The following Management's Discussion and Analysis ("MD&A") is dated March 19, 2024 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, 2023 and 2022. Additional information for the Company, including the Annual Information Form ("AIF"), can be found on SEDAR+ at www.sedarplus.ca or at www.alvopetro.com. This MD&A contains financial terms that are not considered measures under IFRS Accounting 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 and Other Financial 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

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Description of Business

Alvopetro is engaged in the exploration for and the acquisition, development and production of hydrocarbons in Brazil. Alvopetro is a pioneer in the development of Brazil's independent onshore natural gas industry anchored by the Company's core Caburé natural gas asset and midstream projects. 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 Murucututu natural gas assets and our strategic midstream infrastructure. Our objective is to create a balanced reinvestment and long-term stakeholder return model where approximately half of our cash flows are reinvested in organic growth opportunities and the other half is distributed to stakeholders.



FINANCIAL & OPERATING SUMMARY

	As at a	nd Three Mont December 31		As	at and Year Er December 31	
	2023	2022	Change (%)	2023	2022	Change (%)
Financial						
(\$000s, except where noted)						
Natural gas, oil and condensate sales	15,300	17,077	(10)	59,687	63,508	(6)
Net income	652	5,191	(87)	28,525	31,732	(10)
Per share – basic (\$) ⁽¹⁾	0.02	0.14	(86)	0.77	0.92	(16)
Per share – diluted (\$) ⁽¹⁾	0.02	0.14	(86)	0.76	0.86	(12)
Cash flows from operating activities	7,904	12,366	(36)	47,702	47,534	-
Per share – basic (\$) ⁽¹⁾	0.21	0.34	(38)	1.29	1.37	(6)
Per share – diluted (\$) ⁽¹⁾	0.21	0.33	(36)	1.26	1.29	(2)
Funds flow from operations (2)	12,393	13,193	(6)	48,030	49,879	(4)
Per share – basic (\$) ⁽¹⁾	0.33	0.36	(8)	1.29	1.44	(10)
Per share – diluted (\$) ⁽¹⁾	0.33	0.35	(6)	1.27	1.35	(6)
Dividends declared	5,127	4,357	18	20,462	12,697	61
Per share ⁽¹⁾	0.14	0.12	17	0.56	0.36	56
Capital expenditures	4,934	5,944	(17)	27,449	24,795	11
Cash and cash equivalents	18,326	19,784	(7)	18,326	19,784	(7)
Net working capital ⁽²⁾	13,117	14,698	(11)	13,117	14,698	(11)
Weighted average shares outstanding						
Basic (000s) ⁽¹⁾	37,262	36,231	3	37,121	34,642	7
Diluted (000s) ⁽¹⁾	37,963	37,298	2	37,770	36,919	2
Operations						
Natural gas, NGLs and crude oil sales:						
Natural gas (Mcfpd), by field:						
Caburé (Mcfpd)	11,699	15,329	(24)	11,742	14,592	(20)
Murucututu (Mcfpd)	546	217	152	487	55	785
Total natural gas (Mcfpd)	12,245	15,546	(21)	12,229	14,647	(17)
NGLs – condensate (bopd)	92	128	(28)	99	110	(10)
Oil (bopd)	10	5	100	6	6	-
Total (boepd)	2,143	2,724	(21)	2,142	2,557	(16)
Average realized prices ⁽²⁾ :						
Natural gas (\$/Mcf)	12.85	11.18	15	12.64	11.07	14
NGLs – condensate (\$/bbl)	89.45	89.29	-	86.29	103.50	(17)
Oil (\$/bbl)	73.67	79.50	(7)	71.22	82.67	(14)
Total (\$/boe)	77.60	68.13	14	76.33	68.04	12
Operating netback (\$/boe)(2)						
Realized sales price	77.60	68.13	14	76.33	68.04	12
Royalties	(2.07)	(4.15)	(50)	(2.13)	(4.81)	(56)
Production expenses	(5.84)	(3.90)	50	(5.38)	(3.80)	42
Operating netback	69.69	60.08	16	68.82	59.43	16
Operating netback margin ⁽²⁾	90%	88%	2	90%	87%	3
Notes:	3070	3370		30,0	0770	

Notes:



⁽¹⁾ Per share amounts are based on weighted average shares outstanding other than dividends per share, which is based on the number of common shares outstanding at each dividend record date. The weighted average number of diluted common shares outstanding in the computation of funds flow from operations and cash flows from operating activities per share is the same as for net income per share.

⁽²⁾ See "Non-GAAP and Other Financial Measures" section within this MD&A.

HIGHLIGHTS AND SIGNIFICANT TRANSACTIONS FOR THE FOURTH QUARTER OF 2023

- Our daily sales averaged 2,143 boepd during the quarter, an increase of 26% from Q3 2023 which had been impacted by lower demand from Bahiagás and a decrease of 21% from Q4 2022 due to reduced natural gas availability from the Caburé natural gas field following increased nominations from our partner on the field.
- Our average realized natural gas price was \$12.85/Mcf, a 15% increase from Q4 2022 with the 3% increase in our contracted BRL-denominated natural gas price, enhanced sales tax credits available in 2023 and a 6% appreciation in the average BRL to USD in Q4 2023 compared to Q4 2022. With the higher natural gas price, our overall realized price per boe was \$77.60 (+14% from Q4 2022).
- Our natural gas, condensate and oil revenue was \$15.3 million in Q4 2023, a decrease of \$1.8 million (-10%) compared to Q4 2022 and an increase of \$3.0 million (+24%) compared to Q3 2023.
- Our operating netback⁽¹⁾ in the quarter was \$69.69 per boe (+\$9.61 per boe from Q4 2022) with a higher realized sales price and lower royalties, partially offset by the impact of fixed operating costs with lower sales volumes.
- We generated funds flows from operations⁽¹⁾ of \$12.4 million (\$0.33 per basic and per diluted share), a decrease of \$0.8 million compared to Q4 2022 and an increase of \$2.8 million compared to Q3 2023.
- We reported net income of \$0.7 million in Q4 2023, a decrease of \$4.5 million compared to Q4 2022 and a decrease of \$5.2 million compared to Q3 2023. Net income in Q4 2023 included impairment losses of \$11.0 million (Q4 2022 \$6.3 million).
- Capital expenditures totaled \$4.9 million, including drilling and completion costs for the 183-A3 well on our Murucututu natural gas field, completion costs for the BL-06 well on our Bom Lugar field, and long-lead purchases for future capital projects.
- Our working capital⁽¹⁾ surplus was \$13.1 million as of December 31, 2023, increasing \$1.7 million from September 30, 2023, and decreasing \$1.6 million from December 31, 2022.

ADDITIONAL HIGHLIGHTS AND SIGNIFICANT TRANSACTIONS FOR 2023

- Our annual sales averaged 2,142 boepd (95% natural gas, 5% NGLs from condensate and marginal crude oil production), a decrease of 16% compared to 2022.
- We reported net income of \$28.5 million, compared to \$31.7 million in 2022 (-10%).
- We generated funds flow from operations⁽¹⁾ of \$48.0 million (\$1.29 per basic share and \$1.27 per diluted share), a decrease of \$1.8 million compared to 2022.
- Capital expenditures totaled \$27.4 million in 2023.
- > Dividends declared totaled \$0.56 per share in 2023 compared to \$0.36 per share in 2022 (+56%).

RECENT HIGHLIGHTS

- Effective February 1, 2024, our natural gas price under our long-term gas sales agreement with Bahiagás was adjusted to BRL1.94/m³. Our realized gas price, net of sales taxes, is approximately \$12.36/Mcf (based on our average heat content to date and the January 31, 2024 BRL/USD foreign exchange rate of 4.95). The contracted price is based on the adjusted ceiling price of \$10.58/MMBtu which increased 0.5% from the August 1, 2023 price due to the US inflation adjustment for the sixmonth period. With the appreciation of the BRL relative to the USD in the second half of 2023 compared to the first half of 2023, the BRL contracted price decreased from BRL1.99/m³ as of August 1, 2023 to BRL1.94/m³ as of February 1, 2024. This price is effective for all natural gas sales from February 1 to July 31, 2024.
- On February 26, 2024, we announced our reserves at December 31, 2023 with total proved plus probable ("2P") reserves of 8.7 MMboe and a before tax net present value discounted at 10% of \$309.7 million. We also announced the Murucututu resources assessment with risked best estimate contingent resource of 5.4 MMboe (before tax net present value discounted at 10% of \$126.1 million) and risked best estimate prospective resource of 9.6 MMboe (before tax net present value discounted at 10% of \$184.9 million. The reserves and resources data is based on an independent reserves and resources assessment and evaluation prepared by GLJ Ltd. ("GLJ") dated February 26, 2024 with an effective date of December 31, 2023 (the "GLJ Reserves and Resources Report").
- On March 19, 2024, our Board of Directors declared a dividend of \$0.09 per common share, payable in cash on April 15, 2024 to shareholders of record on March 28, 2024.

Notes:

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



NATURAL GAS AND OIL PROPERTIES

As at December 31, 2023, Alvopetro held interests in the Caburé and Murucututu natural gas assets, two exploration blocks (Block 182 and Block 183) and two oil fields (Bom Lugar and Mãe-da-lua), in the Recôncavo basin onshore Brazil.

Property, Plant and Equipment ("PP&E") Assets

Field	Gross Acres	Current Phase Expiry	PP&E balance December 31, 2023 (\$000's)	Net Present Value of 2P Reserves ⁽¹⁾ (\$000's)
Caburé	4,814	December 5, 2043 and May 12, 2044	20,248	170,854
Murucututu	6,988	April 18, 2048	34,706	129,169
Bom Lugar	2,240	December 31, 2035	4,628	8,940
Mãe-da-lua	431	February 22, 2044	47	694
TOTAL ⁽²⁾			59,629	309,657

⁽¹⁾ Before tax net present value discounted at 10%. See "Oil and Natural Gas Reserves" at the end of this MD&A.

Exploration and Evaluation ("E&E") Assets

Block	Gross Acres	Current Phase Expiry	E&E balance December 31, 2023 (\$000's)
182 ⁽¹⁾	4,747	June 1, 2025	-
183 ⁽²⁾	2,946	March 16, 2025	7,100
TOTAL ⁽³⁾			7,100

⁽¹⁾ Block 182 is currently in the Development Assessment Plan ("PAD") phase. There are no work units (UTs) applicable in the PAD phase; however, the Company must notify the ANP of its work plan to be completed during the phase and to the extent such work is not completed, some or all of the acreage may be lost. Alvopetro has completed all firm projects on the PAD but has an additional contingent project to undertake a stimulation of the 182-C2 well contingent on the stimulation of the 183-B1 well. Alvopetro has written off all costs associated with this block as discussed in further detail below.

NATURAL GAS ASSETS AND MIDSTREAM INFRASTRUCTURE:

Caburé Natural Gas Field

The Caburé natural gas field (the "Caburé Field") commenced commercial natural gas deliveries on July 5, 2020. The Caburé Field extends across four blocks in the Recôncavo Basin in the state of Bahia in Brazil, two of which are held by Alvopetro and two of which are held by our partner. Under Brazilian legislation, petroleum accumulations straddling two or more licensed blocks must undergo unitization (pooling) in order to promote efficient and fair exploration and development. In April 2018, Alvopetro and the adjacent resource owner finalized the terms of the Unit Operating Agreement ("UOA"), the unit development plan and all related agreements, with Alvopetro's initial working interest share of the unitized area (the "Unit") being 49.1% and Alvopetro's 50.9% partner being named initial operator. As of December 31, 2023, Alvopetro's share of the unitized area (the "Unit") was 49.1%. 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 for by the other party. Once a party produces their share of estimated recoverable hydrocarbons from the Unit ("Unit Recoverable Volumes"), 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. The parties have agreed to a development plan at the Unit including drilling and completing five wells in 2024 and 2025. Alvopetro's share of these wells, based on the December 31, 2023 working interest of 49.1% is \$6.2 million. In addition, Alvopetro has a facilities upgrade planned at the field for an estimated \$3.2 million relating to compression of natural gas to be delivered to Alvopetro's 100%-owned natural gas processing facility.

As of December 31, 2023 and the date of this MD&A, Alvopetro's working interest in the Unit is 49.1%, with the remaining 50.9% held by our partner. Under the terms of the UOA, the working interest to each party is subject to redeterminations. The first



⁽²⁾ The total balance in the table above excludes \$0.2 million in other assets classified as PP&E as at December 31, 2023, largely relating to furniture and office equipment.

⁽²⁾ The portion of Block 183 which is not part of the Murucututu project is currently in the PAD phase. To maintain the full land area of Block 183, the PAD work includes a firm project to stimulate the 183-B1 well, which is planned for later in 2024 and a contingent project to undertake a long duration test of the well.

⁽³⁾ The total E&E balance reflected in the table above excludes \$6.7 million of other assets classified as E&E as at December 31, 2023, largely relating to equipment and materials inventory available for use on future capital projects.

redetermination was to occur 18 months after Alvopetro commenced production allocations (or January 2022) but the parties agreed to defer the first redetermination to include data up to October 31, 2023 and the redetermination commenced in the fourth quarter of 2023. The parties engaged an independent expert (the "Expert") to evaluate the redetermination. The Expert's determination will be made using what is commonly referred to as the "pendulum" method of dispute resolution. Under this method, the Expert is not required or permitted to provide their own interpretation but is required to select the single Final Proposal (between the two partner's respective Final Proposals), which, in the Expert's opinion, provides the most technically justified result of the application of the relevant information and data and material provided to the Expert consistent with the UOA and all related documents. The decision of the Expert is expected near the end of the first quarter of 2024. As of the date of this MD&A, the outcome of the Expert's decision and the resulting working interest to Alvopetro following the decision is uncertain and may have a material adverse effect on Alvopetro. The impact on Alvopetro's working interest will be effective on the first calendar day of the second month following the date of the decision of the Expert, subject to any government approvals that may be required. All references included herein, including the net present value of 2P reserves reflected in the table above, are based on the 49.1% interest in Caburé, Alvopetro's working interest share as of December 31, 2023 and as of the date of this MD&A. For further analysis on the potential impact of the Expert decision on Alvopetro, refer to the section entitled "Risks and Uncertainties".

Murucututu Natural Gas Field

Alvopetro's Murucututu natural gas project extends across Blocks 183 and 197, both held 100% by Alvopetro. There are three existing wells at the field including the 197(1) well and the 183(1) well, both of which were drilled in 2014, and the 183-A3 well which was drilled in 2023. All three wells are tied into field production facilities and a 9-kilometre transfer pipeline connects the field to the Caburé transfer pipeline. The field commenced production from the 183(1) well in October 2022. In Q2 2023, Alvopetro completed the stimulation of the 197(1) well and the well commenced production at the end of May 2023. In Q4 2023, Alvopetro drilled the 183-A3 well and testing of the well was completed in early January 2024. Alvopetro is working to enhance production from the three existing wells and in 2024 has budgeted capital expenditures of \$4.1 million, including recompletions of both the 183(1) well and the 183-A3 well, targeting both the Gomo and Caruaçu Formations. Future capital projects on the field included in the 2P reserves in the table above include three development wells. With success on these initial projects, longer term development will be undertaken at the Murucututu field. In addition to the reserves assigned to the Murucututu field, contingent resources and prospective resources were assigned to the Murucututu natural gas field in the GLJ Reserves and Resource Report including risked best estimate contingent resource of 5.4 MMboe (before tax net present value discounted at 10% of \$126.1 million).

Natural Gas Sales

Alvopetro's share of natural gas from the Caburé natural gas field and the Murucututu 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 gas sales agreement ("GSA").

The GSA provides for the sale of firm volumes and interruptible volumes and has take-or-pay provisions and ship-or-pay penalties based on firm volumes to ensure performance by both parties. For 2023, the Company agreed to firm volumes of 10.6 MMcfpd (300 $10^3 \text{m}^3/\text{d}$) and interruptible volumes of up to 7.1 MMcfpd (200 $10^3 \text{m}^3/\text{d}$). In 2024, Alvopetro agreed to the same firm and interruptible volumes. Alvopetro can adjust the firm volumes by up to 7.9 MMcfpd (225 $10^3 \text{m}^3/\text{d}$) and the interruptible volumes by up to 9.7 MMcfpd (275 $10^3 \text{m}^3/\text{d}$) with at least 60 days notice.

Take-or-pay provisions apply under the terms of the GSA where Bahiagas demand is below the firm volumes set out in the GSA. See "Sales Volumes" below for further details.

OIL ASSETS:

The Company has two oil fields (Bom Lugar and Mãe-da-lua). In Q2 2023, Alvopetro drilled the first of two initially planned development wells on the Bom Lugar field (BL-06). The well was drilled to a total measured depth of 3,244 metres and in Q3 2023 the well was completed, equipped with an artificial lift system and tied into the existing production facility. The well was brought on production in October 2023 and in Q4 2023, the well averaged 7 bopd. Future plans on the Bom Lugar field include a recompletion of the BL-06 well to improve production rates from the well and, with positive results, drilling a second development well on the field. On the Mãe-da-lua field, future plans include a stimulation of the existing well to improve oil recovery.



EXPLORATION ASSETS (Block 182 & Block 183)

Alvopetro's E&E assets include Block 182 and the portion of Block 183 that is not part of the Murucututu project. Block 183 includes the 183-B1 well which was drilled and tested in 2022. Alvopetro is planning a stimulation of the well later in 2024 to improve recovery rates.

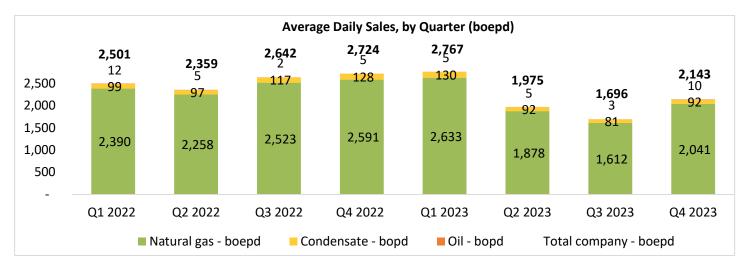
Block 182 includes the 182-C2 well which was drilled in 2022 and tested in early 2023. Following a re-entry Alvopetro determined that no additional work would be undertaken on the well as it was found to be water saturated. Alvopetro expects to abandon the well in 2024. The full carrying value of the block was written off as of December 31, 2023 and an impairment expense of \$6.7 million was recognized in Q4 2023.

FINANCIAL AND OPERATING REVIEW

Sales Volumes

	Three Mo	nths Ended Dece	mber 31,	Year Ended December 31,			
	2023	2022	Change (%)	2023	2022	Change (%)	
Total sales volumes by product:							
Caburé (Mcf)	1,076,268	1,410,357	(24)	4,286,022	5,326,345	(20)	
Murucututu (Mcf)	50,261	19,918	152	177,630	19,918	792	
Total natural gas (Mcf)	1,126,529	1,430,275	(21)	4,463,652	5,346,243	(17)	
NGLs – condensate (bbls)	8,496	11,782	(28)	36,030	40,262	(11)	
Oil (bbls)	923	478	93	2,036	2,129	(4)	
Total sales (boe)	197,174	250,639	(21)	782,009	933,436	(16)	
Average daily sales by product:							
Caburé (Mcfpd)	11,699	15,329	(24)	11,742	14,592	(20)	
Murucututu(Mcfpd)	546	217	152	487	55	785	
Total natural gas (Mcfpd)	12,245	15,546	(21)	12,229	14,647	(17)	
NGLs – condensate (bopd)	92	128	(28)	99	110	(10)	
Oil (bopd)	10	5	100	6	6	-	
Average daily sales (boepd)	2,143	2,724	(21)	2,142	2,557	(16)	

Sales volumes in Q4 2023 decreased compared to Q4 2022 due to lower demand from Bahiagas and reduced availability from the Caburé natural gas field (49.1% working interest). Throughout 2022 and the first quarter of 2023, Alvopetro was able to sell additional production volumes above our working interest from the field pursuant to the terms of the UOA as our partner was not utilizing their working interest share of production from the field. In Q2 2023 our partner increased their production nominations from the field resulting in reduced availability for Alvopetro.





Take-or-pay provisions

Under the terms of the GSA, Bahiagás must prepay for gas volumes where demand is below 80% of the firm volumes under the contract. Any prepayment will be recovered through future natural gas deliveries where future offtake exceeds 90% of the firm volumes. Prepayment under the take-or-pay provisions in the GSA is reflected as unearned revenue through other liabilities on the Corporation's consolidated statement of financial position and only recognized as revenue when the volumes are delivered.

In September 2023, Bahiagás demand was below 80% of the firm volumes and Alvopetro was entitled to receive a total of \$0.4 million in prepayments in addition to the actual sales volumes delivered to Bahiagás in the month of September. Such prepayments were recovered through gas deliveries in Q4 2023 and there is no unearned revenue balance as of December 31, 2023.

Average Realized Sales Prices

	Three Mo	nths Ended Dec	ember 31,	Year	Ended Decembe	er 31,
	2023	2022	Change (%)	2023	2022	Change (%)
Average realized prices ⁽¹⁾ :						
Natural gas (\$/Mcf)	12.85	11.18	15	12.64	11.07	14
NGL – condensate (\$/bbl)	89.45	89.29	-	86.29	103.50	(17)
Oil (\$/bbl)	73.67	79.50	(7)	71.22	82.67	(14)
Total (\$/boe)	77.60	68.13	14	76.33	68.04	12
Average benchmark prices:						
Brent oil (\$/bbl)	84.01	88.72	(5)	82.49	100.93	(18)
Henry Hub (\$/MMBtu)	2.74	5.55	(51)	2.53	6.45	(61)
National Balancing Point (\$/MMBtu)	12.22	19.84	(38)	12.26	25.27	(51)
Average contracted natural gas price(2)						
BRL/m ³	1.99	1.94	3	1.99	1.88	6
Average foreign exchange rate:						
\$1 USD = BRL	4.955	5.255	(6)	4.995	5.165	(3)

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

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 \$6.02/MMBtu and \$10.23/MMBtu, respectively, as of February 1, 2023 (\$5.65/MMBtu and \$9.61/MMBtu as of February 1, 2022) and \$6.19/MMBtu and \$10.52/MMBtu, respectively, as of August 1, 2023 (\$6.01/MMBtu and \$10.22/MMBtu as of August 1, 2022). The floor and ceiling prices are adjusted for US inflation under the terms of the GSA. The natural gas price is then converted to a BRL-denominated natural gas price based on historical average foreign exchange rates and billed monthly in BRL 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.

Alvopetro's natural gas price under the GSA has been set to the ceiling price since February 1, 2022, adjusting semi-annually with US inflation. As of January 1, 2023, Alvopetro became entitled to a sales tax credit of 3.43% on all natural gas, oil and condensate sales. This new tax credit reduces the 12% ICMS tax otherwise owing on natural gas sales from January 1, 2023 to December 31, 2023 and is expected to continue to apply in 2024. With contracted prices continuing at the ceiling price, enhanced sales tax credits applicable as of January 1, 2023, and the appreciation of the BRL relative to the USD, Alvopetro's realized natural gas price increased by 15% from \$11.18/Mcf in Q4 2022 to \$12.85/Mcf in Q4 2023 and increased by 14% to \$12.64/Mcf for the year ended December 31, 2023 compared to 2022.

Condensate production from the Caburé Unit, the Murucututu natural gas field and the Facility is sold pursuant to contracts based on Brent plus a premium. With average Brent prices decreasing in 2023, our realized sales price on condensate decreased.

Oil sales from the Bom Lugar field and the Mãe-da-lua fields are sold at a discount to Brent.

All sales and realized prices are reported net of applicable sales taxes.



⁽²⁾ 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 volumetric natural gas price, which contributes to a higher realized price overall relative to the contractual price.

Natural Gas, Oil and Condensate Sales Revenue

	Three Mo	Three Months Ended December 31,			Year Ended December 31,		
	2023	2022	Change (%)	2023	2022	Change (%)	
Natural gas	14,472	15,987	(9)	56,433	59,165	(5)	
Condensate	760	1,052	(28)	3,109	4,167	(25)	
Oil	68	38	79	145	176	(18)	
Total	15,300	17,077	(10)	59,687	63,508	(6)	

Alvopetro's total natural gas, oil and condensate revenues decreased by \$1.8 million compared to Q4 2022 with the 21% decrease in average daily volumes (resulting in \$4.2 million in reduced revenues), partially offset by the 14% increase in the average realized price per boe (resulting in \$2.4 million in additional revenues). For the year ended December 31, 2023, revenues decreased \$3.8 million compared to 2022 with the 12% increase in the realized sales price per boe partially offsetting the 16% reduction in sales volumes.

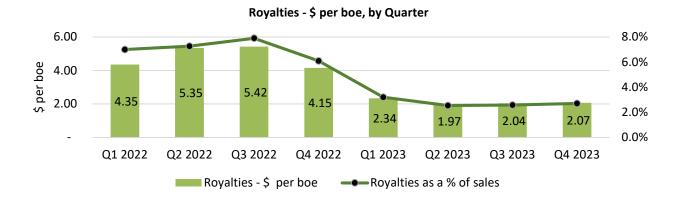
Royalties

	Three Mon	Three Months Ended December 31,			Year Ended December 31,		
	2023	2022	Change (%)	2023	2022	Change (%)	
Royalties	409	1,041	(61)	1,663	4,486	(63)	
Royalties per boe (\$) ⁽¹⁾	2.07	4.15	(50)	2.13	4.81	(56)	
Royalties as a % of sales ⁽¹⁾	2.7%	6.1%	(56)	2.8%	7.1%	(61)	

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

Alvopetro's sales (other than sales from the Bom Lugar Field) are subject to a base 7.5% 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 portion of the Caburé and Murucututu natural gas assets that were previously on Block 197 and the Mãe-da-lua field.

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), resulting in lower effective royalty rates compared to base royalty rates. As Henry Hub spot prices are a significant component of the reference price used for natural gas royalties, Alvopetro's effective royalty rate fluctuates with changes in Henry Hub prices relative to Alvopetro's contracted natural gas price. While Alvopetro's contracted natural gas price under the GSA increased 3% compared to Q4 2022, with the 51% reduction in average Henry Hub prices in Q4 2023 compared to Q4 2022, Alvopetro's overall effective royalty rate decreased to 2.7% in Q4 2023 compared to 6.1% in Q4 2022. Similarly for the year ended December 31, 2023, Alvopetro's natural gas price under the GSA increased 6% compared to 2022 while Henry Hub decreased 61% resulting in an effective royalty rate for the year ended December 31, 2023 of 2.8% compared to 7.1% in 2022.





Production Expenses

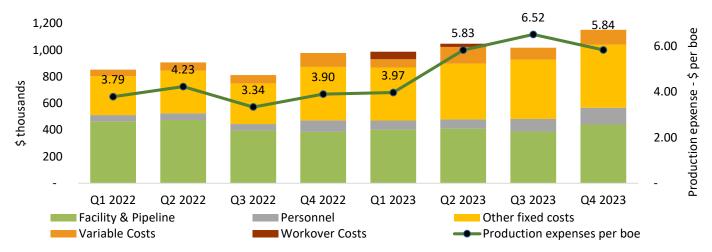
	Three Mon	Three Months Ended December 31,			Year Ended December 31,		
	2023	2022	Change (%)	2023	2022	Change (%)	
Production expenses by type:							
Personnel costs	127	87	46	360	233	55	
Facility and pipeline costs	440	385	14	1,638	1,719	(5)	
Other fixed costs	473	401	18	1,738	1,319	32	
Variable costs	112	105	7	387	279	39	
Workover costs	-	-	-	82	-	-	
Total production expenses	1,152	978	18	4,205	3,550	18	

	Three Months Ended December 31,			Year Ended December 31,		
	2023	2022	Change (%)	2023	2022	Change (%)
Production expenses per boe(\$) ⁽¹⁾ :						
Personnel costs	0.64	0.35	83	0.46	0.25	84
Facility and pipeline costs	2.23	1.54	45	2.10	1.84	14
Other fixed costs	2.40	1.59	51	2.23	1.41	58
Variable costs	0.57	0.42	36	0.49	0.30	63
Workover costs	-	-	-	0.10	-	-
Total	5.84	3.90	50	5.38	3.80	42

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

With commencement of production from the Bom Lugar field in Q4 2023, production expenses increased 18% compared to Q4 2022. Production expenses for the year ended December 31, 2023 were also 18% higher than 2022 due to costs associated with the Murucututu natural gas field which was on production for the full year in 2023 compared to only the fourth quarter in 2022. Workover costs in 2023 represent Alvopetro's share of workover costs at the Caburé Unit. On a per boe basis, production expenses were higher in 2023 compared to 2022 due to higher costs combined with the reduction in sales volumes.

Production Expenses, by Quarter





Operating Netback

	Three Mon	ths Ended De	cember 31,	Year En	ded December	31,
	2023	2022	Change (%)	2023	2022	Change (%)
Operating netback ⁽¹⁾						
Natural gas, oil and condensate sales	15,300	17,077	(10)	59,687	63,508	(6)
Royalties	(409)	(1,041)	(61)	(1,663)	(4,486)	(63)
Production expenses	(1,152)	(978)	18	(4,205)	(3,550)	18
Operating netback	13,739	15,058	(9)	53,819	55,472	(3)
Operating netback per boe ⁽¹⁾ :						
Average realized sales price - \$ per boe ⁽¹⁾	77.60	68.13	14	76.33	68.04	12
Royalties - \$ per boe ⁽¹⁾	(2.07)	(4.15)	(50)	(2.13)	(4.81)	(56)
Production expenses - \$ per boe ⁽¹⁾	(5.84)	(3.90)	50	(5.38)	(3.80)	42
Operating netback per boe	69.69	60.08	16	68.82	59.43	16
Operating netback margin ⁽¹⁾	90%	88%	2	90	87%	3

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

Alvopetro's operating netback increased by \$9.61 per boe (+16%) in Q4 2023 compared to Q4 2022 and by \$9.39 per boe (+16%) for the year ended December 31, 2023 compared to 2022 due to improved realized sales prices and lower royalties, offset by higher production expenses

Change in Operating Netback per boe by Component (Q4 2023 compared to Q4 2022)



Change in Operating Netback per boe by Component (YTD 2023 compared to YTD 2022)



Alvopetro's operating netback decreased \$0.65 per boe (-1%) in Q4 2023 compared to Q3 2023 with lower realized sales prices and higher royalties offset by lower production expenses per boe with higher sales volumes in the period.



Change in Operating Netback per boe by Component (Q4 2023 compared to Q3 2023)



Other Income

	Three Mont	Three Months Ended December 31,			Year Ended December 31,		
	2023	2022	Change (%)	2023	2022	Change (%)	
Interest income	258	198	30	1,277	367	248	
Tax recoveries from operations	158	134	18	507	449	13	
Water disposal income and other	4	25	(84)	11	107	(90)	
Total	420	357	18	1,795	923	94	

The majority of other income relates to interest income on cash and cash equivalent deposits and tax credits arising from ongoing operations. With higher interest rates in 2023 compared to 2022 and higher average cash balances, Alvopetro's interest income has increased.

General and Administrative ("G&A") Expenses

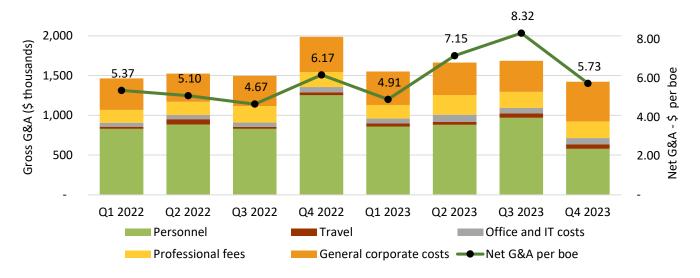
	Three Mon	Three Months Ended December 31,			Year Ended December 31,		
G&A Expenses, by type:	2023	2022	Change (%)	2023	2022	Change (%)	
Personnel	579	1,253	(54)	3,287	3,799	(13)	
Travel	54	36	50	185	152	22	
Office and IT costs	81	67	21	298	224	33	
Professional fees	209	189	11	830	722	15	
General corporate costs	499	441	13	1,721	1,573	9	
Gross G&A	1,422	1,986	(28)	6,321	6,470	(2)	
Capitalized G&A	(292)	(439)	(33)	(1,385)	(1,486)	(7)	
G&A expenses	1,130	1,547	(27)	4,936	4,984	(1)	
\$ per boe ⁽¹⁾	5.73	6.17	(7)	6.31	5.34	18	

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

Personnel expenses decreased in both Q4 2023 and for the year ended December 31, 2023 compared to the same periods in 2022 due to reductions in annual short-term incentive bonuses. For the year ended December 31, 2023, this was partially offset by annual salary inflation adjustments. Travel, IT, professional fees and general corporate costs were impacted by global inflation and increased activity levels. On a per boe basis, G&A expenses were impacted by lower production volumes in 2023 compared to 2022.



G&A Expenses, by Quarter

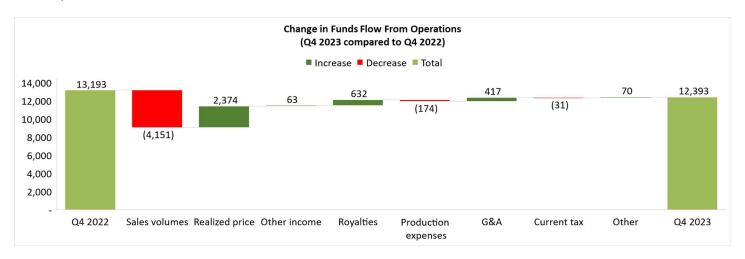


Cash Flows from Operating Activities and Funds Flow from Operations

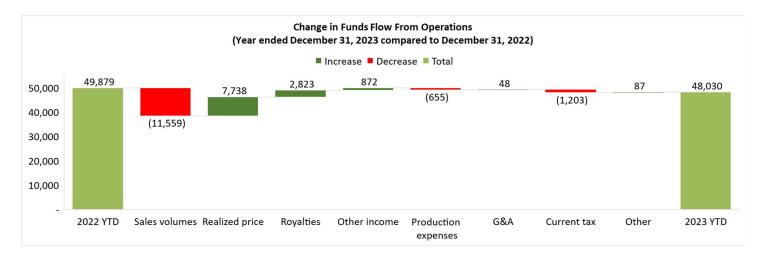
	Three Months Ended December 31,			Year Ended December 31,		
	2023	2022	Change (%)	2023	2022	Change (%)
Cash flows from operating activities	7,904	12,366	(36)	47,702	47,534	-
Per share – basic (\$)	0.21	0.34	(38)	1.29	1.37	(6)
Per share – diluted (\$)	0.21	0.33	(36)	1.26	1.29	(2)
Funds flow from operations ⁽¹⁾	12,393	13,193	(6)	48,030	49,879	(4)
Per share – basic (\$)	0.33	0.36	(8)	1.29	1.44	(10)
Per share – diluted (\$)	0.33	0.35	(6)	1.27	1.35	(6)

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

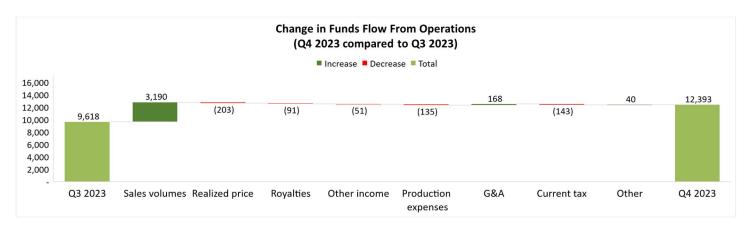
Funds flow from operations decreased in both Q4 2023 and for the year ended December 2023 compared to the same periods in 2023 due mainly to lower sales volumes, higher production expenses and higher current taxes, partially offset by higher realized sales prices, lower royalties and lower G&A.







Compared to Q3 2023, funds flow from operations in Q4 2023 increased \$2.8 million (+29%) due mainly to the 26% increase in average daily sales.



Foreign Exchange

		As at			% Appreciation (Depreciation) of BRL/CAD to USD		
	December 31, 2023	September 30, 2023	December 31, 2022	Q4 2023	YTD 2023		
Rate at end of period:							
\$1 USD = BRL	4.841	5.008	5.218	3.3	7.2		
\$1 USD = CAD	1.323	1.352	1.354	2.1	2.3		

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 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. Foreign exchange rates for the reporting periods as specified are as follows:

		nths Ended ber 31,		Ended ber 31,	% Appreciation (D BRL/CAD	•
	2023	2022	2023	2022	Change from Q4 2022	Change from YTD 2022
Average rate in the period:						
\$1 USD = BRL	4.955	5.255	4.995	5.165	5.7	3.3
\$1 USD = CAD	1.362	1.358	1.349	1.300	(0.3)	(3.8)

The assets and liabilities of Alvopetro's Brazilian subsidiaries are translated to USD at the exchange rate on the reporting period date. The income and expenses of BRL-denominated items are translated to USD at the exchange rates on the date of the relevant



transactions. All resulting foreign currency differences are recorded in exchange gain or loss on translation of foreign operations in other comprehensive income or loss. The BRL appreciated 7% from December 31, 2022 and 3% from September 30, 2023 resulting in an exchange gain in other comprehensive income in both periods.

Foreign exchange fluctuations on USD-denominated intercompany amounts advanced to the Brazilian subsidiaries are recognized in earnings. The Company recorded a foreign exchange gain of \$1.0 million on intercompany advances in Q4 2023 (Q4 2022 - \$1.0 million foreign exchange gain) and \$2.8 million for the year ended December 31, 2023 (2022 – \$2.1 million foreign exchange gain) due to the appreciation of the BRL relative to the USD.

As discussed above, the Company is exposed to foreign exchange fluctuations on its natural gas revenues. With respect to Alvopetro's natural gas price resets on August 1, 2023 and February 1, 2023, respectively, the price determined in BRL was based on average historical exchange rates of 5.07 BRL to 1.00 USD and 5.25 BRL to 1.00 USD. In Q4 2023, the actual average rate was 4.96, an appreciation of 2% compared to the August 1, 2023 reset and an appreciation of 6% compared to the February 1, 2023 reset. 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:

	Three Months End	led December 31,	Year Ended December 31,		
	2023	2022	2023	2022	
Increase (Decrease) to Natural Gas Revenues from:					
5% Appreciation of BRL to USD	762	842	2,970	3,114	
10% Appreciation of BRL to USD	1,608	1,777	6,270	6,574	
5% Depreciation of BRL to USD	(689)	(761)	(2,687)	(2,817)	
10% Depreciation of BRL to USD	(1,316)	(1,453)	(5,130)	(5,378)	

To mitigate exposure to foreign exchange volatility with respect to the BRL, the Company has periodically entered into BRL/USD forward exchange rate contracts. The Company recognized 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. Realized gains or losses are recognized in the period the contracts are settled. No forward contracts were entered into or outstanding at any time in the year ended December 31, 2023 and as a result no gains or losses were recognized in 2023 (2022 – losses of \$0.1 million).

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 earnings as foreign exchange gains or losses.

Depletion and Depreciation

	Three Months Ended December 31,			Year Ended December 31,		
	2023	2022	Change (%)	2023	2022	Change (%)
Depletion and depreciation on PP&E	1,895	1,839	3	6,491	5,961	9
Depreciation of right-of-use assets	297	295	1	1,177	1,042	13
Depletion and depreciation expense	2,192	2,134	3	7,668	7,003	9
\$ per boe ⁽¹⁾	11.12	8.51	31	9.81	7.50	31

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

Depletion is calculated on a unit-of-production basis for all upstream PP&E assets. All midstream PP&E assets are depreciated over the estimated useful life of the assets on a straight-line basis. Depletion and depreciation on PP&E was higher in both Q4 2023 and for the year ended December 31, 2023 compared to the same periods in 2022 despite lower production volumes due to a higher depletable base which includes all of the Murucututu midstream assets as of Q3 2022 and higher anticipated future development costs in 2023 compared to 2022.

The Company's right-of-use assets are depreciated over the lease term on a straight-line basis. With the expansion of the Facility completed in the third quarter of 2022, the increase in future facility costs associated with the expansion was recognized as a right-of-use asset, resulting in higher depreciation commencing in Q3 2022.



Impairment

	Three Mo	Three Months Ended December 31,			Year Ended December 31,		
	2023	2022	Change (%)	2023	2022	Change (%)	
Bom Lugar	4,238	-	-	4,238	-	-	
Block 182	6,748	6,338	6	6,748	6,338	6	
Total impairment expense	10,986	6,338	73	10,986	6,338	73	

In Q4 2023, Alvopetro recognized impairment losses of \$11.0 million, including \$4.2 million on PP&E with respect to the Bom Lugar field and \$6.7 million on E&E with respect to Block 182. In Q4 2023 the Company completed testing of the BL-06 well on the Bom Lugar field and commenced production. With lower than anticipated production volumes from the well, Alvopetro recognized an impairment on the Bom Lugar field of \$4.2 million, reducing the carrying value to the estimated recoverable amount of \$4.6 million to December 31, 2023.

On Block 182, Alvopetro wrote off the remaining carrying value of the block mainly relating to costs incurred on the 182-C2 well which was drilled in 2022 and tested in early 2023. Alvopetro subsequently re-entered the well and results indicate it is water saturated. Alvopetro ceased further work on the well and expects to abandon it later in 2024. Given limited further prospects on the block, the carrying value of the block was written off as of December 31, 2023 and an impairment expense of \$6.7 million was recognized in Q4 2023.

Share-Based Compensation Expense

	Three Months Ended December 31,			Year Ended December 31,		
	2023	2022	Change (%)	2023	2022	Change (%)
Share-based compensation expense	334	269	24	1,147	861	33

Share-based compensation expense is based on the fair value of stock options, restricted share units ("RSUs") and deferred share units ("DSUs") granted and amortized over the respective vesting periods. As of December 31, 2023, a total of 2.7 million awards were outstanding (December 31, 2022 – 2.3 million) with 1,801,440 stock options (December 31, 2022 – 1,564,996) and 881,541 RSUs and DSUs (December 31, 2022 – 729,288). With the overall awards increasing 17% along with higher share prices, share-based compensation increased in 2023 compared to 2022.

Finance Expenses

	Three Months Ended December 31,			Year Ended December 31,		
	2023	2022	Change (%)	2023	2022	Change (%)
Lease interest	360	501	(28)	1,495	1,531	(2)
Accretion on decommissioning liabilities	15	10	50	58	51	14
Amortization of deferred financing costs	-	-	-	-	496	-
Interest on credit facility	-	(6)	(100)	-	300	(100)
Finance expenses	375	505	(25)	1,553	2,378	(35)

Finance expenses decreased in Q4 2023 compared to Q4 2022 due to a reduction in lease liabilities. For the year ended December 31, 2023, finance expenses were 35% lower than 2022 with no interest expense on the credit facility which was fully repaid in September 2022.



Income Tax Expense

	Three Months Ended December 31,			Year I	Year Ended December 31,		
	2023	2022	Change (%)	2023	2022	Change (%)	
Current income tax expense	655	624	5	2,520	1,317	91	
Deferred income tax (recovery) expense	(842)	159	(630)	1,754	4,396	(60)	
Total	(187)	783	(124)	4,274	5,713	(25)	
Effective tax rate	(40.2%)	13.1%	(407)	13.0%	15.3%	(15)	

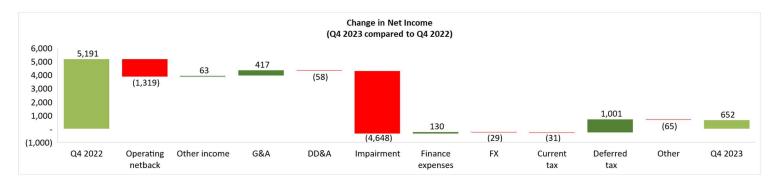
The statutory corporate tax rate in Brazil is 34%. This is comprised of a basic 15% corporate income tax, plus 10% surtax and a 9% social contribution tax. In 2021 the Company received approval from tax authorities in Brazil for Supertintendência de Desenvolvimento do Nordeste ("SUDENE"), a regional tax incentive offered in Bahia State. Under the incentive, special deductions reduce the inherent current tax payable on qualifying projects to an effective rate of 15.25% where SUDENE profits align with taxable income under the actual profit regime. The SUDENE incentive applies to natural gas profits and as of 2023, to condensate profits Alvopetro earns for a period of ten taxation years, commencing January 1, 2021, and ending December 31, 2030. The incentive generally reduces corporate tax and surtax on qualifying projects by 75% where SUDENE profits align with taxable income under the actual profit regime, resulting in an effective tax rate of 15.25%. Where SUDENE profits exceed taxable income, it is possible to further reduce corporate income tax and surtax to a tax rate below 15.25%. As Alvopetro expects the majority of temporary differences to reverse during the SUDENE period, for deferred tax purposes Alvopetro has estimated the future tax rate applicable to temporary differences based on the SUDENE rate of 15.25%.

Current tax expense increased in both Q4 2023 and for the year ended December 31, 2023 compared to the same periods in 2023 despite lower net income as a result of lower tax deductions available on E&E assets due to lower capital expenditures on such projects. Expenditures on these assets are eligible for immediate deduction under Brazil tax legislation and therefore contributed to higher deferred tax expense in 2022. The impairment losses recognized in Q4 2023 resulted in an overall deferred tax recovery in the quarter and lower overall deferred tax expense for the year ended December 31, 2023 as such impairments are not immediately deductible for tax purposes.

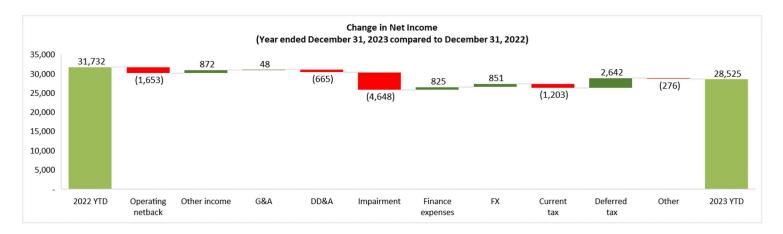
Net Income

	Three Mont	Three Months Ended December 31,		Year Ended December 31,		er 31,
	2023	2022	Change (%)	2023	2022	Change (%)
Net income	652	5,191	(87)	28,525	31,732	(10)
Per share – basic (\$)	0.02	0.14	(86)	0.77	0.92	(16)
Per share – diluted (\$)	0.02	0.14	(86)	0.76	0.86	(12)

Net income in both Q4 2023 and for the year ended December 31, 2023 was lower than the comparable periods in 2022 with higher impairment losses in 2023, lower operating netback and higher current tax partially offset by higher other income, lower G&A and lower deferred tax expense.







Capital Expenditures

	Three Months En	ded December 31,	Year Ended [December 31,
Capital Expenditures by Type	2023	2022	2023	2022
E&E				
Drilling and completions	12	2,946	304	14,314
Facility & equipment	-	4	-	100
Land, lease, and similar payments	-	-	52	(7)
Equipment inventory purchases	1,624	1,600	5,628	3,262
Capitalized G&A	6	292	107	876
Total E&E	1,642	4,842	6,091	18,545
PP&E				
Facility & equipment	518	464	1,148	3,449
Drilling & completions	2,427	420	18,740	1,774
Land, lease, and similar payments	(23)	53	(6)	144
Capitalized G&A	286	147	1,278	610
Furniture & fixtures and other	84	18	198	273
Total PP&E	3,292	1,102	21,358	6,250
Total Capital Expenditures	4,934	5,944	27,449	24,795

	Three Months End	ded December 31,	Year Ended December 31,		
Capital Expenditures by Property	2023	2022	2023	2022	
E&E					
Blocks 182, 183	18	3,242	463	15,308	
Equipment inventory purchases	1,624	1,600	5,628	3,262	
Other	-	-	-	(25)	
Total E&E	1,642	4,842	6,091	18,545	
PP&E					
Caburé and associated midstream assets	495	606	1,022	2,022	
Murucututu	2,575	466	12,989	4,074	
Bom Lugar	251	-	7,330	-	
Mãe-da-lua	-	-	29	-	
Other	(29)	30	(12)	154	
Total PP&E	3,292	1,102	21,358	6,250	
Total Capital Expenditures	4,934	5,944	27,449	24,795	

Capital expenditures in Q4 2023 included \$2.2 million in drilling and completion costs for the 183-A3 well on our Murucututu field, \$0.5 million in facility costs, \$0.2 million in completion costs for our BL-06 well, \$1.6 million for long-lead inventory purchases and \$0.3 million in capitalized G&A.



Summary of Annual Results

	2023	2022	2021
Financial			
Natural gas, oil and condensate sales	59,687	63,508	34,980
Net income	28,525	31,732	5,595
Per share – basic (\$) ⁽¹⁾	0.77	0.92	0.17
Per share – diluted (\$) ⁽¹⁾	0.76	0.86	0.16
Cash flows from operations	47,702	47,534	24,291
Per share – basic (\$) ⁽¹⁾	1.29	1.37	0.73
Per share – diluted (\$) ⁽¹⁾	1.26	1.29	0.70
Funds flow from operations ⁽²⁾	48,030	49,879	24,637
Per share – basic (\$) ⁽¹⁾	1.29	1.44	0.74
Per share – diluted (\$) ⁽¹⁾	1.27	1.35	0.71
Net working capital surplus ⁽²⁾	13,117	14,698	9,097
Total assets	109,825	98,427	73,630
Non-current liabilities	8,739	9,090	14,515
Average daily sales:			
Natural gas (Mcfpd)	12,229	14,647	13,517
NGL – condensate (bopd)	99	110	103
Oil (bopd)	6	6	2
Total average daily sales (boepd)	2,142	2,557	2,358

⁽¹⁾ The weighted average number of diluted common shares outstanding in the computation of funds flow from operations and cash flows from operating activities per share is the same as for net income per share.

In 2023 average daily sales volumes decreased to 2,142 boepd, a decrease of 16% and 9% from 2022 and 2021 respectively. However, with higher average realized prices, natural gas, oil and condensate sales decreased only 6% compared to 2022 and increased 71% compared to 2021. Similarly net income and funds flow from operations in 2023 decreased 10% and 4% relative to 2022 but were 410% and 95% higher than 2021. Net income in 2023 and 2022 was also positively impacted by foreign exchange gains compared to foreign exchange losses in 2021, partially offset by impairment losses recognized in 2022 and 2023.

With improved funds flow from operations, the Company's working capital surplus increased from \$9.1 million as of December 31, 2021 to \$13.1 million as of December 31, 2023.

Total assets have increased 49% from December 31, 2021 primarily due to capital spending on our Murucututu natural gas field, our Bom Lugar field, and E&E assets, along with an increase to right-of-use assets following expansion of the gas treatment facility in 2022, partially offset by DD&A and impairment losses.

Non-current liabilities have decreased \$5.8 million (-40%) since December 31, 2021 due to the repayment of the credit facility in 2022. As of December 31, 2021 the total balance outstanding was \$6.5 million.



⁽²⁾ See "Non-GAAP and Other Financial Measures" section within this MD&A.

Summary of Quarterly Results

	Q4 2023	Q3 2023	Q2 2023	Q1 2023	Q4 2022	Q3 2022	Q2 2022	Q1 2022
Financial								
Natural gas, oil and condensate sales	15,300	12,313	13,914	18,160	17,077	16,672	15,787	13,972
Net income	652	5,819	9,852	12,202	5,191	8,795	6,631	11,115
Per share – basic (\$) ⁽¹⁾	0.02	0.16	0.27	0.34	0.14	0.26	0.20	0.33
Per share – diluted (\$) ⁽¹⁾	0.02	0.15	0.26	0.33	0.14	0.24	0.18	0.30
Cash flows from operating activities	7,904	12,469	13,473	13,856	12,366	13,838	12,997	8,333
Per share – basic (\$) ⁽¹⁾	0.21	0.34	0.37	0.38	0.34	0.40	0.38	0.25
Per share – diluted (\$) ⁽¹⁾	0.21	0.33	0.36	0.37	0.33	0.37	0.35	0.23
Funds flow from operations (2)	12,393	9,618	11,047	14,972	13,193	13,348	12,434	10,904
Per share – basic (\$) ⁽¹⁾	0.33	0.26	0.30	0.41	0.36	0.39	0.37	0.32
Per share – diluted (\$) ⁽¹⁾	0.33	0.25	0.29	0.40	0.35	0.36	0.34	0.30
Dividends declared	5,127	5,122	5,109	5,104	4,357	2,896	2,728	2,716
Per share (\$) ⁽¹⁾⁽²⁾	0.14	0.14	0.14	0.14	0.12	0.08	0.08	0.08
Capital expenditures	4,934	10,703	8,521	3,291	5,944	8,713	6,338	3,800
Net working capital ⁽²⁾	13,117	11,392	18,084	20,915	14,698	12,225	11,641	12,302
Operations								
Average realized prices ⁽²⁾ :								
Natural gas (\$/Mcf)	12.85	13.06	12.86	12.06	11.18	11.18	11.90	10.03
NGL – condensate (\$/bbl)	89.45	89.43	83.35	84.10	89.29	101.57	121.93	106.42
Oil (\$/bbl)	73.67	73.08	63.93	72.29	79.50	80.92	94.47	79.50
Average foreign exchange (\$1 USD = BRL)	4.955	4.880	4.949	5.196	5.255	5.246	4.927	5.230
Operating netback (\$/boe) (2)								
Realized sales price (\$/boe) (2)	77.60	78.90	77.41	72.92	68.13	68.59	73.54	62.08
Royalties (2)	(2.07)	(2.04)	(1.97)	(2.34)	(4.15)	(5.42)	(5.35)	(4.35)
Production expenses ⁽²⁾	(5.84)	(6.52)	(5.83)	(3.97)	(3.90)	(3.34)	(4.23)	(3.79)
Operating netback (\$/boe) (2)	69.69	70.34	69.61	66.61	60.08	59.83	63.96	53.94
Operating netback margin ⁽²⁾	90%	89%	90%	91%	88%	87%	87%	87%
Average daily sales:								
Natural gas (Mcfpd)	12,245	9,675	11,269	15,795	15,546	15,139	13,546	14,339
NGL – condensate (bopd)	92	81	92	130	128	117	13,340 97	99
Oil (bopd)	10	3	5	5	5	2	5	12
Total average daily sales (boepd)	2,143	1,696	1,975	2,767	2,724	2,642	2,359	2,501
Total average daily sales (boepu)	2,143	1,090	1,513	2,707	۷,124	2,042	2,333	2,301

Notes:

In Q4 2023 our average daily sales volumes increased 26% compared to Q3 2023 with increased demand from Bahiagás, resulting in a \$3.0 million increase in natural gas, oil and condensate sales (+24%). With the depreciation of the average BRL/USD in Q4 2023, Alvopetro's realized natural gas price decreased 2% resulting in a 2% reduction in the overall average realized price to \$77.60 per boe. With lower realized sales prices per boe in Q4 2023 compared to Q3 2023, our operating netback decreased to \$69.69 per boe (-1%) despite lower production expenses per boe. Funds flow from operations increased \$2.8 million with higher sales volumes while net income decreased \$5.2 million with impairment losses of \$11.0 million recognized in Q4 2023, partially offset by foreign exchange gains of \$1.3 million in Q4 2023 compared to foreign exchange losses of \$1.5 million in Q3 2023.

Over the past eight quarters, fluctuations in the averaged realized sales price per boe, average daily sales volumes and average foreign exchange rates have impacted natural gas, oil and condensate revenues and funds flow from operations. Net income has fluctuated over the same period due to changes in funds flow from operations, impairment losses and fluctuations in deferred tax expense and foreign exchange gains and losses, largely on intercompany balances. Capital expenditures have fluctuated throughout the period due to changes in the Company's planned spending levels on E&E and PP&E assets which vary based on a number of



⁽¹⁾ Per share amounts are based on weighted average shares outstanding other than dividends per share, which is based on the number of common shares outstanding at each dividend record date. The weighted average number of diluted common shares outstanding in the computation of funds flow from operations and cash flows from operating activities per share is the same as for net income per share.

⁽²⁾ See "Non-GAAP and Other Financial Measures" section within this MD&A.

factors. The Board of Directors approved multiple increases to the quarterly dividend from \$0.08 per share in Q1 2022, to \$0.12 per share in Q4 2022 and to \$0.14 per share in Q1 2023.

Commitments and Contingencies

The following is a summary of Alvopetro's contractual commitments as at December 31, 2023:

	< 1 Year	1-3 Years	Thereafter	Total
Gas Treatment Agreement ⁽¹⁾	1,594	3,188	5,579	10,361
Total commitments	1,594	3,188	5,579	10,361

⁽¹⁾ Amounts for the Gas Treatment Agreement are BRL denominated commitments and reflected in the table above based on the U.S. dollar equivalent as at December 31, 2023. As a result, such commitments are subject to fluctuations in the USD/BRL foreign exchange rate.

Amounts presented above for the Gas Treatment Agreement represent the monthly service fees for operation and maintenance of the Facility and operating fees for Alvopetro's 11-kilometre transfer pipeline. All capital costs associated with the facility, including the expansion that occurred in 2022 are treated as a lease obligation and reflected on the statements of financial position.

The Company has abandonment guarantees that are required to be posted with the ANP for the Bom Lugar, Mãe-da-lua, Caburé and Murucututu fields under the terms of the concession contract for each field. Alvopetro has recognized the estimated abandonment costs relating to these and all exploration assets as part of decommissioning liabilities on the consolidated statements of financial position.

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 the amounts become determinable and the probability of loss is more likely than not. The outcome of adverse decisions in any pending or threatened proceedings related to these and other matters could have a material impact on the Company's financial position, results of operations or cash flows.

LIQUIDITY AND CAPITAL RESOURCES

Cash and Working Capital

At December 31, 2023, Alvopetro's cash and cash equivalents of \$18.3 million and restricted cash of \$0.1 million were held as follows:

		U.S.	CAD	
	Total	Dollar	Dollar ⁽¹⁾	BRL ⁽¹⁾
Cash and cash equivalents held in Canada	12,523	12,374	149	-
Cash and cash equivalents held in Brazil	5,803	-	-	5,803
Restricted cash - current	72	-	-	72
Total	18,398	12,374	149	5,875

⁽¹⁾ Amounts in the table above denote the U.S. dollar equivalent as at December 31, 2023.

The Company had cash and cash equivalents of \$18.3 million and a total net working capital surplus of \$13.1 million at December 31, 2023. Positive cash flows from natural gas deliveries and associated condensate sales are projected to be sufficient to fund the Company's operational activities, planned capital projects and future dividends. However, the Company is exposed to a variety of risks which may adversely impact future cash flows. The Company manages these risks 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 adjusted as necessary. The Board of Directors has discretion with respect to any future dividend amounts and the Company has flexibility on future capital plans, other than with respect to work commitments.

The liability for decommissioning obligations of Alvopetro was \$1.1 million as at December 31 2023, with \$0.1 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, 2023, the Company had \$6.4 million of equipment inventory to be utilized for future operations which is included in exploration and evaluation assets in the interim condensed consolidated statements of financial position.

Lease Liabilities

The lease liability to Enerflex in respect of the monthly facility payments under our Gas Treatment Agreement represents the majority of the Company's lease liabilities as at December 31, 2023 and December 31, 2022. 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 are as follows:

	As at		
	December 31,	December 31,	
	2023	2022	
Lease liabilities, beginning of period	9,428	7,979	
Additions	26	1,930	
Finance expense	1,495	1,525	
Lease payments	(2,274)	(2,027)	
Foreign currency translation	6	21	
Lease liabilities, end of period	8,681	9,428	
Current	959	855	
Non-current	7,722	8,573	
Total, end of period	8,681	9,428	

Dividends

		Three Months Ended December 31,			Year Ended December 31,	
	2023	2022	Change (%)	2023	2022	Change (%)
Dividends declared	5,127	4,357	18	20,462	12,697	61
Dividends declared – per share (\$) ⁽¹⁾	0.14	0.12	17	0.56	0.36	56

⁽¹⁾ See "Non-GAAP and Other Financial Measures" section within this MD&A. Dividends per share is based on the number of common shares outstanding at each dividend record date.

In the third quarter of 2021, Alvopetro initiated a quarterly dividend program and increased dividends in Q1 2022, Q4 2022 and again in Q1 2023, resulting in a 17% increase in dividends per share in Q4 2023 compared to Q4 2022 and a 56% increase in dividends per share in the year ended December 31, 2023 compared to 2022. Total dividends declared are also impacted by increased common shares outstanding in 2023 compared to 2022. All dividends are designated as "eligible dividends" for the purpose of the Income Tax Act (Canada). On March 19, 2024, the Board of Directors declared a dividend of \$0.09 per common share, payable on April 15, 2024 to shareholders of record on March 28, 2024.

The Company expects future dividends to be paid quarterly as part of Alvopetro's long-standing capital allocation objective to balance spending from cash flows between reinvestment in growth opportunities and returns to stakeholders. However, the decision to declare any future quarterly dividend and the amount of such dividend, if any, remains subject to the discretion of the Board and may vary depending on numerous factors. There can be no assurance that dividends will be paid at the intended rate or at any rate in the future.

Normal Course Issuer Bid

On January 3, 2023, Alvopetro announced the approval from the TSX Venture Exchange ("TSXV") for a normal course issuer bid ("NCIB"). The terms of the NCIB permitted Alvopetro to repurchase up to 2,876,414 common shares from January 6, 2023, to the earlier of January 5, 2024 or when the NCIB was completed or terminated by Alvopetro. In March 2023, Alvopetro received approval from the TSXV to enter into an automatic share purchase plan which allowed for the purchase of common shares under the NCIB at times when the Company would not have normally been permitted to purchase common shares due to regulatory restrictions and customary self-imposed blackout periods. In Q4 2023, a total of 4,600 Alvopetro shares were repurchased at an average price of CAD\$6.76 per share and were subsequently cancelled. The NCIB terminated on the expiry date of January 5, 2024.



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 19, 2024, there were 36,617,940 common shares, 1,749,440 stock options, 616,930 RSUs and 273,078 DSUs outstanding. There are no preferred shares outstanding.

RELATED PARTY TRANSACTIONS

There were no related party transactions with entities outside the consolidated group in the years ended December 31, 2023 or December 31, 2022. Key management personnel include Alvopetro's directors and officers. In the year ended December 31, 2023, the Company recorded \$1.3 million (2022 - \$1.9 million) in salary and benefits to key management personnel and \$1.0 million in share-based compensation (2022 - \$0.6 million).

NON-GAAP AND OTHER FINANCIAL MEASURES

This MD&A or documents referred to in this MD&A make reference to various non-GAAP financial measures, non-GAAP ratios, capital management measures and supplementary financial measures as such terms are defined in National Instrument 52-112 Non-GAAP and Other Financial Measures Disclosure. Such measures are not recognized measures under GAAP and do not have a standardized meaning prescribed by IFRS and therefore might not be comparable to similar financial measures disclosed 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 and other financial 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. 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.

Below is a description of the non-GAAP financial measures, non-GAAP ratios, capital management measures and supplementary financial measures used in this MD&A.

Non-GAAP Financial Measures

Operating Netback

Operating netback is calculated as natural gas, oil and condensate sales revenues less royalties and production expenses. This calculation is provided in the "Operating Netback" section of this MD&A using our IFRS measures. Operating netback is a common metric used in the oil and gas industry to demonstrate profitability from operations.

Non-GAAP Financial Ratios

Operating Netback per boe

Operating netback on a per unit basis, which is per barrel of oil equivalent ("boe"), is a common non-GAAP measure used in the oil and gas industry and management believes it assists in evaluating the operating performance of the Company. 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. Alvopetro calculated operating netback per boe as operating netback divided by total sales volumes (barrels of oil equivalent). This calculation is provided in the "Operating Netback" section of this MD&A using our IFRS measures.

Operating Netback Margin

Operating netback margin is calculated as operating netback per boe divided by the realized sales price per boe. Operating netback margin is a measure of the profitability per boe relative to natural gas, oil and condensate sales revenues per boe and is calculated as follows:



		Three Months Ended December 31,		Ended ber 31,
	2023	2022	2023	2022
Operating netback - \$ per boe	69.69	60.08	68.82	59.43
Average realized price - \$ per boe	77.60	68.13	76.33	68.04
Operating netback margin	90%	88%	90%	87%

Funds Flow from Operations Per Share

Funds flow from operations per share is a non-GAAP ratio that includes all cash generated from operating activities (as calculated below) divided by the weighted average shares outstanding for the respective period. For the periods reported in this document the cash flows from operating activities per share and funds flow from operations per share is as follows:

\$ per share		nths Ended ber 31,		Year Ended December 31,	
	2023	2022	2023	2022	
Per basic share:					
Cash flows from operating activities	0.21	0.34	1.29	1.37	
Funds flow from operations	0.33	0.36	1.29	1.44	
Per diluted share:					
Cash flows from operating activities	0.21	0.33	1.26	1.29	
Funds flow from operations	0.33	0.35	1.27	1.35	

Capital Management Measures

Funds Flow from Operations

Funds flow from operations is a non-GAAP capital management measure that includes all cash generated from operating activities and is calculated before changes in non-cash working capital. The most comparable GAAP measure to funds flow from operations is cash flows from operating activities. Management considers funds flow from operations important as it helps evaluate financial performance and demonstrates 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,	
	2023	2022	2023	2022		
Cash flows from operating activities	7,904	12,366	47,702	47,534		
Add back changes in non-cash working capital	4,489	827	328	2,345		
Funds flow from operations	12,393	13,193	48,030	49,879		

Net Working Capital

Net working capital 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 De	cember 31,
	2023	2022
Total current assets	25,995	27,627
Total current liabilities	(12,878)	(12,929)
Net working capital	13,117	14,698



Supplementary Financial Measures

"Average realized natural gas price - \$/Mcf" is comprised of natural gas sales as determined in accordance with IFRS, divided by the Company's natural gas sales volumes.

"Average realized NGL – condensate price - \$/bbl" is comprised of condensate sales as determined in accordance with IFRS, divided by the Company's NGL sales volumes from condensate.

"Average realized oil price - \$/bbl" is comprised of oil sales as determined in accordance with IFRS, divided by the Company's oil sales volumes.

"Average realized price - \$/boe" is comprised of natural gas, condensate and oil sales as determined in accordance with IFRS, divided by the Company's total natural gas, NGL and oil sales volumes (barrels of oil equivalent).

"Dividends per share" is comprised of dividends declared, as determined in accordance with IFRS, divided by the number of shares outstanding at the dividend record date.

"Royalties per boe" is comprised of royalties, as determined in accordance with IFRS, divided by the total natural gas, condensate and oil sales volumes (barrels of oil equivalent).

"Royalties as a percentage of sales" is comprised of royalties, as determined in accordance with IFRS, divided by the total natural gas, condensate and oil sales, as determined in accordance with IFRS.

"Production expenses per boe" is comprised of production expenses, as determined in accordance with IFRS, divided by the total natural gas, NGL and oil sales volumes (barrels of oil equivalent).

"G&A expenses per boe" is comprised of net G&A expense, as determined in accordance with IFRS, divided by the total natural gas, NGL and oil sales volumes (barrels of oil equivalent).

"DD&A expense per boe" is comprised of DD&A expense, as determined in accordance with IFRS, divided by the total natural gas, NGL and oil sales volumes (barrels of oil equivalent).

OFF BALANCE SHEET ARRANGEMENTS

Alvopetro has off-balance sheet arrangements consisting of various contracts entered into in the normal course of operations. Contracts that contain a lease are accounted for under IFRS 16 and recorded on the balance sheet as of December 31, 2023 to the extent the lease has commenced. All other contracts which are entered into in the normal course of operations are captured in the *Commitments and Contingencies* section above.

RISKS AND UNCERTAINTIES

Alvopetro is exposed to a variety of risks including, but not limited to: reservoir performance risk, market risk, exploration and exploitation risk, operational and uninsurable risks, inflation and supply chain management risk, foreign operations risk, legal and regulatory risks including the impact of new and stricter environmental regulations, liquidity and financing risk and competitive risks within the oil and gas industry. In addition, Alvopetro's working interest in the Caburé natural gas field is subject to redeterminations, the first of which is currently underway. The outcome of the redetermination is currently unknown and the outcome may have a material adverse effect on Alvopetro and may increase Alvopetro's exposure to other risks as discussed herein.

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 additional risk factors set forth under the heading "Risk Factors" in our Annual Information Form that can be found on SEDAR+ at www.sedarplus.ca.

A. Redetermination of Alvopetro's working interest

Historically, substantially all of Alvopetro's natural gas and condensate sales have been from the Unit. Alvopetro's current working interest in the Unit as of December 31, 2023 and the date of this MD&A is 49.1%; however, under the terms of the UOA, the working



interest split is subject to redeterminations which may impact Alvopetro's working interest in the future. The first redetermination commenced in the fourth quarter of 2023 and the parties engaged the Expert for this redetermination to decide the revised working interest to each party. As of the date of this MD&A, the outcome of the Expert's decision and the resulting working interest to Alvopetro is uncertain. The resulting impact on Alvopetro's future cash flows and reserves may be material and may have a material adverse effect on Alvopetro. This may also increase Alvopetro's exposure to other risks including operational and liquidity and financing risks. The decision of the Expert is expected near the end of the first quarter of 2024. The impact on Alvopetro's working interest will be effective on the first calendar day of the second month following the date of the decision of the Expert, subject to any government approvals that may be required. Given the effective date of the Expert decision, there is no impact on the consolidated financial statements as at and for the year ended December 31, 2023 and all amounts presented herein are based on Alvopetro's working interest share as of December 31, 2023 of 49.1%. The revision to the working interests will impact future entitlements to natural gas production from the Unit and future revenues from such natural gas, future condensate revenue, reserves and reserve life and capital expenditures as described in further detail below.

Revenues

Under the terms of the UOA, each party is entitled to nominate natural gas deliveries based on their working interest share of Unit production plus any natural gas not nominated by the other party. To the extent Alvopetro's working interest is reduced following the redetermination Alvopetro's entitlement to natural gas production from the Unit will be reduced resulting in lower revenues and cash flows in the future. To the extent Alvopetro's working interest is increased following the redetermination, Alvopetro will be entitled to additional natural gas production allocations from the Unit which may increase future natural gas revenues, subject to demand.

NGL production from the Unit is shared by each party according to working interest. Following a redetermination and a change in working interest, future NGL sales will be adjusted according to the new working interest. In addition, while there is no adjustment for past pricing variances on the NGL sales, the provisions of the UOA include a mechanism to adjust the share of NGL production to the party with an increased working interest following the redetermination by an additional 5% to recover the shortfall of historical NGL volumes in the future. To the extent Alvopetro's working interest decreases following the redetermination, Alvopetro's share of NGL sales from the Unit will be adjusted to this new lower working interest less the additional 5% adjustment, contributing to lower revenues and future cash flows. To the extent Alvopetro's working interest increases following the redetermination, Alvopetro's share of NGLs will be increased potentially contributing to higher revenues and future cash flows.

To mitigate the risks associated with any reduction in working interest at the Unit and an associated reduction in natural gas sales, Alvopetro is focused on developing the 100% owned and operated Murucututu natural gas field. Production commenced from the field in 2022 and in 2024 Alvopetro's capital plans include projects to optimize productivity from the three existing wells on the field with future plans to drill additional development wells.

Reserves and Reserve Life

Under the terms of the UOA the parties agreed to the Unit Recoverable Volumes, an aggregate balance of recoverable hydrocarbon volumes defined as the estimated ultimate recovery of all hydrocarbons from the Unit on a best estimate basis. The redetermination will update the estimated Unit Recoverable Volumes for this purpose and Alvopetro's share of such volumes. Under the terms of the UOA, once a party produces their share of Unit Recoverable Volumes, they will no longer be entitled to future production allocations from the Unit. To the extent that Alvopetro's working interest is reduced following the redetermination, Alvopetro's share of remaining Unit Recoverable Volumes from the Unit will decrease. Once Alvopetro has fully depleted its share of Unit Recoverable Volumes it will no longer be entitled to production allocations from the Unit which may result in a material adverse effect on Alvopetro. Conversely, should Alvopetro's share of the Unit Recoverable Volumes increase following the redetermination, this will extend the period during which Alvopetro will be entitled to production allocations from the Unit.

Alvopetro's reserves as of December 31, 2023 as presented in this MD&A are determined in accordance with the standards contained in the Canadian Oil and Gas Evaluation Handbook (the "COGE Handbook") and National Instrument 51-101 ("NI 51-101") and are based on Alvopetro's working interest of 49.1% as of December 31, 2023. Once the new working interests are effective this will impact Alvopetro's reserves and the impact may be material. To the extent Alvopetro's working interest is reduced following the redetermination, Alvopetro's reserves may be materially reduced which will increase Alvopetro's liquidity and financing risk which 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. Furthermore, Alvopetro's reserves as determined in accordance with the COGE Handbook and NI 51-101 may differ from Alvopetro's remaining entitlement to Unit Recoverable Volumes agreed by the parties under the provisions of the UOA. Even where Alvopetro is still entitled to Unit Recoverable Volumes as determined by the Unit, Alvopetro's remaining reserves determined in accordance with the COGE Handbook and NI 51-101 may be materially different.



Capital expenditures

Historical capital expenditures of the Unit will be adjusted to the revised working interest following the redetermination. To the extent Alvopetro's working interest increases, Alvopetro will have an additional liability for past capital expenditures. To the extent Alvopetro's working interest decreases, Alvopetro will be entitled to a recovery of past costs.

Future capital expenditures will be based on the updated working interests. The Unit has agreed to a development plan which includes five development wells for an estimated total gross cost of \$12.7 million. Alvopetro's share of the future development costs based on the 49.1% working interest effective December 31, 2023 is \$6.2 million. Alvopetro's share of such costs will be adjusted to the new working interest following the redetermination.

Escrow account

The provisions of the UOA and related agreements require that where one party has reached 60% of its total production entitlement of Unit Recoverable Volumes, the parties shall carryout a calculation to forecast the net present value of future abandonment costs, and future capital costs net of future NGL sales. To the extent the forecasted costs exceed the forecasted revenues from NGL sales, once a party reaches 70% of its total production entitlement, it is required to contribute to an escrow account to cover the potential shortfall with a deposit of 33% of the balance due once 70% of the production has been reached, increasing to 66% once 80% of the production has been reached, and to 100% of the balance owing once 90% of the production has been reached. To the extent the redetermination reduces Alvopetro's working interest in the Unit, Alvopetro may be required to fund a portion of the escrow account sooner than previously forecasted which may reduce Alvopetro's available cash and financial resources.

Future redeterminations

The UOA provides for a second redetermination of working interests which is to occur once 40% of the proved and probable reserves of the unit have been produced. Subsequent redeterminations shall occur where there is a variation in the total Unit Recoverable Volumes as determined by the Unit of at least 5%. Any future changes to Alvopetro's working interest as a result of such future redeterminations may also have a material impact to Alvopetro.

B. 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 working interest, initial production rates, production decline rates, future commodity prices, marketability of production, 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 may be material. Virtually all of Alvopetro's production is currently from one asset, the Caburé natural gas field, which increases the risks associated with reservoir performance and other risks discussed herein as there is currently limited production from other assets to offset any production declines from Caburé. Alvopetro has plans to further develop the Murucututu natural gas project to mitigate this risk in the future.

C. 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. Alvopetro's results of operations and future cash flows are dependent on its ability to market its natural gas production and any change to price or volumes under its GSA may impact future earnings. The Company's GSA is with one counterparty and, as a result, Alvopetro is subject to significant credit risk. In the year ended December 31, 2023, 95% of the Company's revenues were sold to one counterparty, Bahiagás, and Alvopetro's future cash flows are dependent on ongoing demand from Bahiagás. If the GSA were terminated for any reason, Alvopetro 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 obtain a new gas sales contract with another party which may result in additional capital expenditures and delays in future cash flows. In addition, where demand is reduced for any reason, future earnings may be reduced as Alvopetro does not currently have other gas sales contracts to sell natural gas to any other parties. During 2023, demand from Bahiagás was reduced below 2022 levels and as a result Alvopetro's net income and funds flow from operations was lower. The GSA contains take-or-pay provisions which mitigates some of the risk. Such provisions require prepayment for gas volumes where demand is below 80% of the firm volumes under the GSA. Any natural gas volumes which are prepaid pursuant to the take-or-pay provisions is recovered through future natural gas deliveries.



Natural gas and crude oil prices fluctuate widely and are influenced by global supply and demand, government regulations, actions of other hydrocarbon-producing countries, international conflicts, 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 Company's access to capital, viability of prospective projects and valuation of existing assets. The Company's long-term GSA includes both a floor and a ceiling price which reduces the Company's exposure to natural gas price fluctuations. The Company monitors market conditions and may selectively use derivative instruments to reduce exposure to commodity price movements.

Alvopetro is exposed to market risks from fluctuations in foreign exchange rates, particularly with respect to its natural gas, oil and condensate revenues and on any cash and cash equivalent balances held in currencies other than USD. With respect to revenues, although natural gas, oil and condensate 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. At times the Company may enter into forward contracts to manage its exposure to foreign currency risk as further discussed above, in the Foreign Exchange section of this MD&A. With respect to cash and cash equivalent balances, Alvopetro closely monitors foreign exchange rates and will determine the currency and location of cash held based on funding needs and opportunities to optimize on foreign currency and local interest rates. While Alvopetro holds cash balances in USD in Canada wherever possible, significantly reducing exposure to foreign exchange fluctuations on such cash balances, funds held in Brazil in BRL are subject to foreign exchange fluctuations relative to the USD.

Cash and cash equivalents consist of balances on deposit at banks and short-term investments and 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. Alvopetro is exposed to credit risk related to such balances. Market uncertainty associated with financial institution instability, bank collapses, international conflicts and geopolitical factors increases Alvopetro's exposure to credit risk. Alvopetro manages this risk by investing only in term deposits or investments of investment grade credit rating, and therefore the Company considers these assets to have negligible credit risk. The Company is exposed to interest rate cash flow risk on cash and cash equivalents due to fluctuations in market interest rates applied to cash balances.

D. Exploration and Exploitation 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 and exploitation 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.

E. Operational and Uninsurable Risks

Alvopetro's Caburé natural gas field is operated by Alvopetro's partner on the Unit. As Alvopetro is not the operator of this property, it is dependent on its partner for the timing and execution of key activities to ensure Alvopetro is able to meet production requirements under its GSA and generate future cash flows. Alvopetro 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, Alvopetro entered into a comprehensive UOA which governs the responsibilities of the operator and non-operators in a fair and balanced approach. Alvopetro's long-term plans include further development of the Murucututu natural gas field (100% owned and operated) to mitigate this risk in the future.

All of Alvopetro's natural gas is processed through the Facility owned by Enerflex under the terms of the Gas Treatment Agreement. The Facility is owned and operated by Enerflex. Although Alvopetro has full control over all gas delivered to the Facility, Alvopetro does not have full control over all operational aspects of the Facility. 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 Alvopetro's costs associated with reduced processing; however, such credits may not fully offset costs incurred by Alvopetro due to ship or pay obligations under the GSA.

Alvopetro 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. Should actual liabilities exceed policy limits under the Company's insurance program, Alvopetro could incur significant costs that could have a material adverse effect on its financial position. As Alvopetro has interests in a limited number of properties, such risk is more significant than if spread over a greater number of properties. Should operational problems reduce or limit Alvopetro's future gas production, future cash flows may be less than expected and Alvopetro may be subject to ship or pay penalties under its long-term GSA that may negatively impact the Company's financial position.

Extreme climate conditions including floods, forest fires, earthquakes, hurricanes, drought and other weather-related events may impact Alvopetro's operations or that of its major customers or suppliers. Climate change may increase the frequency and severity of such events and future events may have a material adverse effect on Alvopetro. The Company's financial results for 2023 and 2022 were not directly impacted from a climate event and the Company did not have any weather-related damages to its properties. The Company maintains insurance coverage that provides a level of insurance for certain events that may arise due to climate change factors, however, the Company's insurance program is subject to limits and various restrictions. No claims were made under the Company's insurance policies in 2023 or 2022 with respect to any climate related matters.

F. Inflation Risk and Supply Chain Management

Future capital costs and ongoing operating and other costs could escalate as a result of inflation cost pressures, supply limitations and other factors. A failure to secure the services and equipment necessary for the Company's operations for the expected price, on the expected timeline, or at all, may have an adverse effect on the Company's financial performance and cash flows. The Company's operating costs could escalate and become uncompetitive due to supply chain delays or disruptions, inflationary cost pressures, equipment availability limitations, escalating supply costs, commodity prices, or new taxes or other regulations. The Company's inability to manage costs may impact project returns and future development decisions, which could have a material adverse effect on its financial performance and cash flows. The cost or availability of equipment and services may adversely affect the Company's ability to undertake exploration and development projects. These materials and services may not be available when required at reasonable prices. A failure to secure the services and equipment necessary to the Company's operations for the expected price or on the expected timeline may have an adverse effect on the Company's financial performance and future cash flows. Our inability to control rising costs may impact future funds flow from operations and may result in delays in project execution and planned developments, further impacting our financial performance.

G. Foreign Operations Risk

Given the Company's operations in Brazil and additional projects which may be evaluated internationally, Alvopetro 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. Currently the state and federal governments' policies and fiscal regimes in Brazil are highly supportive of 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. Alvopetro 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 Alvopetro's opinion, minimizes political risks. However, changes in government may alter the level of support for oil and gas activities, potentially resulting in changes to existing oil and gas regulations in Brazil or to tax or other laws that could adversely affect the Company. There can be no certainty as to any changes in regulations or laws within Brazil and the impact on the Company. Such changes may be material.



Income tax laws affecting the Company may change in the future or be interpreted in a manner that adversely affects the Company. To date Alvopetro has been able to repatriate funds from Brazil in a tax efficient manner and there are currently no significant restrictions on the repatriation of capital and distribution of earnings from Brazil to foreign entities. However, changes in foreign exchange regulations, restrictions on repatriation of funds from Brazil or the imposition of additional income taxes or withholding taxes on repatriations may adversely affect the Company's ability to obtain cash from its Brazil subsidiaries to meet obligations within Canada, including the payment of dividends. The impact on future cash flows may be material.

The majority of Alvopetro'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.

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.

There may be additional costs to comply with sustainability disclosure standards. Emissions, carbon and other regulations impacting climate and climate related matters are constantly evolving. The newly established International Sustainability Standards Board (ISSB) is developing sustainability disclosure standards that are globally consistent, comparable and reliable. The cost to comply with this standard or any other similar disclosure standard has not yet been quantified and may be material.

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's development plans include plans for hydraulic fracture stimulations and are dependent on necessary regulatory approvals. Delays in obtaining these approvals may result in delays in our operational plans which may impact our business and future cash flows. Alvopetro believes that the hydraulic fracturing 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 negatively impact our business plans.

I. Legal and Regulatory Risks

The Company is subject to extensive governmental 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.



From time-to-time Alvopetro must fulfill certain minimum work commitments or work plans on projects in Brazil. There are no assurances that all of these commitments and work plans 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. Alvopetro may request extensions or suspensions to the timeframe allotted for work commitments and work plans. 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. Liquidity and Financing Risk

In 2022, Alvopetro repaid all amounts borrowed under the credit facility which had been entered into in 2019. However, in the future the Company may seek to raise additional funds to fund future capital expenditures on Alvopetro'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.

K. Competitive Risks within the Oil and Gas Industry

The oil and gas industry is highly competitive, with respect to the acquisition of prospective oil and gas properties and reserves, attracting financing sources for the acquisition of new reserves or the development of existing reserves and in marketing production from 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 and its ability to execute sales contracts for future production. 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 larger 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.

CHANGES IN ACCOUNTING POLICIES INCLUDING INITIAL ADOPTION

The Company has not early adopted any standard, interpretation, or amendment that has been issued but is not yet effective.

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

Standard and Description	Date of Adoption	Expected Impact on Consolidated Financial Statements
IAS 1 <i>Presentation of Financial Statements</i> – amended to clarify certain requirements for the presentation of liabilities as current or non-current in the statements of financial position.	January 1, 2024	The Company is evaluating the expected impact on the financial statements.

Management's Report on Internal Control over Financial Reporting. In connection with National Instrument 52-109 — Certification of Disclosure in Issuer's Annual and Interim Filings ("NI 52-109"), the Chief Executive Officer and Chief Financial Officer of the Company are required to file a Venture Issuer Basic Certificate with respect to the financial information contained in the unaudited interim financial statements and the audited annual financial statements and respective accompanying Management's Discussion and



Analysis. The Venture Issuer Basic Certificate does not include representations relating to the establishment and maintenance of disclosure controls and procedures and internal control over financial reporting, as defined in NI 52-109.

Dividend Advisory. The decision to declare any future quarterly dividend and the amount and timing of such dividend, if any, remains subject to the discretion of the Board and may vary depending on numerous factors, including, without limitation, the Company's operational performance, available financial resources and financial requirements, capital requirements and growth plans. There can be no assurance that dividends will be paid at the intended rate or at any rate in the future.

Forward-Looking Statements. Certain information provided in this MD&A constitutes forward-looking statements. The use of any of the words "will", "expect", "intend" and other similar words or expressions are intended to identify forward-looking information. Forward-looking statements involve significant risks and uncertainties, should not be read as guarantees of future performance or results, and will not necessarily be accurate indications of whether or not such results will be achieved. A number of factors could cause actual results to vary significantly from the expectations discussed in the forward-looking statements. These forward-looking statements reflect current assumptions and expectations regarding future events. More particularly and without limitation, this MD&A contains forward-looking statements concerning the redetermination and Alvopetro's working interest share of the Unit and the potential impact of the redetermination on Alvopetro, plans relating to the Company's operational activities, proposed exploration and development activities and the timing for such activities, capital spending levels and future capital costs, exploration and development prospects of Alvopetro, plans for dividends in the future, future production and sales volumes, production allocations from the Caburé natural gas field, the expected natural gas price, gas sales and gas deliveries under Alvopetro's long-term gas sales agreement, sources and availability of capital, expectations regarding sales tax credits, and plans for and the timing of abandonment activities. Forward-looking statements are necessarily based upon assumptions and judgments with respect to the future including, but not limited to, expectations and assumptions concerning the timing of regulatory licenses and approvals, equipment availability, the success of future drilling, completion, testing, recompletion and development activities and the timing of such activities, the performance of producing wells and reservoirs, well development and operating performance, expectations regarding Alvopetro's working interest and the outcome of any redeterminations, environmental regulation, including regulation relating to hydraulic fracturing and stimulation, the ability to monetize hydrocarbons discovered, the outlook for commodity markets and ability to access capital markets, foreign exchange rates, general economic and business conditions, forecasted demand for oil and natural gas, the impact of global pandemics, weather and access to drilling locations, the availability and cost of labour and services, the regulatory and legal environment and other risks associated with oil and gas operations. The reader is cautioned that assumptions used in the preparation of such information, although considered reasonable at the time of preparation, may prove to be incorrect. Actual results achieved during the forecast period will vary from the information provided herein as a result of numerous known and unknown risks and uncertainties and other factors. In addition, the declaration, timing, amount and payment of future dividends remain at the discretion of the Board of Directors. 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 foreign exchange rate fluctuations and general economic conditions. Certain of these risks are set out in more detail in this MD&A and in our 2023 Annual Information Form which has been filed on SEDAR+ and can be accessed at www.sedarplus.ca. Except as may be required by applicable securities laws, Alvopetro assumes no obligation to publicly update or revise any forward-looking statements made herein or otherwise, whether as a result of new information, future events or otherwise.

Oil and Natural Gas Reserves. All net present values in this MD&A are based on estimates of future operating and capital costs and GLI's forecast prices as of December 31, 2023. The reserves definitions used in this evaluation are the standards defined in the COGE Handbook reserve definitions and consistent with National Instrument 51-101 ("NI 51-101") and used by GLJ. References to the net present value of 2P reserves throughout this MD&A represents the reserves of Alvopetro 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 Reserves and Resources Report as of December 31, 2023, based on forecast price and cost assumptions. The net present value of future net revenue attributable to Alvopetro'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 Alvopetro'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 and due to rounding, certain columns may not add exactly. The GLJ Reserves and Resources Report incorporates Alvopetro's working interest share of remaining recoverable reserves and resources. With respect to the Caburé natural gas field, Alvopetro's working interest was 49.1% as of December 31, 2023 but is subject to redetermination, the first of which is currently underway. The outcome of this redetermination is unknown and the resulting impact on the reserves and the net presented value of future net revenue attributable to such reserves as presented herein may be material. The disclosure in the MD&A summarizes certain information contained in the GLJ Reserves and Resources 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, 2023 is contained in the Company's 2023 Annual Information Form which has been filed on SEDAR+ and can be accessed at www.sedarplus.ca.

Contingent Resources. This MD&A discloses estimates of Alvopetro's contingent resources and the net present value associated with net revenues associated with the production of such contingent resources contained in the GLJ Reserves and Resources Report. 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 Annual Information Form which has been filed on SEDAR+ and can be accessed at www.sedarplus.ca for additional disclosures on the Company's contingent resources.

Prospective Resources. This MD&A discloses estimates of Alvopetro's prospective resources contained in the GLJ Reserves and Resources Report. 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 Annual Information Form which has been filed on SEDAR+ and can be accessed at www.sedarplus.ca for additional disclosures on the Company's prospective resources.

Abbreviations:

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 CAD = Canadian dollar

 10^3 m³/d = thousand cubic metre per day

m³ = cubic metre

m³/d = cubic metre per day Mcf = thousand cubic feet

Mcfpd = thousand cubic feet per day
MMBtu = million British Thermal Units

MMcf = million cubic feet

MMcfpd = million cubic feet per day

NGLs = natural gas liquids

Q3 2023 = three months ended September 30, 2023 Q4 2022 = three months ended December 31, 2022 Q4 2023 = three months ended December 31, 2023

USD = United States dollar

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.

