LOGAN

ENERGY CORP.

MANAGEMENT'S DISCUSSION & ANALYSIS
AS AT AND FOR THE YEARS ENDED
DECEMBER 31, 2023 AND 2022

INTRODUCTION

Logan Energy Corp. (“Logan” or the “Company”) was incorporated under the *Business Corporations Act* (Alberta) on March 10, 2023 as “2499938 Alberta Ltd.”. Articles of Amendment were filed to change its name to “Logan Energy Corp.” on March 22, 2023. The Company is engaged in exploration, development and production of crude oil and natural gas properties, focused in the Simonette and Pouce Coupe areas of northwest Alberta, and in the Flatrock area of northeastern British Columbia. Logan does not have any subsidiaries. Common shares of Logan are listed on the TSX Venture Exchange (“TSXV”) and trade under the symbol “LGN”. The Company’s head office is located at 1800, 736 – 6th Avenue S.W., Calgary, Alberta T2P 3T7 and its registered office is 4200 Bankers Hall West, 888 – 3rd Street S.W., Calgary, Alberta T2P 5C5.

The following Management’s Discussion and Analysis (“**MD&A**”) has been prepared by management as of March 18, 2024, in accordance with the requirements of National Instrument 51-102 – *Continuous Disclosure Requirements* (“**NI 51-102**”). This MD&A should be read in conjunction with the Company’s audited annual financial statements and related notes for the years ended December 31, 2023 and 2022 (the “**Annual Financial Statements**”). Additional information relevant to the Company, including Logan’s Annual Information Form for the year ended December 31, 2023 (the “**AIF**”), can be found on SEDAR+ at www.sedarplus.ca and the Company’s website at www.loganenergycorp.com.

Unless otherwise noted, the financial information in this MD&A has been prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board (“**IFRS Accounting Standards**”) up to March 18, 2024, also known as Canadian generally accepted accounting principles (“**GAAP**”). This MD&A contains forward-looking statements, non-GAAP financial measures and other financial and non-financial measures. **Non-GAAP financial measures and ratios reported in this MD&A have been identified using capital letters and are defined herein.** Readers are cautioned that the MD&A should be read in conjunction with the Company’s disclosures under the headings “Non-GAAP and Other Financial Measures”, “Other Measurements”, “Risk and Uncertainties” and “Forward-Looking Statements” included in this MD&A. All dollar amounts are quoted in thousands of Canadian dollars (“**CA$**”), the reporting and functional currency of the Company, unless otherwise indicated.

Common Control Transaction

On June 20, 2023, Logan commenced active operations as a new growth-oriented exploration, development and production company formed through the spin-out of the early stage Montney assets of Spartan Delta Corp. ("**Spartan**"). Pursuant to the terms of an asset conveyance agreement between Logan and Spartan dated June 20, 2023, Spartan transferred certain oil and natural gas assets (the “**Transferred Assets**”) to Logan in exchange for one common share of Logan (a “**Logan Share**”) and one common share purchase warrant of Logan (a “**Transaction Warrant**”) for each common share of Spartan held (the "**Spin-Out**"). The Transferred Assets are focused in the prolific Montney resource trend of northwest Alberta and northeast British Columbia (“**NEBC**”), predominantly in the Simonette, Pouce Coupe and Flatrock areas, as well as legacy production from minor properties in NEBC. In aggregate, 173.2 million Logan Shares and 173.2 million Transaction Warrants were issued to Spartan in consideration for the Transferred Assets, representing the fair market value thereof, in the aggregate amount of approximately $60.6 million. The Logan Shares and Transaction Warrants issued to Spartan in connection with the Spin-Out were distributed to eligible holders of common shares of Spartan (“**Spartan Shareholders**”) on July 6, 2023 (the “**Distribution**”). Concurrent with the Distribution, Logan ceased to be a subsidiary of Spartan and is now a stand-alone legal entity.

Since the shareholders of Logan and Spartan were the same both before and after the conveyance of the Transferred Assets (at the time, Logan was a wholly-owned subsidiary of Spartan), the Spin-Out was deemed to be a common control transaction. The financial and operational results herein present the historic financial position, results of operations and cash flows of the Transferred Assets for all prior periods up to and including June 20, 2023 on a carve-out basis as if they had operated as a stand-alone entity subject to Spartan’s control. The financial position, results of operations and cash flows from March 10, 2023 (the date of incorporation of Logan) to June 20, 2023 include both the Transferred Assets and Logan on a combined basis, and from June 20, 2023 forward include the actual historical results of Logan after assuming the Transferred Assets upon close of the Spin-Out.

Judgements were required in determining the allocation of the reported amounts of Spartan to the carve-out financial statements of Logan. The basis of preparation and methods of allocation are described in note 2b) of the Annual Financial Statements. The carve-out financial statements do not necessarily reflect what the financial position, results of operations and cash flows would have been had these net assets been in a separate entity, or the future results of Logan, as it exists after the completion of the Spin-Out.

H2 2023 HIGHLIGHTS AND 2024 OUTLOOK

Logan is pleased to provide its inaugural year-end report to shareholders. The highlights in this section focus on the fourth quarter and second half of 2023 ("**H2 2023**"), reflecting the first full period of operations following the Spin-Out of the early stage Montney assets from Spartan on June 20, 2023. Since commencing active operations:

- Logan raised net equity proceeds of $102.2 million through completion of the previously announced private placement and exercise of the Transaction Warrants in the third quarter (collectively referenced herein as the "**July 2023 Financings**").
- Successfully executed on its exploration and development capital expenditure program spending $74.1 million during the second half of 2023, in line with budgeted Capital Expenditures before A&D of $75.0 million for the period. The Company also incurred $5.3 million of acquisition costs to expand its undeveloped acreage position at Simonette and to acquire certain equipment inventory.
  - At Simonette, the Company began delineating its land base targeting both crude oil and liquids-rich natural gas prospects in the north and south sections of the play. Logan drilled, completed and brought 2.0 net wells on production in September. During the fourth quarter, Logan drilled two additional wells and a third well was spud in late 2023.
  - At Pouce Coupe, Logan drilled, completed and brought 3.0 net oil wells on production in November driving the significant increase in oil production during the fourth quarter.
  - Logan added 62.25 net sections of land around our core area of Simonette, consisting of 32.75 net sections of Montney acreage and 29.5 net sections of land in non-Montney plays on and surrounding our existing asset base. Within the Montney acreage added, Logan has acquired a 14 net section contiguous block of land in the Lator area west of Simonette.
- Achieved production growth to 7,515 BOE per day (35% liquids) on average for the fourth quarter, up 39% from 5,394 BOE per day (24% liquids) during the previous quarter.
  - Production for the second half of 2023 exceeded guidance by 8% averaging 6,455 BOE per day (31% liquids) compared to the Company's forecast of 6,000 BOE per day (28% liquids).
- Logan's Operating Netback continues to improve as a result of operating leverage and improved scale in the business. The Company's Operating Netback averaged $23.63 per BOE during the fourth quarter, up 116% from $10.94 per BOE reported in the previous quarter, resulting in an average Operating Netback of $18.32 per BOE for the second half of 2023.
- Generated $15.4 million and $20.6 million of Adjusted Funds Flow during the respective three and six month periods ended December 31, 2023. Adjusted Funds Flow for the fourth quarter increased by 198% from $5.2 million during the third quarter of 2023, driven by Logan's liquids-weighted production and revenue growth, together with lower average royalties and a decrease in per unit operating and transportation expenses quarter over quarter.

Logan exited 2023 with a working capital surplus of $41.6 million, including $54.0 million of cash on hand and no bank debt. Subsequent to the reporting period in March 2024, the Company's lender increased the authorized borrowing amount available on its revolving demand credit facility from $15.0 million to $50.0 million (see also, "Capital Resources and Liquidity" and "Subsequent Events"). Logan is well positioned to execute on its 2024 capital expenditure program.

The table below summarizes selected highlights from the Company's financial and operating results for the three and six month periods ended December 31, 2023, representing the reporting periods subsequent to the Spin-Out:

(CA$ thousands, except as otherwise noted)	Q4 2023	H2 2023
FINANCIAL HIGHLIGHTS		
Oil and gas sales	28,653	46,141
Net income and comprehensive income	11,391	683
$ per common share, basic and diluted	0.02	0.00
Cash provided by operating activities	11,176	16,334
Adjusted Funds Flow (1)	15,392	20,551
$ per common share, basic (1)	0.03	0.05
$ per common share, diluted (1)	0.03	0.04
Capital Expenditures before A&D (1)	40,568	74,104
Acquisitions	151	5,295
Total assets	234,638	234,638
Working capital surplus	41,633	41,633
Shareholders' equity	174,116	174,116
Common shares outstanding (000s), end of period (2)	465,537	465,537
OPERATING HIGHLIGHTS AND NETBACKS (5)		
Average daily production		
Crude oil (bbls/d)	1,844	1,313
Condensate (bbls/d) (3)	456	350
Natural gas liquids (bbls/d) (3)	362	318
Natural gas (mcf/d)	29,116	26,844
BOE/d	7,515	6,455
% Liquids (4)	35%	31%
Average realized prices		
Crude oil ($/bbl)	90.40	95.82
Condensate ($/bbl) (3)	102.39	103.37
Natural gas liquids ($/bbl) (3)	51.61	51.20
Natural gas ($/mcf)	2.72	2.70
Combined average ($/BOE)	41.44	38.85
Netbacks ($/BOE) (5)		
Oil and gas sales	41.44	38.85
Processing and other revenue	1.25	1.46
Royalties	(3.37)	(4.41)
Operating expenses	(11.82)	(13.48)
Transportation expenses	(3.87)	(4.10)
Operating Netback ($/BOE) (5)	23.63	18.32
General and administrative expenses	(2.58)	(2.56)
Financing income (6)	1.35	1.61
Settlement of decommissioning obligations	(0.13)	(0.08)
Adjusted Funds Flow Netback ($/BOE) (5)	22.27	17.29

(1) "Adjusted Funds Flow" and "Capital Expenditures before A&D" do not have standardized meanings under IFRS Accounting Standards, refer to "Non-GAAP Measures and Ratios" section of this MD&A.
(2) Refer to "Share Capital" section of this press release.
(3) Condensate is a natural gas liquid ("**NGLs**") as defined by NI 51-101. See "Other Measurements".
(4) "Liquids" includes crude oil, condensate and NGLs.
(5) "Netbacks" are non-GAAP financial ratios calculated per unit of production. "Operating Netback", and "Adjusted Funds Flow Netback" do not have standardized meanings under IFRS Accounting Standards, refer to "Non-GAAP Measures and Ratios" section of this MD&A.
(6) Financing income, net of financing expenses excluding non-cash accretion of decommissioning obligations.

The following table summarizes Logan's actual results for the six months ended December 31, 2023 compared to the financial and operating guidance published in the Company's press release dated November 22, 2023 ("**H2 2023 Guidance**"):

	H2 2023 Actual	H2 2023 Guidance	Variance Amount	Variance %
Average production (BOE/d)	**6,455**	6,000	455	8
% Liquids	**31%**	28%	3	11
Forecast Average Commodity Prices				
WTI crude oil price (US$/bbl)	**80.29**	78.63	1.66	2
AECO natural gas price ($/GJ)	**2.39**	2.40	(0.01)	0
Average exchange rate (US$/CA$)	**1.35**	1.36	(0.01)	(1)
Operating Netback ($/BOE) (1)	**18.32**	15.55	2.77	18
Adjusted Funds Flow ($MM) (1)	**21**	15	6	40
Capital Expenditures before A&D ($MM) (1)	**74**	75	(1)	(1)
Acquisitions ($MM)	**5**	5	-	-
Working capital surplus, end of year ($MM)	**42**	36	6	17
Common shares outstanding, end of year (MM) (2)	**465.5**	465.5	-	-

(1) "Operating Netback", "Adjusted Funds Flow" and "Capital Expenditures before A&D" do not have standardized meanings under IFRS Accounting Standards, see "Non-GAAP Measures and Other Financial Measures".
(2) Based on actual common shares outstanding as of December 31, 2023. Refer to additional information regarding outstanding dilutive securities under the heading of "Share Capital".

The Company outperformed its H2 2023 production guidance of 6,000 BOE per day by 8%, achieving average production of 6,455 BOE per day. Capital Expenditures were in line with forecast. The Company delivered Adjusted Funds Flow of $21 million resulting in an Adjusted Funds Flow Netback of $17.29 per BOE, 24% higher than guidance of $13.97 per BOE. With realized commodity pricing generally in line with forecast, the beat primarily resulted from the higher liquids weighting of production, together with lower royalties and operating expenses on a BOE basis as compared to guidance. Logan's working capital surplus at year-end of $42 million is $6 million higher than forecast due to production outperformance compounded by higher Adjusted Funds Flow per BOE.

2024 OUTLOOK

Logan exited 2023 well positioned to continue executing on its strategic growth plan. The Company's 2024 capital budget and guidance is unchanged from preliminary guidance published in the press release dated November 22, 2023.

WTI oil prices, while volatile, have remained strong hovering between US$70/bbl to US$80/bbl and are expected to average US$75/bbl for the remainder of 2024 based on strip pricing. Together with a weak Canadian dollar, domestic crude oil prices are currently approximately CA$100/bbl driving the strong economics of our development program.

In February 2024, the NYMEX Henry Hub natural gas price benchmark reached a multi-decade low. High production levels in both Canada and the U.S., alongside storage reserves in Europe and North America, have collectively contributed to lower natural gas prices. AECO natural gas prices, too, are expected to remain challenged following a mild winter and through the second and third quarters of 2024, with a seasonal rebound anticipated next winter.

To protect cash flow and preserve project economics, the Company has entered into certain commodity price risk management contracts. Logan has hedged a notional 1,000 bbls/d of WTI oil at CA$102.00/bbl for March to June 2024 and an aggregate of 1,500 bbls/d of WTI oil at an average price of CA$101.33/bbl for July through December 2024. Additionally, the Company has hedged a notional 15,000 GJ/d of AECO natural gas at $1.73/GJ for the period from April to June 2024 and 20,000 GJ/d of AECO natural gas at $1.63/GJ for the period from July to September 2024. See also, "Commodity Hedging Update" under the heading of "Subsequent Events".

RESULTS OF OPERATIONS

PRODUCTION

	Three months ended December 31			Year ended December 31		
Average daily production	**2023**	2022	%	**2023**	2022	%
Crude oil (bbls/d)	**1,844**	837	120	**1,012**	1,031	(2)
Condensate (bbls/d)	**456**	266	71	**313**	301	4
NGLs (bbls/d)	**362**	242	50	**255**	292	(13)
Natural gas (mcf/d)	**29,116**	25,691	13	**25,370**	27,976	(9)
Combined average (BOE/d)	**7,515**	5,627	34	**5,808**	6,287	(8)
% Liquids	**35%**	24%	46	**27%**	26%	4

Production averaged 7,515 BOE per day during the fourth quarter of 2023, up 39% from 5,394 BOE per day in the previous quarter and up 34% from average production of 5,627 BOE per day in the fourth quarter of 2022. Production increased with the success of Logan's drilling program which commenced in the second half of 2023 following the Spin-Out. Logan's first 2.0 net wells at Simonette were brought on production in September 2023 and 3.0 net wells drilled on an existing pad at Pouce Coupe were brought on production in November 2023. The impact of new oil-weighted production drove Logan's liquids weighting to 35% on average for the fourth quarter of 2023 compared to 24% in the same quarter of the previous year.

Production for the calendar year ended December 31, 2023 of 5,808 BOE per day was 8% lower than the previous year average due to natural declines. Average production of 6,287 BOE per day in 2022 benefited from 3.0 net wells that were brought on production at Pouce Coupe in late November 2021. There were no new wells drilled on the Transferred Assets during the year ended December 31, 2022.

REVENUE

	Three months ended December 31			Year ended December 31		
(CA$ thousands, unless otherwise indicated)	**2023**	2022	%	**2023**	2022	%
Oil and gas sales, before royalties						
Crude oil	**15,339**	8,627	78	**35,584**	45,420	(22)
Condensate	**4,297**	2,591	66	**11,375**	13,080	(13)
NGLs	**1,721**	1,344	28	**4,638**	6,811	(32)
Natural gas	**7,296**	13,258	(45)	**27,261**	59,224	(54)
Oil and gas sales	**28,653**	25,820	11	**78,858**	124,535	(37)
Royalties	**(2,329)**	(4,326)	(46)	**(9,528)**	(17,025)	(44)
Oil and gas sales, net of royalties	**26,324**	21,494	22	**69,330**	107,510	(36)
Processing and other	**863**	875	(1)	**3,388**	3,325	2
	27,187	22,369	22	**72,718**	110,835	(34)

Oil and Gas Sales

Oil and gas sales were $28.7 million during the fourth quarter of 2023, up 64% from $17.5 million in the previous quarter and up 11% from $25.8 million in the fourth quarter of 2022. The increase in sales revenue was driven by Logan's oil-weighted production growth which more than offset materially lower gas prices and softer oil and NGLs pricing.

Oil and gas sales were $78.9 million for the year ended December 31, 2023, compared to $124.5 million in the previous year ended December 31, 2022. The decrease in oil and gas sales resulted from materially lower natural gas prices and softer oil and NGLs pricing, together with the decline in production volumes.

Average Realized Prices

	Three months ended December 31			Year ended December 31		
(CA$ thousands, unless otherwise indicated)	**2023**	2022	%	**2023**	2022	%
Average realized prices						
Crude oil ($/bbl)	**90.40**	112.02	(19)	**96.33**	120.64	(20)
Condensate ($/bbl)	**102.39**	105.99	(3)	**99.42**	118.92	(16)
NGLs ($/bbl)	**51.61**	60.38	(15)	**49.82**	63.94	(22)
Natural gas ($/mcf)	**2.72**	5.61	(52)	**2.94**	5.80	(49)
Combined average ($/BOE)	**41.44**	49.88	(17)	**37.19**	54.27	(31)
Benchmark commodity prices						
WTI Cushing Oklahoma (US$/bbl) (1)	**78.32**	82.64	(5)	**77.63**	94.23	(18)
Mixed Sweet Blend ("MSW") (CA$/bbl) (2)	**99.63**	110.01	(9)	**100.42**	120.08	(16)
NYMEX Henry Hub (US$/mmbtu) (3)	**2.88**	6.26	(54)	**2.74**	6.64	(59)
NYMEX – AECO 7A Basis (US$/mmbtu)	**(0.94)**	(2.14)	(56)	**(0.57)**	(2.36)	(76)
AECO 7A (CA$/GJ) (4)	**2.52**	5.29	(52)	**2.78**	5.27	(47)
AECO 5A (CA$/GJ) (5)	**2.18**	4.85	(55)	**2.50**	5.04	(50)
Exchange rate (CA$/US$) (1)	**1.36**	1.36	-	**1.35**	1.30	4

(1) Source: Sproule Associates Limited.
(2) Source: Weighted average trade volume and price per Net Energy and NGX.
(3) Source: Canadian Gas Price Reporter (NYMEX Settle).
(4) Source: Canadian Gas Price Reporter (NGX AB-NIT Month Ahead Index 7A).
(5) Source: Canadian Gas Price Reporter (NGX AB-NIT Same Day Index 5A).

Royalties

	Three months ended December 31			Year ended December 31		
(CA$ thousands, unless otherwise indicated)	**2023**	2022	%	**2023**	2022	%
Gross royalties, before GCA	**3,259**	5,132	(36)	**14,208**	20,260	(30)
Gas cost allowance ("GCA")	**(930)**	(806)	15	**(4,680)**	(3,235)	45
Royalties	**2,329**	4,326	(46)	**9,528**	17,025	(44)
$ per BOE	**3.37**	8.36	(60)	**4.49**	7.42	(39)
Average royalty rate (% of sales)	**8.1%**	16.8%	(52)	**12.1%**	13.7%	(12)

Royalty expenses consist primarily of Crown royalties paid to the provincial governments as well as payments to overriding royalty owners. Crown royalties are calculated based on commodity prices and individual well production rates, and as such are impacted by commodity price fluctuations, changes in production volumes and royalty incentive programs. Total royalties before GCA for the fourth quarter and year ended December 31, 2023 decreased as compared to prior periods primarily due new production receiving incentive royalty rates under the Alberta Modern Royalty Framework ("**MRF**"). GCA credits are typically actualized by the Crown during the second quarter of the year. The true-up of GCA for the 2022 calendar year was recorded in the second quarter of 2023, resulting in higher recoveries in the year ended December 31, 2023.

Processing and Other Revenue

	Three months ended December 31			Year ended December 31		
(CA$ thousands, unless otherwise indicated)	**2023**	2022	%	**2023**	2022	%
Processing and other	**863**	875	(1)	**3,388**	3,325	2
$ per BOE	**1.25**	1.69	(26)	**1.60**	1.45	10

Processing and other revenue primarily relates to processing fees earned on third party volumes processed through ownership in the Simonette 13-11 Gas Plant. Processing and other revenue is relatively consistent at approximately $0.9 million per quarter, with the fluctuations in average processing and other revenue per BOE driven by the movement in total production volumes.

OPERATING EXPENSES

	Three months ended December 31			Year ended December 31		
(CA$ thousands, unless otherwise indicated)	**2023**	2022	%	**2023**	2022	%
Operating expenses	**8,171**	7,710	6	**31,073**	32,458	(4)
$ per BOE	**11.82**	14.89	(21)	**14.65**	14.14	4

Total operating expenses are relatively consistent for the fourth quarter and year ended December 31, 2023 compared to the same periods of 2022 primarily due to significant fixed costs related to ownership in the Simonette 13-11 Gas Plant which do not fluctuate with production.

With the increase in production volumes during the fourth quarter, the Company realized a significant decrease in per unit operating costs which averaged $11.82 per BOE for the three months ended December 31, 2023, down 21% from the same quarter of 2022. Additionally, at the end of the third quarter Logan brought on a water disposal well in Pouce Coupe which provided cost savings on water trucking and disposal throughout the fourth quarter.

TRANSPORTATION EXPENSES

	Three months ended December 31			Year ended December 31		
(CA$ thousands, unless otherwise indicated)	**2023**	2022	%	**2023**	2022	%
Transportation expenses	**2,678**	1,639	63	**8,069**	7,583	6
$ per BOE	**3.87**	3.17	22	**3.81**	3.30	15

Total transportation expenses for the fourth quarter of 2023 of $2.7 million increased by 63% from $1.6 million in the comparative quarter. The increase in transportation expenses resulted from the 34% increase in total volumes together with the significant increase in oil production which carries a higher transportation cost per BOE.

On a per unit basis, transportation expenses were $3.87 per BOE in the fourth quarter and averaged $3.81 per BOE for the year ended 2023. In addition to the higher transportation costs for liquids, on the Spin-Out Logan assumed certain firm transportation contracts with additional capacity to grow production which resulted in higher transportation costs in the current periods (see also, “Commitments and Contingencies”). Transportation expenses declined from $4.41 per BOE in the third quarter of 2023 as soft road conditions put upward pressure on costs in the previous quarter.

OPERATING NETBACKS

The components of Logan's Operating Netbacks are summarized below. All amounts expressed on a BOE equivalent basis are non-GAAP financial ratios.

	Three months ended December 31			Year ended December 31		
($ per BOE)	**2023**	2022	%	**2023**	2022	%
Oil and gas sales	**41.44**	49.88	(17)	**37.19**	54.27	(31)
Processing and other revenue	**1.25**	1.69	(26)	**1.60**	1.45	10
Royalties	**(3.37)**	(8.36)	(60)	**(4.49)**	(7.42)	(39)
Operating expenses	**(11.82)**	(14.89)	(21)	**(14.65)**	(14.14)	4
Transportation expenses	**(3.87)**	(3.17)	22	**(3.81)**	(3.30)	15
Operating Netback	**23.63**	25.15	(6)	**15.84**	30.86	(49)

Logan's Operating Netback averaged $23.63 per BOE for the three months ended December 31, 2023, reflecting an increase of 116% from the average Operating Netback of $10.94 per BOE during the previous quarter ended September 30, 2023. The increase resulted from the Company's liquids-weighted production growth, together with lower average royalties and a decrease in per unit operating and transportation expenses. Relative to the fourth quarter of 2022, the Company's Operating Netback decreased by 6% as weaker commodity prices resulted in lower realized pricing, however the impact was partly mitigated by the increase in oil and NGLs weighted production together with lower royalties and operating expenses.

The Operating Netback averaged $15.84 per BOE for the 2023 calendar year, compared to $30.86 per BOE on average in 2022 in which commodity prices averaged the highest levels of the past decade. The decrease in Operating Netbacks reflects materially lower natural gas prices and softer oil and NGLs pricing, partly offset by lower royalties, compounded by declining production which contributed to higher per unit operating and transportation costs.

GENERAL AND ADMINISTRATIVE ("G&A") EXPENSES

	Three months ended December 31			Year ended December 31		
(CA$ thousands, unless otherwise indicated)	**2023**	2022	%	**2023**	2022	%
Gross G&A expenses ("**Gross G&A**")	**3,011**	1,870	61	**8,188**	6,806	20
Overhead recoveries	**(1,225)**	(135)	807	**(2,392)**	(477)	401
Net G&A expenses ("**Net G&A**")	**1,786**	1,735	3	**5,796**	6,329	(8)
Gross G&A ($ per BOE)	**4.35**	3.61	20	**3.86**	2.97	30
Net G&A ($ per BOE)	**2.58**	3.35	(23)	**2.73**	2.76	(1)

For purposes of the carve-out financial statements, G&A of Spartan was allocated to the Transferred Assets pro rata on a head count basis for the previous year ended December 31, 2022 and up to June 20, 2023.

For the six month period ended December 31, 2023 following the Spin-Out, Logan's Gross G&A expenses were $5.1 million ($4.32 per BOE) and Net G&A expenses were $3.0 million ($2.56 per BOE). The increase in Gross G&A expenses relative to allocated amounts in the comparative periods reflects incremental costs to manage the Transferred Assets as a stand alone entity. Overhead recoveries increased during 2023 over the comparative periods in conjunction with higher capital expenditures. Prior to the Spin-Out, G&A was allocated excluding capital overhead recoveries and capitalized G&A, given that minimal capital expenditures were incurred by Spartan on the Transferred Assets during the periods.

SHARE BASED COMPENSATION ("SBC")

	Three months ended December 31			Year ended December 31		
(CA$ thousands, unless otherwise indicated)	**2023**	2022	%	**2023**	2022	%
Stock options	**560**	105	433	**889**	463	92
Share awards	**-**	503	(100)	**2,991**	1,619	85
Financing Warrants	**-**	-	-	**9,790**	-	nm
Share based compensation expense	**560**	608	(8)	**13,670**	2,082	557
$ per BOE	**0.81**	1.17	(31)	**6.45**	0.91	609

For purposes of the carve-out financial statements, SBC expense of Spartan was allocated to the Transferred Assets pro rata on a head count basis for the previous year ended December 31, 2022 and up to June 20, 2023. For the six month period ended December 31, 2023 following the Spin-Out, Logan's total SBC expense was $10.4 million comprised of: (a) $0.6 million related to stock options granted in the fourth quarter; and (b) a one-time charge of $9.8 million related to the Financing Warrants issued in the third quarter.

(a) Long term incentive plans

Shareholders of the Company approved Logan's stock option plan and share award incentive plan on May 16, 2023 (the "**LTI Plans**"). On November 22, 2023, the Company's Board of Directors approved the grant of 22.7 million stock options with an exercise price of $0.89 per share. As at December 31, 2023, the outstanding stock options represent 4.9% of Logan's total common shares issued and outstanding. SBC expense related to the stock options granted by Logan is recognized over the three-year vesting period using graded amortization which resulted in SBC expense of $0.6 million during the fourth quarter of 2023.

(b) Financing Warrants

During the third quarter of 2023, the Company recorded a one-time share based payment charge of $9.8 million related to 64.3 million Financing Warrants issued under the Private Placement (see also, "Share Capital"). Each Financing Warrant entitles the holder to purchase one Logan Share at an exercise price of $0.35 for a period of five years, expiring on July 12, 2028. The Financing Warrants were valued using the Black-Scholes option pricing model which resulted in a fair value of $0.15 per share.

The Financing Warrants vested and became exercisable as to one-third upon the 10-day weighted average trading price of Logan Shares (the "**Market Price**") equaling or exceeding $0.70 per share, an additional one-third upon the Market Price equaling or exceeding $0.7875 per share and a final one-third upon the Market Price equaling or exceeding $0.875 per share. The Financing Warrants became fully vested in the third quarter of 2023. The Market Price of Logan Shares on the TSXV averaged $0.96 per share for the period from listing on July 18, 2023 to December 31, 2023.

FINANCING

	Three months ended December 31			Year ended December 31		
(CA$ thousands, unless otherwise indicated)	**2023**	2022	%	**2023**	2022	%
Interest and fees on bank debt	**48**	-	-	**77**	-	-
Interest income	**(984)**	-	-	**(2,003)**	-	-
Interest expense (income)	**(936)**	-		**(1,926)**	-	-
Financing cost of lease liabilities	**3**	5	(40)	**13**	19	(32)
Accretion of decommissioning obligations	**260**	229	14	**935**	795	18
Financing expense (income)	**(673)**	234	(388)	**(978)**	814	(220)
Financing expense (income) ($/BOE)	**(0.97)**	0.45	(316)	**(0.46)**	0.36	(228)

The Company earned interest income of $1.0 million and $2.0 million during the fourth quarter and year ended December 31, 2023, respectively. Interest income on cash raised through the July 2023 Financings more than offset financing expenses in the period.

Logan has access to a revolving demand credit facility with National Bank of Canada. The Credit Facility was undrawn during the quarter. Total interest and fees on bank debt includes standby fees on the undrawn facility and amortization of upfront fees incurred to establish the Credit Facility. Additional information is provided under the heading "Capital Resources and Liquidity".

EXPLORATION AND EVALUATION EXPENSES

	Three months ended December 31			Year ended December 31		
(CA$ thousands, unless otherwise indicated)	**2023**	2022	%	**2023**	2022	%
Expired mineral leases	**-**	-	-	**-**	169	(100)
Impairment	**-**	-	-	**21,017**	-	nm
Exploration and evaluation expense	**-**	-	-	**21,017**	169	nm
Exploration and evaluation ($ per BOE)	**-**	-	-	**9.91**	0.07	nm

As at March 31, 2023, an impairment loss of $21.0 million on E&E assets was recognized based on Spartan's historical records for the Transferred Assets. Spartan recognized an impairment loss on the Simonette and Pouce Coupe exploration and evaluation ("**E&E**") assets as these assets were not a development focus of Spartan, with no capital allocated to develop these E&E assets beyond the values captured in the reserve report. The estimated fair value was based on an independent third party land valuation of $5.7 million for the undeveloped Flatrock property. As at December 31, 2023, there were no further indicators of impairment relating to E&E assets.

DEPLETION, DEPRECIATION AND IMPAIRMENT ("DD&I")

	Three months ended December 31			Year ended December 31		
(CA$ thousands, unless otherwise indicated)	**2023**	2022	%	**2023**	2022	%
Depletion and depreciation of PP&E	**8,102**	5,974	36	**25,193**	22,199	13
Depreciation of ROU Assets	**41**	33	24	**148**	138	7
Depletion and depreciation	**8,143**	6,007	36	**25,341**	22,337	13
Impairment of PP&E	**-**	-	-	**7,566**	-	-
Reversal of impairment of PP&E	**(8,448)**	-	-	**(8,448)**	-	-
Total DD&I expense	**(305)**	6,007	(105)	**24,459**	22,337	9
Depletion and depreciation ($ per BOE)	**11.78**	11.60	2	**11.95**	9.73	23
Total DD&I expense ($ per BOE)	**(0.44)**	11.60	(104)	**11.54**	9.73	19

The Company reported depletion and depreciation ("**D&D**") expense of $8.1 million ($11.78 per BOE) for the fourth quarter of 2023, up 36% from $6.0 million ($11.60 per BOE) in the fourth quarter of 2022. The increase in D&D expense per BOE is primarily due to the increase in production volumes quarter over quarter. While Logan substantially increased its proved and probable reserves as at December 31, 2023, as compared to the proved and probable reserves attributed to the Transferred Assets as at December 31, 2022, Logan's future development capital costs increased in tandem.

Total DD&I expense for the current year includes an impairment loss on PP&E of $7.6 million recognized in Spartan's historical records as at March 31, 2023, which was subsequently more than offset by an $8.4 million reversal of accumulated PP&E impairment as at December 31, 2023. While Spartan did not have development plans for the Transferred Assets thereby triggering the impairment loss at March 31, 2023, Logan commenced an active development program subsequent to the Spin-Out and reported a material increase in the Company's oil and gas

reserves at December 31, 2023. As a result, Logan recognized a reversal of impairment of $8.4 million for the Alberta CGU, representing full reversal of accumulated PP&E impairment losses recognized in Spartan's historical records for the Transferred Assets, net of deemed depletion that would have been recorded had no impairment losses been recognized. Refer to note 7 of the Annual Financial Statements for details of the impairment and impairment reversal calculations.

INCOME TAXES

	Three months ended December 31			Year ended December 31		
(CA$ thousands, unless otherwise indicated)	**2023**	2022	**%**	**2023**	2022	%
Current income tax	**-**	-	-	**-**	-	-
Deferred income tax	**3,571**	-	-	**3,361**	-	-
Income tax expense	**3,571**	-	-	**3,361**	-	-
Net income (loss) before income taxes	**14,962**	4,436	237	**(30,438)**	39,403	(177)
Effective tax rate	**23.9%**	-	-	**(11.0%)**	-	-

Logan is subject to income taxes at a combined federal and provincial statutory tax rate of 23.0%. Logan's effective tax rate of 23.9% for the three months ended December 31, 2023 is higher than the statutory tax rate due to non-deductible SBC expense recorded in the period.

The Company did not record current or deferred income taxes for the carve-out financial statements as Logan was not the legal obligor to either the deferred taxes or the tax pools utilized for periods prior to the Spin-Out. This resulted in a negative effective tax rate for the year ended December 31, 2023 as majority of the net loss for the year was incurred during the carve out period. Subsequent to the Spin-Out, Logan recorded $3.4 million of deferred income tax despite a net loss for the period primarily due to non-deductible share based payment expense related to the Financing Warrants.

Logan's total available tax pools are estimated to be approximately $119.4 million as at December 31, 2023, up from $60.6 million of tax pools transferred on the Spin-Out. The Company's estimated tax pools increased as capital expenditures exceeded cash flow during the second half of 2023. The composition of the Company's estimated tax pools is summarized in the table below.

(CA$ thousands, unless otherwise indicated)	Rate [1]	**December 31, 2023**	December 31, 2022
Canadian oil and gas property expenses (COGPE)	10%	**49,875**	-
Canadian development expenses (CDE)	30%	**37,390**	-
Canadian exploration expenses (CEE)	100%	**3,148**	-
Undepreciated capital cost (UCC) [2]	25%	**13,788**	-
Share issue costs (SIC)	5 years	**74**	-
Non-capital losses (NCL) [3]	100%	**15,140**	-
Total available tax pools (estimate)		**119,415**	-

(1) The deduction rates shown represent the maximum annual deduction permitted on a declining balance basis, except for share issue costs which are deductible on a straight-line basis over 5 years.

(2) The majority of the UCC balance relates to Class 41 assets which are deductible at 25% per year.

(3) NCLs expire in year 2043.

NET INCOME (LOSS) AND COMPREHENSIVE INCOME (LOSS)

	Three months ended December 31			Year ended December 31		
(CA$ thousands, unless otherwise indicated)	**2023**	2022	%	**2023**	2022	%
Revenue	**27,187**	22,369	22	**72,718**	110,835	(34)
Expenses	**(12,225)**	(17,933)	(32)	**(103,156)**	(71,432)	44
Net income (loss) before taxes	**14,962**	4,436	237	**(30,438)**	39,403	(177)
Deferred income tax expense	**3,571**	-	-	**3,361**	-	-
Net income (loss) and comprehensive income (loss)	**11,391**	4,436	157	**(33,799)**	39,403	(186)
WA Shares outstanding – basic (000s)	**465,537**	173,201	169	**307,864**	173,201	78
WA Shares outstanding – diluted (000s) [(1)]	**503,660**	173,201	191	**307,864**	173,201	78
Net income (loss) $ per share basic and diluted	**0.02**	0.03	(33)	**(0.11)**	0.23	(148)

(1) In computing the diluted loss per common share for the year ended December 31, 2023, the Company excluded the effect of the Transaction Warrants and Financing Warrants as they were anti-dilutive to the net loss per share. The diluted weighted average shares outstanding excludes the impact of stock options issued, as the stock options were out-of-the-money subsequent to issuance.

The Company generated net income of $11.4 million ($0.02 per share) for the fourth quarter, increasing 157% over net income of $4.4 million ($0.03 per share) for the comparative period. Increased production volumes in the current quarter more than offset the effect of lower commodity prices, with new production volumes drawing lower royalty rates and more efficient operating costs per BOE. Additionally, net income for the fourth quarter of 2023 includes an impairment reversal of $8.4 million recognized in connection with the material increase in the Company's estimated oil and gas reserves as at December 31, 2023, partly offset by deferred income taxes.

The Company incurred a net loss of $33.8 million ($0.11 per share) for the year ended December 31, 2023, as compared to net income of $39.4 million ($0.23 per share) generated in the prior year. The current year loss primarily resulted from an impairment loss on E&E assets of $21.0 million recognized by Spartan as at March 31, 2023 and a one-time charge of $9.8 million of SBC expense related to the Financing Warrants. In addition to the effect of lower commodity prices, the decrease in profitability in the current year reflects the declining production base as Spartan allocated minimal capital to the Transferred Assets prior to the Spin-Out, contributing to higher per unit expenses in the carve-out financial statements for the first half of 2023.

CASH PROVIDED BY OPERATING ACTIVITIES AND ANALYSIS OF OTHER NON-GAAP MEASURES

The tables in this section outline the components of the Company's cash provided by operating activities as well as the average Netback ($ per BOE) for each component. The subtotals provided in the table for Operating Income and Adjusted Funds Flow are used by Logan as key performance measures but are not intended to replace cash provided by operating activities, net income or other measures of financial performance calculated in accordance with IFRS Accounting Standards. Refer to advisories under "Non-GAAP and Other Financial Measures".

Fourth Quarter of 2023 compared to Fourth Quarter of 2022

Amounts are CA$ thousands, except as noted	**Q4/23**	Q4/22	%	**Q4/23 $/BOE**	Q4/22 $/BOE	%
Oil and gas sales	**28,653**	25,820	11	**41.44**	49.88	(17)
Processing and other revenue	**863**	875	(1)	**1.25**	1.69	(26)
Royalties	**(2,329)**	(4,326)	(46)	**(3.37)**	(8.36)	(60)
Operating expenses	**(8,171)**	(7,710)	6	**(11.82)**	(14.89)	(21)
Transportation expenses	**(2,678)**	(1,639)	63	**(3.87)**	(3.17)	22
Operating Income (1)	**16,338**	13,020	25	**23.63**	25.15	(6)
G&A expenses	**(1,786)**	(1,735)	3	**(2.58)**	(3.35)	(23)
Financing income (expenses) (2)	**933**	(5)	nm	**1.35**	(0.01)	nm
Settlement of decommissioning obligations	**(93)**	(115)	(19)	**(0.13)**	(0.22)	(41)
Adjusted Funds Flow (1)	**15,392**	11,165	38	**22.27**	21.57	3
Change in non-cash working capital	**(4,216)**	(607)	595	**(6.10)**	(1.17)	421
Cash provided by operating activities	**11,176**	10,558	6	**16.17**	20.40	(21)
Adjusted Funds Flow per share (1)	**15,392**	11,165	38	**22.27**	21.57	3
Basic ($ per common share)	**0.03**	0.06	(50)			
Diluted ($ per common share)	**0.03**	0.06	(50)			

(1) Refer to "Non-GAAP Measures" section of this MD&A.

(2) Excludes non-cash accretion of decommissioning obligations.

Logan generated $15.4 million of Adjusted Funds Flow for the three months ended December 31, 2023, up from $11.2 million in the fourth quarter of 2022. The increase in Adjusted Funds Flow was driven by higher Operating Income which increased primarily due to higher revenues and lower royalties and operating costs, partly offset by higher transportation costs.

Logan's cash provided by operating activities was $11.2 million and $10.6 million for the three months ended December 31, 2023 and 2022, respectively, which includes the impact of changes in non-cash working capital. The change in non-cash working capital varies each period based on seasonal changes in corporate activity levels, the impact of production levels and commodity prices on accrued revenue receivable, and timing of processing payments, among other factors. In the fourth quarter of 2023, the net decrease in non-cash operating working capital is primarily due to increases in accounts receivable partly offset by increases in operating accounts payable at December 31, 2023 compared to September 30, 2023, reflecting the impact of increased production in the fourth quarter.

Year ended December 31, 2023 compared to Year ended December 31, 2022

Amounts are CA$ thousands, except as noted	**2023**	2022	%	**2023 $/BOE**	2022 $/BOE	%
Oil and gas sales	**78,858**	124,535	(37)	**37.19**	54.27	(31)
Processing and other revenue	**3,388**	3,325	2	**1.60**	1.45	10
Royalties	**(9,528)**	(17,025)	(44)	**(4.49)**	(7.42)	(39)
Operating expenses	**(31,073)**	(32,458)	(4)	**(14.65)**	(14.14)	4
Transportation expenses	**(8,069)**	(7,583)	6	**(3.81)**	(3.30)	15
Operating Income [1]	**33,576**	70,794	(53)	**15.84**	30.86	(49)
G&A expenses	**(5,796)**	(6,329)	(8)	**(2.73)**	(2.76)	(1)
Financing income (expenses) [2]	**1,913**	(19)	nm	**0.90**	(0.01)	nm
Realized foreign exchange gain	**(1)**	-	-	**-**	-	-
Settlement of decommissioning obligations	**(345)**	(341)	1	**(0.16)**	(0.15)	7
Adjusted Funds Flow [1]	**29,347**	64,105	(54)	**13.85**	27.94	(50)
Transaction costs	**(43)**	-	nm	**(0.02)**	-	-
Change in non-cash working capital	**(5,350)**	3,010	(278)	**(2.52)**	1.31	(292)
Cash provided by operating activities	**23,954**	67,115	(64)	**11.31**	29.25	(61)
Adjusted Funds Flow per share [1]						
Basic ($ per common share)	**0.10**	0.37	(73)			
Diluted ($ per common share)	**0.09**	0.37	(76)			

(1) Refer to “Non-GAAP Measures” section of this MD&A.

(2) Excludes non-cash accretion of decommissioning obligations.

Adjusted Funds Flow for the year ended December 31, 2023 was $29.3 million, of which $20.6 million was generated in the six month period following the Spin-Out. By comparison, the Transferred Assets generated $64.1 million of Adjusted Funds Flow during the previous year, driven primarily by higher revenues as commodity prices averaged the highest levels of the past decade in 2022. The decrease in Adjusted Funds Flow and cash provided by operating activities in the current year is primarily due to lower Operating Income (as more particularly discussed herein), partly offset by lower G&A and financing income in 2023. The negative change in non-cash working capital attributed to operating activities in 2023 primarily relates to the increase in accounts receivable as at December 31, 2023 relative to December 31, 2022.

CASH USED IN INVESTING ACTIVITIES AND CAPITAL EXPENDITURES

The following table summarizes Capital Expenditures during the three months and years ended December 31, 2023 and 2022. The term Capital Expenditures does not have a standardized meaning under IFRS Accounting Standards and may not be directly comparable to measures used by other companies. The most directly comparable GAAP measure is cash used in investing activities which was $47.2 million and $68.2 million for the fourth quarter and year ended December 31, 2023, respectively (refer to reconciliation provided under the heading "Non-GAAP and Other Financial Measures").

CAPITAL EXPENDITURES	Three months ended December 31			Year ended December 31		
(CA$ thousands)	**2023**	2022	%	**2023**	2022	%
Land and seismic	**3,328**	5,315	(37)	**8,126**	5,611	45
Drilling and completion	**31,656**	-	-	**59,024**	1,147	nm
Facilities, pipeline and well equipment	**5,429**	134	nm	**12,173**	677	nm
Production optimization	**155**	-	-	**1,083**	206	426
Capital Expenditures before A&D [(1)]	**40,568**	5,449	645	**80,406**	7,641	952
Acquisitions	**151**	-	-	**5,395**	-	-
Dispositions	**-**	-	-	**-**	(88)	(100)
Capital Expenditures [(1)]	**40,719**	5,449	647	**85,801**	7,553	nm

(1) Refer to "Non-GAAP Measures and Ratios" for the reconciliation to cash used in investing activities.

The Company's Capital Expenditures before A&D were $40.6 million and $80.4 million for the three months and year ended December 31, 2023, respectively. Logan commenced its drilling program in the second half of 2023 which included 2.0 net Simonette wells and 3.0 net Pouce Coupe wells drilled, completed and brought on production. Additionally, Logan drilled a further 2.0 net Simonette wells, with a third 1.0 Simonette well spud in late 2023. Subsequent to the Spin-Out, Logan also spent $3.0 million on seismic, $3.6 million at Crown land sales, $7.2 million on facilities and equipment primarily related to water injection facilities at Pouce Coupe, pipe for a water disposal pipeline project and facility debottlenecking projects in progress, and spent $1.1 million on production optimization primarily related to a gas lift compressor and electric submersible pump installed at Simonette.

Logan incurred $5.4 million of acquisition costs during the year ended December 31, 2023, including $2.9 million to expand the Company's undeveloped acreage position at Simonette as well as $2.4 million of casing and equipment purchased from Spartan (see "Related Party Disclosures").

Minimal capital expenditures were incurred prior to Spin-Out when the Transferred Assets were owned by Spartan.

DRILLING ACTIVITY	Three months ended December 31		Year ended December 31	
Number of Net Wells	**2023**	2022	**2023**	2022
Drilled [(1)]	**4.0**	3.0	**7.0**	3.0
Completed	**3.0**	3.0	**5.0**	3.0
On production	**3.0**	3.0	**5.0**	3.0
Service/disposal [(1)]	**-**	-	**-**	-

(1) Wells are counted as drilled based on the rig release date.

CAPITAL RESOURCES AND LIQUIDITY

Logan's capital management objectives are to maintain a flexible capital structure in order to execute on strategic opportunities throughout the business cycle, respond to changes in economic conditions, meet its financial obligations and fund future settlements of decommissioning obligations.

As at December 31, 2023, the Company's capital structure is comprised of working capital and shareholders' equity.

(CA$ thousands, except as noted)	**December 31, 2023**	December 31, 2022
Current assets	**69,172**	8,758
Current liabilities	**(27,539)**	(8,481)
Working capital surplus	**41,633**	277
Total shareholders' equity	**174,116**	95,795

Logan's working capital surplus increased from $0.3 million at December 31, 2022 to $41.6 million at December 31, 2023 primarily due to cash proceeds under the July 2023 Financings partly offset by an increase in capital spending as the Company commenced its exploration and development program in the second half of 2023 following the Spin-Out. During the six months ended December 31, 2023, the Company utilized the net cash proceeds of $102.2 million after issue costs from the July 2023 Financings and $20.6 million of Adjusted Funds Flow from operating activities to fund the Company's Capital Expenditures of $79.4 million (including acquisitions). As at December 31, 2023, Logan had $54.0 million of cash on hand and no bank debt outstanding.

Logan is well positioned to execute on its short and longer term growth strategy. The Company's capital expenditure program for 2024 is expected to be funded by a combination of cash on hand, cash provided by operating activities and advances under the Company's Credit Facility. In order to maintain or adjust its capital structure in the future, the Company may issue new common shares or other equity securities, issue debt, adjust capital expenditures and acquire or dispose of assets.

Logan's existing capital resources, including approximately $54.0 million of cash on hand, are sufficient to satisfy its financial obligations for the next twelve months. The following table outlines a contractual maturity analysis for the Company's financial liabilities and undiscounted lease liabilities as at December 31, 2023:

(CA$ thousands)	1 year	2 to 3 years	4 to 5 years	> 5 years	Total
Accounts payable and accrued liabilities	25,704	-	-	-	25,704
Undiscounted lease liabilities	140	15	-	-	155
Total	**25,844**	**15**	**-**	**-**	**25,859**

CREDIT FACILITY

In July 2023, the Company established a senior secured revolving demand credit facility with National Bank of Canada (the "**Credit Facility**"). As at December 31, 2023, the Company had no bank debt outstanding on the Credit Facility but had issued $1.3 million of undrawn standby letters of credit which reduce the remaining borrowing capacity available.

The authorized borrowing base available under the Credit Facility was $15.0 million as at and during the period ended December 31, 2023. In March 2024, the borrowing base was increased to $50.0 million (see "Subsequent Events"). The borrowing base is subject to semi-annual reviews and may also be subject to redetermination upon, among other things, the liability management rating of the Company falling below 2.0 or disposing of material properties. The annual review was completed early in March 2024 and the next review is scheduled to occur in November 2024.

The Credit Facility is secured by a first fixed and floating charge debenture over all the Company's assets in the amount of $50.0 million and a general assignment of book debts. The debenture was subsequently increased to $150.0 million in March 2024 in conjunction with the increase in borrowing base (see "Subsequent Events"). As the Credit Facility is

repayable on demand, amounts drawn on the facility in the future will be presented within current liabilities. Repayments of principal are not required until requested by National Bank of Canada, provided that the borrowings do not exceed the authorized borrowing base and the Company is in compliance with all covenants, representations and warranties.

As at December 31, 2023, the Company was subject to a financial covenant whereby the Company's "Adjusted Working Capital" ratio (as defined in the credit agreement), calculated quarterly, shall not be less than 1.0 to 1.0. In March 2024, the "Adjusted Working Capital" covenant was replaced with a "Net Debt to Cash Flow" covenant, whereby the Company's net debt relative to trailing cash flow (as defined in the credit agreement), calculated quarterly, shall not be greater than 2.0 to 1.0 (see "Subsequent Events"). The Credit Facility also includes other standard business operating covenants, including but not limited to limitations on acquisitions and dispositions, distributions and hedging arrangements. As at December 31, 2023, Logan's Adjusted Working Capital ratio was 3.01 and the Company is in compliance with all covenants.

The Credit Facility provides for borrowings through direct advances, bankers' acceptances and letters of credit. Interest is payable monthly for borrowings through direct advances at the bank's prime rate plus the applicable margin. Borrowings through bankers' acceptances are typically advanced for maturity periods of one to three months and are funded net of interest at the Canadian Dollar Offered Rate ("**CDOR**") plus bank stamping fees at the applicable margin. In March 2024 as part of the annual review completed, CDOR was replaced with the Canadian Overnight Repo Rate in preparation for the phase out of CDOR in 2024. The Company will incur standby fees on the undrawn facility which also fluctuate based on the applicable margin.

SHARE CAPITAL

Common shares of Logan were listed on the TSXV and commenced trading on July 18, 2023, under the symbol "LGN".

The Company is authorized to issue an unlimited number of common shares, an unlimited number of preferred shares and an unlimited number of special shares, each without par value. The Company issued 173.2 million common shares and 173.2 million Transaction Warrants in connection with the Spin-Out. During the third quarter of 2023, 153.8 million of the total 173.2 million Transaction Warrants were exercised for proceeds of $53.8 million and 19.4 million Transaction Warrants expired on August 14, 2023. In July 2023, 138.5 million common shares and 64.3 million Financing Warrants were issued pursuant to the Private Placement. As of December 31, 2023, and the date of this MD&A, there were 465.5 million common shares outstanding. There are no preferred shares or special shares outstanding.

The total number of outstanding securities of the Company is provided below:

Number of securities outstanding (000s)	March 10, 2023	**December 31, 2023**	**March 18, 2024**
Common shares	-	**465,537**	**465,537**
Financing Warrants [(1)]	-	**64,286**	**64,286**
Stock options [(2)]	-	**22,695**	**22,670**
Total securities outstanding [(3)]	-	**552,518**	**552,493**

(1) The Financing Warrants entitle the holder to purchase Logan Shares at an exercise price of $0.35 per common share on or before July 12, 2028.

(2) On November 22, 2023, 22.7 million stock options were granted with an exercise price of $0.89 per common share and a remaining term of 4.9 years as at December 31, 2023.

(3) The total number of securities outstanding is provided for information purposes only. This calculation does not factor in whether the securities are in-the-money or the number of shares deemed to be repurchased under the treasury stock method in accordance with IFRS Accounting Standards. As such it should not be viewed as an alternative to the diluted weighted average number of common shares outstanding determined in accordance with IFRS Accounting Standards, as presented in the table below.

The table below summarizes the weighted average number of common shares outstanding (000s) used in the calculation of diluted EPS and diluted AFF per share:

	Three months ended December 31			Year ended December 31		
(000s)	**2023**	2022[3]	%	**2023**	2022[3]	%
WA Shares outstanding, basic	**465,537**	173,201	169	**307,864**	173,201	78
Dilutive effect of outstanding securities [1][2]	**38,123**	-	-	**31,235**	-	-
WA Shares outstanding, diluted	**503,660**	173,201	191	**339,099**	173,201	96

(1) Dilutive effect of outstanding securities includes the incremental dilutive impact of the Transactions Warrants between the date of issuance of June 20, 2023 and the exercise of the Transaction Warrants, in addition to the dilutive impact of the Financing Warrants from the date of issuance on July 12, 2023. The diluted weighted average shares outstanding excludes the impact of stock options issued, as the stock options were out-of-the-money subsequent to issuance.

(2) For the year ended December 31, 2023, the outstanding securities were antidilutive to Logan's net loss per share, however they are dilutive to AFF per share.

(3) The number of shares outstanding for the periods prior to the Spin-Out is deemed to be the number of shares issued by the Company to Spartan upon closing of the Spin-Out (173.2 million).

COMMITMENTS AND CONTINGENCIES

The following table summarizes the Company's contractual commitments as of December 31, 2023:

(CA$ thousands)	2024	2025	2026	2027	2028	Thereafter
Gas transportation [1]	7,155	6,005	2,214	1,946	7,387	46,345
Liquids transportation [2]	197	231	60	-	-	-
Processing fees [3]	6,927	7,569	7,638	5,018	4,149	22,027
Capital commitments [4]	2,070	-	-	-	-	-
Total commitments [5]	**16,349**	**13,805**	**9,912**	**6,964**	**11,536**	**68,372**

(1) Logan has firm transportation commitments on natural gas pipelines in Alberta until October 2035.

(2) Relates to upstream NGLs transportation contract in place until March 2026.

(3) Processing fee commitments relate to the following agreements: (i) firm capacity for natural gas gathering and processing at the NorthRiver Fourth Creek and Gordondale East gas plants until March 2027; and (ii) firm capacity for natural gas gathering and processing at the Kanata Simonette gas plant until September 2040.

(4) Capital commitments relates to agreements committing Logan to purchase a total $4.0 million of casing and tubing for capital projects over 2023 to 2024, of which $2.1 million is remaining.

(5) The commitments table does not include lease liabilities. A contractual maturity of the Company's financial liabilities and undiscounted lease payments is provided under "Capital Resources and Liquidity".

OFF-BALANCE SHEET ARRANGEMENTS

Except for the commitments and contingencies disclosed herein, the Company does not believe it has any off-balance sheet arrangements that have, or are reasonably likely to have, a current or future impact of the Company's financial condition, results of operations, liquidity or capital expenditures.

RELATED PARTY DISCLOSURES

a) Inter-corporate relationships

As at December 31, 2023, Logan is a stand alone legal entity. Logan was initially incorporated on March 10, 2023 as a wholly owned subsidiary of Spartan. On July 6, 2023, the Distribution of Logan Shares and Transaction Warrants to eligible holders of common shares of Spartan was completed and Logan ceased to be a subsidiary, and consequently is no longer a related party of Spartan.

Logan and Spartan entered into an agreement to support the transition of resources through the Spin-Out (the "**Transition Services Agreement**"). Pursuant to the Transition Services Agreement, Spartan provided certain administrative services to Logan and Logan provided certain administrative services to Spartan. These services are billed based on time incurred and included as part of G&A expenses. Logan incurred net costs of $0.2 million under the Transition Services Agreement from June 20, 2023 to July 6, 2023.

Subsequent to the completion of the Spin-Out, Logan acquired an additional $2.4 million of casing and equipment from Spartan to be utilized in Logan's development program. On Distribution, the Company's accounts payable included $2.5 million payable to Spartan primarily related to the casing and equipment purchased, reimbursement of prepaid operating expenses related to the Transferred Assets and costs under the Transition Services Agreement, partly offset by net operating income of the Transferred Assets for the period of June 20, 2023 to July 6, 2023 (December 31, 2022 - nil).

b) Related party transactions

During the year ended December 31, 2023, the Company incurred $0.1 million of legal fees to a law firm where the corporate secretary of the Company is a partner (2022 – nil). There were no unpaid legal fees as of December 31, 2023.

c) Key management personnel compensation

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of a company. The Company defines its key management personnel as its officers, board of directors and corporate secretary. The following table summarizes actual and estimated allocated management compensation paid or payable during the years ended December 31, 2023 and 2022. For purposes of the carve-out financial statements, Spartan's key management compensation was allocated pro rata based on relative headcount of the officers and directors of Spartan and Logan for the previous year ended December 31, 2022 and up to June 20, 2023.

	Year ended December 31	
(CA$ thousands)	**2023**	2022
Salaries and benefits	**1,956**	3,656
Share based compensation [1]	**5,817**	2,180
Total key management compensation	**7,773**	5,836

(1) During 2023, key management personnel were granted 9.9 million stock options with an exercise price of $0.89 per share.

Allocated SBC expense in the first half of 2023 is inclusive of the impact of Spartan accelerating the vesting of the issued and outstanding stock options and share awards (see also, "Share Based Compensation").

SUBSEQUENT EVENTS

Upsized Credit Facility

Effective March 18, 2024, the Company's lender increased the authorized borrowing amount available under the Credit Facility from $15.0 million to $50.0 million. The terms of the Credit Facility are substantially unchanged, except as noted:

- the first fixed and floating charge debenture over the Company's assets increased to $150.0 million;
- the "Adjusted Working Capital" covenant was removed and replaced with a "Net Debt to Cash Flow" covenant, whereby the Company's net debt relative to trailing cash flow (as defined in the credit agreement), calculated quarterly, shall not exceed 2.0 to 1.0; and
- certain minimum hedging requirements, which have been fully satisfied as of the date hereof.

Commodity Hedging Update

In March 2024, the Company entered into the following commodity price risk management contracts:

Commodity / Contract Type	Notional Volume	Reference Price	Fixed Contract Price	Remaining Term
Crude oil – swap	1,000 bbls per day	WTI - Nymex	CA$102.00 per bbl	March 1 to December 31, 2024
Crude oil – swap	500 bbls per day	WTI - Nymex	CA$100.00 per bbl	July 1 to December 31, 2024
Natural gas – swap	15,000 GJ per day	AECO 7A	CA$1.73 per GJ	April 1 to June 30, 2024
Natural gas – swap	20,000 GJ per day	AECO 7A	CA$1.63 per GJ	July 1 to September 30, 2024

SUMMARY OF QUARTERLY INFORMATION

The table below summarizes selected financial and operational information over the past eight quarters. As further described under the heading "Common Control Transaction", the financial and operational results herein present the historic financial position, results of operations and cash flows of the Transferred Assets for all prior periods up to and including June 20, 2023 on a "carve-out" basis as if they had operated as a stand-alone entity subject to Spartan's control. The financial position, results of operations and cash flows from March 10, 2023 (the date of incorporation of Logan) to June 20, 2023 include both the Transferred Assets and Logan on a combined basis, and from June 20, 2023 forward include the actual historical results of Logan after assuming the Transferred Assets upon close of the Spin-Out.

Significant judgements were required in determining the allocation of the reported amounts of Spartan to the carve-out financial statements of Logan. The carve-out financial statements do not necessarily reflect what the financial position, results of operations and cash flows would have been had these net assets been in a separate entity, or the future results of Logan, as it exists after the completion of the Spin-Out.

(CA$ millions, except as noted)	**Q4 2023**	Q3 2023	Q2 2023	Q1 2023	Q4 2022	Q3 2022	Q2 2022	Q1 2022
Revenue	**27,187**	15,458	13,400	19,016	22,369	24,563	32,317	31,586
Net income (loss) and comprehensive income (loss)	**11,391**	(10,708)	(3,856)	(30,626)	4,436	6,959	14,756	13,251
$ per share, basic	**0.02**	(0.03)	(0.02)	(0.18)	0.03	0.04	0.09	0.08
$ per share, diluted	**0.02**	(0.03)	(0.02)	(0.18)	0.03	0.04	0.09	0.08
Cash provided by operating activities	**11,176**	5,158	(1,087)	8,707	10,558	16,925	19,731	19,901
Adjusted Funds Flow (1)	**15,392**	5,159	3,142	5,655	11,166	12,914	20,515	19,508
Capital Expenditures (1)	**40,719**	38,680	5,478	924	5,448	710	374	1,020
Total assets	**234,638**	218,390	94,913	95,549	131,903	132,483	141,544	148,701
Working capital surplus (deficit)	**41,633**	67,374	(5,227)	(3,274)	277	536	4,788	3,635
Long-term liabilities	**32,983**	25,675	28,297	28,442	27,627	29,564	28,989	32,329
Shareholders' equity	**174,116**	162,165	56,791	58,778	95,795	95,465	104,396	108,045
Average daily production (BOE/d)	**7,515**	5,394	5,015	5,290	5,627	6,041	6,144	7,358
% Oil and NGLs	**35%**	24%	22%	23%	24%	25%	25%	29%
Average realized price ($ per BOE)	**41.44**	35.24	30.02	39.94	49.88	49.78	65.17	52.26
Operating Netback ($ per BOE) (1)	**23.63**	10.94	10.01	15.21	25.14	26.20	39.60	31.80

(1) "Adjusted Funds Flow", "Capital Expenditures" and "Operating Netbacks" do not have standardized meanings under IFRS Accounting Standards, refer to "Non-GAAP Measures and Ratios".

Spartan drilled and brought on production 3.0 net wells at Pouce Coupe in late 2021. Thereafter Spartan focused its capital program on other assets in its portfolio, with the revenue, net income (loss) and Adjusted Funds Flow of the Transferred Assets reflecting production volumes declines and fluctuations in the underlying commodity benchmark prices. During the second quarter of 2022, commodity prices reached decade highs, more than offsetting the impact of production declines on revenue and net income during the quarter. During the first quarter of 2023, Spartan recognized total impairments of $28.6 million on the Transferred Assets (see “Exploration and Evaluation Expense” and “Depletion, Depreciation and Impairment”). Logan commenced active operations and its drilling program in the third quarter of 2023, driving the increase in capital spending as well as higher production volumes and revenue, together with higher average realized prices. The July 2023 Financings were completed for net proceeds of approximately $102.2 million, funding Logan’s working capital surplus as at September 30, 2023. The net loss reported for the third quarter of 2023 primarily resulted from a one-time charge of $9.8 million of share based compensation expense related to the Financing Warrants. Logan continued its capital program through the fourth quarter, spending $40.7 million to finish off the H2 2023 $75 million capital budget. Net income for the current quarter increased with higher production resulting from the 2.0 net wells brought on production late in the third quarter, with a boost from 3.0 net wells brought on production in the fourth quarter, as well as an $8.4 million reversal of PP&E impairment.

SELECTED ANNUAL INFORMATION

The following table summarizes key annual financial and operating information over the three most recently completed financial years.

(CA$ thousands, except as noted)	**2023**	2022	2021[3]
Revenue	**72,718**	110,835	47,896
Net income (loss) and comprehensive income (loss)	**(33,799)**	39,403	15,470
$ per share, basic and diluted	**(0.11)**	0.23	0.09
Cash provided by operating activities	**23,954**	67,115	21,265
Adjusted Funds Flow [1]	**29,347**	64,105	26,080
Capital Expenditures [1][2]	**85,801**	7,552	134,431
Total assets	**234,638**	131,903	156,595
Working capital surplus (deficit)	**41,633**	277	(10,320)
Long-term liabilities	**32,983**	27,627	36,207
Shareholders’ equity	**174,116**	95,795	99,178
Average daily production (BOE/d)	**5,808**	6,287	3,893
% Liquids	**27%**	26%	23%
Average realized price ($ per BOE)	**37.19**	54.27	36.30
Operating Netback ($ per BOE) [1]	**15.84**	30.86	20.41

(1) “Adjusted Funds Flow", “Capital Expenditures” and "Operating Netback" do not have standardized meanings under IFRS Accounting Standards, refer to "Non-GAAP Measures and Ratios".
(2) Capital Expenditures for the year ended 2021 includes Spartan costs to acquire the Transferred Assets.
(3) The Transferred Assets were acquired by Spartan during 2021 and as such the above does not reflect a full year of results.

MATERIAL ACCOUNTING POLICIES

The material accounting policies applied by the Company are described in note 3 of the Annual Financial Statements as at December 31, 2023.

The International Accounting Standards Board has issued a number of new accounting standards, amendments to accounting standards and interpretations that are effective for periods beginning on or after January 1, 2024. None of the accounting pronouncements are expected to have a material impact upon initial adoption. Logan will continue to evaluate the impact of the pronouncements which will be adopted on their respective effective dates.

SIGNIFICANT ESTIMATES AND JUDGEMENTS

The timely preparation of the financial statements requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amount of assets, liabilities, income and expenses. Actual results may differ materially from these estimates. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are reviewed and for any future years affected. The significant judgements, estimates and assumptions made by management are consistent with those outlined in note 2 of the Annual Financial Statements.

Notably, the carve-out financial statements present the historic financial position, results of operations and cash flows of the Transferred Assets for all prior periods up to and including June 20, 2023 on a carve-out basis as if they had operated as a stand-alone entity subject to Spartan's control. Judgements were required in determining the allocation of the reported amounts of Spartan to the carve-out financial statements of Logan. Refer to note 2b) of the Annual Financial Statements for discussion of the basis of measurement and allocations from Spartan. The carve-out financial statements do not necessarily reflect what the financial position, results of operations and cash flows would have been had these net assets been in a separate entity, or the future results of Logan, as it exists after the completion of the Spin-Out.

RISKS AND UNCERTAINTIES

The business of exploring for, developing and producing crude oil and natural gas reserves is inherently risky. The Company is subject to both risks that directly affect Logan's business and operations, as well as indirect risks that impact third parties or industry generally. The following information is a summary only of certain risk factors relating to the Company and should be read in conjunction with the Company's AIF for the year ended December 31, 2023 which can be found at www.sedarplus.ca. Prospective investors should carefully consider the risk factors set out below and consider all other information contained in this MD&A and in the Company's other public filings before making an investment decision. The risks set out below are not an exhaustive list, nor should be taken as a complete summary or description of all the risks associated with the Company's business and the oil and natural gas business generally.

Market Risks

Market risk is the risk that changes in market conditions, such as commodity prices, interest rates and foreign exchange rates, will affect the Company's cash flows, net income or fair value of financial instruments. Logan's risk management objective is to manage and control market risk exposures within acceptable limits, while maximizing long-term returns. The Company may utilize derivative financial instruments and physical delivery sales contracts to manage market risks. All such transactions are conducted in accordance with the Company's risk management policies.

a) Commodity Price Risk

Commodity price risk is the risk that future cash flows will fluctuate as a result of changes in commodity prices. Inherent to the business of producing oil and gas, the Company's revenue and cash provided by operating activities is subject to commodity price risk. Commodity prices are impacted by world economic events that dictate the levels of supply and demand as well as the currency exchange rate relationship between the Canadian and U.S. dollar. A strengthening in the Canadian dollar against the U.S. dollar could negatively impact the commodity prices realized by Logan, even with no change in the underlying commodity U.S. benchmark.

From time to time, Logan may enter into agreements to receive fixed prices on its oil and natural gas production to offset the risk of revenue losses if commodity prices decline. Similarly, the Company may enter into agreements to fix the differential or discount pricing gap which exists, and may fluctuate between different grades of crude oil, NGLs and natural gas and the various market prices received for such products. However, if commodity prices increase or differentials narrow beyond the levels set in such agreements, Logan may be prevented from realizing the full benefits of price increases above the levels of the derivative instruments used to manage price risk and the Company may nevertheless be obligated to pay royalties on such higher prices, even though not received by it, after giving effect to such agreements. In addition, if the Company enters into hedging arrangements it may be exposed to the risk of

financial loss in certain circumstances, including instances in which: production falls short of the hedged volumes or prices fall significantly lower than projected; there is a widening of price-basis differentials between delivery points for production and the delivery point assumed in the hedge arrangement; the counterparties to the hedging arrangements or other price risk management contracts fail to perform under those arrangements; and/or a sudden unexpected material event impacts crude oil and natural gas prices.

The Company did not have any commodity price risk management contracts in place as at or during the year ended December 31, 2023, however refer to "Subsequent Events" for details of new contracts entered subsequent to the reporting period.

b) *Interest Rate Risk*

Interest rate risk is the risk that future cash flows will fluctuate as a result of changes in market interest rates. Although the Company currently has no bank debt outstanding, under the Credit Facility interest rates will fluctuate based on the bank prime rate plus an applicable margin. The Company will be exposed to interest rate risk on its cash and cash equivalents. The Company does not currently have any interest rate risk management contracts in place.

c) *Currency Risk*

Currency risk is the risk that future cash flows will fluctuate as a result of changes in foreign exchange rates. Logan is exposed to fluctuations of the Canadian to U.S. dollar exchange rate given the Company's realized pricing in Canadian dollars is directly influenced by U.S. dollar denominated benchmark pricing. The Company does not currently have any foreign exchange risk management contracts in place.

Credit Risk

Credit risk is the risk of potential loss to the Company if the counterparty to a financial instrument fails to meet its contractual obligations. As at December 31, 2023, the Company's financial assets include cash and cash equivalents, accounts receivable and deposits. Cash and cash equivalents are held on deposit with a Canadian chartered bank. The Company's credit risk exposure arises primarily from receivables from oil and gas marketers and joint venture partners. The oil and gas industry has a pre-arranged monthly clearing day for payment of revenues from all buyers of oil and natural gas; this occurs on the 25th day following the month of sale. As a result, the Company's production revenues are current. All other accounts receivable are generally contractually due within 30 days, however the collection period is typically between 60 to 90 days. Amounts outstanding for more than 90 days are generally considered "past due" and relate primarily to receivables from the Company's joint venture partners. When determining whether amounts that are past due are collectible, management assesses the creditworthiness and past payment history of the counterparty, as well as the nature of the past due amount. At December 31, 2023 and 2022, Logan's expected credit loss provision was nominal.

Liquidity Risk

Liquidity risk is the risk that a company will not be able to meet its financial obligations as they become due. The Company prepares and regularly updates its capital and operating budget to forecast future cash flows to ensure, to the extent possible, that it will have sufficient liquidity to meet its obligations. As at December 31, 2023, Logan's financial liabilities include accounts payable and lease liabilities. As at December 31, 2023, Logan's Credit Facility was undrawn. A contractual maturity analysis is provided in the "Capital Resources and Liquidity" section of this MD&A. Logan's existing capital resources are sufficient to satisfy its financial obligations for the next twelve months.

Substantial Capital Requirements

Logan anticipates making substantial capital expenditures for the acquisition, exploration, development and production of oil and natural gas reserves in the future. As future capital expenditures will be financed out of cash generated from operations, borrowings and possible future equity sales, the Company's ability to do so is dependent on, among other factors: the overall state of the capital markets; the Company's credit rating (if applicable); commodity prices; interest

rates; royalty rates; tax burden due to current and future tax laws; and investor appetite for investments in the energy industry and Logan's securities in particular.

Further, if the Company's revenues or reserves decline, it may not have access to the capital necessary to undertake or complete future drilling programs. The current conditions in the oil and natural gas industry have negatively impacted the ability of oil and natural gas companies to access additional financing. There can be no assurance that debt or equity financing, or cash generated by operations will be available or sufficient to meet these requirements or for other corporate purposes or, if debt or equity financing is available, that it will be on terms acceptable to the Company. The inability of the Company to access sufficient capital for its operations could have a material adverse effect on its business financial condition, results of operations and prospects.

Credit Facility Arrangements

The amount authorized under the Credit Facility is dependent on the borrowing base determined by the lender to Logan under the Credit Facility. The Company is required to comply with covenants under the Credit Facility, which from time to time, either affect the availability, or price, of additional funding and in the event that the Company does not complete therewith, the Company's access to capital could be restricted or repayment could be required. The failure of the Company to comply with such covenants, which may be affected by events beyond the Company's control, could result in an event of default under the Credit Facility which could result in the Company being required to repay amounts owing thereunder. Even if the Company is able to obtain new financing, it may not be on commercially reasonable terms or terms that are acceptable to the Company. If the Company is unable to repay amounts owing, the lender to Logan under the Credit Facility could proceed to foreclose or otherwise realize upon the collateral granted to them to secure the indebtedness. The acceleration of the Company's indebtedness under one agreement may permit acceleration of indebtedness under other agreements that contain cross default and cross-acceleration provisions. In addition, the Credit Facility may, from time to time, impose operating and financial restrictions on the Company that could include restrictions on, the payment of dividends, repurchase or making of other distributions with respect to the Company's securities, incurring of additional indebtedness, provision of guarantees, the assumption of loans, making of capital expenditures, entering into of amalgamations, mergers, take-over bids or disposition of assets, among others.

The Company's borrowing base is determined and re-determined by the lender to Logan under the Credit Facility based on the Company's reserves, commodity prices, applicable discount rate and other factors as determined by the Company's lender. A material decline in commodity prices could reduce the Company's borrowing base, therefore reducing the funds available to the Company under the Credit Facility which could result in a portion, or all, of the Company's bank indebtedness needing to be repaid.

Refer to additional information under the heading “Capital Resources and Liquidity” of this MD&A.

Exploration, Development and Production Risks

Oil and natural gas operations involve many risks that even a combination of experience, knowledge and careful evaluation may not be able to overcome. The long-term commercial success of Logan depends on its ability to find, acquire, develop and commercially produce oil and natural gas reserves. Without the continual addition of new reserves, any existing reserves Logan may have at any particular time and the production therefrom will decline over time as such existing reserves are exploited. A future increase in Logan's reserves will depend not only on its ability to explore and develop any properties it may have from time to time, but also on its ability to select and acquire suitable producing properties or prospects. No assurance can be given that Logan will be able to continue to locate satisfactory properties for acquisition or participation. Moreover, if such acquisitions or participations are identified, Logan may determine that current markets, terms of acquisition and participation or pricing conditions make such acquisitions or participations uneconomic. There is no assurance that further commercial quantities of oil and natural gas will be discovered or acquired by Logan.

Future oil and natural gas exploration may involve unprofitable efforts, not only from dry wells, but from wells that are productive but do not produce sufficient net revenues to return a profit after drilling, operating and other costs. Completion of a well does not assure a profit on the investment or recovery of drilling, completion and operating costs. In addition, drilling hazards or environmental damage could greatly increase the cost of operations, and various field

operating conditions may adversely affect the production from successful wells. These conditions include delays in obtaining governmental approvals or consents, shut-ins of connected wells resulting from extreme weather conditions, insufficient storage or transportation capacity or other geological and mechanical conditions. While diligent well supervision and effective maintenance operations can contribute to maximizing production rates over time, production delays and declines from normal field operating conditions cannot be eliminated and can be expected to adversely affect revenue and cash flow levels to varying degrees.

Drilling hazards, environmental damage and various field operating conditions could greatly increase the cost of operations and adversely affect the production from successful wells. Field operating conditions include, but are not limited to, delays in obtaining governmental approvals or consents and the shutting-in of wells resulting from extreme weather conditions, insufficient storage or transportation capacity or geological and mechanical conditions. While diligent well supervision, effective maintenance operations and the development of enhanced oil recovery technologies can contribute to maximizing production rates over time, it is not possible to eliminate production delays and declines from normal field operating conditions, which can negatively affect production, which may reduce the Company's revenue.

Oil and natural gas exploration, development and production operations are subject to all the risks and hazards typically associated with such operations, including but not limited to hazards such as fire, explosion, blowouts, cratering, sour gas releases and spills and other environmental hazards, each of which could result in substantial damage to oil and natural gas wells, production facilities, other property and the environment or in personal injury.

Oil and natural gas production operations are also subject to all the risks typically associated with such operations, including geological and seismic risks, encountering unexpected formations or pressures, premature decline of reservoirs and the invasion of water into producing formations. Losses resulting from the occurrence of any of these risks could have a negative effect on future results of operations, liquidity and financial condition, which could prove to be material over time.

As is standard industry practice, Logan is not fully insured against all risks, nor are all risks insurable. Although the Company maintains liability insurance in an amount considered consistent with industry practice, liabilities associated with certain risks could exceed policy limits or not be covered. In either event, Logan could incur significant costs.

Inflation and Cost Management

The Company's operating costs could escalate and become uncompetitive due to supply chain disruptions, inflationary cost pressures, equipment limitations, escalating supply costs, commodity prices and additional government intervention through stimulus spending or additional regulations. Logan's inability to manage costs may impact project returns and future development decisions, which could have a material adverse effect on the Company's financial performance and funds from operations.

The cost or availability of oil and gas field equipment may adversely affect the Company's ability to undertake exploration, development and construction projects. The oil and gas industry is cyclical in nature and is prone to shortages of supply of equipment and services including drilling rigs, geological and geophysical services, engineering and construction services, major equipment items for infrastructure projects and construction materials generally. 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, on the expected timeline, or at all, may have an adverse effect on its financial performance and funds from operations.

Reliance on Operators, Management and Key Personnel

The operations and management of the Company require the recruitment and retention of a skilled workforce, including engineers, technical personnel and other professionals. The loss of key members of such workforce, or a substantial portion of the workforce as a whole, could result in the failure to implement the Company's business plans which could have a material adverse effect on the Company's business, financial condition, results of operations and prospects. Logan’s success will be, in part, dependent on the performance of its key managers and consultants. Failure to retain the managers and consultants, or to attract or retain additional key personnel, with the necessary skills and experience

could have a materially adverse impact upon Logan's growth and profitability. Logan does not carry key person insurance. The contributions of the existing management team to the immediate and near-term operations of the Company are likely to be of central importance. Investors must rely upon the ability, expertise, judgment, discretion, integrity and good faith of the management of the Company. In addition, Logan may not be the operator of certain oil and natural gas properties in which it acquires an interest. To the extent Logan is not the operator of its oil and natural gas properties, Logan will be dependent on such operators for the timing of activities related to such properties and will largely be unable to direct or control the activities of the operators.

Competition

There is strong competition relating to all aspects of the oil and natural gas industry. Logan will actively compete for capital, skilled personnel, access to rigs and other equipment, access to processing facilities and pipeline and refining capacity and in all other aspects of its operations with a substantial number of other organizations. The A&D market has also become increasingly competitive as more energy companies seek to consolidate operations to increase in scale and relevance to investors.

The Company competes with other exploration and production companies, any of whom may have more financial resources, staff or political influence than the Company. Logan's ability to increase its production in the future will depend not only on its ability to develop the Company's properties, but also on its ability to select other suitable assets for further exploration and development.

Political Uncertainty

The Company's results can be adversely impacted by political, legal, or regulatory developments in Canada and elsewhere that affect local operations and local and international markets. Changes in government, government policy or regulations, changes in law or interpretation of settled law, third-party opposition to industrial activity generally or projects specifically and duration of regulatory reviews could impact Logan's existing operations and planned projects. This includes actions by regulators or other political factors to delay or deny necessary licenses and permits for the Company's activities or restrict the operation of third-party infrastructure that the Company relies on. Additionally, changes in environmental regulations, assessment processes or other laws, while increasing and expanding stakeholder consultation (including Indigenous stakeholders), may increase the cost of compliance or reduce or delay available business opportunities and adversely impact Logan's results.

Other government and political factors that could adversely affect the Company's financial results include increases in taxes or government royalty rates (including retroactive claims) and changes in trade policies and agreements. Further, the adoption of regulations mandating efficiency standards, and the use of alternative fuels or uncompetitive fuel components could affect the Company's operations. Many governments are providing tax advantages and other subsidies to support alternative energy sources or are mandating the use of specific fuels or technologies. Governments and others are also promoting research into new technologies to reduce the cost and increase the scalability of alternative energy sources, and the success of these initiatives may decrease demand for Logan's products.

The federal government was re-elected in 2019, but in a minority position. Another federal election was held on September 20, 2021 and the federal government was re-elected again in a minority position. The ability of the minority federal government to pass legislation will be subject to whether it is able to come to agreement with, and garner the support of, the other elected parties, most of whom are opposed to the development of the petroleum and natural gas industry. The minority federal government will also be required to rely on the support of the other elected parties to remain in power, which provides less stability and may lead to an earlier subsequent federal election. A change in federal, provincial or municipal governments in Canada may have an impact on the directions taken by such governments on matters that may impact the petroleum and natural gas industry including the balance between economic development and environmental policy. Lack of political consensus, at both the federal and provincial government level, continues to create regulatory uncertainty, the effects of which become apparent on an ongoing basis, particularly with respect to carbon pricing regimes, curtailment of crude oil production and transportation and export capacity, and may affect the business of participants in the petroleum and natural gas industry, which effect could prove to be material over time.

Following former Alberta Premier Jason Kenney's resignation on May 18, 2022, Danielle Smith was elected as Premier on October 11, 2022. Shortly after her appointment, Premier Smith introduced Bill 1: The Alberta Sovereignty Within a United Canada Act (the "Sovereignty Act"). The Sovereignty Act was passed on December 8, 2022, and received Royal Assent on December 15, 2022. The Sovereignty Act, amongst other things, enables the Alberta Government to choose which federal legislation, policies or programs it will enforce in Alberta, providing an overriding right to not enforce those which the Alberta Government deems to be " harmful" to Alberta's interests or infringe on the Federal Constitution and its division of powers. The Sovereignty Act has been opposed by many, including the New Democratic Party and various Indigenous groups who have expressed concern as to how the Sovereignty Act will affect Indigenous rights and consultation obligations in Alberta. It is unclear what the effect the Sovereignty Act will have on Alberta, including the petroleum and natural gas industry, Alberta businesses and its federal and interprovincial relationships, including the application of certain federal legislation in Alberta, such as the Greenhouse Gas Pollution Pricing Act and the Impact Assessment Act and the way in which the Alberta Government may address any legislative and policy gaps created. Although the Sovereignty Act has not yet been challenged in court, it is possible the Sovereignty Act's constitutionality will be challenged.

Geopolitical Risks

The marketability and price of oil and natural gas that may be acquired or discovered by Logan is and will continue to be affected by political events throughout the world that cause disruptions in the supply of oil. Conflicts, or conversely peaceful developments, arising outside of Canada, including changes in political regimes or parties in power, may have a significant impact on the price of crude oil and natural gas. Any particular event could result in a material change in prices and therefore result in a change of Logan's revenue.

The level of geo-political risk escalates at certain points in time. While the specific impact on the global economy would depend on the nature of the event, in general, any major event could result in instability and volatility. Current areas of concern include: global uncertainty and market repercussions due to the spread of global pandemics; Russia's military invasion of Ukraine; the Israel-Hamas conflict, and rising civil unrest and activism globally.

Royalty Regimes

There can be no assurance that the provincial governments of the western provinces will not adopt new royalty regimes or modify the existing royalty regimes which may have an impact on the economics of the Company's projects. An increase in royalties would reduce the Company's earnings and could make future capital investments, or Logan's operations, less economic. On January 29, 2016, the Government of Alberta adopted a new royalty regime which took effect on January 1, 2017. British Columbia introduced a new royalty framework in May 2022 that comes into effect on September 1, 2024, with a number of incentives ending for any wells spudded after September 1, 2022.

Indigenous Claims

Indigenous peoples have claimed Indigenous rights and title in portions of Western Canada. Claims and protests of indigenous peoples may disrupt or delay third-party operations, new development or new project approvals on the Company's properties. Logan is not aware that any material claims have been made in respect of Logan's assets; however, if a claim arose and was successful this could have an adverse effect on Logan and its operations. In addition, the process of addressing such claims, regardless of the outcome, is expensive and time consuming and could result in delays which could have a negative effect on the Company's business, financial condition, results of operations and prospects, which negative effect could prove to be material over time.

Moreover, in recent years there has been increasing litigation regarding historical treaties with Indigenous peoples in Canada. Judicial interpretation of such historical treaties, and in particular the rights granted thereunder to Indigenous nations to manage and use the lands in a manner consistent with their ancestral practices, may impact future resource and industrial development in and around these lands. While the potential impact of current and future judicial decisions is uncertain at this time, it is possible that such decisions may have a negative effect on the Company's business, financial condition, results of operations and prospects, which negative effect could prove to be material over time.

Climate Change

Global climate issues continue to attract public and scientific attention. Numerous reports, including reports from the Intergovernmental Panel on Climate Change, have engendered concern about the impacts of human activity, especially hydrocarbon combustion, on global climate issues. In turn, increasing public, government, and investor attention is being paid to global climate issues and to emissions of greenhouse gas ("GHG"), including emissions of carbon dioxide and methane from the production and use of oil, liquids and natural gas. The majority of countries across the globe, including Canada and the United States, have agreed to reduce their carbon emissions in accordance with the Paris Agreement. In addition, during the course of the 2021 United Nations Climate Change Conference in Glasgow, Scotland, Canada's Prime Minister Justin Trudeau made several pledges aimed at reducing Canada's GHG emissions and environmental impact.

Chronic Climate Change Risks

The Company's exploration and production facilities and other operations and activities emit GHGs and require the Company to comply with federal and/or provincial GHG emissions legislation. Climate change policy is evolving at regional, national and international levels, and political and economic events may significantly affect the scope and timing of climate change measures that are ultimately put in place to prevent climate change or mitigate its effects. The direct or indirect costs of these regulations may have a material adverse effect on the Company's business, financial condition, results of operations and prospects. There is no guarantee the current provincial regimes in place will continue to meet federal stringency requirements and their continued application is subject to achieving the stringency standards as required by the federal government.

Climate change has been linked to long-term shifts in climate patterns, including sustained higher temperatures. As the level of activity in the Canadian petroleum and natural gas industry is influenced by seasonal weather patterns, long-term shifts in climate patterns pose the risk of exacerbating operational delays and other risks posed by seasonal weather patterns. In addition, long-term shifts in weather patterns such as water scarcity, increased frequency of storm and fire and prolonged heat waves may, among other things, require the Company to incur greater expenditures (time and capital) to deal with the challenges posed by such changes to its premises, operations, supply chains, transport needs and employee safety, which may in turn have a material adverse effect on the Company. Specifically, in the event of water shortages or sourcing issues, the Company may not be able to, or will incur greater costs to, carry out hydraulic fracturing.

Foreign and domestic governments continue to evaluate and implement policy, legislation and regulations focused on restricting emissions commonly referred to as GHG emissions and promoting adaptation to climate change and the transition to a low-carbon economy. Given the evolving nature of climate change policy and the control of GHG and resulting requirements, it is expected that current and future climate change regulations will have the effect of increasing operating expenses on the royalty properties, and, in the long-term, potentially reducing the demand for crude oil and natural gas and related products, resulting in a decrease in the Company's profitability and a reduction in the value of its assets.

Concerns about climate change have resulted in a number of environmental activists and members of the public opposing the continued exploitation and development of fossil fuels which influenced investors' willingness to invest in the petroleum and natural gas industry. Historically, political and legal opposition to the fossil fuel industry focused on public opinion and the regulatory process. More recently, however, there has been a movement to more directly hold governments and oil and natural gas companies responsible for climate change through climate litigation. In November 2018, ENVironment JEUnesse, a Quebec advocacy group, applied to the Quebec Superior Court to certify all Quebecois under 35 as a class in a proposed class action lawsuit against the Government of Canada for climate related matters. The application was denied and ENVironment JEUnesse appealed to the Appeal Court of Quebec on February 23, 2021. The appeal was dismissed on December 31, 2021. In January 2019, the City of Victoria became the first municipality in Canada to endorse a class action lawsuit against oil and natural gas producers for alleged climate-related harms. The Union of British Columbia Municipalities defeated the City of Victoria's motion to initiate a class action lawsuit to recover costs it claims are related to climate change.

Given the perceived elevated long-term risks associated with regulatory changes or other market developments related to climate change, there have also been efforts in recent years affecting the investment community, including investment advisors, sovereign wealth funds, public pension funds, universities and other institutional investors, promoting direct engagement and dialogue with companies in their portfolios on climate change action (including exercising their voting rights on matters relating to climate change) and increased capital allocation to investments in low-carbon assets and businesses while decreasing the carbon intensity of their portfolios through, among other measures, divestments of companies with high exposure to GHG intensive operations and products. Certain stakeholders have also pressured insurance providers and commercial and investment banks to reduce or stop financing, and providing insurance coverage to crude oil and natural gas and related infrastructure businesses and projects. The impact of such efforts may require the Company's management to dedicate significant time and resources to these climate change related concerns, may adversely affect the Company's operations, the demand for and price of the Company's securities and may negatively impact the Company's cost of capital and access to the capital markets, which negative impact could prove to be material over time.

Claims have been made against certain energy companies alleging that GHG emissions from crude oil and natural gas operations constitute a public nuisance under certain laws or that such energy companies provided misleading disclosure to the public and investors of current or future risks associated with climate change. As a result, individuals, government authorities or other organizations may make claims against crude oil and natural gas companies, for alleged personal injury, property damage or other potential liabilities. While the Company is not a party to any such litigation or proceedings, it could be named in actions making similar allegations. An unfavorable ruling in any such case could adversely affect the demand for and price of securities issued by the Company, impact its operations and have an adverse effect on its financial condition, which could prove to be material.

Given the evolving nature of climate change policy and the control of GHG and resulting requirements, it is expected that current and future climate change regulations will have the effect of increasing the Company's operating expenses and in the long-term, potentially reducing the demand for crude oil and natural gas production resulting in a decrease in the Company's profitability and a reduction in the value of its assets or requiring impairments for financial statement purposes.

Public support for climate change action and receptivity to new technologies has grown in recent years. Governments in Canada and around the world have responded to these shifting societal attitudes by adopting ambitious emissions reduction targets and supporting legislation, including measures relating to carbon pricing, clean energy and fuel standards and alternative energy incentives and mandates. There has also been increased activism, including threats of culpability, legal action against oil and gas producers, and public opposition to fossil fuels and the oil and gas industry in which the Company operates. Given the evolving nature of the debate related to climate change and the control of GHGs and resulting requirements, it is not possible to predict the impact on its operations and financial condition.

Emissions, carbon and other regulations impacting climate and climate-related matters are constantly evolving. With respect to environmental, social, governance and 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 published for comment Proposed National Instrument 51-107 - Disclosure of Climate-Related Matters, intended to introduce climate-related disclosure requirements for reporting issuers in Canada with limited exceptions. If the Company is not able to meet future sustainability reporting requirements of regulators or current and future expectations of investors, insurance providers, or other stakeholders, its business and ability to attract and retain skilled employees, obtain regulatory permits, licences, registrations, approvals, and authorizations from various governmental authorities, and raise capital may be adversely affected.

Acute Climate Change Risks

Climate change has been linked to extreme weather conditions. Extreme hot and cold weather, heavy snowfall, heavy rainfall and wildfires may restrict or could interfere with the Company's operations, increasing its costs and otherwise negatively impacting its operations. Over the last several years, certain areas of British Columbia and Alberta have been negatively impacted by wildfires, and most recently with extreme flooding in British Columbia, causing temporary

interruption to both pipeline systems and railway lines. Extreme weather conditions may lead to disruptions in the Company's ability to transport produced oil and natural gas as well as goods and services in its supply chains. The Company's assets are located in locations that are proximate to forests and rivers and a wildfire or flood, respectively, may lead to significant downtime and/or damage to such assets which may affect production. At this time, the Company is unable to determine the extent to which climate change may lead to increased storm or weather hazards affecting the Company's operations.

Carbon Pricing Risk

The majority of countries across the globe have agreed to reduce their carbon emissions in accordance with the Paris Agreement. In Canada, the federal and certain provincial governments have implemented legislation aimed at incentivizing the use of alternative fuels and in turn reducing carbon emissions. The federal system, which was upheld by the Supreme Court of Canada, currently applies in provinces and territories without their own system that meets federal stringency standards. Provinces with their own system are subject to continued compliance with the federal system. There is no guarantee that a province with a system that currently applies will meet, or continue to meet, federal stringency standards. The taxes placed on carbon emissions may have the effect of decreasing the demand for crude oil and natural gas products and at the same time, increasing the operating expenses of crude oil and natural gas companies, each of which may have a material adverse effect on the Company's revenue. Further, the imposition of carbon taxes puts the Company at a disadvantage with its counterparts who operate in jurisdictions where there are less costly carbon regulations.

Environmental Risks

Oil and gas exploration and production can involve environmental risks such as litigation, physical and regulatory risks. Physical risks include the pollution of the environment, climate change and destruction of natural habitat, as well as safety risks such as personal injury. Logan works hard to identify the potential environmental impacts of its new projects in the planning stage and during operations. The Company conducts its operations with high standards in order to protect the environment, its employees and consultants and the general public. Logan maintains current insurance coverage for comprehensive and general liability as well as limited pollution liability. The amount and terms of this insurance are reviewed on an ongoing basis and adjusted as necessary to reflect current corporate requirements, as well as industry standards and government regulations. Without such insurance, and if the Company becomes subject to environmental liabilities, the payment of such liabilities could reduce or eliminate its available funds or could exceed the funds the Company has available and result in financial distress.

The oil and gas industry is subject to environmental regulation under a variety of Canadian federal, provincial, territorial and municipal laws and regulations, all of which are subject to governmental review and revision from time to time. The regulations in Canada are some of the most stringent and progressive in the world. Such regulations provide for, among other things, restrictions and prohibitions on the spill, release or emission of various substances produced in association with certain crude oil and natural gas industry operations, including the abandonment and reclamation of well, facility and pipeline sites. Compliance with such regulations can require significant expenditures by the businesses operating and a breach of such requirements may result in suspension or revocation of necessary licenses and authorizations, civil liability and the imposition of material fines and penalties. Further to these specific, known requirements, future changes to environmental legislation, including legislation for air pollution and greenhouse gas emissions, may impose further requirements on operators and other companies in the crude oil and natural gas industry. The Company works with applicable federal, provincial and municipal regulators to ensure compliance.

Evolving Corporate Governance, Sustainability and Reporting Framework

The Company's business is subject to evolving corporate governance and public disclosure regulations that have increased both compliance costs and the risk of noncompliance, which could have an adverse effect on the price of the Company's securities. Logan is subject to changing rules and regulations promulgated by a number of governmental and self-regulated organizations, including the Canadian Securities Administrators, the TSXV and the Financial Accounting Standards Board. These rules and regulations continue to evolve in scope and complexity making compliance more difficult and uncertain. Further, the Company's efforts to comply with these and other new and existing rules and regulations have resulted in, and are likely to continue to result in, increased general and administrative

expenses and a diversion of management time and attention from revenue-generating activities to compliance activities.

Information Technology Systems and Cyber-Security

Logan has become increasingly dependent upon the availability, capacity, reliability and security of its information technology infrastructure, and its ability to expand and continually update this infrastructure, to conduct daily operations. Various information technology systems are relied upon to estimate reserve quantities, process and record financial data, manage the land base, manage financial resources, analyze seismic information, administer contracts and communicate with employees and third-party partners.

The Company is subject to a variety of information technology and system risks as a part of its normal course operations, including potential breakdown, invasion, virus, cyber-attack, cyber-fraud, security breach, and destruction or interruption of Logan's information technology systems by third parties or insiders. Unauthorized access to these systems by employees or third parties could lead to corruption or exposure of confidential, fiduciary or proprietary information, interruption to communications or operations or disruption to its business activities or competitive position. In addition, cyber-phishing attempts, in which a malicious party attempts to obtain sensitive information such as usernames, passwords, and credit card details (and money) by disguising as a trustworthy entity in an electronic communication, have become more widespread and sophisticated in recent years. If the Company becomes a victim to a cyber-phishing attack it could result in a loss or theft of the Company's financial resources or critical data and information or could result in a loss of control of the Company's technological infrastructure or financial resources. The Company's employees are often the targets of such cyber-phishing attacks, as they are and will continue to be targeted by parties using fraudulent "spoof" emails to misappropriate information or to introduce viruses or other malware through "Trojan horse" programs to the Company's computers. These emails appear to be legitimate emails, but direct recipients to fake websites operated by the sender of the email or request recipients to send a password or other confidential information through email or to download malware.

The Company maintains policies and procedures that address and implement employee protocols with respect to electronic communications and electronic devices and conducts annual cyber security risk assessments. The Company also employs encryption protection of its confidential information, all computers and other electronic devices. Despite the Company's efforts to mitigate such phishing attacks through education and training, phishing activities remain a serious problem that may damage Logan's information technology infrastructure. The Company applies technical and process controls in line with industry-accepted standards to protect its information assets and systems, including written incident response plan for responding to a cyber security incident. However, these controls may not adequately prevent cyber-security breaches.

Disruption of critical information technology services, or breaches of information security, could have a negative effect on the Company's performance and earnings, as well as reputation. Logan applies technical and process controls in line with industry-accepted standards to protect information assets and systems; however, these controls may not adequately prevent cyber-security breaches. The significance of any such event is difficult to quantify, but may in certain circumstances be material and could have a material adverse effect on the Company's business, financial condition and results of operations.

Pandemic Risk

Severe disruptions in regional economies and the world economy can be caused by the outbreak of a contagious illness. Such pandemics and efforts to contain them could result in international, national and local border closings, travel restrictions, significant disruptions to business operations, supply chains, customer activity and demand, service cancellations, reductions and other changes, significant challenges in healthcare service preparation and delivery, and quarantines, as well as considerable general concern and uncertainty, all of which could negatively affect the economic environment and may in the future have further impacts, as was the case for the COVID-19 pandemic. It is not possible to predict what measures and restrictions may be imposed by governmental authorities and the period of time during which those measures and restrictions may apply. Economic and supply chain disruptions, including temporary staff shortages resulting from a pandemic, could further materially affect the Company's financial results and operations. A pandemic could also further and significantly impact global economic activity, including demand for hydrocarbons, and

cause increased market volatility, continued changes to the macroeconomic environment and commodity prices in connection with ensuing economic disruption, supply shortages, trade disruption, temporary staff shortages and temporary closures of facilities in geographic locations more importantly impacted by the outbreak. The scope and severity of such disruptions and their impact on the Company's financial results and operations could be material.

Forward-Looking Information May Prove Inaccurate

Current and prospective investors are cautioned not to place undue reliance on forward-looking information. By its nature, forward-looking information involves numerous assumptions, known and unknown risks and uncertainties, of both a general and specific nature, that could cause actual results to differ materially from those suggested by the forward-looking information or contribute to the possibility that predictions, forecasts or projections will prove to be materially inaccurate. Additional information on the risks, assumptions and uncertainties in this MD&A under the heading "Forward-Looking Statements".

NON-GAAP AND OTHER FINANCIAL MEASURES

This MD&A contains certain financial measures and ratios, as described below, which do not have standardized meanings prescribed by IFRS Accounting Standards or GAAP. As these non-GAAP and other financial measures are commonly used in the oil and gas industry, the Company believes that their inclusion is useful to investors. The reader is cautioned that these amounts may not be directly comparable to measures for other companies where similar terminology is used.

The non-GAAP and other financial measures used in this MD&A, represented by the bolded, capitalized and defined terms outlined below, are used by Logan as key measures of financial performance and are not intended to represent operating profits nor should they be viewed as an alternative to cash provided by operating activities, net income or other measures of financial performance calculated in accordance with IFRS Accounting Standards.

Non-GAAP Financial Measures

Operating Income and Operating Netback

Operating Income, a non-GAAP financial measure, is a useful supplemental measure that provides an indication of the Company's ability to generate cash from field operations, prior to administrative overhead, financing and other business expenses. "**Operating Income**" is calculated by Logan as oil and gas sales, net of royalties, plus processing and other revenue, less operating and transportation expenses. The Company refers to Operating Income expressed per unit of production as an "**Operating Netback**" which is a non-GAAP financial ratio. Logan considers Operating Netback an important measure to evaluate its operational performance as it demonstrates its field level profitability relative to current commodity prices.

The components of Logan's Operating Income and Operating Netbacks are outlined below:

	Three months ended December 31			Year ended December 31		
(CA$ thousands, unless otherwise indicated)	**2023**	2022	%	**2023**	2022	%
Oil and gas sales	**28,653**	25,820	11	**78,858**	124,535	(37)
Processing and other revenue	**863**	875	(1)	**3,388**	3,325	2
Royalty expenses	**(2,329)**	(4,326)	(46)	**(9,528)**	(17,025)	(44)
Operating expenses	**(8,171)**	(7,710)	6	**(31,073)**	(32,458)	(4)
Transportation expenses	**(2,678)**	(1,639)	63	**(8,069)**	(7,583)	6
Operating Income	**16,338**	13,020	25	**33,576**	70,794	(53)
Production (BOE)	**691,426**	517,644	34	**2,120,231**	2,294,847	(8)
Operating Netback ($/BOE)	**23.63**	25.15	(6)	**15.84**	30.86	(49)

Adjusted Funds Flow

"**Adjusted Funds Flow**" is calculated by Logan as cash provided by operating activities before changes in non-cash working capital and adding back transaction costs (if any). Logan utilizes Adjusted Funds Flow as a key performance measure in the Company's annual financial forecasts and public guidance. Logan believes Adjusted Funds Flow provides useful information to understand the cash flows generated by the Company's operations during the current production period excluding the impact of timing of payments and cash receipts. Transaction costs, which primarily include legal and financial advisory fees, regulatory and other expenses directly attributable to execution of acquisitions and dispositions ("**A&D**"), are excluded to provide a measure representing cash flow generated by the Company's routine business operations. For greater clarity, incremental overhead expenses related to ongoing integration and restructuring post-acquisition (if applicable) are not adjusted and are included in Logan's general and administrative expenses. The Company refers to Adjusted Funds Flow expressed per unit of production as an "**Adjusted Funds Flow Netback**".

The following table reconciles cash provided by operating activities as determined in accordance with IFRS Accounting Standards to the Company's definition of Adjusted Funds Flow:

	Three months ended December 31			Year ended December 31		
(CA$ thousands)	**2023**	2022	%	**2023**	2022	%
Cash provided by operating activities	**11,176**	10,558	6	**23,954**	67,115	(64)
Change in non-cash operating working capital	**4,216**	607	595	**5,350**	(3,010)	nm
Add back: transaction costs	**-**	-	-	**43**	-	-
Adjusted Funds Flow	**15,392**	11,165	38	**29,347**	64,105	(54)

Adjusted Funds Flow per share ("**AFF per share**")

AFF per share is a non-GAAP financial ratio used by the Logan as a key performance indicator. The basic and diluted weighted average common shares ("**WA Shares**") outstanding used in the calculation of AFF per share is calculated using the treasury stock method under the same methodology as net income per share. The table below outlines the calculation of AFF per share:

	Three months ended December 31			Year ended December 31		
(CA$ thousands, except for share amounts)	**2023**	2022	%	**2023**	2022	%
Adjusted Funds Flow	**15,392**	11,165	38	**29,347**	64,105	(54)
WA Shares outstanding (000s) – basic	**465,537**	173,201	169	**307,864**	173,201	78
WA Shares outstanding (000s) – diluted	**503,660**	173,201	191	**339,099**	173,201	96
AFF per share						
Basic ($ per common share)	**0.03**	0.06	(50)	**0.10**	0.37	(73)
Diluted ($ per common share)	**0.03**	0.06	(50)	**0.09**	0.37	(76)

Capital Expenditures

Logan uses "**Capital Expenditures before A&D**" to measure its capital investment level compared to the Company's annual budgeted capital expenditures for its organic drilling program, excluding acquisitions or dispositions (if any). "**Capital Expenditures**" is calculated by adding cash acquisition costs, net of proceeds from dispositions to Capital Expenditures before A&D. The directly comparable GAAP measure is cash used in investing activities.

The following table details the composition of capital expenditures and its reconciliation to cash used in investing activities:

(CA$ thousands)	Three months ended December 31 2023	2022	Year ended December 31 2023	2022
Exploration and evaluation assets	**3,328**	5,315	**8,126**	5,611
Property, plant and equipment	**37,240**	134	**72,280**	2,030
Capital Expenditures before A&D	**40,568**	5,449	**80,406**	7,641
Acquisitions	**151**	-	**5,395**	-
Dispositions	**-**	-	**-**	(88)
Capital Expenditures	**40,719**	5,449	**85,801**	7,553
Change in non-cash investing working capital	**6,483**	359	**(17,569)**	14,562
Cash used in investing activities	**47,202**	5,808	**68,232**	22,115

Capital Management Measures

Working capital

Management uses working capital as a measure to assess the Company's financial position. The working capital surplus (deficit) is calculated as current assets less current liabilities. Refer to the calculation of working capital under the heading "Capital Resources and Liquidity".

Supplementary Financial Measures

The supplementary financial measures used in this MD&A (primarily average sales price per product type, royalty rates, and certain per BOE and per share figures) are either a per unit disclosure of a corresponding GAAP measure, or a component of a corresponding GAAP measure, presented in the financial statements. Supplementary financial measures that are disclosed on a per unit basis are calculated by dividing the aggregate GAAP measure (or component thereof) by the applicable unit for the period. Supplementary financial measures that are disclosed on a component basis of a corresponding GAAP measure are a granular representation of a financial statement line item and are determined in accordance with GAAP.

OTHER MEASUREMENTS

All dollar amounts are referenced in Canadian dollars, except when noted otherwise. This MD&A contains various references to the abbreviation "**BOE**" which means barrels of oil equivalent. Where amounts are expressed on a BOE basis, natural gas volumes have been converted to oil equivalence at six thousand cubic feet per barrel. A BOE conversion ratio of six thousand cubic feet per barrel is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead and is significantly different than the value ratio based on the current price of crude oil and natural gas. This conversion factor is an industry accepted norm and is not based on either energy content or current prices. Such abbreviation may be misleading, particularly if used in isolation.

Throughout this MD&A, "crude oil" or "oil" refers to light and medium crude oil product types as defined by National Instrument 51-101 *Standards of Disclosure for Oil and Gas Activities* ("**NI 51-101**"). Condensate is a natural gas liquid as defined by NI 51-101. References to "natural gas liquids" or "NGLs" throughout this MD&A comprise pentane, butane, propane and ethane, being all NGLs as defined by NI 51-101 other than condensate, which is disclosed separately by Logan due to the significant difference in value per barrel. References to "liquids" includes crude oil, condensate and NGLs. References to "gas" relates to natural gas.

ABBREVIATIONS

A&D	acquisitions and dispositions
AECO	Alberta Energy Company "C" Meter Station of the NOVA Pipeline System, the Canadian benchmark price for natural gas
AIF	refers to the Company's 2023 Annual Information Form dated March 18, 2024
API	American Petroleum Institute gravity
bbl	barrel
bbls/d	barrels per day
BOE	barrels of oil equivalent
BOE/d	barrels of oil equivalent per day
G&A	general and administrative expenses
GAAP	refers to Canadian Generally Accepted Accounting Principles, which incorporate IFRS Accounting Standards for public companies
GJ	gigajoule
H2 2023	six months ending December 31, 2023
mbbls	one thousand barrels
mBOE	one thousand barrels of oil equivalent
mcf or MCF	one thousand cubic feet
mcf/d	one thousand cubic feet per day
MM	millions of dollars
mmbtu	one million British thermal units
mmcf	one million cubic feet
mmcf/d	one million cubic feet per day
nm	"not meaningful", generally with reference to a percentage change
NGLs	natural gas liquids
NYMEX	New York Mercantile Exchange
Q1 2023	first quarter of 2023
Q2 2023	second quarter of 2023
Q3 2023	third quarter of 2023
Q4 2023	fourth quarter of 2023
Q1 2022	first quarter of 2022
Q2 2022	second quarter of 2022
Q3 2022	third quarter of 2022
Q4 2022	fourth quarter of 2022
TSXV	TSX Venture Exchange
US$	United States dollar
WTI	West Texas Intermediate, price paid in US$ at Cushing, Oklahoma, for crude oil of standard grade

FORWARD-LOOKING STATEMENTS

Certain statements contained within this MD&A constitute forward-looking statements within the meaning of applicable Canadian securities legislation. All statements other than statements of historical fact may be forward-looking statements. Forward-looking statements are often, but not always, identified by the use of words such as "anticipate", "budget", "plan", "endeavour", "continue", "estimate", "evaluate", "expect", "forecast", "monitor", "may", "will", "can", "able", "potential", "target", "intend", "consider", "focus", "identify", "use", "utilize", "manage", "maintain", "remain", "result", "cultivate", "could", "should", "believe" and similar expressions. The Company believes that the expectations reflected in such forward-looking statements are reasonable, but no assurance can be given that such expectations will prove to be correct and such forward-looking statements should not be unduly relied upon.

Without limitation, this MD&A contains forward-looking statements pertaining to:

- the intentions of management and the Company with respect to its growth strategy and business plan;
- assumptions regarding future commodity benchmark pricing and the ability to protect cash flow and preserve project economics through hedging;
- Logan's intention to maintain a flexible capital structure and to maintain a strong balance sheet to allow the Company to take advantage of opportunities;
- capital resources and liquidity, including Logan's expectations regarding sources of funding for future development capital expenditures and acquisitions;
- estimates used to calculate the fair value of the Financing Warrants;
- estimates used to calculate decommissioning obligations and depletion, impairment and impairment reversal of PP&E;
- estimates used to calculate deferred income taxes and estimated available tax pools;
- commitments and contingencies; and
- expectations for forecast commodity prices in 2024 and beyond.

The forward-looking statements and information are based on certain key expectations and assumptions made in respect of Logan including expectations and assumptions concerning the business plan of Logan, the timing of and success of future drilling, development and completion activities, the performance of existing wells, the performance of new wells, the availability and performance of facilities and pipelines, the geological characteristics of Logan's properties, the successful integration of the recently acquired assets into Logan's operations, the successful application of drilling, completion and seismic technology, prevailing weather conditions, prevailing legislation affecting the oil and gas industry, prevailing commodity prices, price volatility, price differentials and the actual prices received for Logan's products, impact of inflation on costs, royalty regimes and exchange rates, the application of regulatory and licensing requirements, the availability of capital, labour and services, the creditworthiness of industry partners and the ability to source and complete acquisitions.

Although Logan believes that the expectations and assumptions on which such forward-looking statements and information are based are reasonable, undue reliance should not be placed on the forward-looking statements and information because Logan can give no assurance that they will prove to be correct. By its nature, such forward-looking information is subject to various risks and uncertainties, which could cause the actual results and expectations to differ materially from the anticipated results or expectations expressed. These risks and uncertainties include, but are not limited to, fluctuations in commodity prices, changes in industry regulations and political landscape both domestically and abroad, wars (including Russia's ongoing military actions in Ukraine and the recent crisis in Israel and Gaza), hostilities, civil insurrections, foreign exchange or interest rates, increased operating and capital costs due to inflationary pressures (actual and anticipated), volatility in the stock market and financial system, impacts of the current COVID-19 pandemic and the retention of key management and employees. Ongoing military actions between Russia and Ukraine and the recent crisis in Israel and Gaza have the potential to threaten the supply of oil and gas from those regions. The long-term impacts of the actions between these nations remains uncertain. The foregoing list is not exhaustive. Please refer to Logan's AIF dated March 18, 2024 for discussion of additional risk factors relating to Logan, which can be accessed on its SEDAR+ profile at www.sedarplus.ca or on the Company's website at www.LoganEnergyCorp.com.

This MD&A contains future-oriented financial information and financial outlook information (collectively, "**FOFI**") about Logan's prospective results of operations and production, organic growth, operating costs, capital expenditures, Adjusted Funds Flow, working capital, Operating Netback, all of which are subject to the same assumptions, risk factors,

limitations, and qualifications as set forth in the above paragraphs. FOFI contained in this document was approved by management as of the date of this document and was provided for the purpose of providing further information about Logan's proposed business activities in 2024. Logan and its management believe that FOFI has been prepared on a reasonable basis, reflecting management's best estimates and judgments, and represent, to the best of management's knowledge and opinion, the Company's expected course of action. However, because this information is highly subjective, it should not be relied on as necessarily indicative of future results. Logan disclaims any intention or obligation to update or revise any FOFI contained in this document, whether as a result of new information, future events or otherwise, unless required pursuant to applicable law. Readers are cautioned that the FOFI contained in this document should not be used for purposes other than for which it is disclosed herein. Changes in forecast commodity prices, differences in the timing of capital expenditures, and variances in average production estimates can have a significant impact on the key performance measures included in Logan's guidance. The Company's actual results may differ materially from these estimates.