



MANAGEMENT'S DISCUSSION & ANALYSIS

**FOR THE THREE AND NINE-MONTHS ENDED
September 30, 2023 and 2022**

MANAGEMENT'S DISCUSSION AND ANALYSIS

Management's Discussion and Analysis ("MD&A") is a summary review of core operations, strategy, outlook, risks, the results of operations, liquidity, and capital resources of High Arctic Energy Services Inc. ("High Arctic" or the "Corporation"). This MD&A is based on information available to November 15, 2023 and should be read in conjunction with the unaudited condensed interim consolidated financial statements and notes for the three and nine-months ended September 30, 2023 and 2022 (the "Financial Statements") and the audited amended and restated consolidated financial statements and notes for the years ended December 31, 2022 and 2021 that were refiled on November 6, 2023. Additional information relating to the Corporation including the Corporation's Annual Information Form ("AIF") for the year ended December 31, 2022 that was refiled on November 6, 2023, is available under the Corporation's profile on SEDAR at www.sedarplus.ca. This MD&A and the Financial Statements were reviewed by High Arctic's Audit Committee and approved by the Board of Directors on November 15, 2023. All amounts are expressed in thousands of Canadian dollars ("CAD").

Readers are cautioned that this MD&A contains certain forward-looking information. Please refer to the "Forward-Looking Statements" section of this MD&A for the Corporation's discussion on forward looking information including risk factors that could cause actual results to differ materially and certain assumptions used to underlie the forward-looking information. Definitions of certain non-IFRS financial measures are included under the "Non-IFRS Measures" section of this MD&A. Please refer to abbreviations listed on the last page of this MD&A.

In the following discussion, the three-months ended September 30, 2023 may be referred to as the "Quarter" or "Q3-2023". The comparative three-months ended September 30, 2022 may be referred to as "Q3-2022". References to other quarters may be presented as "QX-20XX" with X being the quarter/year to which the commentary relates. Additionally, the nine-months ended September 30, 2023 may be referred to as "YTD" or "YTD-2023". References to other nine-month periods ended September 30 may be presented as "YTD-20XX" with XX being the year to which the nine-month period ended September 30 commentary relates.

CORPORATE PROFILE

Headquartered in Calgary, Alberta, Canada, High Arctic provides oilfield services to exploration and production companies operating in Papua New Guinea ("PNG") and Canada. High Arctic is a publicly traded corporation listed on the Toronto Stock Exchange in Canada under the symbol "HWO".

High Arctic conducts its business operations in three separate operating segments: Drilling Services, Ancillary Services and Production Services. These operating segments are supported by a Corporate segment.

It is important to highlight that a significant portion of the Production Services segment asset base was sold through two asset sale transactions during the third quarter of 2022. Subsequent to these disposals the Corporation retained meaningful assets in its Production Services segment, as of September 30, 2023, through its investment of \$3,350 in property and equipment and \$8,190 in equity investments. High Arctic carries on with operations through its snubbing assets located in Colorado, US, hydraulic workover rig assets located in PNG and its 49% investment in Seh' Chene Well Services Limited Partnership ("Seh' Chene Partnership") in Canada. In addition, the Corporation has maintained snubbing services investment in Canada by obtaining a 42% equity interest in Team Snubbing Service Inc. ("Team Snubbing", a private entity) as a result of the transactions.

Drilling Services

The Drilling Services segment consists of High Arctic's Drilling Services in PNG including the provision of personnel to assist our customer's drilling related operations in the country. High Arctic has operated in PNG since 2007 and controls the largest fleet of tier-1 heli-portable drilling rigs in the country, with two owned rigs and one rig managed by High Arctic under operating and maintenance contracts for one of the Corporation's customers.

Ancillary Services

The Ancillary Services segment consists of High Arctic's oilfield rental equipment in Canada and PNG. The rentals business in Canada is primarily focused on pressure control.

Discontinued Operations – Nitrogen Assets

On July 31, 2023, the Corporation closed the sale of its Canadian nitrogen business assets previously included in its Ancillary Services segment. A majority of personnel supporting the nitrogen business also departed the Corporation and moved over to the acquirer. As a result, the Corporation has exited the nitrogen line of business and accordingly, for the three and nine-month periods presented in this MD&A, the operating results of the Corporation's nitrogen assets have been presented as discontinued operations.

Production Services

The Production Services segment consists of High Arctic's workover equipment in PNG, snubbing assets in the United States and strategic equity investments in snubbing and well servicing businesses operating primarily in Canada.

As referenced above, during the third quarter of 2022, the Corporation closed the sale of certain assets of High Arctic's Canadian well servicing operations (the "Well Servicing Transaction") and at the same time closed the sale of Canadian snubbing services assets to Team Snubbing (the "Snubbing Transaction"). The sale of these assets represented the Corporation's steady and recurring Canadian direct revenue streams included in the Production Services operating segment. As a result of this transaction, the Corporation's Canadian Production Services revenue generating activities will now primarily be recognized through its acquired 42% strategic equity investment in Team Snubbing, rather than through direct ownership of the Canadian snubbing assets. Accordingly, the Production Services operating segment will recognize income through its equity investment. After these disposals, the Corporation retains its snubbing assets in the USA and its heli-portable workover rig in PNG, however revenue generated from these assets can be intermittent in nature. High Arctic also continues to market Production Services through its interest in the Seh' Chene Partnership.

Corporate

The Corporate segment supports High Arctic's operations, with monetary investments and borrowings, and provides executive leadership, and certain corporate administrative services.

2023 Third Quarter Highlights

- Full drilling utilization of PNG Rig 103 during the Quarter, pursuant to a 3-year contract renewed in August 2022.
- Generated positive Adjusted EBITDA from continuing operations of \$3.2 million on revenues of \$17.8 million, funds flow from continuing operations of \$3.2 million, and incurred capital expenditures of \$0.7 million.
- Recorded a non-cash impairment loss of \$20.5 million on PNG asset carrying values based on uncertainty around future drilling activity levels.
- Incurred a net loss from continuing operations of \$15.0 million or (\$0.31) per share in Q3-2023.
- After the Quarter, suspended the monthly dividend to optimize capability to fund a pending tax-efficient return of capital to shareholders, and
- Closed the sale of the Corporation's Canadian nitrogen transportation, hauling and pumping services business for total cash consideration of \$1.35 million resulting in a gain on sale of \$0.6 million.

Intention to Return Capital and Reorganize

On May 11, 2023, the Corporation announced that the Board of Directors intends to recommend to shareholders a tax efficient return of capital to a maximum of \$38.2 million relating to the Q3-2022 sale of High Arctic's Canadian well servicing assets, and a reorganization of the Corporation.

The reorganization was intended to separate the international business of High Arctic, which is focussed on Papua New Guinea, from the Canadian business. This addresses the inefficiency of managing two small businesses on opposite sides of the world, with few synergies and allowing senior management to concentrate where they can have the most success.

The Corporation has received feedback from some shareholders and is working with its advisors on the reorganization plan to incorporate key elements of the shareholder feedback. The High Arctic Board has reserved its final decision to proceed with the reorganization until these matters and ongoing strategic review have been addressed to their satisfaction. The Corporation cautions readers of this MD&A that there is no certainty that the reorganization will proceed in the format previously announced, or at all.

Select Comparative Financial Information

The following is a summary of select financial information of the Corporation:

(unaudited) (thousands of Canadian Dollars, except per share amounts)	Three months ended Sept 30,		Nine months ended Sept 30,	
	2023	2022	2023	2022
Operating results from continuing operations:				
Revenue ⁽³⁾	17,814	11,940	43,819	65,278
Net loss from continuing operations	(15,039)	(4,368)	(15,580)	(26,895)
<i>Per share – basic</i> ⁽¹⁾⁽²⁾	<i>(0.31)</i>	<i>(0.09)</i>	<i>(0.32)</i>	<i>(0.56)</i>
Oilfield services operating margin ⁽²⁾⁽³⁾	5,855	3,086	15,215	14,368
<i>Oilfield services operating margin as a % of revenue</i> ⁽²⁾	<i>32.9%</i>	<i>25.9%</i>	<i>34.7%</i>	<i>22.0%</i>
EBITDA ⁽²⁾	(16,166)	(270)	(11,109)	(2,996)
Adjusted EBITDA ⁽²⁾	3,202	598	8,556	6,686
<i>Adjusted EBITDA as % of revenue</i> ⁽²⁾	<i>18.0%</i>	<i>5.0%</i>	<i>19.5%</i>	<i>10.2%</i>
Operating income (loss)	308	(2,582)	(373)	(8,107)
Cash flow from continuing operations:				
Cash flow from operating activities	1,882	971	3,391	7,494
<i>Per share – basic</i> ⁽¹⁾⁽²⁾	<i>0.04</i>	<i>0.02</i>	<i>0.07</i>	<i>0.15</i>
Funds flow from (used in) operating activities ⁽²⁾	3,154	(620)	8,470	4,349
<i>Per share – basic</i> ⁽¹⁾⁽²⁾	<i>0.06</i>	<i>(0.01)</i>	<i>0.17</i>	<i>0.09</i>
Dividend payments	730	731	2,190	1,218
<i>Per share – basic</i> ⁽¹⁾⁽²⁾	<i>0.01</i>	<i>0.01</i>	<i>0.05</i>	<i>0.02</i>
Capital expenditures	702	636	1,829	3,940

(unaudited) (thousands of Canadian Dollars, except per share amounts)	As at Sept 30, 2023	As at Dec 31, 2022
Financial position:		
Working capital ⁽²⁾	63,452	59,461
Cash	46,801	19,559
Total assets	115,566	133,957
Long-term debt	3,394	4,028
Long-term financial liabilities, excluding long-term debt	1,139	4,881
Shareholders' equity	97,302	115,231
<i>Per share – basic</i> ⁽¹⁾⁽²⁾	<i>2.00</i>	<i>2.37</i>
Common shares outstanding (in thousands)	48,674	48,691

(1) The number of common shares used in calculating net loss from continuing operations per share, cash flow from (used in) operating activities per share, funds flow from continuing operations per share, dividends per share and shareholders' equity per share is determined as explained in Note 10 of the Financial Statements.

(2) Readers are cautioned that Oilfield services operating margin, EBITDA from continuing operations (Earnings from continuing operations before interest, tax, depreciation, and amortization), Adjusted EBITDA from continuing operations, Funds flow from continuing operations, oilfield services operating margin and working capital per share - basic & diluted do not have standardized meanings prescribed by IFRS – see "Non-IFRS Measures" for calculations of these measures.

(3) Revenue generated from the Canadian well services and snubbing assets sold in the Sale Transactions, during the three and nine months ended September 30, 2022 totaled \$4,959 and \$36,099 respectively. Oilfield services expenses, incurred from the Canadian well services and snubbing assets sold in the Sale Transactions, during the three months and nine months September 30, 2022 totaled \$3,965 and \$31,740 respectively. The Canadian snubbing assets were sold for an equity interest in the purchaser, Team Snubbing, on July 27, 2022. As a result, subsequent to this date, revenue and expenses in connection with High Arctic's 42% ownership interest in Team Snubbing are being reflected in income from equity investments.

Outlook

High Arctic's Canadian rental business, while small, continues to generate solid margins with a high level of utilization and we anticipate this continuing through the winter period. Opportunities to gain scale and underlying net profitability are a priority. Our investment in Team Snubbing performed well in Q3-2023 with Team recording its highest quarterly revenue to date and we have expectations for increased activity to drive Team's revenues up further across the traditionally busy winter period.

Coupling the nearing completion of the long-awaited pipeline expansion to tidewater for both oil liquids and natural gas production, with the evolving attitudes to carbon sequestration, energy security and the longevity of Canada's oil and gas industry, sets up a favourable backdrop for relatively sustained upstream energy service demand in Canada. We continue to seek opportunities to expand our rentals business capacity to service the energy industry now and into the future.

High Arctic's PNG business was highlighted by Rig 103 operating continuously through the third quarter. Rig 103 has now completed two of the four approved wells on our customer's current drilling program which is expected to be completed by Q3-2024. In addition, the Ancillary Services segment rental fleet of equipment continues to generate strong utilization and pricing and our manpower solutions continues to contribute a strong revenue stream at appropriate margins.

The Corporation's owned rig assets in PNG, heli-portable drilling rigs 115 and 116 and hydraulic workover rig 102, have been idle throughout 2023. This equipment continues to be actively marketed. However, we do not currently have outstanding customer contract tenders or open bid submissions. That said, the appointment of Chris Fraser as a key business development executive for High Arctic International has led to opportunities to promote our services to new customers and markets within the region. The Corporation is focussed upon our specialist PNG know-how, drilling capability, fleet of rental equipment and camps, and our worker development and manpower solutions.

We continue to await the final investment decision of the TotalEnergies led Papua-LNG project expected in early 2024. That project is anticipated to stimulate other exploration and appraisal activity and is expected to be followed by the P'nyang gas field development in the Western Province of PNG. State owned Kumul Petroleum continues to advance towards appraisal of other gas discoveries in PNG and discussions continue with other exploration companies towards future work.

In the immediate term, the current monetary policy environment is delivering high yield fixed interest income for investment of surplus cash. Additional cost discipline as well as the recent suspension of the Corporation's regular monthly dividend, aim to optimize a tax-efficient return of capital to shareholders.

2023 Strategic Objectives

High Arctic's 2023 Strategic Objectives build on the platform we created in 2022, and include:

- Safety excellence and quality service delivery,
- Return idled assets in PNG to service,
- Scaling our Canadian rentals business,
- Opportunities for growth and corporate transactions that enhance shareholder value, and
- Examination of the Corporation's optimal capital and overhead structure.

Discussion of Operations

Third Quarter 2023 Summary

- Revenue for the Quarter from continuing operations was \$17,814, an increase of \$5,874 compared to Q3-2022 at \$11,940. The combined Drilling Services segment and Ancillary Services segments increased revenue by an aggregate \$10,618 on the strength of increased revenues from PNG and Canadian rentals. This increase was partially offset with the decline from the Production Services segment that decreased by \$4,959 as a result of the sale of Canadian well servicing and snubbing assets in 2022. Revenue generated from the assets sold in the Sale Transactions during Q3-2022 totaled \$4,959.
- High Arctic recorded an impairment loss of \$20,500 on its PNG Operations CGU as uncertainty around future drilling activity levels in PNG negatively impact future cashflows and asset carrying values.
- Reported Adjusted EBITDA from continuing operations of \$3,202 in Q3-2023, an increase of \$2,603 over Q3-2022. The favourable variance was primarily due to the full utilization of PNG Rig 103 in the Quarter, associated rentals, and operational momentum with PNG drilling commencement in late Q1-2023. Higher utilization rates experienced in the Canadian rentals business also contributed to the increase in Adjusted EBITDA in the quarter.
- Oilfield services operating margins improved as a percent of revenue from 25.9% in Q3-2022 to 32.9% in Q3-2023. This improvement was primarily a result of the elimination of the lower margin Canadian well servicing and snubbing assets that were sold in Q3-2022.
- High Arctic generated a net loss of \$15,039 from continuing operations in Q3-2023 compared to a net loss from continuing operations of \$4,368 for Q3-2022. The increase in net loss of \$10,671 in Q3-2023 over Q3-2022 was due to the impairment loss of \$20,500 on its PNG Operations CGU. Mitigating the impact of the impairment was the stronger operational performance mentioned above, a \$3,865 deferred tax recovery recorded as a result of the impairment and \$470 in higher Q3-2023 interest income.

Year-to-date September 30, 2023 Summary

- Revenue from continuing operations for the nine months of 2023 was \$43,819, a decrease of \$21,459 compared to the corresponding period of 2022 at \$65,278. This decrease was due to the sale of Canadian well servicing and snubbing assets in 2022 which accounted for revenues of \$36,099 for the nine months ended September 30, 2022. Partially offsetting this decline was increased revenue from the Drilling Services segment of \$13,108 as a result of steady drilling activity in PNG since Q1-2023. Revenue generated from the assets sold in the Sale Transactions during first half of 2022 totaled \$36,099.
- Despite lower revenue for the nine months of 2023, Adjusted EBITDA from continuing operations increased \$1,870 to \$8,556 when compared to the corresponding period of 2022. The increase is primarily attributable to the contribution coming from High Arctic's higher margin businesses being Drilling and Ancillary Services when compared to 2022 which had a greater contribution from the Production Services segment which contained the Canadian well servicing and snubbing assets that were sold on July 27, 2022.
- Oilfield services operating margins improved as a percent of revenue from 22.0% for the nine months of 2022 to 34.7% in the nine months of 2023. This improvement is primarily a result of the strength in Drilling Services and Ancillary Services operating segments and the results of the Canadian well servicing and snubbing assets impact on the 2022 Production Services segment results.
- High Arctic generated a net loss of \$15,580 from continuing operations in YTD-2023 compared to a net loss of \$26,895 in the corresponding period of 2022. The lower net loss recorded in YTD-2023 was primarily attributable to improved income from operations, the gain on sale of the nitrogen business, higher interest income and lower interest and finance expenses. The YTD-2022 deferred tax expense of \$7,116 recorded that related to the reversal of the Corporation's deferred tax asset and the YTD-2023 deferred tax recovery of \$3,892 recorded as a result of the impairment recorded in Q3-2023, offset the \$10,942 year over year asset impairment expenses increase.

Operating Results

Drilling Services segment

(thousands of Canadian Dollars, unless otherwise noted)	Three months ended Sept 30,		Nine months ended Sept 30,	
	2023	2022	2023	2022
Revenue	13,940	4,870	33,653	20,545
Oilfield services expense	(10,731)	(3,718)	(25,475)	(15,832)
Oilfield services operating margin ⁽¹⁾	3,209	1,152	8,178	4,713
Operating margin (%)	23.0%	23.7%	24.3%	22.9%

(1) See "Non-IFRS Measures"

Revenues in the Quarter increased by 186% over Q3-2022 because of higher PNG drilling rig utilization. Customer-owned Rig 103 was fully utilized in Q3-2023 whereas in Q3-2022, High Arctic had no owned or Customer owned rigs operating. In Q3-2022, revenue primarily related to manpower provision for well site activities for two large PNG customers. Revenues for the nine months ended September 30, 2023 increased over the comparable period in 2022 by \$13,108 or 64% primarily due to the higher drilling rig utilization as the revenue from Rig 103, which reactivated in March 2023, far exceeded the short duration work High Arctic recorded in Q1-2022 for its owned Rig 115.

Slightly offsetting the increased revenue from the higher rig utilization was reduced level of revenue from the provision of manpower that High Arctic offers to its customers to assist them with other operational needs. High Arctic continues to develop its labour resourcing capabilities for customers and in 2022 benefitted from a specific customer's projects completed in the second and third quarter of that year.

Operating margin as a percent of revenues of 23.0% was slightly lower in the Quarter than the operating margin of 23.7% achieved in Q3-2022. Significant low margin reimbursable costs incurred in Q3-2023 were the primary factor for this decline in margin percentage. Operating margins for the nine months ended September 30, 2023 improved to 24.3% as compared to 22.9% for the comparable period in 2022. This was primarily attributable to the revenue contribution from Rig 103 from March to September 2023 which exceeded the short duration work High Arctic recorded in Q1-2022 for its owned Rig 115.

Ancillary Services segment

(thousands of Canadian Dollars, unless otherwise noted)	Three months ended Sept 30,		Nine months ended Sept 30,	
	2023	2022	2023	2022
Revenue	3,874	2,326	10,166	10,235
Oilfield services expense	(1,190)	(882)	(3,091)	(3,460)
Oilfield services operating margin ⁽¹⁾	2,684	1,444	7,075	6,775
Operating margin (%)	69.3%	62.1%	69.6%	66.2%

(1) See "Non-IFRS Measures"

The Ancillary Services segment consists of High Arctic's oilfield rental equipment in Canada and PNG. After the Q3-2022 Sale Transactions, rental equipment in Canada is primarily made up of oilfield pressure-control equipment.

Revenues from continuing operations increased 67% compared to Q3-2022 due to increased deployment in PNG. Rental equipment benefited from utilization associated with active Rig 103 drilling operations in PNG, overcoming lower revenue from Canada due to the sale of certain rental assets associated with Canadian well servicing in 2022. Margins for the same period improved 7.1% to 69.3% in the Quarter primarily because of PNG equipment mix and Canadian cost structure improvements.

Ancillary Services revenues of \$10,166 for the nine-month period ended September 30, 2023 are comparable to the same period in 2022. Impacting revenues for 2023 was an increase in rental activity in PNG with higher utilization offset by lower year-over-year revenues recorded Canada.

Nitrogen Assets – Discontinued Operations

On July 31, 2023, the Corporation closed the sale of all nitrogen business assets, which were located in Canada, previously included in its Ancillary Services segment. The Corporation received cash of \$1,350 and recorded a gain of \$615 on the sale of nitrogen business which had a net carrying value of \$674. Costs included in the determination of the gain on the sale totaled \$61. Accordingly, for the three and nine-month periods presented in this MD&A, the operating results of the Corporation's nitrogen business have been presented as discontinued operations.

The results of the operations of the disposed nitrogen assets are as follows:

(thousands of Canadian Dollars, unless otherwise noted)	Three months ended Sept 30,		Nine months ended Sept 30,	
	2023	2022	2023	2022
Revenue	105	579	1,307	1,643
Oilfield services expenses	(132)	(577)	(1,191)	(1,677)
General and administrative expenses	(79)	(29)	(292)	(97)
Depreciation expense	(18)	(151)	(129)	(451)
Loss on sale of property and equipment	-	-	-	(3)
Net loss from discontinued operations	(124)	(178)	(305)	(585)

Production Services segment

(thousands of Canadian Dollars, unless otherwise noted)	Three months ended Sept 30,		Nine months ended Sept 30,	
	2023	2022	2023	2022
Revenue	-	4,959	-	36,099
Oilfield services expense	(38)	(4,469)	(38)	(33,219)
Oilfield services operating margin ⁽¹⁾	(38)	490	(38)	2,880
Operating margin (%)	nm	9.9%	nm	8.0%

(1) See "Non-IFRS Measures"

For the three-and nine-month periods ended September 30, 2023 the Production Services segment includes High Arctic's hydraulic workover rig package in PNG, snubbing packages in the USA and its equity investment in Seh' Chene Partnership in Canada. While these operations generated no revenue in the three-and nine-month periods ended September 30, 2023, High Arctic continues to assess and pursue market opportunities to generate customer activity.

The Q3-2022 Sale Transactions impacted Production Services as certain assets were sold through two transactions. Revenue generated from the Canadian well services and snubbing assets sold in the Sale Transactions, during the three and nine months ended September 30, 2022 totaled \$4,959 and \$36,099 respectively. Oilfield services expenses, incurred from the Canadian well services and snubbing assets sold in the Sale Transactions, during the three months and nine months ended September 30, 2022 totaled \$4,469 and \$33,219 respectively. The Canadian snubbing assets were sold for an equity interest in the purchaser, Team Snubbing. As a result, subsequent to the sale to Team Snubbing, revenue and expenses in connection with High Arctic's 42% ownership interest in Team Snubbing are being reflected in income from equity investments. For Canadian well servicing assets, these were disposed of for cash consideration, leaving High Arctic with well servicing equipment and capability in PNG.

High Arctic continues to pursue discussions with active E&P companies in PNG towards deployment of Rig 102 after refurbishing the service rig package and actively bidding for projects. For the three-and nine-month periods ended September 30, 2023, direct operating costs totaled \$38 and are primarily direct costs related to the remaining Production Services assets.

Team Snubbing

High Arctic accounts for the results of its 42% equity interest in Team Snubbing using the equity method of accounting, with Team Snubbing's net earnings recorded as income from equity investments in the respective reporting period. As reported in the Corporation's Interim Financial Statements (Note 6), Team Snubbing achieved unaudited gross revenues of \$5,385 in Q3-2023 versus gross revenues of \$2,434 for the comparative period in Q3-2022. This increase in revenues is a result of increased job count activity as Team Snubbing had up to six snubbing packages in operation during Q3-2023 versus four in Q3-2022. Q3-2022 also represented just two months of activity with the current fleet of snubbing units as the Snubbing Transaction closed on July 27, 2022. High Arctic's proportionate share of net income for Q3-2023 was \$499 versus \$275 for the comparable period in 2022 due to higher customer demand and operational performance.

General and Administrative ('G&A')

(thousands of Canadian Dollars, unless otherwise noted)	Three months ended Sept 30,		Nine months ended Sept 30,	
	2023	2022	2023	2022
G&A	(2,653)	(2,488)	(6,659)	(7,682)
Percent of revenue (%)	14.9%	20.8%	15.2%	11.8%

G&A costs for Q3-2023 increased by \$165 when compared to Q3-2022 primarily due to higher severance and legal and professional fees incurred in Q3-2023. Throughout 2023, the Corporation has focused on reducing G&A costs, many of which are fixed in nature, to consider its reduced asset base in Canada. These efforts have supported the YTD-2023 G&A reductions and a lower percentage of revenue of 14.9% versus 20.8% for Q3-2022.

Depreciation

Depreciation expenses on property and equipment and right-of-use assets totaled \$2,778 in Q3-2023 compared to \$2,998 during Q3-2022, a decline of \$220 or 7.4%. This decline is a result of the sale of the Canadian well servicing and snubbing assets in 2022 and the disposition of the Canadian nitrogen business assets in 2023 that reduced the cost base of High Arctic's property and equipment and right-of-use assets which has reduced depreciation expense in the Quarter and for YTD-2023.

Impairment

As at September 30, 2023, the Corporation noted indicators of potential impairment in its PNG Operations CGU. The indicators noted have created uncertainty around future drilling activity levels in PNG for the Corporation. The Corporation then undertook an impairment analysis of the PNG Operations CGU and determined that its recoverable amount was below its estimated carrying value of USD 38,500. Based on the impairment analysis High Arctic recorded an impairment of USD15,100 (CAD 20,500) reducing the net carrying value of oilfield property and equipment.

Share-Based Compensation

Share-based compensation expense is the charge to income over the service period relating to stock option or unit plans which generally contemplate the issuance of common shares upon vesting. The Corporation recorded an expense of \$116 in Q3-2023 compared to an expense of \$182 in Q3-2022. This reduced expense was primarily due to reduced levels of share-based compensation awards outstanding in Q3-2023 when compared to Q3-2022.

Interest, finance expenses and income

(thousands of Canadian Dollars)	Three months ended Sept 30,		Nine months ended Sept 30,	
	2023	2022	2023	2022
Interest on long-term debt and standby fees	(41)	(105)	(134)	(358)
Finance expense – lease liabilities	(52)	(5)	(183)	(180)
Notes receivable accretion	50	(842)	141	(842)
Other expenses	(4)	(13)	(41)	(37)
Interest and finance expenses	(47)	(965)	(217)	(1,417)
Interest and other income	538	68	1,465	71
Income from equity investments	508	296	451	424
Finance and other income	1,046	364	1,916	495

In December 2021, the Corporation obtained long-term mortgage financing of \$8,100 on certain High Arctic owned land and buildings in Canada. As part of the Sale Transactions \$3,565 principal was re-paid in December 2022, resulting in a reduced mortgage liability and a commensurate lower interest on long-term debt expense in 2023. As part of the sale of all Canadian nitrogen business assets \$500 principal was re-paid in July 2023 further reducing the future interest on long-term debt. The mortgage has a remaining term of 3.4 years with a fixed interest rate of 4.30% with payments occurring monthly. As at September 30, 2023, the mortgage principal balance was \$3,571.

Finance expense on lease liabilities associated with the time value of money for the three-month period ended September 30, 2023 was \$52 (Q3-2022 - \$5), as liability is initially recorded at its present value. Higher finance expense on lease liabilities is primarily due to the addition of a lease related to the PNG office and operational support base in the second quarter of 2023.

As part of the Snubbing Transaction, the Corporation received a convertible promissory note for \$3,365 with a five-year term, annual interest of 4.5% accruing from January 1, 2023, and principal payments commencing in July 2024. The carrying value reporting in the financial statements was determined using an effective interest rate of 13%, which approximates the Corporation's cost of capital at the date of the agreement. As a result, in Q3-2022 the Corporation recognize \$842 of accretion expense at the time of entering into the note receivable agreement.

Interest income is from invested cash and the convertible promissory note. The Corporation's excess cash is invested in high interest savings accounts, redeemable term deposits and guaranteed investment certificates which generated interest of \$538 during Q3-2023 (Q3-2022 - \$68). As at September 30, 2023, the Corporation has \$37,315 invested in redeemable term deposits earning interest at various rates of up to 5.40%.

Income from equity investments represents High Arctic's equity interest in Team Snubbing and the Seh' Chene Partnership using the equity method of accounting. High Arctic records its proportionate interest of net income generated from these investments into its earnings in the respective reporting period.

Income taxes

(thousands of Canadian Dollars, unless otherwise noted)	Three months ended Sept 30,		Nine months ended Sept 30,	
	2023	2022	2023	2022
Income (loss) before income tax from continuing operations	(18,453)	(4,165)	(18,522)	(18,602)
Current income tax expense	(451)	(327)	(950)	(1,177)
Deferred income tax (expense) recovery	3,865	124	3,892	(7,116)
Total income tax (expense) recovery	3,414	(203)	2,942	(8,293)
<i>Effective tax rate</i>	<i>18.5%</i>	<i>4.9%</i>	<i>15.9%</i>	<i>44.6%</i>

The Corporation's current income tax expense is primarily due to withholding taxes incurred in foreign jurisdictions where High Arctic has its international operations. These withholding taxes are based on revenues and not on pre-tax income and as a result makes comparing effective tax rates from one period to another difficult. The increased total income tax recovery for Q3-2023 and YTD-2023 relates to a recovery of \$3,865 due to the impairment recorded in Q3-2023. The increased total income tax expense for YTD-2022 was due to the write-down of deferred tax assets in Canada given the Well Servicing Transaction and Snubbing Transaction.

Other Comprehensive Gain (Loss)

The Corporation recorded a \$997 foreign currency translation gain in other comprehensive loss for Q3-2023 (Q3-2022: \$4,137 gain) associated with subsidiaries with functional currencies other than CAD. The gain incurred in Q3-2023 was primarily a result of the period end USD strengthening against the CAD from USD/CAD 1.324 to USD/CAD 1.352 over the three months ended September 30, 2023.

Liquidity and capital resources

(thousands of Canadian Dollars)	Three months ended		Nine months ended	
	Sept 30, 2023	Sept 30, 2022	Sept 30, 2023	Sept 30, 2022
Cash provided by (used in) continued operations:				
Operating activities	1,882	971	3,391	7,494
Investing activities	1,146	8,690	28,005	6,745
Financing activities	(1,540)	(905)	(4,009)	(2,214)
Effect of exchange rate changes on cash	-	(419)	4	(512)
Increase in cash from continued operations	1,488	8,337	27,391	11,513
(thousands of Canadian Dollars, unless otherwise noted)			As at Sept 30, 2023	As at Dec 31, 2022
Current assets			77,183	69,278
Working capital ⁽¹⁾			63,452	59,461
Working capital ratio ⁽¹⁾			5.6:1	7.1:1
Cash and cash equivalents			46,801	19,559
Net cash ⁽¹⁾			43,230	15,345

(1) See "Non-IFRS Measures"

The Bank of PNG continues to encourage the use of the local market currency, Kina, or PGK. Due to High Arctic's requirement to transact with international suppliers and customers, High Arctic has received approval from the Bank of PNG to maintain its USD account within the conditions of the Bank of PNG currency regulations. The Corporation continues to use PGK for local transactions when practical. Included in the Bank of PNG's conditions is for PNG contracts to be settled in PGK, unless otherwise approved by the Bank of PNG for the contracts to be settled in USD. The Corporation has historically received such approval for its contracts with its key customers in PNG. The Corporation will continue to seek Bank of PNG approval for our contracts to be settled in USD on a contract-by-contract basis, however, there is no assurance the Bank of PNG will grant these approvals.

If such approvals are not received, the Corporation's PNG contracts will be settled in PGK which would expose the Corporation to exchange rate fluctuations related to the PGK. In addition, this may delay the Corporation's ability to receive USD which may impact the Corporation's ability to settle USD denominated liabilities and repatriate funds from PNG on a timely basis. The Corporation also requires the approval from the PNG Internal Revenue Commission ("IRC") to repatriate funds from PNG and make payments to non-resident PNG suppliers and service providers. While delays can be experienced for the IRC approvals, all such approvals have eventually been received in the past.

Operating Activities

In Q3-2023, cash generated from operating activities from continuing operations was \$1,882, up from the Q3-2022 cash generated from operating activities of \$971. Funds flow from continuing operations totaled \$3,154 in the Quarter versus funds flow used in continuing operations for Q3-2022 of \$620, see "Non-IFRS Measures", and a \$1,272 cash outflow from working capital changes (Q3-2022: \$1,591 inflow).

In the nine months ended September 30, 2023, cash generated from operating activities from continuing operations was \$3,391, down from \$7,494 in the corresponding period of 2022. Funds flow from continuing operations totaled \$8,470 in the nine months ended September 30, 2023, (YTD-2022: \$4,349), see "Non-IFRS Measures", and a \$5,079 cash outflow from working capital changes (YTD-2022: \$3,145 inflow).

Investing Activities

During Q3-2023, the Corporation's cash from investing activities from continuing operations was \$1,146 compared to Q3-2022 that saw positive cash from investing activities from continuing operations of \$8,690. 2022 was favorably impacted with initial \$10,000 cash receipts from the sale of the Canadian well servicing assets that exceeded the \$1,350 received in the Quarter for the sale of the Canadian nitrogen business assets.

During the nine months ended September 30, 2023, the Corporation's cash from investing activities from continuing operations was \$28,005 (YTD-2022 \$6,745) reflecting the receipt of the final cash proceeds of \$28,000 from the Well Servicing Transaction in Q1-2023 (YTD-2022: \$11,361) offset by lower capital expenditures totaling \$1,829 (YTD-2022: \$3,940) and \$1,350 in proceeds received on the disposal of the Canadian nitrogen business assets, and cash inflow of \$383 relating to working capital balance changes for capital items (YTD-2022: \$676, cash outflow).

Financing Activities

In Q3-2023, the Corporation's cash used in financing activities was \$1,540 (Q3-2022: \$905). During the Quarter, the Corporation paid \$730 in dividends (Q3-2022 \$731), \$544 (Q3-2022: \$80) in principal payments on its mortgage financing and \$266 in lease liability payments (Q3-2022: \$94).

During the nine months ended September 30, 2023, the Corporation's cash used in financing activities was \$4,009 (YTD-2022: \$2,214). During the period, the Corporation paid \$2,190 in dividends (YTD-2022: \$1,218), \$643 (YTD-2022: \$215) in principal payments on its mortgage financing, \$1,151 in lease liability payments (YTD-2022: \$1,025), \$25 in purchase of common shares for cancellation (YTD-2022: \$nil) and cash inflow of \$nil relating to non-cash working capital balance changes (YTD-2022: \$244).

Commitments and Contingencies

As part of the Corporation's contractual rig management and operations, the Corporation has been supplied equipment and an inventory of spare parts with a total value of \$8,294 at September 30, 2023 (December 31, 2022 - \$8,309) by a customer for the Corporation's operations in PNG, the underlying value is denominated in USD. The capital equipment and inventory are owned by this party and have not been recorded on the books of High Arctic. Written notice is required to end the contract. When notice to terminate is communicated, the Corporation must return the balance of capital equipment and inventory and make a payment to the customer equivalent to any shortfall. As at September 30, 2023, the Corporation has recorded a current obligation of \$3,264 (December 31, 2022 - \$3,270) as a result of consuming third-party owned inventory in operations which it is required to replenish on or prior to the termination of the contractual arrangement.

Outstanding Share Data

The Corporation's authorized share capital consists of an unlimited number of common shares and an unlimited number of preferred shares. The common shares do not have a par value and all issued shares are fully paid. Directors, officers, and certain employees have been granted stock options and incentive shares and units under the Corporation's approved equity compensation plans.

(Common shares issued and outstanding)	Nine months ended Sept 30, 2023		Year ended Dec 31, 2022	
	Shares	Amount	Shares	Amount
Balance, beginning of period	48,691,864	169,554	48,733,145	169,697
Purchase of common shares for cancellation	(18,296)	(64)	(41,281)	(143)
Balance, end of period	48,673,568	169,490	48,691,864	169,554

On December 13, 2022, the Corporation received approval from the Toronto Stock Exchange to acquire for cancellation of up to 750,000 common shares, or approximately 1.5 percent of the Corporation's outstanding shares, under a Normal Course Issuer Bid ("NCIB"). The NCIB is valid for one year, commencing on December 15, 2022 and terminating on December 14, 2023. Pursuant to this NCIB no shares were purchased and cancelled in 2022. During 2023, a total of 18,296 shares have been purchased pursuant to this NCIB and cancelled.

The Corporation's previous NCIB commenced on December 15, 2021 and terminated on December 14, 2022. Pursuant to this previous NCIB, 16,376 common shares were purchased and cancelled in 2022.

At September 30, 2023, 217,000 stock options were outstanding at an average exercise price of \$1.38 per share, as well as 812,096 units under the Corporation's Performance Share Unit Plan and 892,134 units under the Deferred Share Unit plan were outstanding.

No common shares have been issued from September 30, 2023 to the date of this MD&A.

Summary of Quarterly Results – Continuing operations

The following is a summary of selected consolidated financial information of the Corporation for the last eight completed quarters:

(thousands of Canadian Dollars) (except per share)	Three months ended							
	Sep 30, 2023	Jun 30, 2023	Mar 31, 2023	Dec 31, 2022	Sep 30, 2022	Jun 30, 2022	Mar 31, 2022	Dec 31, 2021
Revenue	17,814	17,234	8,771	12,323	11,940	25,023	28,123	22,793
Adjusted EBITDA⁽¹⁾⁽²⁾								
Continuing operations	3,202	4,413	897	(848)	599	2,979	2,835	1,792
Net income (loss)⁽²⁾								
Continuing operations	(15,039)	89	(630)	(8,909)	(4,368)	(20,233)	(2,571)	(4,491)
Earnings (loss) per share – basic and diluted⁽¹⁾								
Continuing operations	(0.31)	0.00	(0.01)	(0.18)	(0.09)	(0.42)	(0.05)	(0.09)
Cash flow from (used in) operating activities⁽¹⁾								
Continuing operations	1,882	1,082	316	541	971	6,001	247	(3,516)
Fund flow from (used in) operating activities⁽¹⁾								
Continuing operations	3,154	3,914	1,291	(7,995)	(620)	2,502	2,191	1,346

(1) See "Non-IFRS Measures"

(2) Adjusted EBITDA and Net loss from continuing operations includes the impact of wages subsidies and rent subsidies recorded during Q4-2021

(3) Revenue generated from the Canadian well services and snubbing assets sold in the Sale Transactions for Q4-2021: \$13,637; Q1-2022: \$15,060; Q2-2022: \$16,079 and Q3-2022 \$4,959. The Canadian snubbing assets were sold for an equity interest in the purchaser, Team Snubbing, on July 27, 2022. As a result, subsequent to this date, revenue and expenses in connection with High Arctic's 42% ownership interest in Team Snubbing are being reflected in income from equity investments.

Revenue primarily remained consistent in Q3-2023 relative to Q2-2023 primarily as a result of the Rig 103 drilling operations that were ongoing for all of Q2-2023 and Q3-2023 respectively. Net loss from continuing operations in Q3 2023 was attributable to asset impairment expenses of \$20,500 associated with High Arctic's PNG CGU partially offset by a \$3,865 deferred income tax recovery, and a \$615 gain on sale of the Canadian nitrogen business assets. The relatively large net loss from continuing operations incurred in Q4-2022 and Q3-2022 were primarily a result of the inventory adjustments of \$3,900 relating to stock held in PNG and the \$8,679 equipment impairment and \$7,921 write down of deferred income tax asset respectively.

Industry Indicators and Market Trends

PNG

The following table provides information for the last eight quarters to assist with the understanding of the PNG oilfield services industry and the effect that commodity prices have on industry activity levels. In addition, the Corporation's international financial results are impacted by fluctuations in the USD to CAD exchange rate.

	Three months ended							
	Sep 30, 2023	Jun 30, 2023	Mar 31, 2023	Dec 31, 2022	Sep 30, 2022	Jun 30, 2022	Mar 31, 2022	Dec 31, 2021
Oil and LNG prices – Average for each period:								
Brent crude oil (US\$/bbl) ⁽¹⁾	82	80	76	89	98	112	97	80
Japan LNG (US\$/mmbtu) ⁽²⁾	12.50	13.17	18.87	20.67	20.60	17.07	16.57	13.47
USD/CAD exchange rate ⁽¹⁾	1.34	1.35	1.35	1.35	1.37	1.29	1.25	1.26

(1) Source: Sproule

(2) Source: YCharts

Pricing for oil and natural gas production in PNG is generally tied to world prices such as Brent Crude and Japan LNG, which rebounded strongly from lows experienced in 2020 and early 2021 when global demand was negatively impacted by COVID-19. Current commodity price levels provide a sustainable environment in which to invest in exploring for and developing new oil and gas reserves.

More recently global commodity prices have stabilized in the high 70's to low 80's down from their 2022 highs. In the Quarter, Brent Crude Oil price average increased 3% from previous quarter to USD 82/bbl as demand continues to be supportive globally for oil and OPEC continues with its plans for production cuts to maintain pricing for the commodity. Japanese LNG prices declined 5% from previous quarter to USD 12.50/MMBtu in the Quarter as seasonal demand pulled back and storage levels in Europe and Asia have improved.

The Corporation's PNG activity has historically been based on longer term, USD-denominated contracts and therefore is less affected over the short-term volatility in oil and gas prices. The Quarter end USD strengthened against the CAD from USD/CAD 1.3240 at June 30, 2023 to USD/CAD 1.3520 at September 30, 2023 which resulted in a foreign currency translation gain on the Corporation's PNG operations for the Quarter.

Activity levels for the Corporation's major customers in PNG are less dependent on short-term fluctuations in oil and gas prices and instead are based on medium and long-term decisions, particularly with their significant interest in large scale LNG projects both on-stream and in-development.

Canada

The following table provides information for the last eight quarters to assist with the understanding of the Canadian oilfield services industry and the effect that commodity prices have on industry activity levels.

	Three months ended							
	Sep 30, 2023	Jun 30, 2023	Mar 31, 2023	Dec 31, 2022	Sep 30, 2022	Jun 30, 2022	Mar 31, 2022	Dec 31, 2021
Oil and natural gas prices – Average for each period:								
West Texas Intermediate (WTI) (US\$/bbl) ⁽¹⁾	77	76	76	83	92	108	94	77
West Canada Select (WCS) (CA\$/bbl) ⁽¹⁾	80	82	75	77	94	122	101	79
Canada Light Sweet Oil (CLS) (CA\$/bbl) ⁽¹⁾	101	97	100	108	117	136	118	92
AECO (CA\$/MMBtu) ⁽¹⁾	2.76	2.43	3.23	5.24	4.46	7.26	4.77	4.74

(1) Source: Sproule

In Q3-2023, WTI, WCS, CLS prices were generally stable throughout the quarter. Consistent with global liquids pricing, product demand generally firmed up as supply levels stayed relatively constant. Recessionary fears in North America that were present at the end of Q1-2023 and early in Q2-2023 abated during the quarter which also supported the energy commodity complex.

In Canada, industry activity remained steady throughout the Quarter and was relatively consistent when compared to Q3-2022. North American commodity prices remain in a profitable range assisted by the favorable USD/CAD exchange rate, the aforementioned strong demand outlook and a political focus attempting to balance energy transition and energy security. All of these factors are favourable to the energy industry and provide impetus to justify upstream capital investment.

Financial Risk Management

The Corporation's financial instruments have the following foreign exchange exposure as at September 30, 2023:

(thousands of Canadian Dollars)	USD ⁽¹⁾	PGK ⁽²⁾	Aus Dollar (AUD) ⁽³⁾
Cash	3,281	5,734	545
Accounts receivable	11,576	8,225	115
Accounts payable and accrued liabilities	(7,615)	(343)	(646)
Total – Canadian Dollars	7,242	13,616	15

(1) As of Sept 30, 2023, one USD was equivalent to 1.352 CAD.

(2) As at Sept 30, 2023, one PGK was equivalent to 0.370 CAD.

(3) As at Sept 30, 2023, one AUD was equivalent to 0.872 CAD.

Credit risk, customers, and economic dependence

Credit risk is the risk of a financial loss occurring as a result of a default by a counter party on its obligation to the Corporation. The Corporation's financial instruments that are exposed to credit risk consist primarily of accounts receivable and cash balances held in banks. The Corporation mitigates credit risk by regularly monitoring its accounts receivable position and depositing cash in properly capitalized banks. The Corporation also institutes credit reviews prior to commencement of contractual arrangements.

The Corporation's accounts receivable is predominantly with customers who explore for and develop petroleum reserves and are subject to industry credit risk consistent with the industry. The Corporation assesses the creditworthiness of its customers on an ongoing basis and monitors the amount and age of balances outstanding.

In providing for expected credit losses ("ECL"), the Corporation uses the historical default rates within the industry between investment grade and non-investment grade customers as well as forward looking information to determine the appropriate loss allowance provision.

The net carrying amount of accounts receivable represents the estimated maximum credit exposure on the accounts receivable balance. The Corporation has a range of customers comprised of small independent, intermediate, and large multinational oil and gas producers in North America and predominantly large global customers in PNG.

The Corporation provided services to two large multinational customers who individually accounted for greater than 10% of its consolidated revenues during the three months ended September 30, 2023 with total sales of \$11,988 and \$2,317 respectively (2022: three customers with revenues of \$4,655, \$4,451, and \$1,556 respectively).

The Corporation provided services to two large multinational customers who individually accounted for greater than 10% of its consolidated revenues during the nine months ended September 30, 2023 with total sales of \$21,606 and \$4,608 respectively (2022: six customers with revenues of \$12,138, \$9,468, \$8,617, \$8,367, \$7,050, and \$6,721 respectively).

As at September 30, 2023, two customers represented a total of \$13,897 or 69% of outstanding accounts receivable (December 31, 2022 – three customers represented a total of \$6,415 or 58% of outstanding accounts receivable).

The aging of the Corporation's accounts receivable is as follows:

(thousands of Canadian Dollars)	As at Sept 30, 2023	As at Dec 31, 2022
Less than 31 days	6,507	3,049
31 days to 60 days	7,482	2,636
61 days to 90 days	2,325	2,173
Greater than 90 days	3,770	3,279
Provision for expected credit losses	(43)	(45)
Total	20,041	11,092

Liquidity Risk

Liquidity risk is the risk that the Corporation will not be able to meet its financial obligations as they fall due. The Corporation's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due.

The Corporation's processes for managing liquidity risk include preparing and monitoring capital and operating budgets, working capital management, coordinating, and authorizing project expenditures, authorization of contractual agreements, managing compliance to debt finance agreements, and remaining attentive to the relationship with High Arctic's bankers and other creditors. The Corporation seeks to manage its financing based on the results of these processes.

High Arctic intends to fund working capital and capital expenditure needs from cash balances with a view to establish a new arrangement geared towards its Papua New Guinea business.

Critical Accounting Judgements and Estimates

As a routine element of the financial statement preparation process, management is required to make estimates and assumptions based on information available as at the financial statement date. These estimates and assumptions affect the reported amounts of assets and liabilities, and the possible disclosure of contingent assets and liabilities at the date of the Interim Financial Statements and the reported amounts of revenue and expenses for the period.

Information on the Corporation's critical accounting judgements and estimates can be found in Note 2 Basis of Presentation – Critical Accounting Judgements and Estimates in the audited amended and restated annual consolidated financial statements for the year ended December 31, 2022. Although estimates and assumptions must be made during the financial statement preparation process, it is management's opinion that none of the estimates or assumptions were highly uncertain at the time they were made. The most significant estimates in High Arctic's Interim Financial Statements relate to, but are not limited to, the following:

Accounts receivable – Expected credit loss

The Corporation estimates the amount of expected credit losses for trade receivables with no financing component using a provision matrix. The provision matrix is based on historical loss experience and is adjusted for forward-looking estimates based on current and future economic conditions using internal and externally sourced data. Judgement is required when applying this information to the expected credit loss and any adjustments as a result of this new information.

The Corporation uses the simplified approach of the expected credit loss model for lease and trade receivables with no significant financing component which requires measuring the loss allowance at an amount equal to the lifetime expected credit losses at initial recognition and throughout its life.

Inventory obsolescence provision

The Corporation measures inventories at the lower of the cost and net realizable value. The cost of inventories may not be recoverable if inventories are damaged or can no longer be used in the field and therefore obsolete. Judgement is required when determining which inventory requires a provision for obsolescence.

The Corporation inspects inventory throughout the year and adjusts provisions for obsolete inventory each reporting period. Inventory that is identified as damaged or obsolete is eventually scrapped and removed from the inventory listing.

Identification of CGUs & impairment of property and equipment

Property and equipment are tested for impairment when events and or changes in circumstances indicate that the carrying amount may not be recoverable which involves both judgement and estimation. For the purpose of measuring recoverable amounts, assets are grouped at the lowest levels for which there are separately identifiable cash inflows, defined as CGUs.

The classification of assets and allocation of corporate assets in CGUs requires significant judgement and interpretation. Further, the factors considered in CGU classification include the integration between assets, shared infrastructures, the existence of common sales points, geography and the way management monitors and makes decisions about its operations. As such, the determination of a CGU involves considerable judgement and could have a significant impact on impairment losses and reversals.

The assessment of impairment or impairment reversal indicators is based on significant judgment of whether there are internal and external factors that would indicate that a cash generating unit and specifically the non-financial assets within the cash generating unit, either are impaired or are no longer impaired. These factors include revenue and earnings before interest, taxes, depreciation and amortization ("EBITDA") forecasts, expected industry activity levels, commodity price developments and market capitalization. The Corporation's CGUs consist of the Canadian Rentals Operations, and PNG Operations as at September 30, 2023.

The recoverable amount is the higher of a CGU's fair value less costs of disposal and value in use (being the present value of the expected future cash flows of the relevant CGU). Estimates of future cash flows used in the evaluation of impairment of assets are made using management's current operating forecasts, expected utilization, rates and costs of available equipment (margin), terminal values and discount rates. An impairment loss is recognized for the amount by which the CGU's carrying amount exceeds its expected recoverable amount.

Disposal of non-current assets

Pursuant to both the Well Servicing Transaction and the Snubbing Transaction in 2022 High Arctic sold specific assets associated with its well servicing and snubbing services operations in Canada. The Corporation applied judgement to determine whether a component of the Corporation that either has been disposed of, or is classified as held for sale, met the criteria of a discontinued operation. The key area that involves management judgement in this determination is whether the component represented a separate major line of business.

The Corporation concluded that the disposal of well servicing assets and snubbing assets did not meet the criteria of discontinued operations because they did not represent the disposal of a separate major line of business. This is because the Corporation continues to conduct activities in its Production Services line of business through its investments in Team Snubbing and the Seh' Chene Partnership, and its well servicing assets in PNG. The Corporation also continues to own snubbing equipment and to assess opportunities in the United States.

The Corporation has accounted for the sale of the Canadian nitrogen business assets as a discontinued operations in the Interim Financial Statements. On closing of the sale of the Canadian nitrogen business assets, the Corporation had disposed of all of its Canadian nitrogen transportation, hauling and pumping business assets which represented a major line of business for the Corporation. There were no retained liabilities directly associated with the sale of this business.

As at the date of the MD&A, the Corporation has concluded that its intended reorganization that involves the spinout of its PNG business does not currently meet the definition of an asset held for sale or distribution. While the Corporation's Board of Directors' intention is to continue to proceed with a reorganization, significant outstanding matters need to be resolved before the reorganization can be viewed as being highly probable.

Disclosure Controls and Procedures ("DC&P") and Internal Controls over Financial Reporting ("ICFR")

As disclosed in the Corporation Q2-2023 amended and restated MD&A, during the period from August 31, 2023 to October 26, 2023, an evaluation of the effectiveness of High Arctic's ICFR as defined under the rules adopted by the Canadian securities regulatory authorities was carried out under the supervision and with the participation of management, including the Chief Executive Officer ("CEO") and the Chief Financial Officer ("CFO"). The Corporation identified a material weakness in the ICFR as it related to insufficient management review of complex accounting and financial reporting matters, including related disclosures.

As a result of the control weakness, incorrect amounts were reported in its operating segments note disclosure under IFRS 8. The Corporation restated its consolidated financial statements for the year ended December 31, 2022, and its Q4-2022 MD&A and its Q2-2023 MD&A. Based on this evaluation, the CEO and CFO concluded that as at December 31, 2022, and June 30, 2023, High Arctic's ICFR was not effective due to the material weakness noted above. The Corporation identified the weakness and remediated the deficiency by adding an additional level of review for all of its consolidated financial statement note and MD&A disclosures.

ICFR is a process designed by or under the supervision of management and effected by the Board, management and other personnel to provide reasonable assurance regarding the reliability of financial reporting and preparation of consolidated financial statements for external purposes in accordance with IFRS. Management is responsible for establishing and maintaining adequate ICFR, which no matter how well designed, has inherent limitations and can provide only reasonable assurance with respect to the preparation and fair presentation of published financial statements. There have been no changes to High Arctic's internal controls over financial reporting during the three months ended September 30, 2023 that have materially affected, or are reasonably likely to materially affect, its internal controls over financial reporting.

For information regarding the corporate governance policies and practices of High Arctic, the reader should refer to the High Arctic's 2022 Annual Report, High Arctic's Amended and Restated Annual Information Form dated November 6, 2023 in respect of the year ended December 31, 2022, and High Arctic's Information Circular in respect of the May 11, 2023 Annual General and Special Meeting of shareholders each of which are available under the Corporation's profile on SEDAR at www.sedarplus.ca.

Business Risks and Uncertainties

In addition to the financial risks discussed above under "Financial Risk Management", below under "Forward Looking Statements" and elsewhere in this MD&A, High Arctic is exposed to a number of business risks and uncertainties that could have a material impact on the Corporation. Readers of the Corporation's MD&A should carefully consider the risks described under the heading "Risk Factors" in the Corporation's AIF, which are specifically incorporated by reference herein. The AIF is available on SEDAR at www.sedarplus.ca, copies of which can be obtained on request, from the Corporation.

Non-IFRS Measures

This MD&A contains references to certain financial measures that do not have a standardized meaning prescribed by IFRS and may not be comparable to the same or similar measures used by other companies. High Arctic uses these financial measures to assess performance and believes these measures provide useful supplemental information to shareholders and investors. These financial measures are computed on a consistent basis for each reporting period and include the following:

Earnings from continuing operations before interest, taxes, depreciation, and amortization (“EBITDA from continuing operations”)

EBITDA from continuing operations is a non-IFRS financial measure that does not have a standardized meaning under IFRS and therefore may not be comparable to similar measures presented by other entities. EBITDA from continuing operations is defined as net loss adjusted for income taxes, interest and finance expense, and depreciation. Management believes that, in addition to net loss reported in the consolidated statements of loss and comprehensive loss, EBITDA from continuing operations is a useful supplemental measure of the Corporation’s performance prior to consideration of how operations are financed or how results are taxed or how depreciation and amortization affects results. EBITDA from continuing operations is not intended to represent or be construed as an alternative to net earnings (loss) calculated in accordance with IFRS. Note that EBITDA from continuing operations is inclusive of government wage subsidies and rental subsidies recorded. Refer to table in Adjusted EBITDA from continuing operations below that provides a reconciliation of net earnings (loss), as disclosed in the consolidated statements of loss and comprehensive loss, to EBITDA from continuing operations.

Adjusted EBITDA from continuing operations

Adjusted EBITDA from continuing operations is a non-IFRS financial measure that does not have a standardized meaning under IFRS and therefore may not be comparable to similar measures presented by other entities. Adjusted EBITDA from continuing operations is defined based on EBITDA from continuing operations (as defined above) prior to the effect of share-based compensation, gains or losses on sales or purchases of assets or investments, business acquisition costs, impairment charges, equity earnings from investments, other costs related to consolidating facilities, excess of insurance proceeds over costs and foreign exchange gains or losses. Note that Adjusted EBITDA from continuing operations is inclusive of the CEWS and rental subsidy programs which ended in October 2022.

Management believes the addback for these items provides a more comparable measure of the Corporation’s operational financial performance between periods. Adjusted EBITDA from continuing operations as presented is not intended to represent or be construed as an alternative to net loss in accordance with IFRS.

The following table provides a quantitative reconciliation of consolidated net loss from continuing operations, as disclosed in the consolidated statements of comprehensive income (loss), to EBITDA from continuing operations and Adjusted EBITDA from continuing operations for the three and nine-months ended September 30, 2023 and 2022:

(thousands of Canadian Dollars)	Three months ended Sept 30,		Nine months ended Sept 30,	
	2023	2022	2023	2022
Net loss from continuing operations	(15,039)	(4,368)	(15,580)	(26,895)
Add:				
Interest and other income	(538)	(68)	(1,465)	(71)
Interest and finance expenses	47	965	217	1,417
Income tax	(3,414)	203	(2,942)	8,293
Depreciation	2,778	2,998	8,661	14,260
EBITDA from continuing operations	(16,166)	(270)	(11,109)	(2,996)
Adjustments to EBITDA:				
Share based compensation	116	182	268	533
Income from equity investment	(508)	(296)	(451)	(424)
Impairment	20,500	879	20,500	9,558
Gain on sale of property and equipment	(581)	(28)	(724)	(167)
Foreign exchange (gain) loss	(159)	131	72	182
Adjusted EBITDA from continuing operations	3,202	598	8,556	6,686

Oilfield services operating margin

Oilfield services operating margin is a non-IFRS financial measure that does not have a standardized meaning under IFRS and therefore may not be comparable to similar measures presented by other entities. Oilfield services operating margin is used by management to analyze overall operating performance. Management believes this non-IFRS financial measure provides useful information to investors and others in understanding the Corporation’s operating performance. Oilfield services operating margin is not intended to represent revenue, net earnings (loss), or other measures of financial performance calculated in accordance with IFRS. Oilfield services operating margin is calculated as revenue less oilfield services expense. Oilfield services operating margin as presented is not intended to represent or be construed as an alternative to revenue or net earnings (loss) in accordance with IFRS. The table disclosed in oilfield services operating margin % below provides a quantitative reconciliation of revenue, as disclosed in the consolidated statements of comprehensive income (loss), to oilfield services operating margin and oilfield operating margin % for the three and nine-months ended September 30, 2023 and 2022.

Oilfield services operating margin % from continuing operations

Oilfield services operating margin % is a non-IFRS measure in line with oilfield services operating margin discussed above. Oilfield services operating margin % is used by management to analyze overall operating performance. Oilfield services operating margin % is calculated as oilfield services operating margin divided by revenue.

The following table provides a quantitative calculation of oilfield services operating margin and %:

(thousands of Canadian Dollars, unless otherwise noted)	Three months ended Sept 30,		Nine months ended Sept 30,	
	2023	2022	2023	2022
Revenue	17,814	11,940	43,819	65,278
Oilfield services expenses	(11,959)	(8,854)	(28,604)	(50,910)
Oilfield services operating margin	5,855	3,086	15,215	14,368
Oilfield services operating margin %	32.9%	25.9%	34.7%	22.0%

Operating income (loss) from continuing operations

Operating income (loss) from continuing operations is a non-IFRS financial measure that does not have a standardized meaning under IFRS and therefore may not be comparable to similar measures presented by other entities. Operating income (loss) from continuing operations is used by management to analyze overall operating performance. Management believes this non-IFRS financial measure provides useful information to investors and others in understating the Corporation's operating performance. Operating income (loss) from continuing operations is not intended to represent revenue, net earnings (loss), or other measures of financial performance calculated in accordance with IFRS. Operating income (loss) from continuing operations is calculated as revenue less oilfield services expense, general and administrative expense, depreciation, and share-based compensation. Operating income (loss) from continuing operations as presented is not intended to represent or be construed as an alternative to revenue or net earnings (loss) or other measures of financial performance calculated in accordance with IFRS.

The table disclosed below provides a quantitative reconciliation of revenue, as disclosed in the consolidated statements of comprehensive income (loss) to operating income (loss) from continuing operations for the three and nine-months ended September 30, 2023 and 2022:

(thousands of Canadian Dollars)	Three months ended Sept 30,		Nine months ended Sept 30,	
	2023	2022	2023	2022
Revenue from continuing operations	17,814	11,940	43,819	65,278
Oilfield services expenses	(11,959)	(8,854)	(28,604)	(50,910)
General and administrative expenses	(2,653)	(2,488)	(6,659)	(7,682)
Depreciation	(2,778)	(2,998)	(8,661)	(14,260)
Share based compensation	(116)	(182)	(268)	(533)
Operating income (loss) from continuing operations	308	(2,582)	(373)	(8,107)

Percentage of revenue

Certain figures are stated as a percentage of revenue and are used by management to analyze individual components of expenses to evaluate the Corporation's performance from prior periods and to compare its performance to other companies.

Funds flow from continuing operations

Funds flow from continuing operations is a non-IFRS financial measure that does not have a standardized meaning under IFRS and therefore may not be comparable to similar measures presented by other entities. Funds flow from continuing operations is defined as net cash generated (used in) from continuing operating activities adjusted for changes in non-cash working capital. Management believes that, in addition to net cash generated from operating activities as reported in the consolidated statements of cash flows, cash generated from operating activities before changes in non-cash working capital adjustments is a useful supplemental measure as it provides an indication of the funds generated by High Arctic's principal business activities prior to consideration of changes in items of working capital.

This measure is not intended to represent or be construed as an alternative to net cash generated from operating activities as calculated in accordance with IFRS.

The following tables provide a quantitative reconciliation of net cash generated from (used in) operating activities, as disclosed in the consolidated statements of cash flows, to funds flow from (used in) continuing operations for the three and nine-months ended September 30, 2023 and 2022:

(thousands of Canadian Dollars)	Three months ended Sept 30,		Nine months ended Sept 30,	
	2023	2022	2023	2022
Net cash generated from operating activities	1,882	971	3,391	7,494

Less: Changes in non-cash working capital balances - operating	(1,272)	1,591	(5,079)	(3,145)
Funds flow from continuing operations	3,154	(620)	8,470	4,349

Working capital

Working capital is a non-IFRS financial measure that does not have a standardized meaning under IFRS and therefore may not be comparable to similar measures presented by other entities. Working capital is used by management as another measure to analyze the operating liquidity available to the Corporation. It is defined as current assets less current liabilities. Working capital ratio is defined as current assets divided by current liabilities. This measure is not intended to represent or be construed as an alternative to current assets as calculated in accordance with IFRS.

The following tables provide a quantitative reconciliation of current assets, as disclosed in the consolidated statements of financial position, to working capital as at September 30, 2023 and December 31, 2022:

(thousands of Canadian Dollars)	As at Sept 30, 2023	As at Dec 31, 2022
Current assets	77,183	69,278
Current liabilities	(13,731)	(9,817)
Working capital	63,452	59,461
Working capital ratio	5.6:1	7.1:1

Net cash

Net cash is a non-IFRS financial measure that does not have a standardized meaning under IFRS and therefore may not be comparable to similar measures presented by other entities. Net cash is used by management to analyze the amount by which cash and cash equivalents (if applicable) exceed the total amount of long-term debt and bank indebtedness, or vice versa. The amount, if any, is defined as cash and cash equivalents less total long-term debt.

The following tables provide a quantitative reconciliation of cash, as disclosed in the consolidated statements of financial position, to net cash:

(thousands of Canadian Dollars)	As at Sept 30, 2023	As at Dec 31, 2022
Cash and cash equivalents	46,801	19,559
Less: Long term debt ⁽¹⁾	(3,571)	(4,214)
Net cash	43,230	15,345

(1) Long-term debt includes current portion of \$177 (Q4-2022: \$186) and non-current portion of \$3,394 (Q4-2022: \$4,028)

Forward-Looking Statements

This MD&A contains forward-looking statements. When used in this document, the words "may", "would", "could", "will", "intend", "plan", "anticipate", "believe", "seek", "propose", "estimate", "expect", and similar expressions are intended to identify forward-looking statements. Such statements reflect the Corporation's current views with respect to future events and are subject to certain risks, uncertainties, and assumptions. Many factors could cause the Corporation's actual results, performance, or achievements to vary from those described in this MD&A.

Should one or more of these risks or uncertainties materialize, or should assumptions underlying forward-looking statements prove incorrect, actual results may vary materially from those described in this press release as intended, planned, anticipated, believed, estimated or expected. Specific forward-looking statements in this press release include, among others, statements pertaining to the following: general economic and business conditions which will include, among other things, the outlook for energy services; continued impact of Russia-Ukraine conflict and other conflicts; sustained upstream energy service demand in Canada; the expansion of Canada's traditional and emerging energy industries; opportunities for growth and transactions that enhance shareholder value; the Corporation's ability to maintain a USD bank account and conduct its business in USD in PNG; market fluctuations in interest rates, commodity prices, and foreign currency exchange rates; restrictions to repatriate funds held in PGK; expectations regarding the Corporation's ability to manage its liquidity risk, raise capital and manage its debt finance agreements; projections of market prices and costs; factors upon which the Corporation will decide whether or not to undertake a specific course of operational action or expansion; the Corporation's ongoing relationship with its major customers; the return of capital to the Corporation's shareholders; potential impacts regarding the Corporation's reorganization plan; the performance of the Corporation's investment in Team Snubbing; realizing opportunities to gain scale and underlying net profitability in the Canadian business; expansion of the Canadian rentals business; upswing in PNG energy sector activity and opportunities for growth; the final investment decision on the Papua-LNG project and development of the P'nyang gas field; stimulation of other exploration and appraisal activity in PNG; expectations of Rig 103 to operate beyond the current approved wells on the customers drilling program; deploying idle heli-portable drilling rigs 115

and 116; future work with other exploration companies in PNG; executing on one or more corporate transactions and estimated credit risks.

With respect to forward-looking statements contained in this MD&A, the Corporation has made assumptions regarding, among other things, its ability to: maintain its ongoing relationship with major customers; successfully market its services to current and new customers; devise methods for, and achieve its primary objectives; source and obtain equipment from suppliers; successfully manage, operate, and thrive in an environment which is facing much uncertainty; remain competitive in all its operations; attract and retain skilled employees; and obtain equity and debt financing on satisfactory terms.

The Corporation's actual results could differ materially from those anticipated in these forward-looking statements as a result of the risk factors set forth above and elsewhere in this MD&A, along with the risk factors set out in the most recent Annual Information Form filed on SEDAR at www.sedarplus.ca.

The forward-looking statements contained in this MD&A are expressly qualified in their entirety by this cautionary statement. These statements are given only as of the date of this MD&A. The Corporation does not assume any obligation to update these forward-looking statements to reflect new information, subsequent events or otherwise, except as required by law.

Abbreviations

The following is a summary of abbreviations used in this Management Discussion and Analysis:

AIF	- Annual information form
AUD	- Australian dollars
bbl	- Barrel
CAD	- Canadian dollars
CLS	- Canadian Light Sweet
DCP	- Disclosure controls and procedures
EBITDA	- Earnings before interest, tax, depreciation, and amortization
ESG	- Environmental, Social and Corporate Governance
ICFR	- Internal controls over financial reporting
IFRS	- International Financial Reporting Standards
IRC	- Internal Revenue Commission of PNG
LNG	- Liquefied natural gas
MD&A	- Management discussion and analysis
mmbtu	- Million British thermal units
NCIB	- Normal course issuer bid
nm	- Not meaningful
OPEC	- Organization of Petroleum Exporting Countries
PGK	- Papua New Guinea kina
PNG	- Papua New Guinea
US	- United States of America
USD	- United States dollars
WCS	- West Canada Select
WCSB	- Western Canadian Sedimentary Basin
WTI	- West Texas Intermediate
YTD	- Year to date