

## Q1 2023 Management's Discussion and Analysis

The following management's discussion and analysis ("MD&A") as provided by the management of Headwater Exploration Inc. ("Headwater" or the "Company") is dated May 11, 2023 and should be read in conjunction with the unaudited interim condensed financial statements as at and for the three months ended March 31, 2023, and the MD&A and the audited financial statements and the notes thereto for the year ended December 31, 2022, copies of which are available through the System for Electronic Document Analysis and Retrieval ("SEDAR") at [www.sedar.com](http://www.sedar.com). The unaudited interim condensed financial statements have been prepared in accordance with IAS 34 *Interim Financial Reporting* as issued by the International Accounting Standards Board ("IASB"). All dollar amounts are referenced in Canadian dollars unless otherwise stated.

### Description of the Company

Headwater is a Canadian resource company engaged in the exploration for and development and production of petroleum and natural gas in Canada. Headwater currently has heavy oil production and reserves in the Clearwater formation in the Marten Hills, West Nipisi and Greater Peavine areas of Alberta and natural gas production and reserves in the McCully field near Sussex, New Brunswick.

Unless otherwise indicated herein, all production information presented herein has been presented on a gross basis, which is the Company's working interest prior to deduction of royalties and without including any royalty interests.

### HIGHLIGHTS FOR THREE MONTHS ENDED MARCH 31, 2023

- Declared second cash dividend of \$0.10 per common share and returned \$23.5 million to shareholders in April 2023.
- Production averaged 17,004 boe/d (consisting of 14,777 bbls/d of heavy oil, 12.8 mmcf/d of natural gas and 91 bbls/d of natural gas liquids) representing an increase of 37% from the first quarter of 2022.
- Realized adjusted funds flow from operations <sup>(1)</sup> of \$59.2 million (\$0.25 per share basic).
- Achieved an operating netback inclusive of financial derivatives <sup>(2)</sup> of \$44.60/boe and an adjusted funds flow netback <sup>(2)</sup> of \$38.75/boe.
- Achieved net income of \$30.0 million (\$0.13 per share basic).
- Executed a \$69.5 million capital expenditure <sup>(3)</sup> program inclusive of 31.5 net sections of land in the West Nipisi area and drilled 24 crude oil wells including 9 exploration wells in Greater Peavine and West Nipisi.
- As at March 31, 2023, Headwater had adjusted working capital <sup>(1)</sup> of \$70.5 million, working capital of \$77.4 million, and no outstanding bank debt.

(1) Refer to "Management of capital" in note 12 of the interim financial statements and to "Non-GAAP and Other Financial Measures" within this MD&A.

(2) Non-GAAP ratio that does not have any standardized meaning under IFRS and therefore may not be comparable with the calculation of similar measures of other entities. Refer to "Non-GAAP and Other Financial Measures" within this MD&A.

(3) Non-GAAP measure that does not have any standardized meaning under IFRS and therefore may not be comparable with the calculation of similar measures of other entities. Refer to "Non-GAAP and Other Financial Measures" within this MD&A.

## Results of Operations

### Production and Pricing

	Three months ended March 31,		Percent Change
	2023	2022	
Average daily production			
Heavy oil (bbls/d)	14,777	10,602	39
Natural gas (mmcf/d)	12.8	10.8	19
Natural gas liquids (bbls/d)	91	7	1200
Barrels of oil equivalent (boe/d)	17,004	12,414	37
Average daily sales <sup>(1)</sup>			
Heavy oil (bbls/d)	14,741	10,587	39
Natural gas (mmcf/d)	12.8	10.8	19
Natural gas liquids (bbls/d)	91	7	1200
Barrels of oil equivalent (boe/d)	16,968	12,398	37
Headwater average sales price <sup>(2)</sup>			
Heavy oil (\$/bbl) <sup>(3)</sup>	65.41	98.80	(34)
Natural gas (\$/mcf)	5.58	15.65	(64)
Natural gas liquids (\$/bbl)	66.53	108.57	(39)
Barrels of oil equivalent (\$/boe)	61.40	98.09	(37)
Average Benchmark Price			
WTI (US\$/bbl) <sup>(4)</sup>	76.13	94.29	(19)
WCS differential to WTI (US\$/bbl)	(24.77)	(14.53)	70
WCS (Cdn\$/bbl) <sup>(5)</sup>	69.45	101.02	(31)
Condensate at Edmonton (Cdn\$/bbl)	105.88	124.49	(15)
AGT (US\$/mmbtu) <sup>(6)</sup>	5.13	13.67	(62)
AECO 5A (Cdn\$/GJ)	3.05	4.60	(34)
NYMEX Henry Hub (US\$/mmbtu)	3.42	4.95	(31)
Exchange rate (US\$/Cdn\$)	0.74	0.79	(6)

(1) Includes sales of heavy crude oil excluding the impact of purchased condensate and butane. The Company's heavy oil sales volumes and production volumes differ due to changes in inventory.

(2) Average sales prices are calculated using average sales volumes.

(3) Realized heavy oil prices are based on sales, net of blending expense.

(4) WTI = West Texas Intermediate.

(5) WCS = Western Canadian Select.

(6) AGT = Algonquin city-gates. The AGT price is the average for the winter producing months in the McCully field which include January to April, November and December.

	Three months ended March 31,		Percent Change
	2023	2022	
	<i>(thousands of dollars)</i>		
Heavy oil sales	96,422	103,373	(7)
Blending expense	(9,639)	(9,240)	4
Heavy oil, net of blending <sup>(1)</sup>	86,783	94,133	(8)
Natural gas	6,437	15,252	(58)
Natural gas liquids	546	70	680
Gathering, processing and transportation	804	567	42
Total sales, net of blending expense <sup>(1)</sup>	94,570	110,022	(14)

(1) Non-GAAP measure. Refer to "Non-GAAP and Other Financial Measures" within this MD&A.

## **Heavy Oil – Alberta**

The Company's realized price received for its heavy crude oil is determined by the quality of crude compared to the benchmark price of WCS. Headwater's heavy crude oil production (average 18 – 22° API) is blended with diluent in order to meet pipeline transportation specifications.

The WTI price has softened from prior year due to reduced oil demand out of China and elevated recessionary risks in North America. The WCS differential to WTI widened during the three months ended March 31, 2023, due to reduced US Gulf Coast demand primarily as a result of increased refinery maintenance and downtime.

During the three months ended March 31, 2023, Headwater's heavy oil sales, net of blending expense, decreased to \$86.8 million from \$94.1 million in the comparable period of 2022. This decrease was attributable to a 34% decrease in realized commodity pricing, consistent with the decrease in benchmark WCS pricing, partially offset by a 39% increase in sales volumes. Headwater's discount to WCS widened during the first quarter of 2023 primarily due to strong condensate pricing relative to WCS pricing.

During the three months ended March 31, 2023, Headwater's heavy oil sales volumes averaged 14,741 bbls/d compared to 10,587 bbls/d in the comparable period of 2022. The Company's heavy oil sales volumes have increased as a result of Headwater's extensive 2022 and first quarter 2023 capital expenditure programs. Headwater drilled 97.0 total net crude oil wells during the year ended December 31, 2022, and drilled 24.0 total net crude oil wells in the first quarter of 2023, substantially increasing the Company's heavy oil production.

## **Natural Gas – New Brunswick and Alberta**

The Company produces natural gas out of the McCully field in New Brunswick. The transaction price is based on the AGT daily benchmark price adjusted for delivery location and heat content. Headwater also produces natural gas in Alberta, processing its gas through the Company's joint gas processing facility located in Marten Hills. The natural gas sales transaction price is based on the AECO 5A daily benchmark price adjusted for delivery location and heat content.

For the three months ended March 31, 2023, Headwater's natural gas sales decreased to \$6.4 million from \$15.3 million in the corresponding period of the prior year due to a 64% decrease in realized commodity pricing partially offset by a 19% increase in natural gas sales volumes. Natural gas sales volumes increased to 12.8 mmcf/d during the three months ended March 31, 2023, from 10.8 mmcf/d in the corresponding period of the prior year, as a result of higher associated natural gas production from the Company's Marten Hills assets. Realized natural gas pricing decreased due to lower benchmark pricing for both AGT and AECO 5A. AGT saw a 62% decrease from prior year due to warmer winter weather experienced in the northeastern US natural gas market which significantly reduced natural gas demand in the area.

Consistent with prior years, the Company shut-in McCully natural gas production for the upcoming summer season effective May 1, 2023.

## **Financial Derivative Gains (Losses)**

	Three months ended March 31,		Percent Change
	2023	2022	
	<i>(thousands of dollars)</i>		
Realized gains (losses)	7,240	(3,945)	(284)
Unrealized gains (losses)	2,003	(130)	(1641)
Financial derivative gains (losses)	<u>9,243</u>	<u>(4,075)</u>	(327)
Per boe (\$)	6.05	(3.65)	(266)

### **Natural gas and crude oil commodity contracts**

Headwater enters into financial derivative commodity contracts to manage the risks associated with fluctuations in commodity prices.

The realized financial derivative gains recognized during the three months ended March 31, 2023, represent the natural gas contracts referenced to the AGT price. A realized financial derivative gain was recorded during the three months ended March 31, 2023, of \$7.2 million compared to a realized loss of \$3.9 million in the corresponding period of 2022. The Company recognized gains on its AGT contracts during the three months ended March 31, 2023, as the commodity contracts to fix the AGT price exceeded the settlement price in the period. The AGT settlement price was lower than expected due to warmer winter weather experienced in the northeastern US natural gas market resulting in significantly reduced natural gas demand in the area.

The unrealized gains recorded are a result of the change in fair value of the Company's outstanding financial derivative contracts over the periods. As at March 31, 2023, the fair value of Headwater's outstanding financial derivative commodity contracts was a net unrealized asset of \$0.8 million as reflected in the interim financial statements. The fair value or mark to market value of these contracts is based upon the estimated amount that would have been payable as at March 31, 2023, had the contracts been monetized or terminated. Subsequent changes in the fair value of the contracts are recognized in each reporting period and could be materially different than what is recorded as at March 31, 2023. For the three months ended March 31, 2023, Headwater recognized unrealized gains of \$2.0 million compared to unrealized losses of \$130 thousand in the corresponding period of 2022.

As at March 31, 2023, Headwater had the following financial derivative commodity contracts outstanding:

Commodity	Index	Type	Term	Daily Volume	Contract Price
Natural Gas	AECO 5A	Fixed	Apr 2023- Oct 2023	3,000 GJ	Cdn\$3.53/GJ
Crude Oil	WCS Basis	Differential	Oct 2023- Dec 2023	1,000 bbl	US\$16.50/bbl

### **Foreign exchange contracts**

The Company is exposed to fluctuations of the Canadian to U.S. dollar exchange rate given realized pricing is directly influenced by U.S. dollar denominated benchmark pricing and from exposure to its U.S. dollar denominated heavy oil and natural gas marketing arrangements.

Headwater mitigates this risk by entering into commodity contracts in Canadian dollars and entering into short-term foreign exchange contracts.

As at March 31, 2023, Headwater had the following financial derivative foreign exchange contract outstanding:

Type	Buy Currency	Sell Currency	Rate	Notional Amount	Settlement Date
Forward contract	CAD	USD	March 2023 average <sup>(1)</sup>	US\$26 million	April 26, 2023

(1) WM/Reuters Intraday Spot Rate as of Noon EST

(2) Unrealized change in fair value related to the Company's foreign exchange contracts is included in interest income and other expense in the interim financial statements.

## **Royalty Expense**

	Three months ended March 31,		Percent Change
	2023	2022	
	<i>(thousands of dollars)</i>		
Heavy oil	14,478	16,040	(10)
Natural gas and natural gas liquids	854	798	7
Total royalty expense	<u>15,332</u>	<u>16,838</u>	(9)
Percentage of total sales, net of blending <sup>(1)</sup>	16.2%	15.3%	6
Per boe (\$)	10.04	15.09	(33)

(1) Non-GAAP ratio. Refer to the advisory "Non-GAAP and Other Financial Measures".

Royalty expense consists of crown royalties payable to the Alberta and New Brunswick provincial governments and the gross overriding royalty ("GORR") payable to Topaz Energy Corp. Under the Alberta Modernized Royalty Framework ("MRF"), the Company will pay a flat royalty of 5% on a well's production until the well's total revenue exceeds the Drilling and Completion Cost Allowance (C\*), then royalty rates increase on a sliding scale up to 40% depending on commodity reference pricing.

For the three months ended March 31, 2023, royalty expense decreased to \$15.3 million from \$16.8 million in the comparable period of 2022, due to a 14% decrease in total sales, net of blending expense.

Headwater's average corporate royalty rate was 16.2% for the three months ended March 31, 2023, compared to 15.3% in the corresponding period of 2022. Over the past year, several of the Company's Marten Hills wells' cumulative revenues exceeded C\* and reverted to the sliding scale royalty under the MRF, resulting in a higher Alberta crown royalty rate.

## **Transportation Expense**

	Three months ended March 31,		Percent Change
	2023	2022	
	<i>(thousands of dollars)</i>		
Transportation expense	8,397	5,471	53
Per boe (\$)	5.50	4.90	12

Transportation expense includes clean oil trucking, terminal fees and pipeline tariffs incurred to move production to the sales point.

For the three months ended March 31, 2023, transportation expense increased to \$8.4 million from \$5.5 million in the comparable period of the prior year as a result of increased heavy oil sales volumes and higher trucking fees.

For the three months ended March 31, 2023, transportation expense per boe increased to \$5.50 from \$4.90 in the corresponding period of the prior year due to higher trucking fees associated with apportioned sales volumes and increased production out of the Marten Hills West, West Nipisi and Greater Peavine areas.

Headwater has firm transportation service commitments in place to secure pipeline capacity to the point of sale. Refer to “Contractual Obligations and Commitments” for more information.

## **Production Expense**

	Three months ended March 31,		Percent Change
	2023	2022	
	<i>(thousands of dollars)</i>		
Production expense	9,979	6,436	55
Per boe (\$)	6.53	5.77	13

Production expense in the three months ended March 31, 2023, was \$10.0 million compared to \$6.4 million in the corresponding period of 2022. The increase in production expense reflects the increase in the Company’s production volumes over the period.

For the three months ended March 31, 2023, production expense per boe increased to \$6.53 from \$5.77 in the corresponding period of the prior year due to higher overall costs associated with Headwater’s significant production growth including carbon taxes and emulsion trucking.

## **Netbacks**

Operating netback reflects the Company’s margin on a per-barrel of oil equivalent basis. The following table provides a reconciliation of Headwater’s operating netback and operating netback, including financial derivatives. Refer to the heading “Non-GAAP and Other Financial Measures” for more information.

	Three months ended March 31,		Percent Change
	2023	2022	
	<i>(\$/boe)</i>		
Sales	68.24	106.88	(36)
Royalties	(10.04)	(15.09)	(33)
Transportation and blending	(11.81)	(13.18)	(10)
Production expense	(6.53)	(5.77)	13
Operating netback <sup>(1)</sup>	39.86	72.84	(45)
Realized gains (losses) on financial derivatives	4.74	(3.54)	(234)
Operating netback, including financial derivatives <sup>(1)</sup>	44.60	69.30	(36)

(1) Non-GAAP ratio. Refer to the advisory “Non-GAAP and Other Financial Measures”.

For the three months ended March 31, 2023, the Company’s operating netback, including financial derivatives decreased to \$44.60 per boe, compared to the Company’s operating netback, including financials derivatives of \$69.30 per boe in the corresponding period of 2022, as a result of lower realized commodity pricing partially offset by lower royalties and higher realized gains on financial derivatives.

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

	Three months ended March 31,		Percent Change
	2023	2022	
	<i>(thousands of dollars)</i>		
G&A expenses	2,904	2,489	17
Capitalized G&A	(841)	(839)	-
Net G&A expenses	2,063	1,650	25
Per boe (\$)	1.35	1.48	(9)

The Company incurred gross G&A expenses of \$2.9 million during the three months ended March 31, 2023, compared to \$2.5 million in the corresponding period of 2022. Increased G&A costs before capitalization were mainly the result of increased employee related costs and professional fees due to the significant growth experienced by the Company over the period. Headwater recognized \$0.8 million in capitalized G&A as a result of Headwater’s significant capital expenditure program in the first quarter of 2023.

G&A expenses were \$1.35 per boe during the three months ended March 31, 2023, down from \$1.48 per boe in the comparable period of 2022 due to a significant increase in the Company’s sales volumes over the period.

## Interest Income and Other Expense

	Three months ended March 31,		Percent Change
	2023	2022	
	<i>(thousands of dollars)</i>		
Interest income	1,788	237	654
Realized and unrealized foreign exchange losses	(3)	(369)	(99)
Accretion on decommissioning liability	(262)	(115)	128
Interest on repayable contribution	(117)	-	100
Interest on lease liability	(10)	(18)	(44)
Total interest income and other expense	1,396	(265)	(627)
Per boe (\$)	0.91	(0.24)	(479)

Foreign exchange gains and losses, accretion and interest were offset by a significant increase in interest income for the three months ended March 31, 2023.

The increase in interest income in the three months ended March 31, 2023, is a result of carrying a higher average cash balance in 2023 when compared to 2022, combined with the significant increase in interest rates throughout 2022 and the first quarter of 2023. The Bank of Canada increased the target overnight rate to 4.50% in January 2023, resulting in a prime rate of 6.70%.

The Company manages fluctuations in foreign exchange gains and losses by entering into foreign exchange contracts to fix the foreign exchange rate. Refer to “Financial Derivatives Gains (Losses)” for more information.

## **Stock-based Compensation**

	Three months ended March 31,		Percent Change
	2023	2022	
	<i>(thousands of dollars)</i>		
Stock options	509	977	(48)
Deferred share units	665	56	1088
Share awards	787	-	100
Capitalized stock-based compensation	(346)	(334)	4
Stock-based compensation	<u>1,615</u>	<u>699</u>	131
Per boe (\$)	1.06	0.63	68

During the three months ended March 31, 2023, stock-based compensation expense increased to \$1.6 million from \$0.7 million in the corresponding period of the prior year, as a result of grants of restricted share units (“RSUs”) and performance share units (“PSUs”) and collectively with the RSUs, the “Awards”) under the Company’s incentive awards plan (the “Awards Plan”) and grants of deferred share units (“DSUs”) under the Company’s DSU plan (the “DSU Plan”). During the three months ended March 31, 2023, the Company capitalized \$0.3 million of stock-based compensation expense, as a result of Headwater’s significant capital expenditure program in the first quarter.

### **Stock Options**

The Company has an old and new stock option plan (the “Option Plans”) under which options to purchase common shares of the Company may be granted to directors, officers, employees and consultants of the Company. The exercise price of each option granted is based on the closing price of the common shares on the Toronto Stock Exchange (“TSX”) on the trading day prior to the date the option was granted. Options granted generally vest as to one third of the number granted on each of the first, second and third anniversaries of the date of grant over a three-year period and expire four to five years after the grant date. There were no stock options granted in the three months ended March 31, 2023, or in the year ended December 31, 2022, and the Company cannot grant any further stock options under the Option Plans.

As at March 31, 2023, there were 4,086,853 stock options outstanding under the Option Plans.

### **Share Awards**

The Awards Plan provides for the grant of RSUs and PSUs to officers, employees and consultants of the Company. Under the Awards Plan, the aggregate number of common shares reserved for issuance may not exceed the lesser of: (i) 6.0% of the aggregate number of issued and outstanding common shares less the aggregate number of common shares reserved for issuance under the Option Plans; and (ii) 4.5% of the aggregate number of issued and outstanding common shares. Generally, one third of the RSUs will vest on each of the first, second and third anniversaries of the date of grant and all PSUs will vest on the third anniversary of the date of grant, unless otherwise determined by the Board of Directors of the Company (the “Board”). The common shares underlying PSUs are adjusted based on a payout multiplier ranging from 0 to 2 times, which is determined based on certain corporate performance measures, as determined by the Board.

During the three months ended March 31, 2023, the Board approved the cash settlement of RSUs. Previously, these awards had been accounted for as equity-settled. As a result of this modification to the Company’s outstanding RSUs from equity-settled to cash-settled, the fair value of the awards previously expensed was reclassified from contributed surplus to stock-based compensation liability. Subsequent to modification, the grant date fair value is used to record the cost of the RSUs and any subsequent remeasurement of the liability is also recognized in the Statement of Income and Comprehensive Income.

It is the intention of the Company to equity settle any outstanding PSUs. The Awards Plan allows a holder to receive common shares upon vesting. Headwater uses the fair value method for valuing the PSUs. The fair value of PSUs is determined based on the volume weighted average trading price of the five days preceding the grant date. This fair value is recognized as stock-based compensation expense, with a portion being capitalized, over the vesting period with a corresponding increase to contributed surplus. The amount of stock-based compensation expense is reduced by an estimated forfeiture rate determined at the date of the grant and updated each period. Upon vesting of the PSUs and settlement in common shares, the previously recognized value in contributed surplus will be recorded as an increase to capital stock.

As at March 31, 2023, there were 323,394 RSUs outstanding and 1,852,202 PSUs outstanding.

## DSUs

The DSU Plan provides for grants of DSUs to non-management directors. Each DSU vests on the date of grant; however, settlement of the DSU occurs when the individual ceases to be a director of the Company. DSUs are to be settled in cash or by payment in common shares acquired through the facilities of the TSX. It is the intention of the Company to settle DSUs in cash. The directors may also elect to receive all of their annual cash compensation in the form of DSUs provided that such election must be made on December 1st of the preceding calendar year (or within a certain prescribed time frame if an individual becomes a director after the commencement of a calendar year or after the initial adoption of the DSU Plan) and after such date the election will be irrevocable for such year. DSUs are measured at fair value using the volume weighted average trading price of the five days preceding the grant date.

As at March 31, 2023, there were 231,357 DSUs outstanding.

## Depletion & Depreciation

	Three months ended March 31,		Percent Change
	2023	2022	
	<i>(thousands of dollars)</i>		
Depletion	28,441	18,807	51
Depreciation	216	231	(6)
Depletion & depreciation	<u>28,657</u>	<u>19,038</u>	51
Depletion – Per boe (\$)	18.63	16.85	11
Depreciation – Per boe (\$)	0.14	0.21	(33)
Depletion & depreciation per boe (\$)	18.77	17.06	10

Depletion expense is calculated using the unit-of-production method which is based on production volumes in relation to the proved plus probable reserves base.

Depletion for the three months ended March 31, 2023, increased to \$28.4 million from \$18.8 million in the corresponding period of 2022, due to a significant increase in the Company's production volumes over the period.

Depletion and depreciation per boe increased during the three months ended March 31, 2023, when compared to the corresponding period of 2022 primarily due to significant exploration drilling, infrastructure spend and waterflood expenditures.

## Impairment Assessment

As at March 31, 2023, there were no indicators of impairment identified for either of the Company's Alberta or New Brunswick CGUs. As such, an impairment test was not performed.

## Current and Deferred Income Taxes

	Three months ended March 31,		Percent Change
	2023	2022	
	<i>(thousands of dollars)</i>		
Current income tax expense	8,572	5,816	47
Deferred income tax expense	615	7,371	(92)

For the three months ended March 31, 2023, the Company recorded current taxes of \$8.6 million and a deferred income tax expense of \$0.6 million. Current income taxes increased by 47% from the prior year as a result of lower tax pool claims, partially offset by lower adjusted funds flow from operations for the three months ended March 31, 2023, compared to the corresponding period of the prior year.

## Cash Flows Provided by Operating Activities and Adjusted Funds Flow From Operations

Refer to the heading "Non-GAAP and Other Financial Measures" for more information.

	Three months ended March 31,		Percent Change
	2023	2022	
	<i>(thousands of dollars)</i>		
Cash flows provided by operating activities	60,201	60,689	(1)
Changes in non-cash working capital	(8,414)	15,150	(156)
Current income taxes	(8,572)	(5,816)	47
Income taxes paid	15,942	-	100
Adjusted funds flow from operations <sup>(1)</sup>	59,157	70,023	(16)

	Three months ended March 31,		Percent Change
	2023	2022	
	<i>(\$/boe)</i>		
Cash flows provided by operating activities	39.42	54.39	(28)
Changes in non-cash working capital	(5.51)	13.57	(141)
Current income taxes	(5.61)	(5.21)	8
Income taxes paid	10.45	-	100
Adjusted funds flow netback <sup>(2)</sup>	38.75	62.75	(38)

(1) Refer to "Management of capital" in note 12 of the interim financial statements and to "Non-GAAP and Other Financial Measures" within this MD&A.

(2) Non-GAAP ratio. Refer to the advisory "Non-GAAP and Other Financial Measures".

For three months ended March 31, 2023, adjusted funds flow from operations decreased to \$59.2 million from \$70.0 million in the corresponding period of the prior year primarily as a result of 37% decrease in realized commodity pricing partially offset by a 37% increase in sales volumes. The Company also incurred higher overall cash costs including transportation, production expense and current income taxes.

## **Capital Expenditures**

	Three months ended March 31,		Percent Change
	2023	2022	
	<i>(thousands of dollars)</i>		
Lease acquisition, retention and geological and geophysical	4,498	26,521	(83)
Site preparation	5,363	4,113	30
Drilling and completions	51,971	35,518	46
Equipping and facilities	7,662	15,805	(52)
Capital expenditures <sup>(1)</sup>	<u>69,494</u>	<u>81,957</u>	(15)

(1) Non-GAAP measure. Refer to “Non-GAAP and Other Financial Measures” within this MD&A.

During the three months ended March 31, 2023, the Company invested a total of \$69.5 million on capital expenditures including \$52.0 million on drilling and completions, \$7.7 million on equipping and facilities, \$5.4 million on site preparation including road construction and \$4.5 million on lease acquisition and geological and geophysical costs.

## Drilling Activity

The following table summarizes the Company’s drilling results:

	Three months ended March 31,			
	2023		2022	
	Gross	Net	Gross	Net
Heavy crude oil <sup>(1)</sup>	24	24.0	26	26.0
Natural gas	-	-	-	-
Injection	2	2.0	-	-
Source/stratigraphic test	2	2.0	2	2.0
Junked and abandoned	-	-	1	1.0
<b>Total</b>	<u>28</u>	<u>28.0</u>	<u>29</u>	<u>29.0</u>
<b>Success</b>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>

(1) Includes wells that were rig released in the three months ended March 31, 2023. There were 3 (3.0 net) additional wells drilled that were rig released in the second quarter of 2023.

## **Decommissioning Liabilities**

As at March 31, 2023, the decommissioning liabilities of the Company were \$35.1 million. The Company recorded an increase of \$2.8 million in the obligation from the decommissioning liability of \$32.3 million as at December 31, 2022. This increase of \$2.8 million is due to additions of \$3.7 million as a result of the Company’s capital expenditure program and accretion expense of \$0.3 million partially offset by a downward change in estimate of \$1.2 million. The change in estimate is a result of a decrease to the inflation rate from 2.1% at December 31, 2022 to 1.7% at March 31, 2023, partially offset by a decrease to the risk-free rate from 3.3% at December 31, 2022 to 3.0% at March 31, 2023. The total undiscounted uninflated

amount of estimated cash flows required to settle these obligations is \$47.9 million (December 31, 2022 - \$43.0 million).

## **2023 Guidance**

Headwater is reconfirming its 2023 guidance as released on March 9, 2023. Headwater expects to fund its 2023 capital expenditure budget of \$200.0 million through existing working capital and forecasted cash flows provided by operating activities.

## **Liquidity and Capital Resources**

The Company's objectives when managing capital are to i) deploy capital to provide an appropriate return on investment to its shareholders; ii) maintain financial flexibility in order to preserve the Company's ability to meet financial obligations; and iii) maintain a capital structure that provides financial flexibility to execute strategic acquisitions. To aid in managing the capital structure, the Company monitors adjusted working capital and adjusted funds flow from operations, supplemented as necessary by equity and debt financings.

On November 3, 2022, Headwater announced its inaugural quarterly cash dividend of \$0.10 per common share (\$0.40 per common share annualized). The first dividend was paid on January 16, 2023, to shareholders of record at the close of business on December 30, 2022. On March 9, 2023, Headwater declared a cash dividend of \$0.10 per common share. The dividend was paid on April 17, 2023, to shareholders of record at the close of business on March 31, 2023.

As at March 31, 2023, the Company had cash of \$154.8 million, adjusted working capital of \$70.5 million and no outstanding bank debt. The Company expects to have adequate liquidity to fund its 2023 capital expenditure budget of \$200 million, quarterly cash dividends and contractual obligations in the near term through existing working capital and forecasted adjusted funds flow from operations. Headwater anticipates that it will make use of debt or equity financing for any substantial expansion of its capital program or to finance any significant acquisitions.

To the extent that the Company's existing working capital is not sufficient to pay the cash portion of the purchase price for any future acquisition, Headwater anticipates that it will make use of additional equity or debt financings as available. Alternatively, the Company may issue equity as consideration to complete any future acquisition.

## **Credit Facilities**

During the fourth quarter of 2022, the Company entered into an agreement with the National Bank of Canada and the Bank of Montreal (the "Lenders") providing for senior secured revolving syndicated credit facilities. The extendible revolving credit facilities are comprised of a \$20.0 million operating facility and an \$80.0 million syndicated facility.

As at March 31, 2023, Headwater had not drawn on the credit facilities. The Company does not intend to draw on the credit facilities at current commodity pricing.

The credit facilities have a revolving period of 364 days, extendible annually at the request of the Company, subject to approval of the Lenders. If not extended, the credit facilities will automatically convert to a term loan and all outstanding obligations will be repayable one year after the expiry of the revolving period. The borrowing base is subject to semi-annual redeterminations occurring by June 30<sup>th</sup> and by November 30<sup>th</sup> of each year. The credit facilities are secured by a demand debenture in the amount of \$250.0 million. Repayments of principal are not required until the maturity date, provided that

the borrowings do not exceed the authorized borrowing base and the Company is in compliance with all covenants, representations and warranties.

The credit facilities bear interest at a floating market rate with margins charged by the Lenders linked to the Company's senior debt to EBITDA ratio. EBITDA, for the purposes of calculating the senior debt to EBITDA ratio, is calculated as net income adjusted for non-cash items, interest expense and income taxes. Senior debt, for the purposes of calculating the senior debt to EBITDA ratio, is calculated as any debt of the Company excluding the financial derivative liability and repayable contribution.

The credit facilities are not subject to any financial covenants. Additionally, distributions are permitted subject to compliance with a Board approved distributions policy.

## Contractual Obligations and Commitments

As at March 31, 2023, the Company is committed to future payments under the following agreements:

	Total	2023	2024	2025	2026	2027	Thereafter
	\$	\$	\$	\$	\$	\$	\$
Transportation <sup>(1)</sup>	107,833	9,244	13,362	13,628	14,775	15,906	40,918
Waste disposal <sup>(2)</sup>	1,270	1,270	-	-	-	-	-
Lease <sup>(3)</sup>	676	268	375	33	-	-	-
Government grant <sup>(4)</sup>	8,834	-	-	883	2,942	5,009	-

- (1) At March 31, 2023, Headwater has the following transportation commitments:
  - a. 8- year take-or-pay transportation agreement with a minimum volume commitment of 10,000 boe/d.
  - b. 8- year financial commitment at \$1.9 million per year adjusted for inflation.
  - c. 8- year take-or-pay transportation agreement with a current minimum volume commitment of 4,750 boe/d increasing to 9,750 boe/d in year 4 and to 12,500 boe/d in year 6.
- (2) Relates to a commitment to deliver a certain amount of drilling waste to a third-party landfill.
- (3) Relates to variable operating costs, which are a non-lease component of the Company's head office lease.
- (4) Relates to scheduled undiscounted re-payments of federal government funding under the terms of the repayable contribution agreement with NRCan.

## Common Share Information

### Share Capital

<i>(thousands)</i>	Three months ended	
	March 31,	
	2023	2022
Weighted average outstanding common shares <sup>(1)</sup>		
-Basic	234,069	221,209
-Diluted	236,279	234,265
Outstanding securities at March 31, 2023		
-Common shares		235,386
-Stock options – weighted average strike price of \$3.09		4,087
-Restricted share units		323
-Performance share units		1,852
-Deferred share units		231

- (1) The Company uses the treasury stock method to determine the dilutive effect of stock options, RSUs and PSUs. Under this method, only "in-the-money" dilutive instruments impact the calculation of diluted income per common share. This method also assumes that the proceeds received from the exercise of all "in-the-money" dilutive instruments are used to repurchase shares at the average market price.

Changes to share capital during the three months ended March 31, 2023, were the following:

- 1.6 million stock options were exercised for 1.1 million common shares on a cashless basis, and 0.4 million stock options were exercised for 0.4 million common shares for total proceeds of \$0.7

million. Contributed surplus related to the options exercised of \$1.6 million was transferred to capital stock.

- The remaining balance of the Company's warrants to purchase common shares that were outstanding were exercised for common shares for total proceeds of \$5 thousand. The associated fair value of the warrants of \$2 thousand, along with the proceeds received, were transferred to capital stock.

## **Total Market Capitalization**

The Company's market capitalization at March 31, 2023 was approximately \$1.5 billion.

<i>(thousands)</i>	March 31, 2023
Common shares outstanding	235,386
Share price <sup>(1)</sup>	\$ 6.31
<b>Total market capitalization</b>	<b>\$1,485,286</b>

(1) Represents the closing price on the TSX on March 31, 2023.

As at May 11, 2023 the Company had 235,573,670 common shares outstanding.

<i>(thousands)</i>	May 11, 2023
Outstanding securities at May 11, 2023	
-Common shares	235,574
-Stock options – weighted average strike price of \$3.17	3,820
-Restricted share units	323
-Performance share units	1,852
-Deferred share units	231

## **Environmental, Social and Governance (“ESG”) Update**

Headwater remains committed to strong ESG performance. Recent achievements related to the Company's ESG strategy include:

- Nominating a third female to the Board for election at the annual meeting of shareholders to be held on May 11, 2023. The Board has set a target of achieving and maintaining a Board composition in which at least 30% of its directors are women by no later than the date of the annual meeting of shareholders in 2023.
- Headwater released its inaugural ESG report on November 3, 2022, highlighting key factors of the Company's ESG program including emissions management, Indigenous and community engagement and sustainability stewardship. For more information, see the Company's ESG report on the Company's website at [www.headwaterexp.com](http://www.headwaterexp.com).

The Board continually focuses on ensuring its governance structure is appropriate and following best practices given Headwater's size and stage of development. The primary responsibility of Headwater's Corporate Governance and Sustainability Committee, which is comprised of independent members of the Board, is to develop the Company's approach to matters concerning corporate governance, sustainability, human resources and compensation. In addition, the Board has also established the Audit Committee and Reserves and Safety Committee, which are both comprised of independent members of the Board, to ensure the integrity of the financial and reserves reporting of the Company. For additional information relating to the governance policies and structure of the Company see the Company's management information circular dated March 27, 2023 for the annual meeting of the shareholders to be

held on May 11, 2023, which is available on SEDAR at [www.sedar.com](http://www.sedar.com) and the information under the heading Corporate Responsibility on the Company's website at at [www.headwaterexp.com](http://www.headwaterexp.com).

## Summary of Quarterly Information

	Q1/23	Q4/22	Q3/22	Q2/22	Q1/22	Q4/21	Q3/21	Q2/21
<b>Financial</b> (thousands of dollars except share data)								
Total sales	104,209	109,377	99,587	130,153	119,262	75,287	50,123	40,038
Total sales, net of blending <sup>(1) (2)</sup>	94,570	102,974	94,949	122,102	110,022	70,125	48,841	37,429
Adjusted funds flow from operations <sup>(3)</sup>	59,157	71,828	58,441	79,435	70,023	48,731	31,524	23,182
Per share - basic <sup>(4)</sup>	0.25	0.31	0.25	0.35	0.32	0.24	0.16	0.12
- diluted <sup>(4)</sup>	0.25	0.31	0.25	0.34	0.30	0.22	0.14	0.10
Cash flows provided by operating activities	60,201	66,448	72,060	84,728	60,689	47,753	27,888	23,232
Net income	29,979	39,789	31,545	48,412	42,363	27,927	26,106	4,588
Per share - basic	0.13	0.17	0.14	0.21	0.19	0.14	0.13	0.02
- diluted	0.13	0.17	0.13	0.21	0.18	0.13	0.12	0.02
Capital expenditures <sup>(2)</sup>	69,494	60,677	71,001	30,860	81,957	49,043	37,293	16,781
Depletion and depreciation	28,657	25,842	17,284	17,243	19,038	15,790	10,889	10,459
Adjusted working capital <sup>(3)</sup>	70,467	104,918	117,967	130,206	80,072	92,929	63,709	69,697
Working capital	77,415	109,433	113,381	127,101	77,122	89,775	16,490	32,586
Shareholders' equity	551,160	543,335	525,006	492,145	441,148	397,791	295,528	268,191
Dividends declared	23,539	23,392	-	-	-	-	-	-
Per share	0.10	0.10	-	-	-	-	-	-
Weighted average shares (thousands)								
Basic	234,069	231,766	229,909	226,168	221,209	204,005	202,313	197,445
Diluted <sup>(5)</sup>	236,279	235,305	236,658	233,479	234,265	220,958	218,190	213,905
Shares outstanding, end of period (thousands)								
Basic	235,386	233,920	229,911	229,908	223,727	217,681	202,466	202,286
Diluted <sup>(6)</sup>	241,368	241,029	241,593	241,585	241,688	242,448	240,447	240,257
<b>Operating (6:1 boe conversion)</b>								
Average daily production								
Heavy oil (bbls/d)	14,777	13,536	10,842	10,637	10,602	9,377	7,637	6,185
Natural gas (mmcf/d)	12.8	11.5	4.3	6.4	10.8	6.4	0.3	2.3
Natural gas liquids (bbls/d)	91	99	55	66	7	-	-	5
Barrels of oil equivalent (boe/d) <sup>(7)</sup>	17,004	15,546	11,612	11,772	12,414	10,449	7,688	6,565
Average daily sales <sup>(8)</sup>	16,968	15,568	11,680	11,705	12,398	10,459	7,613	6,653
Average selling prices								
Heavy oil (\$/bbl)	65.41	73.10	92.35	121.49	98.80	75.12	70.00	64.20
Natural gas (\$/mcf)	5.58	10.15	4.23	7.28	15.65	8.46	4.49	2.76
Natural gas liquids (\$/bbl)	66.53	73.02	95.54	113.61	108.57	-	-	73.99
Barrels of oil equivalent (\$/boe)	61.40	71.60	88.27	114.34	98.09	72.62	69.71	61.52
Netbacks (\$/boe) <sup>(4) (9)</sup>								
Operating								
Sales, net of blending <sup>(1) (2)</sup>	61.93	71.90	88.36	114.63	98.60	72.88	69.73	61.83
Realized gain (loss) on financial derivatives	4.74	2.96	-	(0.24)	(3.54)	1.41	-	0.24
Royalties	(10.04)	(13.51)	(21.93)	(23.85)	(15.09)	(11.34)	(10.46)	(8.84)
Transportation	(5.50)	(4.21)	(3.94)	(4.07)	(4.90)	(6.98)	(8.68)	(8.21)
Production	(6.53)	(6.25)	(5.95)	(5.66)	(5.77)	(4.20)	(4.42)	(4.89)
Operating netback, including financial derivatives (\$/boe)	44.60	50.89	56.54	80.81	69.30	51.77	46.17	40.13
General and administrative	(1.35)	(1.14)	(1.46)	(1.52)	(1.48)	(1.23)	(1.40)	(1.60)
Interest income and other expense <sup>(10)</sup>	1.11	1.15	1.18	0.44	0.14	0.10	0.24	(0.23)
Current income taxes	(5.61)	(0.75)	(1.87)	(5.16)	(5.21)	-	-	-
Adjusted funds flow netback (\$/boe)	38.75	50.15	54.39	74.57	62.75	50.64	45.01	38.30

- (1) Heavy oil sales are netted with blending expense to compare the realized price to benchmark. In the interim financial statements, blending is recorded in blending and transportation expense.
- (2) Non-GAAP measure. Refer to “Non-GAAP and Other Financial Measures” within this MD&A.
- (3) Refer to “Management of capital” in note 12 of the interim financial statements and to “Non-GAAP and Other Financial Measures” within this MD&A.
- (4) Non-GAAP ratio. Refer to the advisory “Non-GAAP and Other Financial Measures”.
- (5) Diluted weighted average shares outstanding includes the impact of any stock options, RSUs and PSUs that would be outstanding as dilutive instruments using the treasury stock method. The number of outstanding RSUs and PSUs have been adjusted for dividends.
- (6) Includes in-the-money dilutive instruments as at March 31, 2023 which include 4.1 million stock options with a weighted average exercise price of \$3.09 and 1.9 million PSUs. The number of outstanding PSUs has been adjusted for dividends. RSUs have been excluded as the Company intends to cash settle these awards.
- (7) See barrels of oil equivalent under “Oil and Gas Measures”.
- (8) Includes sales of unblended heavy crude oil. The Company’s heavy oil sales volumes and production volumes differ due to changes in inventory.
- (9) Netbacks are calculated using average sales volumes.
- (10) Excludes unrealized foreign exchange gains/losses, accretion on decommissioning liabilities and interest on the lease liability.

2022 and 2021 were transformational years for Headwater following the recapitalization transaction and Marten Hills acquisition in 2020. The Company spent \$140.4 million on its capital program in 2021 growing production from 1,646 boe/d in the fourth quarter of 2020 to 10,449 boe/d in the fourth quarter of 2021. The Company continued this expansion in 2022 by spending \$244.5 million on its capital program and growing production to 15,546 boe/d in the fourth quarter of 2022. The recovery of crude oil prices and the increase in the Company’s average production has resulted in a significant increase in sales, cash flows provided by operating activities and net income. Headwater also declared its first dividend in the fourth quarter of 2022 at \$0.10 per common share outstanding. This growth trend continued into the first quarter of 2023, as Headwater spent \$69.5 million on capital expenditures and grew production to 17,004 boe/d.

Prior to Headwater’s initial acquisition of its Marten Hills assets in December 2020, Headwater solely produced natural gas and liquids out of its McCully assets in New Brunswick. Headwater’s east coast natural gas sales are priced at AGT. The AGT market has been characterized by excess demand during the winter season resulting in significant premiums in the sales price for natural gas during the winter season as compared to prices during other periods of the year. In response to this trend in natural gas prices, since 2015, the Company has shut-in most of its producing natural gas wells in the McCully field in New Brunswick for a portion of the summer and fall period to time the start-up of production, and the associated recovery of flush volumes, with peak winter pricing to maximize adjusted funds flow from operations and to retain Headwater’s reserves for production in future years.

## **Off-Balance Sheet Arrangements**

All off-balance sheet arrangements are in the normal course of business. Refer to the commitments under the heading “Contractual Obligations and Commitments”.

## **Subsequent Events**

### **Dividend**

Subsequent to March 31, 2023, the Company declared a cash dividend of \$0.10 per common share. The dividend will be payable on July 17, 2023, to shareholders of record at the close of business on June 30, 2023.

### **Commodity Contract**

Subsequent to March 31, 2023, Headwater entered into the following commodity contract:

Commodity	Index	Type	Term	Daily Volume	Contract Price
Crude Oil	WCS Basis	Differential	Oct 2023- Dec 2023	1,000 bbl	US\$16.25/bbl

## Foreign Exchange Contracts

Subsequent to March 31, 2023, Headwater entered into the following foreign exchange contracts:

Type	Buy Currency	Sell Currency	Rate	Notional Amount	Settlement Date
Forward contract	CAD	USD	April 2023 average	US\$29.8 million	May 26, 2023
Forward contract	CAD	USD	May 2023 average	US\$26.0 million	June 27, 2023

## Non-GAAP and Other Financial Measures

Throughout this MD&A, the Company uses various non-GAAP and other financial measures to analyze operating performance and financial position. These non-GAAP and other financial measures do not have standardized meanings prescribed under IFRS and therefore may not be comparable to similar measures presented by other entities.

### *Heavy oil sales, net of blending*

Management utilizes heavy oil sales, net of blending expense to compare realized pricing to WCS benchmark pricing. It is calculated by deducting the Company's blending expense from heavy oil sales. In the interim financial statements blending expense is recorded within blending and transportation expense.

	Three months ended March 31,	
	2023	2022
	<i>(thousands of dollars)</i>	
Heavy oil sales	96,422	103,373
Blending expense	(9,639)	(9,240)
Heavy oil sales, net of blending expense	86,783	94,133

### *Total sales, net of blending*

Management utilizes total sales, net of blending expense to compare realized pricing to benchmark pricing. It is calculated by deducting the Company's blending expense from total sales. In the interim financial statements blending expense is recorded within blending and transportation expense.

	Three months ended March 31,	
	2023	2022
	<i>(thousands of dollars)</i>	
Total sales	104,209	119,262
Blending expense	(9,639)	(9,240)
Total sales, net of blending expense	94,570	110,022

### *Capital expenditures*

Management utilizes capital expenditures to measure total cash capital expenditures incurred in the period. Capital expenditures represents capital expenditures – exploration and evaluation and capital expenditures – property, plant and equipment in the statement of cash flows in the Company's interim financial statements.

	Three months ended March 31,	
	2023	2022
	<i>(thousands of dollars)</i>	
Cash flows used in investing activities	57,957	80,374
Restricted cash	-	(5,000)
Change in non-cash working capital	11,537	6,583
Capital expenditures	69,494	81,957

### Capital Management Measures

#### *Adjusted Funds Flow from Operations*

Management considers adjusted funds flow from operations to be a key measure to assess the Company's management of capital. In addition to being a capital management measure, adjusted funds flow from operations is used by management to assess the performance of the Company's oil and gas properties. Adjusted funds flow from operations is an indicator of operating performance as it varies in response to production levels and management of production and transportation costs. Management believes that by eliminating changes in non-cash working capital and adjusting for current income taxes in the period, adjusted funds flow from operations is a useful measure of operating performance.

	Three months ended March 31,	
	2023	2022
	<i>(thousands of dollars)</i>	
Cash flows provided by operating activities	60,201	60,689
Changes in non-cash working capital	(8,414)	15,150
Current income taxes	(8,572)	(5,816)
Current income taxes paid	15,942	-
Adjusted funds flow from operations	59,157	70,023

#### *Adjusted Working Capital*

Adjusted working capital is a capital management measure which management uses to assess the Company's liquidity. Financial derivative receivable/liability have been excluded as these contracts are subject to a high degree of volatility prior to settlement and relate to future production periods. Financial derivative receivable/liability are included in adjusted funds flow from operations when the contracts are ultimately realized. Management has included the effects of the contribution receivable and repayable contribution to provide a better indication of Headwater's net financing obligations.

	March 31,	December 31,
	2023	2022
	<i>(thousands of dollars)</i>	
Working capital	77,415	109,433
Contribution receivable (long-term)	1,104	1,104
Repayable contribution	(6,837)	(6,720)
Financial derivative receivable	(1,215)	(419)
Financial derivative liability	-	1,520
Adjusted working capital	70,467	104,918

### Non-GAAP Ratios

#### *Adjusted funds flow netback, operating netback and operating netback, including financial derivatives*

Adjusted funds flow netback, operating netback and operating netback, including financial derivatives are non-GAAP ratios and are used by management to better analyze the Company's performance against prior periods on a more comparable basis.

Adjusted funds flow netback is defined as adjusted funds flow from operations divided by sales volumes in the period.

Operating netback is defined as sales less royalties, transportation and blending costs and production expense divided by sales volumes in the period. Sales volumes exclude the impact of purchased condensate. Operating netback, including financial derivatives is defined as operating netback plus realized gains or losses on financial derivatives.

#### *Adjusted funds flow per share*

Adjusted funds flow per share is a non-GAAP ratio and is used by management to better analyze the Company's performance against prior periods on a more comparable basis. Adjusted funds flow per share is calculated as adjusted funds flow from operations divided by weighted average shares outstanding during the period on a basic or diluted basis.

#### *Royalty rate*

Corporate royalty rate is calculated as total royalties as a percentage of total sales, net of blending expense.

#### *Per boe numbers*

This MD&A represents various results on a per boe basis including Headwater average realized sales price, financial derivatives gains/losses per boe, royalty expense per boe, transportation expense per boe, production expense per boe, general and administrative expenses per boe, interest income and other expense per boe, stock-based compensation expense per boe and depletion and depreciation per boe. These figures are calculated using sales volumes.

### **Disclosure Controls and Procedures**

The Chief Executive Officer and Chief Financial Officer have designed, or caused to be designed under their supervision, disclosure controls and procedures as defined in National Instrument 52-109 of the Canadian Securities Administrators, to provide reasonable assurance that (i) material information relating to the Company is made known to the Chief Executive Officer and Chief Financial Officer by others, particularly during the period in which the annual and interim filings are being prepared and (ii) information required to be disclosed by the Company in its annual filings, interim filings or other reports filed or submitted by it under securities legislation is recorded, processed, summarized and reported within the time periods specified in securities legislation.

### **Internal Controls over Financial Reporting**

The Chief Executive Officer and Chief Financial Officer have designed, or caused to be designed under their supervision, internal controls over financial reporting as defined in National Instrument 52-109 of the Canadian Securities Administrators, in order to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS.

The Company confirms that there were no changes to Headwater's internal controls over financial reporting during the interim period from January 1, 2023 to March 31, 2023 that have materially affected, or are reasonably likely to affect, the Company's internal control over financial reporting.

It should be noted that while Headwater's Chief Executive Officer and Chief Financial Officer believe that the Company's internal controls and procedures provide a reasonable level of assurance and that they are

effective, they do not expect that these controls will prevent all errors or fraud. A control system, no matter how well conceived or operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

## **Critical Accounting Estimates**

### Use of estimates and judgments

The preparation of the Company's financial statements in accordance with IFRS requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Such estimates and assumptions are evaluated at each reporting date and are based on management's experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Estimates are more difficult to determine, and the range of potential outcomes can be wider, in periods of higher volatility and uncertainty. The impacts of the COVID-19 pandemic and the recovery therefrom coupled with several factors including higher levels of uncertainty due to the Russian invasion of Ukraine and its impact on energy markets, rising interest and inflation rates, and constrained supply chains have created a higher level of volatility and uncertainty. Management has, to the extent reasonable, incorporated known facts and circumstances into the estimates made, however, actual results could differ from those estimates and those differences could be material. The Company has identified the following areas requiring significant judgments, assumptions or estimates.

### *Climate change*

The following provides certain disclosures as to the impact of climate change on the amounts recorded in the financial statements as at and for the three months ended March 31, 2023. The below is not a comprehensive list or analysis of all climate change impacts and risks.

Emissions, carbon and other regulations impacting climate and climate related matters are constantly evolving. With respect to climate reporting, the International Sustainability Standards Board has issued an IFRS Sustainability Disclosure Standard with the aim to develop sustainability disclosure standards that are globally consistent, comparable and reliable. In addition, the Canadian Securities Administrators have issued a proposed National Instrument 51-107 - *Disclosure of Climate-Related Matters*. The cost to comply with these standards, and others that may be developed or evolve over time, has not yet been quantified.

The Company has considered the impact of the evolving worldwide demand for energy and global advancement of alternative sources of energy that are not sourced from fossil fuels in its assessment as a possible indication of impairment of its oil and gas properties. The Company completed the analysis of triggers for impairment as at March 31, 2023 and climate risk/climate change, in of itself, did not result in the Company completing an impairment test. The Company has considered the impact of the evolving worldwide demand for energy and global advancement of alternative sources of energy that are not sourced from fossil fuels in its assessment of depletion on its oil and gas properties. Depletion of the Company's oil and gas properties was based on proved and probable reserves, the life of which is generally less than 20 years. The ultimate period in which global energy markets can transition from carbon-based sources to alternative energy is highly uncertain, however, the majority of the Company's proved and probable reserves per the 2022 reserve report should be realized prior to the elimination of carbon-based energy. At this time, the Company has not capped its reserve life for purposes of calculating depletion expense, however, this estimate will be monitored as the energy evolution continues.

The Company engages a third-party external reserve engineer to prepare the reserve report. The reserve report includes anticipated impacts from emissions related taxes, most notably the reserve report includes estimated carbon tax related to the Company's operations consistent with Alberta's Emissions Management and Climate Resilience Act.

The evolving energy transition and general sentiment to the oil and gas industry may result in reduced access to capital markets. Management will continue to adjust the capital structure to the dynamic environment.

The Company's financial results for the three months ended March 31, 2023 were not directly impacted from a climate event. During the three months ended March 31, 2023, the Company did not incur material weather related damages to its property, plant and equipment. Management is not aware of a material disruption in its supply chain or the marketers of the Company's product related to climate events.

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 during the three months ended March 31, 2023 with respect to climate related matters.

#### a) Critical Judgments in Applying Accounting Policies

##### *Business Combinations*

Business combinations are accounted for using the acquisition method of accounting. The determination of fair value is estimated based on information available at the date of acquisition and requires management to make assumptions and estimates about future events. The assumptions and estimates with respect to determining the fair value of exploration and evaluation assets and property, plant and equipment acquired generally require the most judgment and include estimates of the cash flows associated with proved and probable reserves acquired which is impacted by assumptions related to forecasted production, forecasted operating and royalty costs, future development costs, future crude oil and natural gas commodity prices, foreign exchange rates, and discount rates. Assumptions are also required to determine the fair value of decommissioning liabilities associated with the properties. Changes in any of these assumptions or estimates used in determining the fair value of acquired assets and liabilities could impact the amounts assigned to assets, liabilities (including deferred income tax liabilities) in the acquisition equation. Future net income (loss) will be affected as the fair value on initial recognition impacts future depletion expense, as well as the risk of potential impairment in future periods.

##### *Determination of cash-generating units ("CGU") and impairment*

The determination of what constitutes a CGU used to test the recoverability of the carrying values of the Company's oil and gas properties is subject to management's judgment. Judgments are made in regard to shared infrastructure, geographical proximity, petroleum type and similar exposure to market risks and materiality. The asset composition of a CGU can directly impact the recoverability of the assets included therein.

Judgments are required to assess when impairment or impairment reversal indicators exist and impairment testing is required.

The Company's CGUs as at March 31, 2023 include its Alberta CGU and its New Brunswick CGU.

##### *Exploration and evaluation ("E&E") assets*

The application of the Company's accounting policy for E&E assets requires management to make certain judgments as to whether economic quantities of reserves have been found. Judgment is also required to determine the level at which E&E is assessed for impairment; for Headwater, the recoverable amount of E&E assets is assessed at a CGU level.

#### b) Key Sources of Estimation Uncertainty

*Recoverability of asset carrying value and the impact of reserves on depletion and the evaluation of the recoverable amount of a CGU*

At each reporting date, the Company assesses its property, plant and equipment and exploration and evaluation assets to determine if there is any indication that the carrying amount of the assets may not be recoverable. An assessment is also made at each reporting date to determine whether there is any indication that previously recognized impairment losses no longer exist or have decreased. Determination as to whether and how much an asset is impaired, or no longer impaired, involves management's estimates on highly uncertain matters. The key estimates used in the determination of cash flows from crude oil and natural gas reserves and the volume of proved and probable crude oil and natural gas reserves include the following:

- i) Reserves and forecasted production – assumptions that are valid at the time of reserve estimation may change significantly when new information becomes available. Changes in future price estimates, production levels or results of future drilling may change the economic status of reserves and may ultimately result in reserve revisions.
- ii) Forecasted crude oil and natural gas prices – commodity prices can fluctuate for a variety of reasons including supply and demand fundamentals, inventory levels, exchange rates, weather, and economic and geopolitical factors.
- iii) Discount rate – the discount rate used to calculate the net present value of cash flows is based on estimates of an approximate industry peer group weighted average cost of capital. Changes in the general economic environment could result in significant changes to this estimate.
- iv) Forecasted operating and royalty costs and future development costs – estimates concerning future drilling and infrastructure costs and production costs required to operate the assets are used in the cash flow model.

Changes in circumstances may impact these estimates which could have a material financial impact in future periods.

Reserves estimates also have a material financial impact on depletion expense, property, plant, and equipment acquired in business combinations, deferred income taxes and decommissioning liabilities, all of which could have a material impact on financial results. These reserve estimates are evaluated by third-party reserve evaluators at least annually, who work with information provided by the Company to establish reserve determinations in accordance with National Instrument 51-101 - *Standards of Disclosure for Oil and Gas Activities*. Changes in circumstances may impact these estimates which could have a material financial impact in future periods.

#### *Decommissioning liabilities*

The decommissioning costs which will ultimately be incurred by the Company are uncertain and estimates can vary in response to many factors including changes to relevant legal requirements, the emergence of new restoration techniques or experience at other production sites. The expected timing can also change in response to changes in reserves or changes in laws and regulations. As a result, there could be significant adjustments to the provisions established which could materially affect future financial results. Judgments include the most appropriate discount rate to use, which management has determined to be a risk-free rate.

#### *Valuation of financial instruments*

The estimated fair values of the Company's financial derivative commodity and foreign exchange contracts are subject to measurement uncertainty due to the estimation of future crude oil and natural gas commodity prices, foreign exchange rates and volatility.

#### *Valuation of stock options*

The estimated fair values of the stock options issued under the Company's stock option plans were based on the Black-Scholes pricing model incorporating assumptions on volatility, risk-free interest rate, forfeiture rate and the expected term.

## **Business Conditions and Risks**

There are numerous factors both known and unknown, that could cause actual results or events to differ materially from forecast results. The following is a summary of such risk factors, which should not be construed as exhaustive:

- Volatility in the market conditions for the oil and natural gas industry may affect the value of the Company's reserves and restrict its cash flow and ability to access capital to fund the development of its properties and pay dividends;
- Risks related to the Alberta wildfires including safety of personnel, asset integrity and potential disruption of operations which could affect the Company's results, business, financial conditions or liquidity;
- Various factors may adversely impact the marketability of oil and natural gas, affecting net production revenue, production volumes and development and exploration activities;
- The anticipated benefits of acquisitions may not be achieved and the Company may dispose of non-core assets for less than their carrying value on the financial statements as a result of weak market conditions;
- The impact of the Russian Ukrainian conflict on commodity prices and the world economy could affect the Company's results, business, financial conditions or liquidity;
- Natural disasters, terrorist acts, civil unrest, war, pandemics (including any continuing impacts of the COVID-19 pandemic) and other disruptions and dislocations may affect the Company's results, business, financial conditions or liquidity;
- The Company's business may be adversely affected by political and social events and decisions made in Canada, the United States, Europe and elsewhere;
- Lack of capacity and/or regulatory constraints on gathering and processing facilities and pipeline systems may have a negative impact on the Company's ability to produce and sell its oil and natural gas;
- The Company competes with other oil and natural gas companies, some of which have greater financial and operational resources;
- The Company's ability to successfully implement new technologies into its operations in a timely and efficient manner will affect its ability to compete;
- Changes to the demand for oil and natural gas products and the rise of petroleum alternatives may negatively affect the Company's financial condition, results of operations and cash flow;
- Modification to current, or implementation of additional, regulations (including environmental regimes) or royalty regimes may reduce the demand for oil and natural gas, impact the Company's cash flows and/or increase the Company's costs and/or delay planned operations;
- Taxes on carbon emissions affect the demand for oil and natural gas, the Company's operating expenses and may impair the Company's ability to compete;
- Liability management programs enacted by regulators in the western provinces may prevent or interfere with the Company's ability to acquire properties or require a substantial cash deposit with the regulator;
- The Company may require additional financing, from time to time, to fund the acquisition, exploration and development of properties and its ability to obtain such financing in a timely fashion and on acceptable terms may be negatively impacted by the current economic and global market volatility;

- Changing investor sentiment towards the oil and natural gas industry may impact the Company's access to, and cost of, capital;
- Oil and natural gas operations are subject to seasonal weather conditions and, if applicable to the Company's operations in the future, the Company may experience significant operational delays as a result;
- Regulatory water use restrictions and/or limited access to water or other fluids may impact the Company's future production volumes from any future waterflood of the Company;
- Credit risk related to non-payment for sales contracts or other counterparties;
- Foreign exchange risk as commodity sales are based on US dollar denominated benchmarks; and
- The risk of significant interruption or failure of the Company's information technology systems and related data and control systems or a significant breach that could adversely affect the Company's operations.

Additional risks and information on risk factors are included in the Annual Informational Form for the year ended December 31, 2022, dated March 9, 2023, which is available on the Company's website at [www.headwaterexp.com](http://www.headwaterexp.com) and under the Company's profile on SEDAR at [www.sedar.com](http://www.sedar.com).

The Company uses a variety of means to help mitigate or minimize these risks including the following:

- Attracting and retaining a team of highly qualified and motivated professionals who have a vested interest in the success of the Company;
- Employing risk management instruments to minimize exposure to volatility of commodity prices;
- Maintaining a strong financial position;
- Maintaining strict environmental, safety and health practices;
- Maintaining a comprehensive insurance program;
- Managing credit risk by entering into agreements with counterparties that are investment grade; and
- Implementation of cyber security protocols and procedures to reduce to risk of failure of breach of data.

## **Oil and Gas Metrics**

### Barrels of Oil Equivalent

The term barrels of oil equivalent (“boe”) may be misleading, particularly if used in isolation. Per boe amounts have been calculated using a conversion rate of six thousand cubic feet of natural gas to one barrel of crude oil. This 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. As the value ratio between natural gas and crude oil based on the current prices of natural gas and crude oil is significantly different from the energy equivalency of 6:1, utilizing a conversion on a 6:1 basis may be misleading as an indication of value.

## **Dividend Policy**

The amount of future cash dividends paid by the Company, if any, will be subject to the discretion of the Board and may vary depending on a variety of factors and conditions existing from time to time, including, among other things, adjusted funds flow from operations, fluctuations in commodity prices, production levels, capital expenditure requirements, acquisitions, debt service requirements and debt levels, operating costs, royalty burdens, foreign exchange rates and the satisfaction of the liquidity and solvency tests imposed by applicable corporate law for the declaration and payment of dividends. Depending on these

and various other factors, many of which will be beyond the control of the Company, the Board will adjust the Company's dividend policy from time to time and, as a result, future cash dividends could be reduced or suspended entirely.

## **Forward Looking Information**

This MD&A contains certain forward-looking statements and forward-looking information (collectively referred to herein as "forward-looking statements") within the meaning of Canadian securities laws. All statements other than statements of historical fact are forward-looking statements. Forward-looking information typically contains statements with words such as "anticipate", "believe", "plan", "continuous", "estimate", "expect", "may", "will", "project", "should" or similar words suggesting future outcomes. In particular, this MD&A contains forward-looking statements pertaining to the following:

- business plans and strategies (including its production optimization and hedging strategies);
- the Company's intent to settle PSUs in equity;
- the Company's intent to settle DSUs in cash;
- the expectation that Headwater could make use of additional equity or debt financings to fund any substantial increase of its capital expenditure program or for future acquisitions;
- the expectation that the Company has adequate liquidity to fund its 2023 capital expenditure budget of \$200 million, future dividend payments and contractual obligations in the near term through existing working capital and forecasted cash flows from operations;
- the Company's intent to not draw on the credit facilities at current commodity pricing;
- exploration and development plans of Headwater;
- 2023 crude oil and natural gas pricing assumptions; and
- 2023 Canadian – US dollar exchange rates;
- the estimated amount to settle the Company's decommissioning liabilities; and
- the expectation that the majority of the Company's proved and probable reserves per the 2022 reserve report should be realized prior to the elimination of carbon-based energy.

Statements relating to "reserves" are forward-looking statements, as they involve the implied assessment, based on certain estimates and assumptions that the reserves described, as applicable, exist in the quantities predicted or estimated and can profitably be produced in the future.

Undue reliance should not be placed on forward-looking statements, which are inherently uncertain, are based on estimates and assumptions, and are subject to known and unknown risks and uncertainties (both general and specific) that contribute to the possibility that the future events or circumstances contemplated by the forward-looking statements will not occur. There can be no assurance that the plans, intentions or expectations upon which forward-looking statements are based, will in fact be realized. Actual results will differ, and the difference may be material and adverse to the Company and its shareholders.

The forward-looking statements contained herein are based on certain key expectations and assumptions made by the Company, including but not limited to expectations and assumptions concerning the success of optimization and efficiency improvement projects, the availability of capital, current legislation, receipt of required regulatory approval, the success of future drilling, development and waterflooding activities, the performance of existing wells, the performance of new wells, Headwater's growth strategy, general economic conditions including inflationary pressures, availability of required equipment and services, prevailing equipment and services costs and prevailing commodity prices. Although the Company believes 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 the Company can give no assurance that they will prove to be correct.

Any financial outlook or future oriented financial information in this press release, as defined by applicable securities legislation, has been approved by management of the Company as of the date hereof. Readers

are cautioned that any such future-oriented financial information contained herein should not be used for purposes other than those for which it is disclosed herein.

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, the risks identified under the heading "*Business Conditions and Risks*". Further information regarding these factors and additional factors may be found under the heading "Risk Factors" in the Annual Informational Form for the year ended December 31, 2022, dated March 9, 2023, which is available on the Company's website at [www.headwaterexp.com](http://www.headwaterexp.com) and under the Company's profile on SEDAR at [www.sedar.com](http://www.sedar.com). Readers are cautioned that the foregoing list of factors that may affect future results is not exhaustive.

The forward-looking statements contained in this MD&A are made as of the date hereof and the Company does not undertake any obligation to update publicly or to revise any of the included forward-looking statements, except as required by applicable law. The forward-looking statements contained herein are expressly qualified by this cautionary statement.

## **Corporate Information**

### **Board of Directors**

NEIL ROSZELL  
Executive Chairman & CEO, Headwater Exploration Inc.  
Calgary, Alberta

JASON JASKELA  
President and COO, Headwater Exploration Inc.  
Calgary, Alberta

CHANDRA HENRY <sup>(1)</sup> <sup>(2)</sup>  
CFO and Chief Compliance Officer Longbow Capital Inc.  
Calgary, Alberta

STEPHEN LARKE <sup>(2)</sup>  
Director Vermillion Energy Inc. and Topaz Energy Corp.  
Calgary, Alberta

PHILLIP KNOLL <sup>(3)</sup>  
Director Altagas Ltd.  
Calgary, Alberta

KEVIN OLSON <sup>(1)</sup> <sup>(3)</sup>  
Independent Businessman  
Calgary, Alberta

DAVE PEARCE <sup>(2)</sup> <sup>(3)</sup>  
Deputy Managing Partner, Azimuth Capital Management  
Calgary, Alberta

KAM SANDHAR <sup>(1)</sup>  
Executive Vice President, Strategy and Corporate Development  
Cenovus Energy Inc.  
Calgary, Alberta

ELENA DUMITRASCU  
Cofounder and Chief Technology Officer, Credivera  
Calgary, Alberta

(1) Audit Committee

(2) Corporate Governance and Sustainability Committee

(3) Reserves and Safety Committee

**Website: [www.headwaterexp.com](http://www.headwaterexp.com)**

### **Officers**

NEIL ROSZELL, P. Eng.  
Executive Chairman & CEO

JASON JASKELA, P. Eng.  
President and COO

ALI HORVATH, CPA, CA  
Vice President Finance & CFO

TERRY DANKU, P. Eng.  
Vice President Engineering

JON GRIMWOOD, P. Geo.  
Vice President Exploration

SCOTT RIDEOUT  
Vice President Land

BRAD CHRISTMAN  
Vice President Production

TED BROWN (Corporate Secretary)  
Burnet, Duckworth & Palmer LLP

### **Head Office**

Suite 1400, 215 – 9<sup>th</sup> Avenue SW  
Calgary, Alberta T2P 1K3  
Tel: (587) 391-3680

### **Auditors**

KPMG LLP  
Calgary, Alberta

### **Independent Reservoir Consultants**

GLJ Ltd.