MANAGEMENT'S DISCUSSION & ANALYSIS

FOR THE YEARS ENDED
December 31, 2022 and 2021

AMENDED AND RESTATED

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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 6, 2023 and should be read in conjunction with the audited consolidated financial statements and notes for the years ended December 31, 2022 and 2021 (the "**Financial Statements**"). Additional information relating to the Corporation including the Corporation's Amended and Restated Annual Information Form dated November 6, 2023 ("**AIF**") for the year ended December 31, 2022, is available under the Corporation's profile on SEDAR at www.sedar.com. This MD&A and the Financial Statements were reviewed by High Arctic's Audit Committee and approved by the Board of Directors on November 6, 2023. The Corporation originally issued its MD&A for the years ended December 31, 2022 and 2021 on March 28, 2023. This MD&A was re-issued to clarify disclosures regarding the assets currently included in the Corporation's Production Services segment and to correctly allocate certain expenses amongst High Arctic's Production Services and Ancillary Services segments. All amounts are expressed in thousands of Canadian dollars ("**CAD**"), unless otherwise noted, and have been prepared in accordance with International Financial Reporting Standards ("**IFRS**") as issued by the International Accounting Standards Board.

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 significantly and certain assumptions used to underlie the forward-looking information. Definitions of certain non-IFRS financial measures are included on page 19 under the "Non-IFRS Measures" section.

In the following discussion, the three months ended December 31, 2022 may be referred to as the "**Quarter**" or "**Q4-2022**", and similarly the year ended December 31, 2022 may be referred to as "**YTD-2022**". The comparative three months ended December 31, 2021 may be referred to as "**Q4-2021"** and similarly the year ended December 31, 2021 may be referred to as "**YTD-2021**". References to other quarters may be presented as "**QX-20XX**" with **X** being the quarter/year to which the 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 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 December 31, 2022, through its investment of $4,462 in property and equipment and $7,739 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 within 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 currently consists of High Arctic's oilfield rental equipment in Canada and PNG, as well as its Canadian nitrogen services. The rentals business in Canada is focused on pressure control. Revenue generated from the Canadian based oilfield rental equipment disposed of as part of the Well Servicing Transaction is included in this operating segment up to July 27, 2022.

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, on July 27, 2022 the Corporation closed the sale of certain assets of High Arctic's Canadian well servicing operations 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. As such, the Production Services operating segment will have indirect revenue recognized as income from the equity investment. The Corporation has retained 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 with its Production Services operations and indirect revenue generating activities 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.

Fourth Quarter and Year Highlights

- Disposition of underperforming assets in Canada for $38.2 million.
- Executed a strategic consolidation of the snubbing industry in Canada by partnering with Team Snubbing, a large snubbing specialist.
- Retained profitable Rental and Nitrogen Services businesses and real estate in Canada.
- After a slowdown prolonged by the pandemic in PNG, rig operations recommenced in 2022.
- In April, reinstated a monthly dividend of $0.005 per share and returned $2.2 million to shareholders.
- Generated Adjusted EBITDA(1) of $5.7 million YTD-2022 and a negative Adjusted EBITDA(1) of $0.9 million in Q4-2022 while realizing a net loss of $36.6 million YTD-2022 and net loss of $9.1 million Q4-2022.
- The significant loss was due to non-cash impairment expense of $9.7 million and elimination of $7.7 million deferred tax asset both associated with the Canadian assets sales, a $3.9 million PNG inventory adjustment and obsolescence provision in Q4-2022 in PNG, and $17.7 million in depreciation expense.

(1) see "Non IFRS Measures" on page 19

2022 Review

On the backdrop of a dynamic 2022, High Arctic strengthened its financial condition and is positioned for PNG reactivation growth with a strong balance sheet. These strategic developments led to the Company reinstating a regular monthly dividend during the second quarter.

Papua New Guinea – Drilling, Production and Ancillary Services

Drilling Services activities rose in 2022 with PNG seeing drilling rig activity following a long period of relative inactivity during the Covid-19 pandemic. Early in 2022, the Corporation utilized Rig 115 to complete the abandonment of a complex legacy well for a key customer while in Q3-2022 the Corporation executed a three-year renewal of the contract for the provision of drilling services with its principal customer using Rig 103. 2022 also saw the Corporation take steps to formalize the provision of personnel services to the PNG industry following the success of doing the same in 2021. Provision of personnel to both key PNG customers remained strong throughout the year. With higher industry activity, the Corporation increased utilization of its rental equipment including camps, matting, and mobile material handling equipment. The combination of these service activities led to High Arctic achieving revenues of $30.7 million in 2022 as compared to $10.7 million in 2021 in its Drilling Services segment.

In 2022, the *Papua-LNG* joint venture entered front-end-engineering-and-design ("FEED") and commenced early works activity, foreshadowing a final investment decision ("FID") in the second half of 2023. The operator of the PNG-LNG joint venture announced the signing of a gas agreement for the development of the P'nyang gas field in the Western Province of PNG, which is anticipated to result in the addition of further gas liquefaction capacity in the world class PNG-LNG export facility.

In preparation for year-end verification and active drilling in 2023, High Arctic conducted comprehensive substantive procedures to verify the current asset carrying value of inventory. This resulted in a $3.9 million inventory adjustment in the fourth quarter of 2022.

The Corporation is also well positioned to provide well servicing, including snubbing operations with its hydraulic workover rig located in PNG.

Canada – Production and Ancillary Services

On July 27, 2022, High Arctic executed two separate asset sales transactions resulting in the divestment of a significant portion of its Canadian well servicing and snubbing assets (the "Sale Transactions").

Certain Canadian well servicing assets were sold for an aggregate purchase price of $38.2 million to be settled in cash consideration. The Well Servicing Transaction involved the sale of well servicing rigs, associated rental equipment, and real estate used in the support of these operations along with the transfer of field personnel and a large majority of the office support personnel. The sale price was $38.2 million, which resulted in impairment of $9.0 million recognized in 2022. The well servicing assets were originally purchased by the Corporation in August 2016 for $42.8 million in cash with a non-cash $12.7 million gain on the acquisition booked to PP&E.

The Canadian snubbing assets were sold to Team Snubbing for a consideration consisting of 42% equity ownership in the post-closing outstanding shares in Team Snubbing, valued at $7.7 million, and a convertible promissory note of $3.4 million. The note has a five-year term, with interest accruing at 4.5% from January 1, 2023, and principal repayments commencing July of 2024. High Arctic's investment in the share capital of Team Snubbing allows for significant influence of key corporate, strategic and financial decisions and High Arctic has rights to the net assets of Team Snubbing. The sale resulted in a 2022 impairment loss of $0.7 million.

The Corporation's well servicing and snubbing activities in Canada continue through its interest in Team Snubbing and its interest in the Seh' Chene Partnership. High Arctic retains its Ancillary Services Segment in Canada comprised of the Nitrogen Pumping business and a Rentals business focused on pressure control equipment.

As a result of the Sale Transactions, the Corporation has a significantly reduced Canadian operations and has written down the deferred tax assets of $7.7 million while retaining $126.7 million of operating tax loss carry-forward in Canada. Additionally, the $37.0 million revolving bank loan credit facility was terminated effective July 28, 2022.

2022 Strategic Priorities

High Arctic's has a relentless focus on quality and is driven to be recognized as a trusted service provider in the energy industry. High Arctic works towards this by defining and measuring results against strategic priorities. Our 2022 strategic priorities and highlights of progress include:

- Safety excellence and quality service delivery,
  - ✓ High Arctic extended its recordable incident free activity in PNG to 6 years and over 3 million work hours.
- Actions aimed at generating free cash flow:
  - ✓ Divested underperforming assets in Canada, increased activity in PNG and diversified into providing personnel at market rates to the wider PNG industry.
- Development of new and existing employees to grow our workforce to meet demand,
  - ✓ While the Corporation realized a substantive reduction to our workforce driven by the Sale Transactions, High Arctic doubled its employee count in PNG during 2022, and advanced PNG citizens into two management roles.
- Pursuit of opportunities that secure the Corporation's future as a lower emissions energy services provider,
  - ✓ High Arctic's patented electric well servicing rig design was sold as part of the Well Servicing Transaction. The Corporation continues to look for ways to innovate its PNG service offerings and contribute to the reduction of the emissions intensity of the energy industry there.

- Pursuit of opportunities for growth and corporate transactions in well understood markets that enhance shareholder value, and

  ✓ The disposal of the Canadian well servicing assets provided capital to support future corporate objectives. The investment in Team Snubbing consolidated the Canadian snubbing market while retaining significant exposure to this high margin bespoke service offering. High Arctic renewed a three-year contract for drilling services with its principal customer in PNG and remains focused on growth in the PNG market.

- Disciplined capital stewardship to improve returns for shareholders including divestitures, dividends, and common share buybacks.

  ✓ High Arctic announced the finalization of the sale of its Well Servicing Transaction in January 2023 leading to more than $42 million cash and cash equivalents available. High Arctic issued dividends of $2.2 million in 2022 and repurchased 41,281 shares for cancellation totaling $0.1 million.

Select Comparative Financial Information

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

($ thousands, unless otherwise stated and per share amounts)	For the year ended		
	December 31 2022	December 31 2021	December 31 2020
Revenue[3]	**80,020**	76,442	90,834
Oilfield services operating margin [1][3]	**11,917**	15,216	21,311
Oilfield services operating margin as a % of revenue [1]	***14.9%***	*19.9%*	*23.5%*
Net loss	**(36,583)**	(18,607)	(25,985)
Per share (basic and diluted) [2]	***(0.75)***	*(0.38)*	*(0.52)*
EBITDA [1]	**(8,714)**	4,429	10,404
Adjusted EBITDA [1]	**5,664**	4,918	8,529
Adjusted EBITDA as % of revenue [1]	***7.1%***	*6.4%*	*9.4%*
Operating loss [1]	**(16,689)**	(19,430)	(27,510)
Cash flow from (used in) operating activities	**7,863**	(1,797)	20,152
Per share (basic and diluted)	***0.16***	*(0.04)*	*0.41*
Funds flow from operating activities [1]	**(2,980)**	3,697	6,320
Per share (basic and diluted) [1]	***(0.06)***	*0.08*	*0.13*
Dividend payments	**2,193**	9,747	1,638
Per share (basic and diluted) [1][2]	***0.045***	*0.20*	*0.03*
Capital expenditures	**4,073**	7,242	4,874

($ thousands, unless otherwise stated and per share amounts)	As at / For the year ended		
	December 31 2022	December 31 2021	December 31 2020
Working capital [1]	**59,461**	29,724	44,577
Cash and cash equivalents	**19,559**	12,037	32,598
Total assets	**133,957**	185,452	214,159
Long-term debt	**4,028**	7,779	10,000
Long-term financial liabilities, excluding long-term debt	**5,186**	13,414	15,926
Shareholders' equity	**115,231**	148,851	177,221
Per share (basic and diluted)[2]	**2.37**	3.05	3.58
Common shares outstanding	**48,691,864**	48,733,145	48,759,660

(1) Readers are cautioned that Oilfield services operating margin, EBITDA (Earnings before interest, tax, depreciation, and amortization), Adjusted EBITDA, Operating loss, Funds flow from operating activities, Dividend payments per share, Working capital and Long-term financial liabilities do not have standardized meanings prescribed by IFRS – see "Non IFRS Measures" on page 19 for calculations of these measures. EBITDA includes wage and rent subsidies received from the Canadian Government during 2021 and 2020.

(2) The number of common shares used in calculating net loss per share, cash flow from (used in) operating activities, funds flow from operating activities per share, dividend payments per share, and shareholders' equity per share is determined as explained in Note 12 of the Financial Statements.

(3) Revenue generated from the Canadian well services and snubbing assets sold in the Sale Transactions, during the three months and year ended December 31, 2022 totaled $nil and $36,100 respectively. Oilfield services expenses, incurred from the Canadian well services and snubbing assets sold in the Sale Transactions, during the three months and year ended December 31, 2022 totaled $180 and $29,396 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

The Corporation begins 2023 with a strong balance sheet, access to substantial cash resources on hand and is well positioned. This enables High Arctic to pursue opportunistic growth in both our PNG and Canadian businesses return value to shareholders, and weather market turbulence due to high inflation or recession.

The fundamentals for sustained high LNG demand, particularly in Asia, positions PNG for substantive LNG export growth. The advancement of the TotalEnergies led *Papua-LNG* project’s FEED continues with early-works activity underway and an FID on the multi-train project expected in the 2nd half of 2023. This project is expected to be followed by the P’nyang gas field development in the Western Province of PNG, which is anticipated to result in the addition of further gas liquefaction capacity in the world class *PNG-LNG* export facility. These developments underpin our optimism of an expanding PNG energy sector and increasing future demand for our equipment, personnel and expertise.

To date, the recommencement of drilling activity has been slower than the Corporation anticipated. Currently, customer plans have deferred mobilisation of Rig 115, and both Rig 115 and Rig 116 remain preserved in condition ready to be deployed. The positive effect of the slower ramp up in activity is that the Corporation expects to be able to fund reactivation activities out of PNG cash flow. With the modification and upgrade works completed, Rig 103 commenced drilling operations last week. Given PNG market conditions and current customer plans, we expect Rig 103 to operate consistently through the term of its contract, which is up for renewal in 2025.

Notwithstanding the foregoing, High Arctic recently received advice from the PNG Central Bank instructing the Corporation to settle our contract for Rig 103 in PNG Kina. The Corporation observes that this follows similar well publicized instructions issued by the PNG Central Bank to other large PNG companies. High Arctic has engaged dialogue with the bank aimed at reinstating approval to settle the contract in USD, dialogue is ongoing. Meanwhile the Corporation has taken steps to minimise the impact of any currency conversion delays on its business.

High Arctic maintains a presence in the Canadian market, through its investments in Team Snubbing and the Seh' Chene Partnership, HAES rentals and our nitrogen pumping operations. Canada is the world's fourth-largest producer of oil and gas, with vast reserves and additional export pathways coming onstream in the coming years. We continue to evaluate opportunities for investment as they arise in the Canadian market, while remaining attentive to opportunities to best realize a return on the investments in our existing Canadian service lines, and its snubbing assets in the USA.

High Arctic’s 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 business,
- Opportunities for growth and corporate transactions that enhance shareholder value, and
- Examination of the Corporation’s optimal capital structure and dividend policy.

Discussion of Operations

Three-month period ended December 31, 2022 Summary:

- High Arctic’s consolidated revenue for Q4-2022 reduced to $13,099 from $23,644 in Q4-2021, impacted largely by the Sale Transactions.
- Low margin reimbursable activity with customers combined with inventory adjustments relating to stock held in PNG reduced consolidated oilfield services operating margin as a percentage of revenue for Q4-2022 to (18.5)% from 19.9% in Q4-2021.
- Delay in the recommencement of Rig 103 in PNG contributed to a net loss of $9,103 in Q4-2022 versus a net loss of $4,608 in Q4-2021. Adjusted EBITDA for Q4-2022 was a loss of $892, compared to a profit of $1,836 in Q4-2021.
- Inventory count and obsolescence reviews conducted in PNG, led to an inventory adjustment of $4,450 and a reduction in the obsolescence provision of $579.

Year ended December 31, 2022 Summary:

- Higher drilling related activity in PNG more than offset the reduction in Canadian well servicing and snubbing revenue following the Sale Transactions during Q2-2022 leading to consolidated revenue for 2022 of $80,020 as compared to $76,442 in 2021. Revenue generated from the assets sold in the Sale Transactions during 2022 totaled $36,100.
- Adjusted EBITDA delivered by the Corporation in 2022 was $5,664, compared to $4,918 in 2021.
- The Sale Transactions and costs associated with reactivation of drilling equipment in PNG contributed to a reduction in consolidated oilfield services operating margin as a percentage of revenue to 14.9% in 2022 from 19.9% in 2021.
- Non-cash impairment expense of $9,667 associated with the disposal of assets through the Sale Transactions, recognition of a non-cash deferred tax expenses on the elimination of a deferred tax assets of $7,743 associated with the Canadian operations, and PNG inventory adjustment and obsolescence provision of $3,871 contributed to the increase in net loss for 2022 to $36,583 compared with the net loss of $18,607 recorded in 2021.

Operating Results

Drilling Services Segment

	Three months ended December 31		Year ended December 31	
($ thousands, unless otherwise noted)	**2022**	2021	**2022**	2021
Revenue	**$10,126**	$6,291	**$30,671**	$10,653
Oilfield services expense	**13,498**	4,831	**29,330**	8,990
Oilfield services operating margin (1)	**($3,372)**	$1,460	**$1,341**	$1,663
Operating margin (%)(1)	***(33.3%)***	*23.2%*	***4.4%***	*15.6%*

(1) See "Non-IFRS Measures" on page 19.

During Q4-2022, High Arctic saw deployment of drilling personnel wind-down with one large customer while the preparation and modification of drilling Rig 103 including the upgrade of its topdrive continued. The topdrive project led to an increase in low margin reimbursable costs.

A full evaluation of High Arctic owned inventory across all locations within PNG led to the recognition of an inventory adjustment and obsolescence provision of $3,704 to the Drilling Services segment. As a result, High Arctic incurred an oilfield services operating loss of $3,372, a significant decrease from the operating margin of $1,460 recorded in Q4-2021.

In 2022, revenue experienced a substantial 187% increase from $10,653 in 2021 to $30,671. This growth was attributable to completing abandonment services with Rig 115 earlier in the year, preparation works for Rig 103 in the second half, and increases in revenues from the provision of skilled personnel for key customers in 2022. As a result, the oilfield services operating margin for YTD-2022 rose significantly, however increases were more than offset from the inventory adjustment in Q4-2022, to $1,341 compared to $1,663 in 2021. However, operating margins as a percent of revenues were lower, effected by the high proportion of low margin reimbursable expenses and inventory adjustment.

The Corporation owns two heli-portable drilling rigs (Rigs 115 and 116) which have been preserved and maintained ready for deployment. On August 1, 2022, High Arctic announced a three-year contract renewal agreement to operate Rig 103 on behalf of a major oil and gas exploration customer in PNG. While the contract for customer owned Rig 104 was not renewed at the time, the rig has been preserved and maintained ready for deployment and High Arctic is optimistic for future contracts with third-party customers in the coming activity cycle.

Production Services Segment

	Three months ended December 31		Year ended December 31	
($ thousands, unless otherwise noted)	**2022**	2021	**2022**	2021
Revenue	**$1**	$13,637	**$36,100**	$55,440
Oilfield services expense	**412**	12,721	**33,631**	47,957
Oilfield services operating (loss) margin (1)	**($410)**	$916	**$2,469**	$7,483
Operating margin (%)	**nm**	*6.7%*	***6.8%***	*13.5%*

(1) See "Non-IFRS Measures" on page 19

During the fourth quarter of 2022 the Production Services segment consisted of High Arctic's service-workover rig package in PNG, snubbing packages in the USA and the Seh' Chene Partnership in Canada. While these operations generated no meaningful revenue in the Quarter, High Arctic continues to assess and pursue market opportunities to sustain customer activity.

High Arctic announced on July 27, 2022, that it had completed the sale of certain Canadian well servicing and snubbing assets, which comprised all of the Corporation's steady and recurring Canadian revenue streams historically included in the Production Services segment operating in the WCSB. Revenue was generated from this fleet of well servicing rigs under the Concord Well Servicing brand and a fleet of stand-alone and rig assist snubbing units. Revenue generated from the Canadian well services and snubbing assets sold in the Sale Transactions, during the three months and year ended December 31, 2022 totaled $nil and $36,100 respectively. Oilfield services expenses, incurred from the Canadian well services and snubbing assets sold in the Sale Transactions, during the three months and year ended December 31, 2022 totaled $180 and $29,396 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 now being reflected in income from equity investments.

Costs of $410 incurred during Q4-2022 were post-Sale Transaction expenses primarily associated with the transition of the Canadian assets to the purchaser and other direct expenses related to the remaining Production Services assets.

Ancillary Services Segment

	Three months ended December 31		Year ended December 31	
($ thousands, unless otherwise noted)	**2022**	2021	**2022**	2021
Revenue(1)	**$2,972**	$4,227	**$14,850**	$12,274
Oilfield services expense	**1,606**	1,902	**6,743**	6,204
Oilfield services operating margin (2)	**$1,366**	$2,325	**$8,107**	$6,070
Operating margin (%)	***46.0***	*55.0%*	***54.6%***	*49.5%*

(1) Revenue includes amounts charged to other segments of the Corporation totalling $1,925 ($1,783).
(2) See "Non-IFRS Measures" on page 19.

The Ancillary Services segment has consisted of High Arctic's oilfield rental equipment in Canada and PNG, as well as its Canadian nitrogen operations. Subsequent to the Sale Transactions, rental equipment in Canada is primarily made up of pressure-controlled oilfield equipment rentals.

In Q4 2022, Ancillary Services revenues and oilfield services operating margin were $2,972 and $1,366, respectively, down from $4,227 and $2,325 in 2021, respectively. This was primarily due to a smaller rental equipment fleet following the Well Servicing Transaction. Also, a full evaluation of High Arctic owned inventory across all locations within PNG led to the recognition of an inventory adjustment and obsolescence provision of $167 to Ancillary Services segment.

For the full year 2022, Ancillary Services revenues and oilfield services operating margin were $14,850 and $8,107, respectively, up from $12,274 and $6,070 YTD-2021. The increase was primarily due to higher utilization of PNG oilfield rental equipment.

General and Administrative ("G&A")

	Three months ended December 31		Year ended December 31	
($ thousands, unless otherwise noted)	**2022**	2021	**2022**	2021
G&A expenses	**$2,346**	$2,864	**$10,124**	$10,298
% of revenue	***17.9%***	*12.1%*	***12.7%***	*13.5%*

In Q4-2022, G&A costs were $2,346, down from $2,864 in Q4-2021 due to the elimination of administration and support services directly supporting the assets disposed of in relation to the Sale Transactions. G&A costs as a percentage of revenues increased to 17.9% from 12.1% in Q4-2021 primarily as a result of a lower revenue base in Q4-2022.

High Arctic is committed to managing and balancing these costs within the overall strategic plan for the Corporation and will continue to right-size G&A costs accordingly.

Depreciation

Depreciation expense on property and equipment and right-of-use assets totaled $2,987 in Q4-2022 compared to $6,005 during Q4-2021. The July 2022 disposal of certain property and equipment in the Well Servicing Transaction having a net book value of $47,191, and the Snubbing Transaction having a net book value of $11,779 led to a significant reduction in depreciable assets. YTD-2022 depreciation expense of $17,698 was lower than the YTD-2021 depreciation expense of $23,639.

Impairment

As a result of the Sale Transactions, impairment expenses of $9,667 was recognized, including $109 recognized during Q4-2022, reflecting the excess of the net book value of the assets sold over the fair value of the transactions.

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 recognized share-based compensation of $784 in 2022 relative to $709 in 2021. The higher 2022 expense relates to new grants and re-invested dividends under the Corporation's Performance Share Unit Plan and Deferred Share Unit Plan.

Interest and Finance Expense

	Three months ended December 31		Year ended December 31	
($ thousands)	**2022**	2021	**2022**	2021
Note receivable accretion	**$(82)**	$-	**$761**	$-
Interest expense and standby fees	**84**	85	**442**	280
Finance expense – lease liabilities	**15**	95	**198**	390
Interest income	**(139)**	-	**(210)**	-
Other	**59**	13	**92**	36
	$(63)	$193	**$1,283**	$706

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 Q4-2022 and YTD-2022 the Corporation recognize $82 accretion income and $761 of accretion expense, respectively.

In December 2021, the Corporation obtained long-term mortgage financing of $8,100 on certain High Arctic owned and occupied land and buildings in Canada, which resulted in higher interest expense in YTD-2022. As part of the Sale Transactions $3,565 principal was paid in December, resulting in an ending balance of $4,214 mortgage financing as at December 31, 2022.

A significant portion of the assets pledged as security for the HSBC Credit facility of $37,000 no longer existed following the disposal of certain Canadian well servicing and snubbing assets and therefore the Credit facility was cancelled effective July 28, 2022. The Corporation did not draw upon the facility in 2022.

Finance expense on lease liabilities associated with the time value of money for the three and twelve-month periods ended December 31, 2022 was $15 and $198, respectively (2021: $95 and $390, respectively), as the liability is initially recorded at its present value. Lower finance expense on lease liabilities is due to transfer of a majority of the leases the Corporation had in place, including the lease of the Acheson facility as part of the Well Servicing Transaction.

Interest income relates to high interest accounts that are included in cash and cash equivalents. The Corporation invested idle cash of $5,000 in a Guaranteed Investment Certificate with an interest rate of 3.75% per annum and redeemable within 90 days. The Corporation also invested idle cash of $5,000 in a 31 Day Notice Account with a floating rate which was 2.75% interest rate.

Other finance expense relates to bank charges in the respective periods, with higher bank charges for settlement of $3,565 principal mortgage financing in December 2022.

Income Taxes

($ thousands)	Three months ended December 31 **2022**	2021	Year ended December 31 **2022**	2021
Net loss before income tax	**$(7,898)**	$(5,023)	**$(27,695)**	$(19,916)
Current income tax expense	**(2,510)**	(348)	**(3,687)**	(905)
Deferred income tax recovery (expense)	**1,305**	763	**(5,201)**	2,214
Total income tax (expense) recovery	**$(1,205)**	$415	**$(8,888)**	$1,309
Effective tax rate	**14.2%**	(8.3)%	**32.1%**	(6.6)%

Higher current income tax expense in 2022 was due to foreign withholding tax on distribution of intercompany dividends from High Arctic's wholly owned foreign subsidiaries in Q4-2022 and taxes withheld in PNG on revenue received by our non-PNG wholly owned foreign subsidiaries.

Higher deferred income tax expense YTD-2022 is due primarily to the write-down of $7,743 deferred tax assets relating to the elimination of deductible temporary differences in Canada, as a result of the Sale Transactions which lead to a significant reduction in revenue generating assets in the Canadian jurisdiction available to utilize accumulated corporate tax losses. Q4-2022 deferred income tax recovery of $1,305 primarily relates to temporary differences between the tax and accounting values of property and equipment and inventory in PNG (Q4-2021: $763 recovery).

In 2022, effective tax rates were affected by foreign taxes on income earned in foreign jurisdictions and write-downs of deferred tax assets related to deductible temporary differences in Canada. Furthermore, the taxing bodies in the Corporation's operating jurisdictions will not recognize the impact of impairment on the Corporation's loss before income taxes.

Other Comprehensive Gain (Loss)

The Corporation recorded a $778 foreign currency translation loss in other comprehensive loss for Q4-2022 (Q4-2021: $474 loss) associated with subsidiaries with functional currencies other than CAD. Loss in the period is reflective of the strengthening of the CAD compared to the USD.

The Corporation recorded a $4,432 foreign currency translation gain in other comprehensive loss for YTD-2022 (YTD-2021: $570 foreign currency translation loss). Gains in YTD-2022 relate to the predominance of weakening of the CAD compared to the USD.

Liquidity and Capital Resources

($ thousands)	Three months ended December 31 **2022**	2021	**2022**	Year ended December 31 2021
Cash provided (used in) by:				
Operating activities	**$501**	$(3,472)	**$7,863**	$(1,797)
Investing activities	**(61)**	(2,722)	**6,652**	(5,572)
Financing activities	**(4,523)**	(2,088)	**(6,737)**	(13,389)
Effect of exchange rate changes on cash	**256**	109	**(256)**	197
(Decrease) increase in cash	**$(3,827)**	$(8,173)	**$7,522**	$(20,561)

($ thousands, unless otherwise noted)	As at **December 31 2022**	 December 31 2021
Current assets	**$69,278**	**$45,132**
Working capital (1)	**59,461**	**29,724**
Working capital ratio (1)	***7.1:1***	***2.9:1***
Cash and cash equivalents	**19,559**	**12,037**
Net cash (1)	**15,345**	**3,962**
Undrawn availability under revolving credit facility (2)	**N/A**	**$37,000**

(1) See "Non-IFRS Measures" on page 19.
(2) Revolving credit facility was cancelled in July 2022 as part of the closing of the Sale Transactions.

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 drilling 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 future customer contracts to be settled in USD on a contract-by-contract basis, however, there is no assurance the Bank of PNG will continue to grant these approvals.

If such approvals are not received, the Corporation's PNG drilling 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

Q4-2022 cash flow from operating activities was $501 (Q4-2021: $3,472 cash flow used in operating activities), of which $8,540 are cash inflows from working capital changes (Q4-2021: $4,862 outflow) partially offset by $8,039 funds flow used in operations (Q4-2021: $1,390 fund flow from operations) mainly due to decrease in inventory and trade accounts receivable during the Quarter.

YTD-2022 cash flow from operating activities was $7,863 (YTD-2021: $1,797 cash flow used in operating activities), of which $10,843 are cash inflow from working capital changes (YTD-2021: $5,494 outflow) and $2,980 are funds flow used in operations (YTD-2021: $3,697), see "Non-IFRS Measures" on page 19.

Investing Activities

During Q4-2022, the Corporation's cash used in investing activities was $61 (Q4-2021: $2,722). Capital expenditures were $97 (Q4-2021: $3,134), partially offset by proceeds on disposal of property and equipment of $36 (Q4-2021: $213). In Q4-2022, no working capital balance changes for capital items (Q4-2021: $199 inflow).

YTD-2022 the Corporation's cash from investing activities was $6,652 (YTD-2021: $5,572 used). Proceeds on disposal of property and equipment mainly related to the Well Servicing Transaction was $11,401 (YTD-2021: $1,196), partially offset by capital expenditures of $4,073 (YTD-2021: $7,242), and $676 cash outflow relating to working capital balance changes for capital items (YTD-2021: $474 inflow).

Financing Activities

Q4-2022, the Corporation's cash used in financing activities was $4,523 (Q4-2021: $2,088). During the quarter, the Corporation made mortgage principal repayments of $3,646, see "Mortgage Financing below", dividend payments of $975 (Q4-2021: $9,747), and $98 inflow for adjustments to lease financing payment schedules post-Sale Transactions and other payments for share cancellations (Q4-2021: $416 outflow lease payments). The Corporation did not enter into any new debt financing arrangements in Q4-2022 (Q4-2021 - $8,075 proceeds mortgage financing.)

YTD-2022, the Corporation's cash used in financing activities was $6,737 (YTD-2021: $13,389). During the period, the Corporation made principal payments on mortgage financing of $3,861, see "Mortgage Financing" below (YTD-2021: $10,000 loan payment on Credit Facility), dividend payments of $2,193 (YTD-2021: $9,747), lease payments of $866

(YTD 2021: $1,615), and share repurchases for cancellation of $60 (YTD-2021: $102). The Corporation did not enter into any new debt financing arrangements in 2022 (YTD-2021 - $8,075 proceeds mortgage financing).

Mortgage Financing

	As at December 31, 2022	As at December 31, 2021
Current	**$186**	$296
Non-current	**4,028**	7,779
Total	**$4,214**	$8,075

In December 2021, High Arctic entered into a mortgage arrangement with the Business Development Bank of Canada (BDC) for $8,100, secured by lands and buildings owned and occupied by High Arctic within Alberta. The mortgage financing provides the Corporation with long term liquidity and adds to existing cash balances. The mortgage has an initial term of 5 years with a fixed interest rate of 4.30% and an amortization period of 25 years with payments occurring monthly. In January 2023, High Arctic transferred title to certain owned real estate locations to the purchaser of the well servicing business, in preparation, the Corporation paid mortgage principal of $3,565 related to these properties during December, 2022.

The Corporation capitalized $25 in financing fees incurred to set up the loan in 2021 and applied this to the long-term debt liability. Financing fees will be amortized over the expected life of the mortgage financing.

Commitments and Contingencies

As part of the Corporation's contractual rig management and operations, the Corporation has been supplied equipment an inventory of spare parts with a total value of $8,309 at December 31, 2022 (December 31, 2021: $7,244) by a customer for the Corporation's operations in PNG. The inventory is owned by this party and has not been recorded on the books of High Arctic. At the end of the contract, the Corporation must make a payment to the customer equivalent to any inventory shortfall and return the balance of inventory on hand. As at December 31, 2022, the Corporation has recorded a current obligation of $3,270 (2021 - $434) 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. Directors, officers and certain employees have been granted stock options and incentive shares and units under the Corporation's approved equity compensation plans.

	Year ended December 31, 2022		Year ended December 31, 2021	
Common shares issued and outstanding:	**Shares**	**Amount**	Shares	Amount
Balance, beginning of year	48,733,145	$169,697	48,759,660	$169,220
Issuance of performance share units	-	-	52,289	751
Normal course issuer bid	(41,281)	(143)	(78,804)	(274)
Balance, end of year	**48,691,864**	**$169,554**	**48,733,145**	**$169,697**

The common shares do not have a par value and all issued shares are fully paid.

On December 13, 2022, the Corporation received approval from the Toronto Stock Exchange to acquire for cancellation 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 have been purchased and cancelled in 2022. During 2023, a total of 2,144 shares have been purchased pursuant to this NCIB and cancelled.

The Corporation purchased and cancelled 24,905 shares outside of the NCIB during 2022 (2021 – Nil).

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.

The Corporation's NCIB active during 2021 commenced on December 11, 2020 and terminated on December 10, 2021. Pursuant to this previous NCIB 78,804 common shares have been purchased and cancelled in 2021.

At December 31, 2022, 250,000 stock options were outstanding at an average exercise price of $1.39 per share, as well as 932,910 units under the Corporation's Performance Share Unit Plan and 1,107,970 units under the Deferred Share Unit plan. As of the date of this MD&A, 250,000 stock options were outstanding.

No common shares have been issued from December 31, 2022 to the date of this MD&A.

Quarterly Results

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

	2022				2021			
($ thousands, except per share)	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
Revenue [3]	**$13,099**	$12,519	$25,706	$28,696	$23,644	$18,654	$16,377	$17,767
Adjusted EBITDA [1][2]	**(892)**	572	3,100	2,884	1,836	1,412	796	874
Net loss	**(9,103)**	(4,546)	(20,263)	(2,671)	(4,608)	(4,784)	(4,018)	(5,197)
Per share – basic and diluted	***(0.19)***	(0.09)	(0.42)	(0.05)	*(0.10)*	*(0.10)*	*(0.08)*	*(0.11)*
Cash flow from (used in) operating activities	**501**	942	6,120	300	(3,472)	737	2,023	(1,085)
Funds flow (used in) from operations [1]	**$(8,039)**	$196	$2,620	$ 2,243	$1,390	$1,077	$640	$590

(1) See "Non-IFRS Measures" on page 19.
(2) Adjusted net loss includes the impact of wages subsidies (CEWS) and rent subsidies recorded during 2021.
(3) Revenue generated from the Canadian well services and snubbing assets sold in the Sale Transactions for Q1-2021: $15,375; Q2-2021: $13,328; Q3-2021: $13,099; 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.

In Q4-2022, revenues were up marginally from Q3-2022, but they remained historically lower compared to previous quarters. This was primarily due to the Sale Transactions, which were concluded in July 2022. High Arctic aims to expand its business in PNG, given the region's strong market fundamentals and outlook. Additionally, High Arctic's PNG Drilling Services Segment has been showing improvement since the Covid-19 prolonged related stoppage in 2020.

Seasonal conditions impact the Corporation's Canadian operations whereby frozen ground during the winter months tends to provide an optimal environment for drilling and many well servicing activities and consequently first quarter activity is typically the strongest. As warm weather returns in the spring, the winter's frost comes out of the ground rendering many secondary roads incapable of supporting the weight of heavy equipment until they have thoroughly dried out. This period is generally referred to as spring break-up.

Road bans, which are generally imposed in the spring, restrict the transportation of heavy equipment onto customer locations thus reducing demand for services in Canadian operations. Therefore, the second quarter is generally the weakest quarter of the year for the Corporation's operations in Canada.

Industry Indicators and Market Trends in 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.

($)	2022				2021			
	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
Oil and natural gas prices								
(Averages for the quarterly periods):								
Brent Crude Oil (USD $/bbl) (1)	89	98	112	97	80	73	69	61
Japan LNG (USD $/mmbtu) (2)	20.67	20.60	17.07	16.57	13.47	11.68	8.75	9.60
USD/CAD average exchange rate (3)	1.35	1.37	1.29	1.25	1.26	1.26	1.23	1.27

(1) Source: Sproule
(2) Source: YCharts
(3) Bank of Canada

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 USD/CAD exchange retreated in Q4-2022 versus Q3-2022 but remained higher than the first half of 2022 and all of 2021 which has had a positive impact on the Corporation's YTD-2022 financial results.

High Arctic's major customers in PNG are less influenced by short-term fluctuations in oil and gas prices, as their activity levels are primarily driven by medium and long-term strategic investment decisions. This is particularly true for their significant interest in large scale LNG projects that are both on-stream and in development. In August 2022, High Arctic renewed a three-year contract with a principal customer in PNG for Rig 103.

The pricing for oil and natural gas production in PNG is typically linked to global prices, such as Brent Crude and Japan LNG. In YTD-2022, these prices rebounded strongly and have remained high. However, in Q4-2022, Brent prices continued to decrease as global demand retracted in response to changing monetary policy in countries around the world to address growing global recession concerns. On the other hand, Japan LNG prices remained high during the same period, as Europe and Asia continued to build natural gas storage to meet winter heating demand.

Industry Indicators and Market Trends in 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.

	2022				2021			
	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
Oil and natural gas prices								
($ Avg for the period):								
West Texas Intermediate ("WTI") (USD $/bbl)(1)	83	92	108	94	77	71	66	58
West Canada Select ("WCS") (CAD $/bbl)(1)	77	94	122	101	79	72	67	57
Canadian Light Sweet Oil ("CLS") (CAD $/bbl) (1)	108	117	136	118	92	84	76	69
AECO (CAD $/mmbtu)(1)	5.24	4.46	7.26	4.77	4.74	3.75	3.07	3.13

(1) Source: Sproule

WTI, WCS and CLS average prices retreated in the second half of 2022 from significant highs seen in Q2-2022 as demand retreated amid growing concerns of recession. High prices through 2022 have been driven by the consequences of historically low capital investments and supply constraints, the conflict in Ukraine and OPEC's close control of production quotas, despite ongoing US governmental pressure to increase production.

In Canada, industry activity has picked up in Q4-2022 relative to Q4-2021, in response to the elevated commodity prices. Long-term, Canada continues to be constrained by the lack of take away pipeline capacity, and lower exploration and production company investment confidence, under the policies of governments in the US and Canada. The current development of additional pathways to market stands to improve global market access over the next three years. Further opportunity is bolstered by a shift in political focus from energy transition to energy security to justify up-front industry investment.

Financial Risk Management

Financial and other risks

The Corporation is exposed to financial risks arising from its financial assets and liabilities. This includes. pandemic and/or endemic disease risk or the risk that operations and/or administration are forced to run at less than full capacity due to an absence or reduction of members of the workforce, either through forced closures by government both within countries and across national borders, by internally imposed rotational schedules and/or quarantine or illness of the workforce. This risk was significant in 2021 in relation to Covid-19. Further, geopolitical risks are the potential risks that a business may face due to changes in global events, policies, or regulations. These could impact the Corporation's workforce and operations by limiting market access and increasing costs. Also, cyber-security risks increase as the Corporation outsources its IT servers to cloud providers and employees work remotely. Such restrictions could significantly impact the ability of the Corporation to operate, and therefore impact financial results.

Market and other related risk

Market risk is the risk that the fair value or future cash flows of financial assets or liabilities will fluctuate due to movements in market rates:

a) Interest rate risk

Interest rate risk is the risk that the value of a financial instrument will fluctuate as a result of changes in market interest rates. The Corporation currently has mortgage financing with a fixed interest rate of 4.30%. The Corporation is exposed to interest rate risk upon renewal or expiration of the initial term. In addition, the Corporation is also exposed to interest rate risk on any future borrowing as rates fluctuate in response to changes in monetary policy and the prime interest rates. The Corporation had no risk management contracts that would be affected by interest rates in place at December 31, 2022.

b) Commodity price risk

Commodity price risk is the risk that the Corporation's future cash flows will fluctuate due to changes in demand for High Arctic's services, where almost all the Corporation's customers are oil and gas producers. High Arctic's customer's activity and strategic decisions are impacted by the fluctuations of oil and gas pricing.

These prices are sensitive to not only the relationship between the Canadian and US dollar, but more importantly local, regional and world economic and geopolitical events. This includes implications from changing oil demand and supply, policy direction taken by OPEC including the role taken by Russia, climate change driven transitions to lower emission energy sources, the implications of changes to government and government policy and ongoing negotiations in PNG to build LNG expansion with industry.

While the Corporation recognizes it will be impacted by these risks, the Corporation also strongly believes that there is a significant role for the energy services industry in the current, transitionary, and future phases of energy industry changes.

The Corporation had no risk management contracts that would be affected by commodity prices in place at December 31, 2022.

Foreign currency risk and PNG foreign currency restrictions

Foreign currency risk is the risk that a variation in the exchange rate between Canadian and foreign currencies will affect the Corporation's results. The Corporation has exposure to US dollar ("**USD**") fluctuations and other currencies such as the PNG Kina ("**PGK**") through its international operations. As a result, the Corporation is exposed to foreign exchange gains and losses through the settlement of foreign currency denominated transactions, which is recorded in net earnings (loss), as well as the conversion of the Corporation's subsidiaries with functional currencies other than CAD, into CAD for financial reporting presentation purposes, which is recorded as part of other comprehensive income (loss) within shareholders' equity.

During 2022 and 2021, a majority of the Corporation's international revenue and expenses are effectively transacted in USD and the Corporation does not actively engage in foreign currency hedging. For the three months and year ended December 31, 2022, a $0.10 cent change in the exchange rate of the Canadian dollar relative to the USD would have resulted in a change to the net loss amounting to $26 and $13, respectively (December 31, 2021: $43 and $560, respectively).

The average CAD to USD exchange rate for the Quarter was 1.35 compared to 1.26 during Q4-2021. As at December 31, 2022, the CAD to USD exchange rate was 1.35 versus 1.26 as at December 31, 2021.

The impact of exchange rates for the Quarter resulted collectively in a $9 foreign exchange loss (Q4-2021 - $244) being recorded in the statements of loss on various foreign currency denominated transactions and on the translation of foreign denominated monetary assets and liabilities. Similarly, during YTD-2022, $191 in foreign exchange losses were recorded (YTD-2021 - $197).

The Corporation's ability to repatriate funds from PNG is controlled by the PNG government through their central bank. There are currently several monetary and currency exchange control measures in PNG that can impact the ability to repatriate funds, as well as establish requirements to transact in the PGK.

As at December 31, 2022, USD $564 (December 31, 2021 - USD $384) was on deposit with a large international bank in PNG. The Bank of PNG ("BPNG") has provided approval for High Arctic to maintain a USD bank account in accordance with the BPNG currency regulations.

Historically, the Corporation has received approval from the BPNG for most of its drilling services contracts with its key customers in PNG to be denominated and settled in USD. However, if such approval is withdrawn in the future, or new contracts do not receive BPNG approval, funds may be converted into PGK and the Corporation would be required to access the foreign currency market in PNG to meet its foreign currency obligations, thus exposing the Corporation to greater foreign exchange exposure for the PGK.

The BPNG currency regulations also limit the amount of foreign currency that companies can maintain in order to meet their forecasted three-month cash flow requirements, with excess funds required to be held in PGK. While no significant issues have been experienced to date, there is no guarantee such restrictions will not exist or will not impact the Corporation's ability to transact or repatriate funds. The Corporation's financial instruments have the following foreign exchange exposure at December 31, 2022:

Balances shown in thousands of foreign currencies	USD (1)	PGK (2)	Australian Dollars ("AUD") (3)
Cash	2,879	7,839	471
Accounts receivable	2,626	14,232	16
Accounts payable and accrued liabilities	(4,126)	(2,988)	(992)
Total – Foreign Currency Balance	1,379	19,083	(505)

(1) As at December 31, 2022, one USD was equivalent to 1.3544CAD.
(2) As at December 31, 2022, one PGK was equivalent to 0.3855 CAD.
(3) As at December 31, 2022, one AUD was equivalent to 0.9196 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 wide range of customers comprised of small independent, intermediate, and large multinational oil and gas producers. Notwithstanding its many customers, the Corporation provides services to two large multinational/regional customers who individually accounted for greater than 10% of its consolidated revenues during the three-month period ended December 31, 2022 with total sales of $5,704, respectively (2021: two customers with total revenues of $8,676).

The Corporation provided services to three large multinational/regional customers who individually accounted for greater than 10% of its consolidated revenues during the year ended December 31, 2022 with total sales of $44,481 (December 31, 2021 – two customers totaling $24,611).

As at December 31, 2022, these three customers represented a total of $6,415 or 58% of outstanding accounts receivable (December 31, 2021 - two customers represented a total of $2,737 or 13% of outstanding accounts receivable).

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

($ thousands)	**As at December 31, 2022**	As at December 31, 2021
Less than 31 days[1]	**$3,049**	$11,803
31 to 60 days	**2,636**	6,415
61 to 90 days	**2,173**	2,522
Greater than 90 days	**3,279**	675
Provision for expected credit losses	**(45)**	(701)
	$11,092	$20,714

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.

Liquidity risk is currently being impacted by uncertainty within capital markets given the COVID-19 pandemic on global economies, economic recession possibilities, and contraction of available capital and reliance on continued fiscal and monetary support by governments around the world.

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 lender. The Corporation seeks to manage its financing based on the results of these processes.

Subsequent to the closing of the Sale Transactions, the Corporation's revolving credit facility was terminated. 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 in due course.

Critical Accounting Judgements and Estimates

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 annual audited consolidated financial statements for the year ended December 31, 2022.

The impact of the conflict between Russia and Ukraine, as well as other significant political and economic developments, are discussed in "Political developments and impact on estimation uncertainty" in Note 2 Basis of Presentation in the Financial Statements. Additionally, there are constantly evolving regulations related to emissions, carbon, and climate matters that impact Environmental, Social & Governance (ESG) and climate reporting. To address these concerns, the International Sustainability Standards Board has issued an IFRS Sustainability Disclosure Standard aimed at developing globally consistent, comparable, and reliable sustainability disclosure standards. Furthermore, the Canadian Securities Administrators have proposed a national instrument 51-107 Disclosure of Climate-related Matters. There is significant uncertainty regarding expected policies to be enforced by large governmental bodies in relation to oil and gas production. The cost to comply with these standards and potential future regulations has not been quantified.

While the trend towards recovery in the industry is promising, the focus on supply balance for oil and gas producers is still necessary. However, there are significant challenges related to meeting climate change emission targets. These political developments impact High Arctic as it pursues its strategy and allocates resources to support its principal markets in Canada and PNG. In Canada, the Corporation's customers are driven by oil and natural gas production, while in PNG, customers are restarting drilling operations, and new LNG supply is being considered.

The global focus on addressing climate change has also led to a rotation of investment capital away from the oil and gas industry in certain markets, which could increase High Arctic's cost of capital and reduce its access to growth funding. The direct and indirect costs of climate change on High Arctic and its customers remain uncertain, and climate change may have an adverse impact on the Corporation and its customers. Additionally, it creates uncertainty regarding the estimated useful life and impairment of property and equipment.

At December 31, 2022, High Arctic determined that no indicators of impairment existed within the Corporation's CGUs.

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.

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

As at December 31, 2022, an evaluation of the effectiveness of High Arctic's DC&P 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**").

Due to the material weaknesses described below, the Corporation determined that it does not have effective DC&P as at December 31, 2022.

Management is also responsible for establishing and maintaining adequate ICFR, which no matter how well designed, has inherent limitations and can provide only reasonably assurance with respect to the preparation and fair presentation of published financial statements. Under the supervision and with the participation of the CEO and CFO, management conducted an evaluation of the effectiveness of its ICFR as at December 31, 2022 using The Internal Control – Integrated Framework (2013) as issued by the Committee of Sponsoring Organizations of the Treadway Commission and concluded because of the material weaknesses described below, ICFR was not effective as at December 31, 2022. 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.

The Corporation identified the following material weaknesses.

- Insufficient inventory controls to ensure timely completion of counts which has the potential to impact the issuer's ability to report on the existence and valuation of inventory.

- Insufficient management review of complex accounting and financial reporting matters, including related disclosures which resulted in incorrect amounts reported in its operating segments note disclosure under IFRS 8 and the Corporation refiling its annual consolidated financial statements.

As a result of the control weaknesses identified above, the Corporation remediated the deficiency by counting inventory before the date of this report and adding an additional level of review for all of its consolidated financial statement note and MD&A disclosures.

Other than the material weaknesses identified above, there were no changes in our ICFR that materially affected or are reasonably likely to materially affect our ICFR. The second material weakness identified above was identified during the period from August 31, 2023 to October 26, 2023, subsequent to the initial filing of this MD&A.

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 several 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.sedar.com, 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 before interest, taxes, depreciation, and amortization ("EBITDA")

EBITDA 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 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 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 is not intended to represent or be construed as an alternative to net earnings (loss) calculated in accordance with IFRS. Note that EBITDA is inclusive of government wage subsidies and rental subsidies recorded. Refer to table in Adjusted EBITDA below that provides a reconciliation of net earnings (loss), as disclosed in the consolidated statements of loss and comprehensive loss, to EBITDA.

Adjusted EBITDA

Adjusted EBITDA 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 is defined based on EBITDA (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 is inclusive of CEWS, and rental subsidies recorded.

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

The following table provides a quantitative reconciliation of consolidated net earnings (loss), as disclosed in the consolidated statements of loss and comprehensive loss, to EBITDA and Adjusted EBITDA for the three and twelve months ended:

($ thousands)	Three months ended December 31 **2022**	2021	Year ended December 31 **2022**	2021
Net loss	**$(9,103)**	**$(4,608)**	**$(36,583)**	**$(18,607)**
Add (deduct):				
Interest and finance expense	(63)	193	1,283	706
Income taxes	595	(415)	8,888	(1,309)
Depreciation	2,987	6,005	17,698	23,639
EBITDA	**(5,584)**	**1,175**	**(8,714)**	**4,429**
Adjustments to EBITDA:				
Inventory adjustments (1)	3,871	-	3,871	-
Impairment	109	-	9,667	-
Share-based compensation	251	413	784	709
Equity investment losses (earnings)	422	-	(1)	
Loss (Gain) on sale of property and equipment	30	4	(134)	(417)
Foreign exchange loss	9	244	191	197
Adjusted EBITDA	**$(892)**	**$1,836**	**$5,664**	**$4,918**

(1) The results of inventory count adjustments and a provision for obsolescence were recorded in Q4-2022.

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.

Oilfield services operating margin %

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, unless otherwise noted)	Three months ended December 31 **2022**	2021	Year ended December 31 **2022**	2021
Revenue	**$13,099**	$23,644	**$80,020**	$76,442
Less:				
Oilfield services expense	**15,516**	18,944	**68,103**	61,226
Oilfield services operating margin	**$(2,417)**	$4,700	**$11,917**	$15,216
Oilfield services operating margin %	***(18.5)%***	*19.9%*	***14.9%***	*19.9%*

Operating loss

Operating loss 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 loss 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 loss is not intended to represent revenue, net earnings (loss), or other measures of financial performance calculated in accordance with IFRS. Operating loss is calculated as revenue less oilfield services expense, general and administrative expense, depreciation, and share-based compensation. Operating loss 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 loss and comprehensive loss, to operating loss for the three and twelve months ended December 31, 2022:

	Three months ended December 31		**Year ended December 31**	
($ thousands)	**2022**	2021	**2022**	2021
Revenue	**$13,099**	**$23,644**	**$80,020**	**$76,442**
Less:				
Oilfield services expense	15,516	18,944	68,103	61,226
General and administrative expense	2,346	2,864	10,124	10,298
Depreciation	2,987	6,005	17,698	23,639
Share-based compensation	251	413	784	709
Operating loss	**$(8,001)**	**$(4,582)**	**$(16,689)**	**$(19,430)**

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 operations

Funds flow from 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 operations is defined as net cash generated (used in) from 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 ("**funds flow from operations**") 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) operations for the three and years ended:

	Three months ended December 31		**Year ended December 31**	
($ thousands)	**2022**	2021	**2022**	2021
Net cash generated from (used in) operating activities	**$501**	$(3,472)	**$7,863**	$(1,797)
Less:				
Changes in non-cash working capital balances – operating	**8,540**	(4,862)	**10,843**	(5,494)
Funds flow (used in) from operations	**$(8,039)**	$1,390	**$(2,980)**	$3,697

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:

($ thousands)	**As at** **December 31** **2022**	December 31 2021
Current assets	**$69,278**	$45,132
Less:		
Current liabilities	**(9,817)**	(15,408)
Working capital	**$59,461**	$29,724
Working capital ratio	***7.1:1***	*2.9:1*

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)	**As at** **December 31** **2022**	December 31 2021
Cash and cash equivalents	**$19,559**	$12,037
Less:		
Long-term debt [1]	**(4,214)**	(8,075)
Net cash	**$15,345**	$3,962

(1) Long-term debt includes current portion of $186 (Q4-2021: $296) and non-current portion of $4,028 (Q4-2021: $7,779)

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 MD&A as intended, planned, anticipated, believed, estimated or expected. Specific forward-looking statements in this MD&A include, among others, statements pertaining to the following: general economic and business conditions which will include, among other things, continued improvement in energy services outlook; continued impact of Russia-Ukraine conflict; continued impact of Covid-19; ability to prioritize a strong balance sheet and liquidity position; activity increases in PNG; opportunities to invest and enhance shareholder value; the Corporation’s ability to maintain a USD bank account and conduct its business in USD in PNG; dialogue with the central bank in PNG aimed at reinstating approval to settle the contract in USD; 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 raise capital and manage its debt obligations; estimated capital expenditure programs; projections of market prices and costs; expectations for improving customer demand in the near-term, 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 major customers; treatment under governmental regulatory regimes and political uncertainty and civil unrest; a final *Papua-LNG* investment decision in 2023; the addition of further gas liquefaction capacity to the PNG-LNG export facility; the Corporation’s ability to innovate its PNG service offerings and contribute to the reduction of the emissions intensity of the energy industry there; the Corporation’s ability to weather any market turbulence due to high inflation or recession; optimism of an expanding PNG energy sector and increasing future demand for our equipment, personnel, and expertise; expectations of Rig 103 to operate consistently through the term of its contract; and estimated credit risks and tax losses.

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 AIF filed on SEDAR at www.sedar.com.

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
CAPP	- Canadian Association of Petroleum Producers
CAOEC	- Canadian Association of Oilwell Energy Contractors
CEWS	- Canada Emergency Wage Subsidy
CLS	- Canadian Light Sweet
DCP	- Disclosure controls and procedures
E&P	- Exploration and production
EBITDA	- Earnings before interest, tax, depreciation, and amortization
ESG	- Environmental, Social and Corporate Governance
FID	- Final Investment Decision
ICFR	- Internal controls over financial reporting
IFRS	- International Financial Reporting Standards
IRC	- Internal Revenue Commission of PNG
LNG	- Liquified natural gas
MD&A	- Management discussion and analysis
mmbtu	- Million British thermal units
NCIB	- Normal course issuer bid
OPEC	- Organization of petroleum exporting countries
OPEC Plus	- OPEC and ten of the world’s major non-OPEC oil-exporting nations
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