



MANAGEMENT'S DISCUSSION & ANALYSIS

**FOR THE THREE AND NINE MONTHS ENDED
September 30, 2022 and 2021**

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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 10, 2022 and should be read in conjunction with the unaudited interim condensed consolidated financial statements and notes for the three and nine-months ended September 30, 2022 and 2021 (the "**Financial Statements**") and the audited consolidated financial statements and notes for the years ended December 31, 2021 and 2020. Additional information relating to the Corporation including the Corporation's Annual Information Form ("**AIF**") for the year ended December 31, 2021, 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 10, 2022. All amounts are expressed in thousands of Canadian dollars ("**CAD**") unless otherwise noted.

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 on page 18 under the "Non-IFRS Measures" section.

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 is a participant in, and manager of the Seh' Chene Limited Partnership ("**Seh' Chene**") with the Saa Dene Group of northern Alberta being the majority participant in a Joint Arrangement. It is Seh' Chene's mission to execute dependable high-quality energy services, focused on environmental stewardship, while creating opportunity for local Indigenous communities and individuals.

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

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.

Production Services

On July 27, 2022 the Corporation closed the sale of all the assets of High Arctic's Canadian well servicing business (the "Well Servicing Transaction") to a third party. Additionally, on July 27, 2022, the Corporation closed the sale of its Canadian snubbing business to Team Snubbing Services Inc. ("Team"), a private entity (the "Snubbing Transaction"). Subsequent to the closing of the Well Servicing Transaction and Snubbing Transaction, there are no active operations within the Production Services Segment. On a prospective basis, the Corporation will discontinue reporting on the Production Services Segment.

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. A portion of revenue generated from the Canadian based oilfield rental equipment is associated with assets included as part of the Well Servicing Transaction. The Corporation retains its nitrogen pumping business and a rentals business focused on pressure control. The snubbing assets held in Colorado, USA and a hydraulic workover rig in PNG will be reported under the Ancillary Services segment in the future.

In the following discussion, the three-months ended September 30, 2022 may be referred to as the "**Quarter**" or "**Q3-2022**" and similarly the nine-months ended September 30, 2022 may be referred to as "**YTD-2022**". The comparative three-months ended September 30, 2021 may be referred to as "**Q3-2021**" and similarly the nine-months ended September 30, 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. All amounts are expressed in thousands of Canadian dollars, unless otherwise noted.

Quarter and YTD-2022 Highlights

- During the Quarter, High Arctic made a strategic shift to capitalize on opportunities and focus on developments in its core market of Papua New Guinea while resetting its long-standing energy service presence in Canada.
 - Disposed of Canadian well servicing business for cash consideration, originally acquired in 2016.
 - Consolidated snubbing industry in Canada through disposal of snubbing business for an equity interest and note receivable in acquiring company.
 - Renewed a key drilling services contract in PNG as the country begins early-stage reactivation of upstream activity in its largest commodity export, liquified natural gas.
 - Carried forward in Canada with active Rental and Nitrogen Services businesses,
 - Built upon its record of shareholder returns with dividend payments of \$731, and
 - Delivered safety excellence and ESG alignment with a customer portfolio of high-quality operators.
- Preparations to return to drilling in PNG with Rig 103 progressed, adding an upgrade of the topdrive, enhancing the rigs drilling capability. Rig 103 is expected to commence drilling operations by the end of the first quarter of 2023.
- High Arctic maintained a strong financial position, with working capital of \$65,434 including \$23,386 cash, \$12,101 accounts receivable, \$28,000 asset sale receivable (due in January 2023), and total debt of \$7,860 as at September 30, 2022.

Select Comparative Financial Information

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

(\$ thousands, except per share amounts)	For the three-months ended September 30		For the nine-months ended September 30	
	2022	2021	2022	2021
Revenue	12,519	18,654	66,921	52,798
Net loss	(4,546)	(4,784)	(27,480)	(13,999)
Per share (basic and diluted) ⁽²⁾	(0.09)	(0.10)	(0.56)	(0.29)
Oilfield services operating margin ⁽¹⁾	3,088	3,886	14,334	10,516
Oilfield services operating margin as a % of revenue ⁽¹⁾	24.7%	20.8%	21.4%	19.9%
EBITDA ⁽¹⁾	(297)	1,294	(3,130)	3,254
Adjusted EBITDA ^{(1) (3)}	572	1,412	6,556	3,082
Adjusted EBITDA as % of revenue ^{(1) (3)}	4.6%	7.6%	9.8%	5.8%
Operating loss ⁽¹⁾	(2,759)	(4,597)	(8,688)	(14,848)
Cash flow from operating activities	942	737	7,362	1,675
Per share (basic and diluted) ⁽²⁾	0.02	0.02	0.15	0.03
Funds flow from operating activities ⁽¹⁾	196	1,077	5,059	2,307
Per share (basic and diluted) ⁽²⁾	-	0.02	0.10	0.05
Dividend payments	731	-	1,218	-
Per share (basic and diluted) ⁽²⁾	0.015	-	0.025	-
Capital expenditures	660	2,658	3,976	4,108

(\$ thousands except shares outstanding)	As at	
	September 30, 2022	December 31, 2021
Working capital ⁽¹⁾	65,434	29,724
Cash and cash equivalents, end of period	23,386	12,037
Total assets	149,662	185,452
Long-term debt	3,971	7,779
Long-term financial liabilities, excluding long-term debt	6,062	13,414
Shareholders' equity	125,652	148,851
Common shares outstanding	48,733,145	48,733,145

(1) Readers are cautioned that Oilfield services operating margin, EBITDA (Earnings before interest, tax, depreciation and amortization), Adjusted EBITDA, Funds flow from operating activities, oilfield services operating margin, operating loss, working capital, and long-term financial liabilities, excluding long-term debt, do not have standardized meanings prescribed by IFRS – see “Non-IFRS Measures” on page 18 for calculations of these measures.

(2) The number of common shares used in calculating net loss per share, cash flow from operating activities per share, funds flow from operating activities per share, dividend payments per share and shareholders' equity is determined as explained in Note 9(b) of the Financial Statements.

(3) Adjusted EBITDA includes the impact of wage and rent subsidies recorded in 2021. No wage or rent subsidies were received during 2022.

Outlook

High Arctic has taken transformative actions this quarter which will allow the Corporation to focus on the emerging opportunities to deploy drilling assets in Papua New Guinea, while maintaining exposure to the Canadian Energy Services market. High Arctic believes that the fundamentals for sustained high LNG demand, particularly in Asia, positions PNG for substantive LNG export growth, and the drilling required to realize this has the potential to exceed our past activity peaks.

On August 1, 2022 High Arctic entered into a three-year contract renewal covering customer owned Heli-portable Rig 103 and High Arctic's services related to the supply of personnel, camp accommodation and rental equipment to support the drilling operations in PNG.

Work is currently underway to prepare Rig 103, including an upgrade of its topdrive, for recommencement of drilling early in 2023. High Arctic anticipates Rig 103 will operate consistently through the term of the contract. This cornerstone contract is flexible and scalable to align with activity, which positions High Arctic to respond quickly to future incremental drilling opportunities associated with LNG expansion. While the contract for customer owned Rig 104 was not renewed at that time High Arctic is optimistic for future contracts with third-party customers in the coming activity cycle.

High Arctic maintains active dialogue with the management of all the active energy companies in PNG, towards understanding their project timeframes and plans for drilling activity utilizing High Arctic's owned rigs. The Corporation expects an additional drilling rig deployment in the 1st half of 2023 and is optimistic about further activity increases by the end of next year.

The advancement of the TotalEnergies led *Papua-LNG* project's front-end-engineering-and-design continues to progress and has recently included public forums outlining plans for early-works and overall project timelines around a final investment decision on the two-train *Papua-LNG* project in the 2nd half of 2023. Earlier this year ExxonMobil, 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 another train to the world class PNG-LNG export facility. These developments underpin our optimism of an expanding PNG energy sector and increasing future demand for our people, equipment and expertise.

In Canada, the post-closing transitional activities have progressed smoothly with the buyers of Concord Well Servicing and High Arctic's snubbing division. The consolidated Team Snubbing Services has already increased market share, with deployed services exiting Q3-2022 exceeding the sum of the two parts in 2021. Team's dominant market position and service quality has immediately driven pricing improvements and margin growth.

Streamlining of the management support structure of High Arctic's remaining Canadian business is well underway and has been consolidated for efficient operation of our pressure control focused *HAES Rentals* and *Nitrogen pumping* services. Management remains attentive to opportunities to best realize a return on the investments in these Canadian service lines, and the dormant snubbing assets in the USA. Commensurate with these efforts is an exploration of growth financing options levered off the Corporations assets in PNG.

Strategy

Strategic priorities build on High Arctic's core values, code of business conduct and fiscal discipline, including:

- Safety excellence and quality service delivery,
- Actions aimed at generating free cash flow including:
 - Increased utilization of the Corporation's world-class fleet of equipment,
 - Improved efficiency and work force productivity, and
 - Operating cost control.
- Development of new and existing employees to grow our workforce to meet demand,
- Pursuit of opportunities that secure the Corporation's future as a lower emissions energy services provider,
- Pursuit of opportunities for growth and corporate transactions in well understood markets that enhance shareholder value, and
- Disciplined capital stewardship to improve returns for shareholders including divestitures, dividends and common share buybacks.

Noteworthy performance during the third quarter included:

- Activity in PNG maintained a personnel count of about 200 employees deployed, reaching key safety milestones of 6 years and 3 million work hours recordable incident free.
- As previously announced, renewed a three-year contract for drilling services with its principal customer in PNG, and made progress towards commencing active drilling operations with Rig 103 in Q1-2023.
- On July 27, 2022, the Corporation sold its Canadian well servicing business for an aggregate purchase price of \$38,200, and sold its Canadian snubbing business for 42% equity ownership of Team, the acquiring company, and a note receivable of \$3,365 (the "Sale Transactions").
- During the Quarter, High Arctic generated \$942 (YTD-2022 \$7,362) in cash flow from operations and spent \$660 (YTD-2022 \$3,976) on equipment capital expenditures for positive net cash generation of \$282 (YTD-2022 \$3,386).
- Paid shareholders dividends of \$731 (YTD \$1,218) and after Quarter-end began to buy back shares, in nominal quantities, pursuant to its Normal Course Issuer Bid expiring in early December 2022.

Canadian Production Services Segment Divestments

As reported last quarter, On July 27, 2022, High Arctic executed two separate asset sales transactions resulting in the effective divestment of the Corporation's Production Services segment.

The Canadian well servicing business was sold for an aggregate purchase price of \$38,200 payable in cash. 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. Cash payment of \$10,200 was received on first closing in July 2022. The second and final closing of the Well Servicing Transaction will occur in January 2023, with the remaining \$28,000 cash payment and transfer of real estate titles to the purchaser. The Corporation will repay \$3,565 of mortgage principal related to the real estate properties at second closing.

As at Q2-2022, an estimated impairment of \$8,236 was charged relating to the difference in carrying value of the assets and total consideration of the Well Servicing transaction. An additional impairment of \$646 was identified in Q3-2022, resulting in a total impairment of \$8,882 relating to this transaction. By comparison, the well servicing business was purchased in August 2016 for \$42,800 with a non-cash \$12,700 gain on the acquisition booked to PP&E.

The Canadian Snubbing business was sold to Team Snubbing Services Inc. for consideration consisting of 42% ownership in the post-closing outstanding shares (420,000 common voting shares) in Team, valued at \$7,738, and a convertible promissory note of \$3,365. The note has a five-year term, with interest accruing at 4.5% from January 1, 2023, and principal repayments commencing July of 2024. Investment in the share capital of Team represents a joint arrangement whereby High Arctic has significant influence of the operations and rights to the net assets of Team. This transaction involved both the sale of High Arctic's Canadian snubbing assets and the transfer of field personnel.

As at Q2-2022, an estimated impairment of \$443 was charged relating to the difference in carrying value of the Canadian snubbing assets of \$11,546 and estimated fair value less cost to sell of \$11,103. An additional impairment of \$233 was identified in Q3-2022, resulting in a total impairment of \$676 relating to the Snubbing Transaction.

High Arctic retains its Ancillary Services Segment in Canada comprised of the Nitrogen Pumping business and a Rentals business focused on pressure control equipment. High Arctic also retains its snubbing assets in the USA, which along with the hydraulic workover rig (Rig 102) in PNG remain idle and will be reported under Ancillary Services.

As a result of the Sale Transactions, the Corporation has a significantly reduced Canadian business and has written down the deferred tax assets of \$7,743 while retaining in excess of \$130,000 of operating tax loss carry-forward in Canada. Additionally, the Corporation cancelled its revolving bank loan credit facility effective July 27, 2022.

Discussion of Operations

Three-month period ended September 30, 2022 summary:

- High Arctic continues to see improved activity levels in PNG, driving a net increase in Drilling Services and Ancillary Service revenues to \$4,870 and \$2,905, respectively (Q3-2021 revenues: \$2,718 and \$3,280, respectively).
- PNG activity drove consolidated oilfield services operating margin as a percentage of revenue up to 24.7% from 20.8% in Q3-2021. Improved profitability in the Quarter relative to Q3-2021 was without Canadian emergency wage subsidies (“CEWS”) and Canadian emergency rent subsidies (“CERS”) in 2022 (Q3-2021 \$865 of CEWS & CERS received).
- High Arctic continued work preparing customer owned Drilling Rig 103, which now includes an equipment upgrade of the top drive, for active well site operations pursuant to its new contract renewal expiring in 2025.
- The Corporation’s Production Service segment realized revenue of \$4,959 and an operating margin of 9.9% in the month of July before the close of the Sale Transactions.

Year to Date September 30, 2022 Summary:

- The recommencement of drilling services activity in PNG has resulted in YTD-2022 Drilling Services segment revenue of \$20,545 compared to \$4,362 YTD-2021 and through associated rentals increased the Ancillary Services segment revenue to \$11,878 YTD-2022 compared with \$8,049 YTD-2021.
- High Arctic’s owned Rig 115 successfully completed abandonment of a customer’s legacy exploration well and the rig was moved offsite during the second quarter of 2022.
- Primarily due to the receipt of first closing payment of \$10,200 associated with the Well Servicing Transaction in Canada, the cash balance on hand increased by \$11,349 YTD-2022 to \$23,386.
- YTD-2022 the Corporation has paid out \$1,218 of dividends since recommencing monthly dividend distribution in Q2-2022.
- The Corporation received payment for services performed for the acquisition and delivery of equipment to be utilized on Drilling Rig 103. At September 30, 2022 the equipment was not yet received in PNG and the \$4,287 cash received has been classified as deferred revenue and the related \$4,115 cost of the equipment is reflected in inventory.

Operating Results

Drilling Services Segment

(\$ thousands, unless otherwise noted)	Three-months ended September 30		Nine-months ended September 30	
	2022	2021	2022	2021
Revenue	\$ 4,870	\$ 2,718	\$ 20,545	\$ 4,362
Oilfield services expense	3,718	2,430	15,832	4,159
Oilfield services operating margin ⁽¹⁾	\$ 1,152	\$ 288	\$ 4,713	\$ 203
Operating margin (%)	23.7%	10.6%	22.9%	4.7%

(1) See "Non-IFRS Measures" on page 18

During Q3-2022, improved revenues of \$4,870 (Q3-2021: \$2,718) relative to Q3-2021 relate primarily to higher utilization of High Arctic's personnel to prepare Rig 103 for services and support other well site activity for two large PNG customers.

YTD-2022, revenues of \$20,545 are reflective of High Arctic completing abandonment services with Rig 115 and increasing personnel utilization in preparation of Rig 103 and supporting other well site activity, versus revenues of \$4,362 YTD-2021 relating primarily to personnel utilization alone.

The increased, and particularly Rig 115 related, activity significantly improved operating margin for the three and nine-month periods ended September 30, 2022, Oilfield services operating margin increased to \$1,152 and \$4,713 (2021: \$288, and \$203, respectively).

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 contract for customer owned Rig 104 was not renewed at that 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.

Rig 115 operated in the first half of 2022, and preparations for drilling service activity for Rig 103 is underway for a drilling campaign expected to commence in early 2023. Rig 116 remains cold stacked.

Production Services Segment

(\$ thousands, unless otherwise noted)	Three-months ended September 30		Nine-months ended September 30	
	2022	2021	2022	2021
Revenue	\$ 4,959	\$ 13,100	\$ 36,099	\$ 41,802
Oilfield services expense	4,469	11,140	33,219	35,236
Oilfield services operating margin ⁽¹⁾	\$ 490	\$ 1,960	\$ 2,880	\$ 6,566
Operating margin (%)	9.9%	15.0%	8.0%	15.7%

(1) See "Non-IFRS Measures" on page 18

On July 27, 2022, High Arctic closed of the sale of its Canadian Well Servicing and the Canadian Snubbing business. These two business lines represented the operating Production Services segment which was conducted in the Western Canadian Sedimentary Basin ("WCSB") through a fleet of well servicing rigs, operating as Concord Well Servicing, and a fleet of stand-alone and rig assist snubbing units.

Subsequent to the close of the Sale Transactions, revenue for the Production services segment was \$4,959 and \$36,099 for the three and nine-month periods ended September 30, 2022 (2021: \$13,100 and \$41,802, respectively).

Oilfield services operating margin for the three and nine-month periods ended September 30, 2022 was \$490 and \$2,880 (2021: \$1,960 and \$6,566, respectively) with operating margins as a percentage of revenue remaining under 10% given the highly competitive market conditions in Canada.

Ancillary Services Segment

(\$ thousands, unless otherwise noted)	Three-months ended September 30		Nine-months ended September 30	
	2022	2021	2022	2021
Revenue	\$ 2,905	\$ 3,280	\$ 11,878	\$ 8,049
Oilfield services expense	1,458	1,642	5,137	4,302
Oilfield services operating margin ⁽¹⁾	\$ 1,447	\$ 1,638	\$ 6,741	\$ 3,747
Operating margin (%)	49.8%	49.9%	56.7%	46.5%

(1) See "Non-IFRS Measures" on page 18

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 Canadian Well Servicing transaction, rental equipment in Canada is primarily made up of pressure-controlled oilfield equipment rentals.

For the three-month period ended September 30, 2022, Ancillary Services revenues and oilfield services operating margin were \$2,905 and \$1,447, respectively, slightly lower relative to revenues of \$3,280 and an operating margin of \$1,638 in Q3-2021 due to smaller rental equipment fleet post-closing of the Well Servicing transaction.

For the nine-month period ended September 30, 2022, Ancillary Services revenues and oilfield services operating margin were \$11,878 and \$6,741, respectively, 48% and 80% higher relative to revenues of \$8,049 and an operating margin of \$3,747 YTD-2021. Higher revenues and oilfield services margin in the period is primarily due to increased utilization of PNG oilfield rental equipment.

General and Administrative ("G&A")

(\$ thousands, unless otherwise noted)	Three-months ended September 30		Nine-months ended September 30	
	2022	2021	2022	2021
G&A	2,516	2,474	7,778	7,434
% of revenue	20.1%	13.3%	11.6%	14.1%

Q3 and YTD-2022 G&A costs of \$2,516 and \$7,778 were slightly higher as compared to \$2,474 and \$7,434 in the same 2021-periods, primarily due to professional fees, and one time severance and related transition costs of \$250 associated with the Sale Transactions. With the reduction in revenue due to the Sale Transactions, G&A costs as a percent of revenue YTD and Q3-2022 were higher at 20.1% compared to 13.3% experienced during Q3-2021

High Arctic remains committed to ensuring these costs are managed and balanced within the overall strategic plan for the Corporation. High Arctic will continue to right-size G&A costs relative to the requirements of the Corporation.

Depreciation

Depreciation expense on property and equipment and right-of-use assets totaled \$3,149 in Q3-2022 compared to \$5,876 during Q3-2021. Reduction in depreciation in Q3-2022 is primarily due to the disposal of property and equipment from the Canadian Well Servicing transaction with a net book value of asset and liabilities of \$47,082 and the Canadian Snubbing transaction with a net book value of \$11,779. YTD-2022 depreciation expense was \$14,711 lower than the \$17,634 YTD-2021 depreciation expense.

Impairment

In Q2-2022, as a result of the Sale Transactions, the Corporation recognized \$8,679 of impairment expense. During Q3-2022, the Corporation recognized an additional impairment of \$879. YTD-2022, the Corporation recognized impairment expense of \$9,558.

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 higher share-based compensation for the three and nine-month periods ended September 30, 2022 of \$182 and \$533, relative to Q3-2021 expense of \$133 and \$296. Higher expenses in the periods are due to new grants and re-invested dividends under the Corporation's Performance Share Unit Plan and Deferred Share Unit Plan.

Interest and Finance Expense

(\$ thousands)	Three-months ended September 30		Nine-months ended September 30	
	2022	2021	2022	2021
Note receivable accretion	\$ 843	\$ -	\$ 843	\$ -
Interest on mortgages, debt and standby fees	105	45	358	195
Finance expense – lease liabilities	5	96	183	295
Interest income and other	(56)	10	(36)	23
Total	\$ 897	\$ 151	\$ 1,346	\$ 513

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 \$843 of accretion expense at the time of entering into the note receivable agreement.

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 Q3 and YTD-2022.

Due to the Sale Transactions, a significant portion of the assets pledged as security for the HSBC Credit facility of \$37,000 no longer existed 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 nine-month periods ended September 30, 2022 was \$5 and \$183, respectively (2021: \$96 and \$295, 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.

Other interest and finance expense relates to bank charges in the respective periods, as well as interest income on high interest accounts. During Q3 2022, the Corporation invested idle cash of \$5,000 in a Guaranteed Investment Certificate with an interest rate of 3.75% per annum and a maturity date of August 29, 2023 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 at September 30, 2022. Interest income for the cash equivalents yielded \$71 in Q3 2022.

Income Taxes

(\$ thousands, unless otherwise noted)	Three-months ended September 30		Nine months-ended September 30	
	2022	2021	2022	2021
Loss before income taxes	\$ (4,343)	\$ (4,733)	\$ (19,187)	\$ (14,893)
Current income tax expense	(327)	(280)	(1,177)	(557)
Deferred income tax (expense) recovery	124	229	(7,116)	1,451
Total income tax	\$ (203)	\$ (51)	\$ (8,293)	\$ 894
<i>Effective tax rate</i>	4.6%	1.1%	43.2%	(6.0%)

Higher current income tax expense in both 2022-periods is reflective of increased activity in PNG resulting in increased withholding tax in foreign jurisdictions.

Higher deferred income tax expense YTD-2022 is due to the write-down of \$7,743 deferred tax assets relating to deductible temporary differences in Canada, as a result of the Sale Transactions and significant reduction in revenue generating assets in the Canadian jurisdiction available to utilize accumulated corporate tax losses.

Tax rates in 2022 were impacted by foreign tax on income earned in foreign jurisdictions as well as write-downs of deferred tax assets with respect to deductible temporary differences in Canada. In addition, the impact of impairment on the Corporation's loss before income taxes will not be recognized by taxing bodies in any of the Corporation's operating jurisdictions.

Other Comprehensive Loss

The Corporation recorded a \$4,137 foreign currency translation gain in other comprehensive loss for Q3-2022 (Q3-2021: \$1,921) associated with subsidiaries with functional currencies other than CAD. Similarly, the Corporation recorded a \$5,210 foreign currency translation gain in other comprehensive loss for YTD-2022 (YTD-2021: \$96 foreign currency translation loss). Gains in both 2022-periods relate to the weakening of the CAD compared to the USD in the respective periods.

Liquidity and Capital Resources

(\$ thousands)	Three-months ended September 30		Nine-months ended September 30	
	2022	2021	2022	2021
Cash generated by (used in):				
Operating activities	\$ 942	\$ 737	\$ 7,362	\$ 1,675
Investing activities	8,670	(2,191)	6,713	(2,850)
Financing activities	(905)	(509)	(2,214)	(11,301)
Effect of exchange rate changes on cash	(419)	445	(512)	88
Increase (decrease) in cash	\$ 8,288	\$ (1,518)	\$ 11,349	\$ (12,388)

(\$ thousands, unless otherwise noted)	As at	
	September 30, 2022	December 31, 2021
Current assets	79,411	45,132
Working capital ⁽¹⁾	65,434	29,724
Working capital ratio ⁽¹⁾	5.7 : 1	2.9 : 1
Cash and cash equivalents	23,386	12,037
Net cash ⁽¹⁾	15,526	3,962
Undrawn availability under revolving credit facility ⁽²⁾	-	37,000

(1) See "Non-IFRS Measures" on page 18

(2) Revolving credit facility was cancelled in July 2022 as part of the closing of the Sales Transaction.

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, such approvals have been received in the past.

Operating Activities

Q3-2022 cash flow from operating activities was \$942 (Q3-2021: \$737), of which \$196 are funds generated by operations (Q3-2021: \$1,077), see "Non-IFRS Measures" on page 18, and \$746 cash inflow from working capital changes (Q3-2021: \$340 outflow) mainly due to decrease in trade accounts receivable during the Quarter.

YTD-2022 cash flow from operating activities was \$7,362 (YTD-2021: \$1,675), of which \$5,059 are funds flow from operations (YTD-2021: \$2,307), see "Non-IFRS Measures" on page 18, and \$2,303 cash inflow from working capital changes (YTD-2021: \$632 outflow) mainly due to decrease in accounts receivable during the period.

Investing Activities

Q3-2022 the Corporation's cash from investing activities was \$8,670 (Q3-2021: \$2,191 cash used in investing activities). Proceeds on disposal of property and equipment mainly related to the Well Servicing transaction was \$10,254 (Q3-2021: \$152), partially offset by capital expenditures of \$660 (Q3-2021: \$2,658), and \$924 cash outflow relating to working capital balance changes for capital items (Q3-2021: \$315 inflow).

YTD-2022 the Corporation's cash from investing activities was \$6,713 (YTD-2021: \$2,850 used). Proceeds on disposal of property and equipment was \$11,365 (YTD-2021: \$983), partially offset by capital expenditures of \$3,976 (YTD-2021: \$4,108), and \$676 cash outflow relating to working capital balance changes for capital items (YTD-2021: \$275 inflow).

Financing Activities

Q3-2022, the Corporation's cash used in financing activities was \$905 (Q2-2021: \$509). During the quarter the Corporation made dividend payments of \$731, lease payments of \$94 (Q2-2021: \$407) and mortgage principal repayments of \$80, see "Mortgage Financing below".

YTD-2022, the Corporation's cash used in financing activities was \$2,214 (YTD-2021: \$11,301). During the period the Corporation made lease payments of \$1,025 (YTD 2021: \$1,199), dividend payments of \$1,218 and principal payments on mortgage financings of \$215, see "Mortgage Financing below" (YTD-2021: \$10,000 loan payment on Credit Facility).

Mortgage Financing

	As at	
	September 30, 2022	December 31, 2021
Current	\$ 3,889	\$ 296
Non-current	3,971	7,779
Total	\$ 7,860	\$ 8,075

In December 2021, High Arctic entered 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, the High Arctic will transfer title to certain owned real estate locations to the purchaser of the well servicing business and will be required to repay mortgage principal of \$3,565 related to these properties.

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 an inventory of spare parts with a total value of \$7,832 at September 30, 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.

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.

	Nine-months ended September 30, 2022		Year ended December 31, 2021	
<i>Common shares issued and outstanding:</i>	Shares	Amount	Shares	Amount
Balance, beginning of period	48,733,145	\$ 169,697	48,759,660	\$ 169,220
Exercise of performance share units	-	-	52,289	751
Normal course issuer bid	-	-	(78,804)	(274)
Balance, end of period	48,733,145	\$ 169,697	48,733,145	\$ 169,697

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

On December 13, 2021, the Corporation received approval from the Toronto Stock Exchange to acquire for cancellation up to 2,420,531 common shares, representing approximately 10 percent of the Corporation's public float at the date of approval, under a Normal Course Issuer Bid ("NCIB"). The NCIB is valid for one year, commencing on December 15, 2021 and terminating on December 14, 2022. Pursuant to the NCIB no shares have been purchased and cancelled in

YTD-2022. Subsequent to September 30, 2022, the Corporation began repurchasing shares, and has repurchased and cancelled 16,376 shares as of the authorization date of these financial statements.

The Corporation's previous NCIB commenced on December 11, 2020 and terminated on December 10, 2021. Pursuant to this previous NCIB, a total of 78,804 common shares were purchased and cancelled in 2021.

At September 30, 2022, 325,000 stock options were outstanding at an average exercise price of \$1.93 per share, as well as 1,123,565 units under the Corporation's Performance Share Unit Plan and 973,264 units under the Deferred Share Unit plan.

Summary of Quarterly Results

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

(\$ thousands, except per share)	2022				2021				2020
	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4	
Revenue	12,519	25,706	28,696	23,644	18,654	16,377	17,767	16,584	
Adjusted EBITDA ⁽¹⁾⁽²⁾	572	3,100	2,884	1,836	1,412	796	874	1,154	
Net loss ⁽²⁾	(4,546)	(20,263)	(2,671)	(4,608)	(4,784)	(4,018)	(5,197)	(11,468)	
Per share – basic and diluted	(0.09)	(0.47)	(0.05)	(0.10)	(0.10)	(0.08)	(0.11)	(0.23)	
Cash flow from (used in) operating activities	942	6,364	300	(3,472)	737	2,023	(1,085)	2,389	
Funds flow from operations ⁽¹⁾	196	2,620	2,243	1,390	1,077	640	590	859	

(1) See "Non-IFRS Measures" on page 18

(2) Adjusted EBITDA and Net loss include the impact of wages subsidies (CEWS) and rent subsidies recorded during 2021 and 2020

Revenues were down in Q3-2022 relative to Q2-2022 due to the Sale Transactions which closed in July 2022. High Arctic will focus on growing its business in PNG as the market fundamentals and outlook for the region is strong. Activity in High Arctic's PNG Drilling Services Segment continues to see improvement since the stoppage in 2020 as a result of Covid-19.

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

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				2020
	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4	
Oil and natural gas prices									
(Averages for each period):									
Brent Crude Oil (USD \$/bbl) ⁽¹⁾	98	112	97	80	73	69	61	45	
Japan LNG (USD \$/mmbtu) ⁽²⁾	20.60	17.07	16.57	13.47	11.68	8.75	9.60	6.65	
USD/CAD exchange rate ⁽¹⁾	1.37	1.29	1.25	1.26	1.26	1.23	1.27	1.30	

(1) Source: Sproule

(2) Source: YCharts

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 rate was higher in Q3-2022 which has had a positive impact on the Corporation's financial results.

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 strategic investment decisions, particularly with their significant interest in large scale LNG projects both on-stream and in-development. In August 2022 High Arctic announced a three-year contract renewal with a principal customer in PNG for Rig 103, with drilling activity now expected to commence early in 2023.

Pricing for oil and natural gas production in PNG is generally tied to world prices such as Brent Crude and Japan LNG, which have rebounded strongly and remained elevated in YTD-2022. Brent prices have retreated in Q3-2022 amid growing global recession concerns. Japan LNG prices continued to climb in Q3-2022 with average prices breaching USD \$20.6/mmbtu in the quarter, and spot prices regularly exceeding USD\$35/mmbtu.

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				2020
	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4	
Oil and natural gas prices									
(\$ Average for each the period):									
West Texas Intermediate ("WTI") (USD \$/bbl) ⁽¹⁾	92	108	94	77	71	66	58	39	
West Canada Select ("WCS") (CAD \$/bbl) ⁽¹⁾	94	122	101	79	72	67	57	36	
Canadian Light Sweet Oil ("CLS") (CAD \$/bbl) ⁽¹⁾	117	136	118	92	84	76	69	45	
AECO (CAD \$/MMbtu) ⁽¹⁾	4.46	7.26	4.77	4.74	3.75	3.07	3.13	2.65	

(1) Source: Sproule

(2) Source: utilization rates CAOEC

WTI, WCS and CLS average prices retreated in Q3-2022 from significant highs seen in Q2-2022 amid growing concerns of a global recession but have remained near historical highs. 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 Q3-2022 relative to Q3-2021, in response to the high commodity prices and demand increase. 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 development of additional pathways to market, and a shift in political focus from energy transition to energy security may be more supportive to 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 the risk associated with the developments relating to Covid-19. Pandemic and/or endemic risk is 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. Further, cyber-security risks increase as employees work from home. Such restrictions could significantly impact the ability for the Corporation to operate, and therefore impact financial results.

The Corporation is also exposed to geopolitical risks including the trade and economic impacts of the ongoing conflict in Ukraine. Geopolitical risks associated with the situation in Ukraine are significantly impacting international trade and global commodity prices.

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 of:

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% for the initial term of five years. The Corporation is exposed to interest rate risk upon renewal or expiration of the initial term. The Corporation had no risk management contracts that would be affected by interest rates in place at September 30, 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 a considerable proportion of 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 declining oil demand and over supply, climate change driven transitions to lower emission energy sources, security of supply, the endemic Covid-19 which creates a scenario of both downward and fluctuating price pressure as well as the implications of changes to government and government policy including the policy directions that will be taken by the Canadian, US and PNG governments.

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, transitional, and future phases of energy industry changes.

The Corporation had no risk management contracts that would be affected by commodity prices in place at September 30, 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.

The 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 and nine-months ended September 30, 2022, a \$0.10 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 \$193 and \$40, respectively (2021: \$144 and \$517, respectively).

The average CAD to USD exchange rate for the Quarter was 1.31 compared to 1.26 during Q3-2021. As at September 30, 2022, the CAD to USD exchange rate was 1.37 versus 1.26 as at December 31, 2021.

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 September 30, 2022, USD \$1,030 (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.

The Corporation has historically 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 September 30, 2022:

<i>(\$ thousands)</i>	USD ⁽¹⁾	PGK ⁽²⁾	Australian Dollars ("AUD") ⁽³⁾
Cash	2,572	11,065	410
Accounts receivable	1,271	13,319	8
Accounts payable and accrued liabilities	(1,275)	(2,912)	(270)
Total – Canadian Dollars	2,568	21,472	148

(1) As at September 30, 2022 one USD was equivalent to 1.37 CAD.

(2) As at September 30, 2022, one PGK was equivalent to 0.39 CAD.

(3) As at September 30, 2022, one AUD was equivalent to 0.89 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 large customer base, the Corporation provides services to 3 large multinational/regional customers who individually accounted for greater than 10% of its consolidated

revenues during the three-month period ended September 30, 2022 with sales of \$4,655, \$4,451, and \$1,556, respectively (2021: one customer with revenues of \$4,056).

The Corporation provided services to six large multinational/regional customers who individually accounted for greater than 10% of its consolidated revenues during the nine-month period ended September 30, 2022 with sales of \$12,138, \$9,468, \$8,617, \$8,367, \$7,050, and \$6,721 respectively (2021: three customers with revenues of \$8,655, \$4,305, and \$4,218, respectively).

As at September 30, 2022, these 6 customers represented a total of \$7,621 or 63% 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:

<i>(\$ thousands)</i>	As at September 30, 2022	As at December 31, 2021
Less than 31 days ⁽¹⁾	\$ 6,242	\$ 11,803
31 to 60 days	626	6,415
61 to 90 days	3,427	2,522
Greater than 90 days	2,444	675
Provision for expected credit losses	(638)	(701)
	\$ 12,101	\$ 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, geopolitical events, contraction of available capital and reliance on continued fiscal stimulus 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.

The Corporation's revolving credit facility was cancelled in July 2022 as part of the closing of the Sales Transactions. High Arctic intends to fund working capital and capital expenditure needs from cash balances with a view to establishing a new arrangement geared towards its PNG 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, 2021.

Impacts of endemic Covid-19 described in "Global Developments and High Arctic's Strategic Objectives" section of the 2021 annual MD&A, as well as emissions, carbon and other regulations impacting climate and climate related matters are constantly evolving. With respect to Environmental Social Governance (ESG) and climate reporting, the International Sustainability Standards Board has issued a IFRS Sustainability Disclosure Standard with the aim to develop sustainability disclosure standards that are globally consistent, comparable and reliable. In addition, the Canadian Securities Administrators have issued a proposed national instrument 51-107 Disclosure of Climate-related Matters. The cost to comply with these standards, and others that may be developed, has not yet been quantified.

There remains significant uncertainty around the expected policies to be enforced by large governmental bodies regarding oil and gas production. While the recovery trend is encouraging and a continuing focus on supply balance for oil and gas producers is warranted, there are significant headwinds surrounding policies to meet climate change emission targets.

These political and pandemic developments impact High Arctic as the Corporation pursues its strategy and allocates resources to support its principal markets in Canada driven by customers' oil and natural gas production and in PNG where its customers are restarting drilling operations, and new LNG supply is being contemplated. In addition, the global focus to address climate change has created a rotation of investment capital away from the oil and gas industry in certain markets with the potential to increase High Arctic's cost of capital and reduce access to growth funding. The direct and indirect costs of climate change relating to High Arctic and its customers is uncertain. Climate change may have an adverse impact on High Arctic and its customers, and creates uncertainty surrounding the estimated useful life and impairment of property and equipment.

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

As at September 30, 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"). Based on this evaluation, the CEO and CFO concluded that as at September 30, 2022, the design and operation of the Corporation's DC&P was effective.

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. Under the supervision and with the participation of the CEO and CFO, management conducted an evaluation of the effectiveness of its ICFR as at September 30, 2022.

Based on this evaluation, the CEO and CFO concluded that as at September 30, 2022, High Arctic's ICFR was effective. The Internal Control – Integrated Framework (2013) as issued by the Committee of Sponsoring Organizations of the Treadway Commission was utilized for this purpose. As at September 30, 2022 there was no change in our ICFR that materially affected or is reasonably likely to materially affect our ICFR.

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 December 31, 2021 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, 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 nine months ended September 30, 2022 and 2021:

(\$ thousands)	Three-months ended September 30		Nine-months ended September 30	
	2022	2021	2022	2021
Net loss	\$ (4,546)	\$ (4,784)	\$ (27,480)	\$ (13,999)
Add:				
Interest and finance expense	897	151	1,346	513
Income taxes	203	51	8,293	(894)
Depreciation	3,149	5,876	14,711	17,634
EBITDA	(297)	1,294	(3,130)	3,254
Adjustments to EBITDA:				
Impairment	879	-	9,558	-
Share-based compensation	182	133	533	296
Equity investment earnings	(295)	-	(423)	-
Gain on sale of property and equipment	(28)	88	(164)	(421)
Foreign exchange loss (gain)	131	(103)	182	(47)
Adjusted EBITDA	\$ 572	\$ 1,412	\$ 6,556	\$ 3,082

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 September 30		Nine-months ended September 30	
	2022	2021	2022	2021
Revenue	\$ 12,519	\$ 18,654	\$ 66,921	\$ 52,798
Less:				
Oilfield services expense	9,431	14,768	52,587	42,282
Oilfield services operating margin	\$ 3,088	\$ 3,886	\$ 14,334	\$ 10,516
Oilfield services operating margin %	24.7%	20.8%	21.4%	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 nine-months ended September 30, 2022 and 2021:

(\$ thousands)	Three-months ended September 30		Nine-months ended September 30	
	2022	2021	2022	2021
Revenue	\$ 12,519	\$ 18,654	\$ 66,921	\$ 52,798
Less:				
Oilfield services expense	9,431	14,768	52,587	42,282
General and administrative expense	2,516	2,474	7,778	7,434
Depreciation	3,149	5,876	14,711	17,634
Share-based compensation	182	133	533	296
Operating loss	\$ (2,759)	\$ (4,597)	\$ (8,688)	\$ (14,848)

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 operating activities, as disclosed in the consolidated statements of cash flows, to funds flow from operations for the three and nine-months ended September 30, 2022 and 2021:

(\$ thousands)	Three-months ended		Nine-months ended	
	September 30, 2022	September 30, 2021	September 30, 2022	September 30, 2021
Net cash generated from operating activities	\$ 942	\$ 737	\$ 7,362	\$ 1,675
Less:				
Changes in non-cash working capital balances - operating	746	(340)	2,303	(632)
Funds flow from operations	\$ 196	\$ 1,077	\$ 5,059	\$ 2,307

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, 2022 and December 31, 2021:

(\$ thousands)	As at	
	September 30, 2022	December 31, 2021
Current assets	\$ 79,411	\$ 45,132
Less:		
Current liabilities	(13,977)	(15,408)
Working capital	\$ 65,434	\$ 29,724
Working capital ratio	5.7 : 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 as at September 30, 2022 and December 31, 2021:

(\$ thousands)	As at	
	September 30, 2022	December 31, 2021
Cash	\$ 23,386	\$ 12,037
Less:		
Long-term debt ⁽¹⁾	(7,860)	(8,075)
Net cash	\$ 15,526	\$ 3,962

⁽¹⁾ Long-term debt includes current portion of \$3,889 (Q4-2021: \$296) and non-current portion of \$3,971 (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: impact of commodity prices on demand for and market prices for the Corporation’s services; continued impact of Covid-19; emerging opportunities to deploy drilling assets in Papua New Guinea; expansion of the PNG energy sector; expected drilling commencement dates for rigs in PNG; additional drilling rig deployment in the first-half of 2023; sustained high LNG demand particularly in Asia; substantive LNG export growth in PNG; anticipation Rig 103 will operate consistently through the term of the contract; incremental drilling opportunities associated with LNG expansion; future contracts for Rig 104 with third-party customers; climate and weather predictions and their effect on energy demand; 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; 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 key customers; treatment under governmental regulatory regimes and political uncertainty and civil unrest; developments in Ukraine; effect of economic and trade sanctions on Russia; OPEC’s ability and desire to change future production; development of additional pathways to market in Canada, and a shift in political focus from energy transition to energy security; 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: obtain equity and debt financing on satisfactory terms; market successfully to current and new customers; the general continuance of current or, where applicable, assumed industry conditions; activity and pricing; assumptions regarding commodity prices, in particular oil and gas; the Corporation’s primary objectives, and the methods of achieving those objectives; obtain equipment from suppliers; construct property and equipment according to anticipated schedules and budgets; remain competitive in all of its operations; and attract and retain skilled employees. 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.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
bbf	- Barrel
CAD	- Canadian dollars
CAOEC	- Canadian Association of Oilwell Energy Contractors
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
NATO	- North Atlantic Trade Organization
NCIB	- Normal course issuer bid
OECD	- Organization for Economic Cooperation and Development
OPEC	- Organization of petroleum exporting countries
PGK	- Papua New Guinea kina
PNG	- Papua New Guinea
TRIFR	- Total Recordable Incident Frequency Rate
US	- United States
USD	- United States dollars
WCS	- West Canada Select
WCSB	- Western Canadian sedimentary basin
WTI	- West Texas Intermediate