign exchange gain, offset by deferred tax expense of \$1.1 million, the Company reported net income in the three months ended December 31, 2020, compared to a loss in 2019. The net income in the year ended December 31, 2020 was impacted by the deferred tax recovery of \$3.7 million recognized in the year, partially offset by the \$1.5 million impairment charge.

Capital Expenditures

Capital Expenditures by Type	Three Months Ended December 31,		Year Ended December 31,	
	2020	2019	2020	2019
E&E				
Drilling and completions	325	1,537	538	2,750
Facility & equipment	-	3	26	98
Land, lease, and similar payments	-	28	34	76
Inventory purchases	-	1	46	8
Capitalized G&A	59	118	237	343
Capitalized finance expense	-	-	114	-
Other	-	-	-	1
Total E&E	384	1,687	995	3,276
PP&E				
Facility & equipment	65	3,136	1,694	6,192
Drilling & completion	-	1,977	-	2,395
Land, lease and similar payments	-	(33)	5	25
Furniture & fixtures	3	2	6	6
Capitalized G&A	-	137	491	642
Capitalized finance expense	-	76	623	76
Other	-	17	-	59
Total PP&E	68	5,312	2,819	9,395
Total Capital Expenditures by Type⁽¹⁾	452	6,999	3,814	12,671

Capital Expenditures by Property	Three Months Ended December 31,		Year Ended December 31,	
	2020	2019	2020	2019
E&E				
9 th Brazil Bid Round blocks (Blocks 182, 183, 197)	384	1,686	949	2,003
11 th Brazil Bid Round blocks (Block 107)	-	-	-	5
13 th Brazil Bid Round blocks (Blocks 57, 62, 71, 145)	-	-	-	1,260
Inventory	-	1	46	8
Total E&E	384	1,687	995	3,276
PP&E				
Caburé and associated midstream assets	65	5,304	2,813	9,380
Bom Lugar	-	1	-	5
Corporate	3	7	6	10
Total PP&E	68	5,312	2,819	9,395
Total Capital Expenditures by Property⁽¹⁾	452	6,999	3,814	12,671

(1) Includes non-cash capital expenditures of \$nil and \$0.4 million in the three and twelve months December 31, 2020 (December 31, 2019 - \$2.6 million and \$3.2 million)

Capital expenditures in the fourth quarter were focused on our E&E assets with \$0.1 million attributable to the installation of the plunger lift system and the production test of our 183(1) well at our Gomo natural gas project and \$0.3 million in civil construction costs for our two exploration wells to be drilled in 2021. For the year ended December 31, 2020, additional capital expenditures were incurred for final construction and commissioning of our Caburé natural gas project and related mid-stream infrastructure which also represent the majority of the costs incurred in 2019.

Summary of Annual Results

	2020	2019	2018
Financial			
Natural gas, oil and condensate sales	11,308	240	519
Net income (loss)	5,706	(5,011)	(4,340)
Per share – basic (\$)	0.06	(0.05)	(0.05)
Per share –diluted (\$)	0.05	(0.05)	(0.05)
Funds flow from operations ⁽¹⁾	6,216	(2,828)	(3,266)
Per share – basic (\$)	0.06	(0.03)	(0.04)
Per share –diluted (\$)	0.06	(0.03)	(0.04)
Working capital surplus (deficit) ⁽¹⁾	5,539	(6,701)	6,729
Total assets	80,388	71,416	65,372
Non-current liabilities	24,330	6,389	3,508
Average daily sales:			
Natural gas (mcfpd)	5,346	-	-
NGL – condensate (bopd)	44	3	-
Oil (bopd)	5	8	21
Total average daily sales (boepd)	940	11	21

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

The Company’s average daily sales increased significantly in 2020 with the commencement of natural gas deliveries in the second half of 2020, which contributed to the overall increase in 2020 in natural gas, oil and condensate sales as well as net income and funds flow from operations. Net income in 2020 was also positively impacted by a foreign exchange gain and a deferred tax recovery. Overall, the Company generated net losses and cash outflows from operations in 2018 and 2019.

With improved funds flow from operations, the Company’s working capital surplus increased to \$5.5 million as of December 31, 2020 compared to a deficit in 2019. The 2019 working capital deficit included \$5.7 million recognized as current liabilities with respect to amounts outstanding for our share of joint unit development costs for the upstream development of the Caburé natural gas field, all of which was repaid in 2020.

Total assets have increased 13% from 2019 and 23% from 2018 primarily due to capital spending on the Company’s Caburé natural gas project (including construction of the transfer pipeline, costs related to the gas processing facility, and Alvopetro’s share of joint unit development costs).

The Company entered into the Credit Facility in 2019 and had drawn \$5.0 million as of December 31, 2019 with the remaining available funds drawn in 2020, bringing the total balance outstanding to \$15.4 million as of December 31, 2020 (compared to \$5.0 million in 2019 and \$nil in 2018), contributing to the increased non-current liabilities as of December 31, 2020 compared to prior years. The Company’s non-current liabilities also increased in 2020 due to the commencement of the capital lease with Enerflex. As of December 31, 2020, the Company’s total non-current capital lease obligation is \$7.8 million compared to \$0.1 million as of December 31, 2019 and \$nil as of December 31, 2018.

Summary of Quarterly Results

	Q4 2020	Q3 2020	Q2 2020	Q1 2020	Q4 2019	Q3 2019	Q2 2019	Q1 2019
Financial								
Natural gas, oil and condensate sales	5,887	5,320	40	61	65	77	30	68
Net income (loss)	2,754	6,483	(1,168)	(2,363)	(1,086)	(2,321)	(841)	(763)
Per share – basic (\$)	0.03	0.07	(0.01)	(0.02)	(0.01)	(0.02)	(0.01)	(0.01)
Per share – diluted (\$)	0.03	0.06	(0.01)	(0.02)	(0.01)	(0.02)	(0.01)	(0.01)
Funds flow from operations ⁽¹⁾	4,252	3,610	(973)	(673)	(713)	(779)	(699)	(637)
Per share – basic (\$)	0.04	0.04	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Per share diluted (\$)	0.04	0.03	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Capital expenditures ⁽²⁾	452	107	1,645	1,610	6,999	3,648	775	1,249
Operations								
Average realized prices:								
Natural gas (\$/mcf)	5.36	5.37	-	-	-	-	-	-
NGL – condensate (\$/bbl)	46.97	44.75	37.27	70.54	69.14	73.63	-	60.73
Oil (\$/bbl)	-	-	30.25	50.66	51.60	51.05	57.80	51.11
Average Foreign Exchange (\$1 USD = BRL)	5.392	5.377	5.385	4.466	4.116	3.968	3.922	3.768
Operating netback (\$/boe) ⁽¹⁾								
Realized sales price (\$/boe)	32.82	32.79	31.13	60.10	57.93	61.60	57.80	52.96
Royalties	(1.51)	(2.81)	(3.89)	(7.88)	(8.91)	(8.80)	(7.71)	(7.01)
Production expenses	(3.39)	(3.99)	(28.02)	(43.35)	(45.45)	(53.60)	(123.31)	(73.21)
Operating netback	27.92	25.99	(0.78)	8.87	3.57	(0.80)	(73.22)	(27.26)
Average daily sales:								
Natural gas (mcfpd)	11,163	10,105	-	-	-	-	-	-
NGL – condensate (bopd)	89	79	2	5	4	7	-	3
Oil (bopd)	-	-	12	6	8	7	6	11
Total average daily sales (boepd)	1,950	1,764	14	11	12	14	6	14

Notes:

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

(2) Includes non-cash capital expenditures of \$0.35 million in Q2 2020, 0.05 million in Q1 2020, \$2.6 million in Q4 2019, \$0.6 million in Q3 2019 and \$0.03 million in Q2 2019.

Natural gas, oil and condensate sales and funds flow from operations increased \$0.6 million in the fourth quarter compared to the third quarter due to the 10.5% increase in average daily production. Fourth quarter net income decreased \$3.7 million compared to the third quarter despite higher revenue and funds flow and a foreign exchange gain of \$1.8 million as the third quarter had included the recognition of a \$4.9 million deferred tax recovery compared to a deferred tax expense of \$1.1 million in the fourth quarter. In all quarters prior to the third quarter of 2020 efforts by the Company were focused on the development of the Caburé asset and related midstream infrastructure, with minimal revenue from oil and condensate sales, and the Company generated net losses and negative funds flow from operations in all prior periods.

Despite consistent realized sales prices in the third and fourth quarters, the operating netback improved 7% to \$27.92 per boe in the fourth quarter due to lower royalties and production expenses. Capital expenditures increased to \$0.5 million in the fourth quarter, primarily on projects on the Company’s E&E assets.

Commitments and Contingencies

The following is a summary of Alvo Petro's contractual commitments as at December 31, 2020:

Commitments	< 1 Year	1-3 Years	Thereafter	Total
Minimum work commitments ⁽¹⁾				
Block 183	-	642	-	642
Bom Lugar	-	-	67	67
Mãe-da-lua	-	-	67	67
Minimum work commitments	-	642	134	776
Gas Treatment Agreement	1,136	2,272	7,385	10,793
Total commitments	1,136	2,914	7,519	11,569

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.

The Company's Gas Treatment Agreement with Enerflex contains a lease related to equipment rental of the Facility for which details are provided in Note 8 to the consolidated financial statements and the obligation is reflected on the Statement of Financial Position as of December 31, 2020. The contract also provides for monthly service fees to Enerflex for operation and maintenance of the Facility as well as Alvo Petro's 11-kilometre transfer pipeline. The committed payments for service fees are included in the table above. The Gas Treatment Agreement includes early termination penalty provisions which vary depending on timing of the termination. While the agreement also includes strict availability requirements and downtime credits, such credits may not fully offset costs incurred by Alvo Petro due to ship or pay obligations under the GSA as discussed below to the extent processing in the Facility is limited due to unplanned or longer than scheduled maintenance or repair.

The Company's GSA with Bahiagás provides for ship or pay penalties applicable to Alvo Petro for supply failure in respect of the firm volumes and also take or pay penalties applicable to Bahiagás should it be unable to accept the firm volumes specified in the contract. The Company believes it can meet the firm sales commitments under the GSA solely with our production from the Caburé natural gas field, however supply failure penalties may arise where there are unplanned production interruptions, or to the extent reservoir performance is below expected production rates. Supply failure penalties are a function of the shortfall of firm volumes and the prevailing natural gas price under the GSA at the time. Alvo Petro can mitigate these risks by adjusting firm volumes annually and by meeting sales commitments under the GSA with third-party gas supplies, through development of existing natural gas resources, or through new natural gas discoveries from our prospect inventory.

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.

LIQUIDITY AND CAPITAL RESOURCES

Credit Facility

In 2019, the Company entered into the \$15 million Credit Facility. The Credit Facility is secured by all of Alvo Petro's assets and matures on October 8, 2022. The Credit Facility is subject to cash interest of 9.5% per annum, payable monthly, and additional PIK interest is payable upon repayment of any Credit Facility amounts at a rate of 3.0% per annum. Amounts drawn under the Credit Facility are repayable at maturity, however amounts may now be repaid in part or full at Alvo Petro's option without penalty. As of December 31, 2020, the Company had drawn the full available balance of \$15.0 million under the Credit Facility. The balance outstanding of \$15.4 million at December 31, 2020 includes PIK amounts owing upon repayment of amounts drawn. Subsequent to December 31, 2020 the Company repaid a total of \$2.5 million in principal balances outstanding under the Credit Facility.

The Credit Facility contains certain customary financial and non-financial covenants, standard representations and warranties and events of default. Events of default include, but are not limited to, failure to pay amounts owing (advances or interest) when due and payable, incorrect representations and warranties, failure to comply with financial and non-financial covenants, cross-default provisions on other debt outstanding, invalidity of security registrations, and change of control. To the extent an event of default occurs, the lenders can terminate their obligations for further advances under the Credit Facility and declare all advances outstanding immediately due and payable.

Financial Covenants

Under the terms of the Credit Facility, Alvo Petro must comply with financial covenants as of December 31, 2020, being a minimum debt service ratio of 1.30 and a maximum leverage ratio of 2.25. For the period ended December 31, 2020, the covenants are computed for the period July 1, 2020 to December 31, 2020 and determined as follows:

Covenant	Covenant threshold	December 31, 2020
Debt Service Ratio	Minimum of 1.30:1	3.57:1
Leverage Ratio	Maximum of 2.25:1	1.33:1

Debt Service Ratio is computed based on the “Adjusted Consolidated EBITDA” to “Consolidated Debt Service” for the period July 1, 2020 to December 31, 2020. Both Adjusted Consolidated EBITDA and Consolidated Debt Service are defined terms in the Credit Facility agreement. Adjusted Consolidated EBITDA is Consolidated EBITDA (which is computed in accordance with the Company’s EBITDA calculation – see “Non-GAAP Measures”) decreased by income taxes and capital expenditures in the period and increased or decreased by the net change in non-cash working capital in the period. In addition, for all periods commencing on July 1, 2020 (being those covenant calculations ending on December 31, 2020, March 31, 2021 and June 30, 2021), Adjusted Consolidated EBITDA is increased by the Company’s cash and cash equivalents as of June 30, 2020. Consolidated Debt Service is defined to include all interest and principal payments on the Company’s outstanding debt and capital lease obligations for the period.

The Leverage Ratio is computed as the ratio of “Adjusted Consolidated Indebtedness” to “Consolidated EBITDA”. Adjusted Consolidated Indebtedness includes all debt of the Company reduced by the portion of debt attributable to the capital lease obligation outstanding to Enerflex and the unrestricted cash balance.

The Company is in compliance with all financial and non-financial covenants as of December 31, 2020.

Lease Liabilities

In 2018, Alvo Petro entered into the 10-year Gas Treatment Agreement with Enerflex. Pursuant to the agreement, Enerflex constructed and operates the Facility to process natural gas from the Company’s Caburé natural gas field. Enerflex also operates the Company’s Caburé transfer pipeline. Alvo Petro pays both a monthly equipment rental fee for the Facility as well as monthly service fees for operations and maintenance. The portion of the agreement that relates to the equipment rental is a right-of-use asset with a corresponding lease liability. The Facility was commissioned and became available for use during the second quarter of 2020 and the associated \$8.3 million right-of-use asset and lease liability were recognized in the period. The ongoing obligations to Enerflex will be satisfied in the normal course. The lease liability to Enerflex represents the majority of the Company’s lease liability as at December 31, 2020. Additional lease liabilities outstanding relate to office space in Canada and Brazil and surface land access for our midstream assets.

The Company's lease liabilities at December 31, 2020 are as follows:

	As at	
	December 31, 2020	December 31, 2019
Lease liabilities, beginning of period	163	-
Lease liabilities upon adoption of IFRS 16	-	244
Additions	8,494	133
Finance expense	706	14
Lease payments	(1,014)	(234)
Foreign currency translation	(39)	6
Lease liabilities, end of period	8,310	163
Current	483	101
Non-current	7,827	62
Total, end of period	8,310	163

Cash and Working Capital

At December 31, 2020, Alvo Petro's cash and cash equivalents of \$5.2 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	2,473	2,423	50	-
Cash held in Brazil	2,686	-	-	2,686
Restricted cash - current	125	-	-	125
Total	5,284	2,423	50	2,811

(1) Amounts in the table above denote the U.S. dollar equivalent as at December 31, 2020.

The Company had cash of \$5.2 million and a total net working capital surplus of \$5.5 million at December 31, 2020. Natural gas deliveries to Bahiagás commenced on July 5, 2020 and positive cash flows are expected going forward. However, as discussed further in "Risks and Uncertainties", the Company is exposed to a variety of risks which may adversely impact future cash flows. The Company manages this risk by forecasting cash flows for a minimum period of twelve months, which involves preparation of capital expenditure, operating and general and administrative budgets, all of which are monitored closely, and adjusting as necessary. The Company has flexibility on future capital plans, other than with respect to work commitments.

Exploration work commitments to be met in Brazil are supported by a credit 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. LCs and letters of guarantee issued may be supported by either cash collateral posted by Alvo Petro or through an Account Performance Security Guarantee from Export Development Canada ("EDC"). As at December 31, 2020, the total amount of LCs issued under the credit support facility was \$0.6 million (December 31, 2019 - \$4.9 million), the full balance of which was satisfied by EDC. The Company has a restricted cash balance of \$0.1 million as at December 31, 2020 (December 31, 2019 - \$0.3 million) primarily in respect of abandonment guarantees on the Company's oil fields.

The liability for decommissioning obligations of Alvo Petro was \$1.1 million as at December 31, 2020, with \$0.06 million expected to be incurred within one year. 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, 2020, the Company had \$1.1 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. As of March 24, 2021, there were 99,726,311 common shares outstanding, 6,395,750 stock options outstanding, 900,000 RSUs outstanding and 8,432,868 warrants outstanding. There are no preferred shares outstanding.

NON-GAAP MEASURES

This MD&A or documents referred to in this MD&A make reference to certain measures which are not recognized measures under GAAP and do not have a standardized meaning prescribed by IFRS. This MD&A contains six non-GAAP measures: 1) funds flow from operations; 2) funds flow from operations per share; 3) net working capital surplus (deficit); 4) net debt; 5) operating netback per barrel of oil equivalent and 6) earnings before interest, taxes, depreciation, and amortization ("EBITDA"). These are complementary measures that are used by management in assessing the Company's financial performance, efficiency and liquidity and they may be used by investors or other users of this document for the same purpose. The non-GAAP measures do not have standardized meanings under IFRS and therefore are unlikely to be comparable to similar measures presented by other issuers. While these measures may be common in the oil and gas industry, the Company's use of these terms may not be comparable to similarly defined measures presented by other companies. The non-GAAP measures referred to in this report should not be considered an alternative to, or more meaningful than measures prescribed by IFRS and they are not meant to enhance the Company's reported financial performance or position.

Funds Flow from Operations and Funds Flow from Operations Per Share

The most comparable GAAP measure to funds flow from operations is cash flows from operating activities. Management considers both funds flow from operations and funds flow per share important as they help evaluate financial performance and demonstrate the Company's ability to generate sufficient cash to fund future growth opportunities. Funds flow from operations should not be considered an alternative to, or more meaningful than, cash flows from operating activities however management finds that the impact of working capital items on the cash flows reduces the comparability of the metric from period to period. A reconciliation of funds flow from operations to cash flows from operating activities is as follows:

	Three Months Ended December 31,		Year Ended December 31,	
	2020	2019	2020	2019
Cash flows from operating activities	3,124	(611)	3,061	(2,509)
Add back changes in non-cash working capital	1,128	(102)	3,155	(319)
Funds flow from operations	4,252	(713)	6,216	(2,828)

The Company also refers to funds flow per share, which is funds flow from operations divided by the weighted average shares outstanding for the respective period. For the periods reported in this document the cash flow from operating activities per share and funds flow from operations per share is as follows:

	Three Months Ended December 31,		Year Ended December 31,	
\$ per share	2020	2019	2020	2019
Cash flows from operating activities per basic share	0.03	(0.01)	0.03	(0.03)
Funds flow from operations per basic share	0.04	(0.01)	0.06	(0.03)
Cash flows from operating activities per diluted share	0.03	(0.01)	0.03	(0.03)
Funds flow from operations per diluted share	0.04	(0.01)	0.06	(0.03)

Net Working Capital Surplus (Deficit)

Net working capital surplus (deficit) is computed as current assets less current liabilities. Net working capital is a measure of liquidity, is used to evaluate financial resources, and is calculated as follows:

	As at December 31,	
	2020	2019
Total current assets	8,487	2,452
Total current liabilities	(2,948)	(9,153)
Net working capital surplus (deficit)	5,539	(6,701)

Net Debt

Net debt is computed as the carrying amount of the Credit Facility, decreased by net working capital surplus or increased by net working capital deficit. Net debt is used by management to assess the Company's overall debt position and borrowing capacity.

	As at December 31, 2019	
	2020	2019
Credit Facility, balance outstanding	15,423	5,027
Net working capital surplus (deficit)	5,539	(6,701)
Net Debt	9,884	11,728

Operating Netback per Barrel of Oil Equivalent

Operating netback is calculated on a per unit basis, which is per barrel of oil equivalent ("boe"). It is a common non-GAAP measure used in the oil and gas industry and management believes this measurement assists in evaluating the operating performance of the Company at the lease level. It is a measure of the economic quality of the Company's producing assets and is useful for evaluating variable costs as it provides a reliable measure regardless of fluctuations in production. Operating netback is calculated as natural gas, oil and condensate sales (after sales taxes) less royalties, and production and transportation costs on a per unit (barrel of oil equivalent) basis. This calculation per unit is provided in the Selected Quarterly Results Section of this MD&A and is illustrated using our IFRS measures as follows:

	Three Months Ended December 31,		Year Ended December 31,	
	2020	2019	2020	2019
Natural gas, oil and condensate sales	5,887	65	11,308	240
Royalties	(271)	(10)	(740)	(34)
Production expenses	(608)	(51)	(1,336)	(276)
Operating netback	5,008	4	9,232	(70)
Operating netback per boe (\$)	27.92	3.57	26.85	(16.76)

EBITDA

EBITDA is used to measure the Company's operating performance and cash available for reinvestment and distribution to stakeholders. The most comparable GAAP measure is net income and is reconciled to net income by adding back depletion, depreciation, impairment, finance expenses, taxes, share based compensation, unrealized gains and losses and other non-cash items as follows:

	Three Months Ended		Year Ended	
	December 31,		December 31,	
	2020	2019	2020	2019
Net income (loss)	2,754	(1,086)	5,706	(5,011)
Depletion and depreciation	1,027	63	2,070	234
Impairment	74	50	1,455	1,645
Finance expenses	996	228	2,337	259
Share-based compensation	101	41	242	141
Deferred tax expense (recovery)	1,148	-	(3,745)	-
Unrealized risk management losses	12	-	12	-
Foreign exchange (gain) loss	(1,859)	(8)	(1,856)	9
EBITDA	4,253	(712)	6,221	(2,723)

RISKS AND UNCERTAINTIES

Alvopetro is exposed to a variety of risks including, but not limited to: market risk, operational risks, foreign operations risk, liquidity and financing risk, reservoir performance risk, legal and regulatory risks including the impact of new and stricter environmental regulations and competitive risks within the oil and gas industry. In addition, the impact of the COVID-19 pandemic increases our exposure to certain of these risks as further discussed below.

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. The Impact of COVID-19 Pandemic and Commodity Price Declines

The COVID-19 pandemic and the responses by governments and health authorities around the world to reduce the spread of the virus have given rise to a significant reduction in global economic activity and reduced demand for crude oil and natural gas, resulting in a sharp decline in current and forecasted commodity prices. While vaccines have been approved for distribution throughout the world, the ultimate timing, outcome and success of the vaccine distribution globally is uncertain. The direct and indirect effects of COVID-19 could have unforeseen implications that may be material. The extent to which the COVID-19 pandemic may impact our operations, financial condition and future financial performance is currently unknown. Even where the COVID-19 pandemic has subsided, the effects of the pandemic may continue for an extended period of time.

As a result of the decline in commodity prices, Alvopetro's natural gas price under the GSA with Bahiagás is based on the floor price of \$5.23/mmbtu as of August 1, 2020 and also based on the floor price of \$5.28/mmbtu when the price was reset on February 1, 2021. While Alvopetro's operations and supply chain has not otherwise been materially impacted to date, the impact on future demand and operations is unknown and unpredictable and the Company may be negatively impacted. In response to the COVID-19 pandemic, Alvopetro is following all applicable rules and regulations as set out by health authorities within Canada and Brazil and has implemented various measures to ensure the health and safety of all employees. The Company is committed to maintaining a strong balance sheet during this period of economic uncertainty and is actively monitoring all spending to ensure a strong financial position. While the Company has fully drawn its available Credit Facility with a balance outstanding of \$15.4 million as at December 31, 2020, the Company exited the fourth quarter with \$5.2 million of cash and cash equivalents and a working capital surplus of \$5.5 million. Subsequent to year-end the Company repaid \$2.5 million of the outstanding credit facility balance.

The pandemic presents uncertainty and risk with respect to the Company, its performance and estimates and assumptions used by Management in the preparation of financial results. The impact of subsequent waves of the COVID-19 pandemic or additional variants of COVID-19 continue to raise uncertainty and global markets may remain under pressure for a sustained period of time. The full extent of the risks associated with the COVID-19 pandemic is continually evolving and the impact is uncertain. In particular and without limitation, the continuation of the COVID-19 pandemic and the impact of subsequent waves or additional variants could adversely impact the Company's financial condition and results of operations and further increase other risks including: 1) market risk due to volatility in commodity prices as a result of reduced oil and natural gas demand and due to

volatility in foreign exchange markets; 2) operational risks due to workforce disruption or shut down orders which may restrict current operations and cash flows or future capital projects; 3) financing risk to the extent additional capital is required as financing alternatives may be limited or only available with terms unacceptable to Alvo Petro a result of reduced commodity prices and continued volatility in the financial markets; and 4) foreign operations risk given the Company's operations are undertaken in Brazil which has been particularly hard hit by the impact of the COVID-19 pandemic and vaccine distribution is uncertain.

B. 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 fluctuate widely and are influenced by global supply and demand, government regulations, actions of other countries, weather conditions, worldwide political conditions, and other worldwide pandemics or other unforeseeable 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. The Company's long-term GSA includes both a floor and a ceiling price which limits the Company's exposure to commodity price risk. The Company monitors market conditions and may selectively use derivative instruments to reduce exposure to commodity price movements.

Alvo Petro is exposed to market risks from fluctuations in foreign exchange rate, particularly with respect to its crude oil, natural gas and condensate revenues. Although the revenues are linked to USD benchmark prices, actual invoices for such sales are denominated in BRL, exposing the Company to foreign currency risk. This is particularly significant with respect to natural gas sales under the Company's long-term GSA as the natural gas price is determined semi-annually based on historical USD benchmark prices and converted to a fixed BRL denominated price based on historical exchange rates. The Company then receives the fixed BRL denominated price until the next price determination date. As a result, fluctuations in the actual USD to BRL exchange rate from the average historical rate used to determine the BRL denominated natural gas price will result in USD realized prices which differ from the USD natural gas price at the price determination. Should the BRL depreciate from the average historical rate used in determining the BRL denominated natural gas price, the Company will realize lower equivalent USD until the next price reset which may result in a material decrease in funds flow. In the three months ended December 31, 2020 the Company entered into forward contracts to manage its exposure to foreign currency risk as further discussed above.

The Company has entered into a long-term GSA with one counterparty. As a result, Alvo Petro is subject to increased credit risk as result of concentration with one counterparty. In the year-ended December 31, 2020, 93% of the Company's revenues were sold to this one counterparty. If this gas sales contract were terminated for any reason, Alvo Petro may be unable to enter into a relationship with another purchaser for such gas on a timely basis or on similar terms. Additional infrastructure development may be required to enter into a new gas sales contract with a new counterparty which may result in additional capital expenditures and delays in future cash flows. Alvo Petro's results of operations and future cash flows are dependent on its ability to market its gas production and any change to price or volumes under its gas sales contract may impact future earnings.

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. As the interest rate on the Company's Credit Facility is fixed, it is not exposed to interest rate risk on amounts drawn.

C. Operational Risk

Alvo Petro's Caburé natural gas field is operated by Alvo Petro's partner on this field. As Alvo Petro is not the operator of this property, it is dependent on its partner for the timing and execution of key activities to ensure Alvo Petro is able to meet production requirements under its GSA and generate future cash flows. Alvo Petro is also dependent on its partner, to varying extents, to exercise best practices in terms of safety, environmental regulations, and employment law. To manage these risks, Alvo Petro entered into a comprehensive unitization agreement which governs the responsibilities of the operator and non-operators in a fair and balanced approach.

All of Alvo Petro's natural gas is processed through the Facility owned by Enerflex under the terms of the Gas Treatment Agreement. As the Facility is owned and operated by Enerflex, although Alvo Petro has full control over the gas processed within the Facility, Alvo Petro does not have full control over all operational matters. From time to time, the Facility may discontinue or decrease operations either as a result of normal servicing requirements or as a result of unexpected events. While the GSA allows for

scheduled downtime and routine maintenance, should such downtime be unplanned or extend for longer than anticipated, this could have a material adverse impact on the Company's operations and could give rise to ship or pay penalties under the GSA if the Company is unable to meet its firm production requirements. The terms of the Gas Treatment Agreement include strict availability requirements and downtime credits to minimize Alvo Petro's costs associated with reduced processing; however, such credits may not fully offset costs incurred by Alvo Petro due to ship or pay obligations under the GSA.

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. Should operational problems reduce or limit Alvo Petro's future gas production, future cash flows may be less than expected and Alvo Petro may be subject to ship or pay penalties under its long-term GSA.

D. 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 risks from changes in policies and regulations, renegotiations or modifications of existing contracts, changes in tax and royalty regulations, foreign exchange controls and potential economic instability and uncertainty. 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.

The majority of Alvo Petro's operations are conducted in Portuguese and the Company may enter into significant contracts in Portuguese which may give rise to uncertainties. The Company manages this risk through the employment and involvement of qualified personnel within Brazil in all local operations.

E. Liquidity and Financing Risk

The Company owed a total of \$15.4 million under its Credit Facility as of December 31, 2020. The Company's ability to make payments of interest and principal on future amounts borrowed will depend on its future operating performance and cash flows from operations, which are subject to commodity prices, exchange rates, demand for oil and natural gas, the timing of capital activities, regulatory approvals, reservoir performance, and prevailing economic conditions, among other factors, many of which are beyond its control. The Company's cash flow from operations will be in part dedicated to the payment of principal and interest on future amounts drawn and there can be no assurance that the Company will be able to repay the Credit Facility. During the first quarter of 2021, the Company repaid \$2.5 million of the Credit Facility.

The Credit Facility also imposes certain restrictions on the Company, including on the payment of dividends, incurring additional indebtedness, acquisition and disposition of assets, entering into amalgamations, mergers, among other restrictions. In addition, the Credit Facility includes certain financial covenants with which the Company must comply. A breach of any of the terms of the Credit Facility could cause an event of default, resulting in some or all of the amounts borrowed becoming immediately due and payable, which could adversely affect the Company's financial condition. Pursuant to the terms of the Credit Facility, the lender has been provided with security over all of the assets of the Company. A failure to comply with the obligations in the Credit Facility and related agreements could result in an event of default which, if not cured or waived, could permit acceleration of future amounts owing under the Credit Facility. It is uncertain whether the Company's assets would be sufficient to generate the funds necessary to repay such amounts in the event of an acceleration.

The Company may seek to raise additional funds in the future to fund future capital expenditures on Alvo Petro's properties or other potential business development activities. There can be no assurance that debt or equity financing will be available or

sufficient to meet these requirements 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 planned 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.

F. Reservoir Performance Risk

Lower than projected reservoir performance on the Company's assets could have a material adverse impact on the Company's future results of operations, cash flows, and overall financial condition. Estimates of future cash flows from Alvopetro's properties are based on judgment and assumptions with respect to timing and evaluation of development plans. Additional factors affecting the ultimate recoveries from Alvopetro's properties include initial production rates, production decline rates, future commodity prices, marketability of production, and operating costs, and royalties and other government levies that may be imposed over the producing life of the reserves. All judgments and assumptions were based on the best information available at the date the forecasts were prepared and all are subject to change, some being beyond the control of Alvopetro. Actual production and funds flow derived therefrom will vary from these forecasts, and such variations could have a material impact.

G. 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. The Company's current reserves will decline as reserves are produced unless the Company is able to discover new reserves which involves exploration risk. There can be no assurance that Alvopetro's future exploration activities will result in material additions to reserves or that such activities will lead to future cash flows. 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.

H. Trends in Environmental Regulation

Environmental legislation provides for, among other things, restrictions and prohibitions on spills and releases or emissions of various substances produced in association with oil and gas operations. The legislation also requires that wells and facility sites be operated, maintained, abandoned and reclaimed to the satisfaction of applicable regulatory authorities. Compliance with such legislation can require significant expenditures and a breach may result in the imposition of fines and penalties, some of which may be material. Environmental legislation is evolving in a manner expected to result in stricter standards and enforcement, larger fines and liability and potentially increased capital expenditures and operating costs. While 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, there can be no assurance that future changes to environmental laws will not result in a curtailment of production or a material increase in future costs which may adversely affect Alvopetro's financial condition. Alvopetro anticipates increased capital and operating expenditures as a result of increasingly stringent laws relating to the protection of the environment.

In addition to regulatory requirements, there have been increasing concerns raised by investors and potential investors within the oil and gas industry as to the impact of oil and gas operations on the environment and communities in which oil and gas companies operate. As a result of these concerns, certain investors may divest of any interest in oil and gas companies or the industry as a whole. This may further limit Alvopetro's ability to access sources of financing in the future should it be required. Furthermore, even where capital is available, such investors may require the implementation of more stringent policies and practices concerning environmental matters, including with respect to greenhouse gas ("GHG") emissions or otherwise, some of which may require the installation of emissions monitoring and measuring devices, the verification and reporting of emissions data and additional financial expenditures to comply with GHG emissions reduction requirements. More stringent policies and monitoring requirements may come at a significant cost and time commitment of management, which may increase the overall cost of capital and have a negative impact on future cash flows from operations and earnings.

The expanded use of hydraulic fracturing as a recovery technique employed in oil and natural gas drilling has given rise to increased public scrutiny over potential environmental impacts. Alvopetro may need to utilize hydraulic fracturing in the wells it drills and completes. Alvopetro believes that the hydraulic fracturing that we have conducted to date and may conduct in the future, given the depth and location of the wells and our consistent utilization of good oilfield practices, will be environmentally sound. 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 these regulatory requirements may impact our business.

I. Legal and Regulatory Risks

The Company is subject to extensive governmental and approvals and regulations in 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.

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. There is no assurance that such future requests will be granted. To the extent requests are not approved, acreage positions may be lost, and fines or penalties may be applied.

J. Competitive Risks within the Oil and Gas Industry

The oil and gas industry is highly competitive, both with respect to the acquisition of prospective oil and gas properties and reserves as well as in attracting financing sources for the acquisition of new reserves or the development of existing reserves. Alvopetro's competitive position depends on its geoscience and engineering expertise, its financial resources, its ability to develop its properties and its ability to select, acquire and develop proved reserves. Alvopetro will compete with a substantial number of other companies having larger technical staff and greater financial and operational resources and access to capital. Many such companies not only engage in the acquisition, exploration, development and production of petroleum reserves, but also carry on refining operations and market refined products. 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. Alvopetro competes with Petrobras and other major and independent oil and gas 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. 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.

Alvopetro also competes with other oil and gas companies in attempting to secure 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 Alvopetro 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 may 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 Alvopetro.

CHANGES IN ACCOUNTING POLICIES INCLUDING INITIAL ADOPTION

New and revised accounting standards

On January 1, 2020, the Company adopted the amendments to the following standards:

- IFRS 3 *Business Combinations*;
- IAS 1 *Presentation of Financial Statement*; and
- IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors*.

These amendments did not have an effect on the financial statements as at and for the three and twelve months ended December 31, 2020.

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 concerning the plans relating to the Company's operational activities, future results from operations, projected financial results, future capital and operating costs, the impact of the COVID-19 pandemic, the expected timing and outcomes of certain of Alvo Petro's testing activities, future production rates, proposed exploration and development activities and the timing for such 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, the timing of regulatory licenses and approvals, 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, forecasted demand for oil and natural gas, 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 2019 MD&A and 2019 Annual Information Form which are available on SEDAR and can be accessed at www.sedar.com. Except as may be required by applicable securities laws, Alvo Petro 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.

Oil and Natural Gas Reserves. All net present values in this MD&A are based on estimates of future operating and capital costs and GLJ's forecast prices as of December 31, 2020. The reserves definitions used in this evaluation are the standards defined in the Canadian Oil and Gas Evaluation Handbook reserve definitions and consistent with NI 51-101 and used by GLJ. References to the net present value of 2P reserves throughout this MD&A represents the reserves of Alvo Petro for the associated fields and the before-tax net present value of future net revenue attributable to such reserves, discounted at 10%, as evaluated by GLJ in the GLJ Report as of December 31, 2020, based on forecast price and cost assumptions. The net present value of future net revenue attributable to Alvo Petro's reserves as disclosed in this MD&A is stated without provision for interest costs and general and administrative costs, but after providing for estimated royalties, production costs, development costs, other income, future capital expenditures, well abandonment and reclamation costs for only those wells assigned reserves and material dedicated gathering systems and facilities. The net present values of future net revenue attributable to the Alvo Petro's reserves estimated by GLJ do not represent the fair market value of those reserves. The recovery and reserve estimates of the Company's reserves provided herein are estimates only and there is no guarantee that the estimated reserves will be recovered. Actual reserves may be greater than or less than the estimates provided herein. The disclosure in the MD&A summarizes certain information contained in the GLJ Report but represents only a portion of the disclosure required under NI 51-101. Full disclosure with respect to the Company's reserves as at December 31, 2020 is contained in the Company's 2020 Annual Information Form which has been filed on SEDAR and can be accessed at www.sedar.com.

Contingent Resources. This MD&A discloses estimates of Alvo Petro's contingent resources and the net present value associated with net revenues associated with the production of such contingent resources. There is no certainty that it will be commercially viable to produce any portion of such contingent resources and the estimated future net revenues do not necessarily represent the fair market value of such contingent resources. Estimates of contingent resources involve additional risks over estimates of reserves. See the Company's news release dated March 23, 2021 and the Company's Annual Information Form which has been filed on SEDAR and can be accessed at www.sedar.com for additional disclosures on the Company's contingent resources.

Prospective Resources – This MD&A discloses estimates of Alvo Petro's prospective resources. There is no certainty that any portion of the prospective resources will be discovered and even if discovered, there is no certainty that it will be commercially viable to produce any portion. Estimates of prospective resources involve additional risks over estimates of reserves. The accuracy of any resources estimate is a function of the quality and quantity of available data and of engineering interpretation and judgment. While resources presented herein are considered reasonable, the estimates should be accepted with the understanding

that reservoir performance subsequent to the date of the estimate may justify revision, either upward or downward. See the Company's news release dated March 23, 2021 and the Company's Annual Information Form which has been filed on SEDAR and can be accessed at www.sedar.com for additional disclosures on the Company's prospective resources.

Abbreviations:

10 ³ m ³	=	thousands of cubic metres
10 ³ m ³ /d	=	thousands of cubic metres per day
ANP	=	The National Agency of Petroleum, Natural Gas and Biofuels of Brazil
bbls	=	barrels of oil and/or natural gas liquids (condensate)
boepd	=	barrels of oil equivalent ("boe") per day
bopd	=	barrels of oil and/or natural gas liquids (condensate) per day
BRL	=	Brazilian real
m ³	=	cubic metre
m ³ /d	=	cubic metre per day
mcf	=	thousand cubic feet
mcfe	=	thousand cubic feet of gas equivalent
mcfpd	=	thousand cubic feet per day
mmcfpd	=	million cubic feet per day
mmboe	=	millions of barrels of oil equivalent
mmbtu	=	million British Thermal Units
mmcf	=	million cubic feet
mmcfpd	=	million cubic feet per day
NGLs	=	natural gas liquids

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 (6 mcf/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.