

# Management's Discussion & Analysis for the nine months ended September 30, 2022

# **ABACUS MINING & EXPLORATION CORPORATION**

(An exploration stage company)

Management's discussion & analysis

For the period ended September 30, 2022

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November 21, 2022



Management's Discussion & Analysis for the nine months ended September 30, 2022

This Management's Discussion and Analysis ("MD&A" or "Report") of the financial condition of Abacus Mining & Exploration Corporation (an exploration stage company) ("Abacus" or the "Company") and results of operations of the Company for the period ended September 30, 2022 (the "Period") has been prepared by management in accordance with the requirements under National Instrument 51-102 as at November 21, 2022 (the "Report Date"). The Report should be read in conjunction with the unaudited condensed interim consolidated financial statements including the notes thereto for the nine months ended September 30, 2022 and 2021 and the audited consolidated financial statements including the notes thereto for the years ended December 31, 2021 and 2020 (collectively, the "Financial Statements"). The Financial Statements are presented in accordance with International Financial Reporting Standards ("IFRS"), and Abacus' accounting policies are described in Note 3 of the Financial Statements. All dollar amounts in the Report are in Canadian dollars unless otherwise noted.

The Financial Statements, together with the MD&A, are intended to provide investors with a reasonable basis for assessing the performance and potential future performance of the Company and are not necessarily indicative of the results that may be expected in future periods. The information in the MD&A may contain forward-looking statements, and the Company cautions investors that any forward looking statements by the Company are not guarantees of future performance, as they are subject to significant risks and uncertainties that may cause projected results or events to differ materially from actual results or events. Please refer to the risks and cautionary notices of this MD&A. Additional information relating to the Company may be found on SEDAR at <a href="https://www.sedar.com">www.sedar.com</a>.

### **Special Note Regarding Forward-Looking Information**

The Company's Financial Statements, and this accompanying MD&A, contain statements that constitute "forward-looking statements" within the meaning of National Instrument 51-102, Continuous Disclosure Obligations of the Canadian Securities Administrators. Forward-looking statements often, but not always, are identified by the use of words such as "seek", "anticipate", "believe", "plan", "estimate", "expect", "targeting" and "intend" and statements that an event or result "may", "will", "should", "could", or "might" occur or be achieved and other similar expressions. Forward-looking statements in this MD&A include statements regarding the Company's future exploration plans and expenditures, the satisfaction of rights and performance of obligations under agreements to which the Company is a part, the ability of the Company to hire and retain employees and consultants and estimated administrative assessment and other expenses. The forward-looking statements that are contained in this MD&A involve a number of risks and uncertainties. As a consequence, actual results might differ materially from results forecast or suggested in these forward-looking statements. Some of these risks and uncertainties are identified under the heading "RISKS AND UNCERTAINTIES" in this MD&A. Additional information regarding these factors and other important factors that could cause results to differ materially may be referred to as part of particular forward-looking statements. The forward-looking statements are qualified in their entirety by reference to the important factors discussed under the heading "RISKS AND UNCERTAINTIES" and to those that may be discussed as part of particular forward-looking statements. Forward-looking statements involve known and unknown risks, uncertainties, assumptions and other factors that may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Factors that could cause the actual results to differ include market prices, exploration success,



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continued availability of capital and financing, inability to obtain required regulatory approvals and general market conditions. These statements are based on a number of assumptions, including assumptions regarding general market conditions, the timing and receipt of regulatory approvals, the ability of the Company and other relevant parties to satisfy regulatory requirements, the availability of financing for proposed transactions and programs on reasonable terms and the ability of third-party service providers to deliver services in a timely manner. Forward-looking statements contained herein are made as of the date of this MD&A and the Company disclaims any obligation to update any forward-looking statements, whether as a result of new information, future events or results or otherwise. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements.

Additional information relating to the Company and its operations can be obtained from the offices of the Company or on SEDAR at <u>www.sedar.com</u>.

#### **Qualified Person**

The Company's disclosure of a technical or scientific nature has been reviewed and approved by Paul G. Anderson, M.Sc., P.Geo., a qualified person under the definition of National Instrument 43-101.

# **Background and overall performance**

#### Willow Project (includes the Willow Property and the Nev-Lorraine Property):

Both properties are located just west of Yerington, Nevada. As the Nev-Lorraine Property is contiguous to the larger Willow Property, the two properties have been aggregated, for geological and exploration reporting purposes only, into the Willow Project. (See Willow Option Agreement and Nev-Lorraine Lease Agreement below.)

At the Willow Project, a work program comprising geological mapping, geochemical sampling, geophysics and relogging of old core was undertaken in 2017 shortly after the option deal was signed with the objective of developing drill targets. This work outlined a robust, buried target that has the geochemical, geophysical and geological signature of a porphyry copper deposit.

A short drilling program was initiated in late April of 2018, although two of the six holes drilled were lost before reaching their target depths. Despite this, the program was successful in validating the Company's model of the property, by discovering the Luhr Hill Granite. This granite is the source rock for all copper porphyry deposits in the Yerington camp, and this granite is not known to occur in the camp without a copper porphyry associated with it. As such, this represented a significant new discovery, as this rock unit was not previously known to exist on the Willow property.

The Company began a new drilling program in Q2 2021 and completed three new holes using vectors developed



from the 2018 program. All holes intersected the Luhr Hill granite, which is the host rock of the four known porphyry Cu-Mo deposits in the Yerington camp. All were well mineralized and altered, and hit *significant* composited intervals of low-grade copper and molybdenum mineralization. Porphyry copper deposits generally require several programs of drilling to narrow down the target, and with only 4 holes into a very large area, the project remains poorly drill tested. The Company is optimistic that a new porphyry copper deposit is likely to be delineated on the Willow project, but more drilling will be required.

# Willow Option Agreement:

On February 14, 2017, the Company entered into an option agreement, as amended, (the "Option Agreement") with Almadex Minerals Limited and its wholly owned Nevada subsidiary Almadex America Inc. (collectively, "Almadex"), to acquire the exclusive right and option to earn, in the aggregate, up to a 75% undivided ownership interest in the Willow Property (the "Willow Property") located in Douglas County, near Yerington, Nevada, USA.

To acquire an initial 60% interest in the Willow Property, the Company is required to issue common shares and incur exploration expenditures as follows:

Date	Common shares in the capital of Abacus		Cumulative minimum annual exploration expenditures	•
	(#)		(US\$)	
TSX-V approval (received February 22, 2017)	41,667	(1)	Nil	
On or before February 22, 2018	41,667	(1)	100,000	(2)
On or before February 22, 2019	41,667	(1)	400,000	(2)
On or before February 22, 2020	41,667	(1)	1,000,000	(2)
On or before February 22, 2021	83,333	(1)	1,800,000	(2)
On or before February 22, 2022	166,666	(3)	-	
On or before December 31, 2022	-		3,000,000	_
Total	416,667			-

<sup>&</sup>lt;sup>(1)</sup> Issued to December 31, 2021

Upon having earned the 60% Option Interest in the Willow Property and until February 22, 2027, the Company will be required to incur minimum exploration expenditures on an exploration program on the Property of US\$500,000 per year. The Company will act as the Willow Property's operator during the initial five-year term and following the earning of the 60% Option Interest, until such time as a joint venture is established, as described below. Under the terms of the Option Agreement, should either Abacus or Almadex acquire the rights to additional property ("AP") within the Area of Interest ("AOI"), the other party may elect to make the AP part of the Willow Project. Almadex elected to include the Nev-Lorraine claims (see Nev-Lorraine Lease Agreement below) in the Willow Project.

In order to earn the 15% Additional Interest, such that the Company would have an aggregate interest of 75% in

<sup>(2)</sup> Incurred to December 31, 2021

<sup>(3)</sup> Issued on February 16, 2022



the Willow Property, the Company will be required to deliver a Feasibility Study on the Willow Property to Almadex on or before February 22, 2027. Upon having earned the Additional Interest, the Company will continue to act as the Willow Property's operator until such time as a 75:25 joint venture is established for the further management, exploration and development of the Willow Property.

In June of 2020, the Company elected under the Option Agreement to excise a total of 47 claims comprising the northern portion of the Willow claim group, and to return them to Almadex. These claims have been thoroughly explored by Abacus, and were initially acquired due to the presence of a large area of altered rocks. Further work has determined that this portion of the property lacks the geochemical and geophysical signatures of the main target to the south. These altered rocks are now known to represent the far upper extremities of the Ann Mason deposit to the east, and thus have no potential for porphyry copper mineralization.

# **Nev-Lorraine Lease Agreement:**

The Company entered into an Exploration and option to purchase agreement (the "NL Agreement"), as amended, dated effective January 1, 2018, with three individuals (collectively, the "Optionors"), to lease the Nev-Lorraine unpatented mining claims located near Yerington in Douglas County, Nevada, USA (the "Nev-Lorraine Property"). The property is contiguous to the southeast corner of the Willow property. The NL Agreement is a ten-year lease agreement allowing the Company to explore the Nev-Lorraine claims pursuant to the following payments and expenditures:

				Minimum Annual Exploration	
	Minimum			Expenditures	
Date	Payments (US\$)		Date	(US\$)	_
Initial minimum payment	3,000	(1)	-	-	-
On execution of the Agreement	60,000	(1)	On or before December 31, 2018	20,000	(2)
On or before January 1, 2019	70,000	(1)	On or before December 31, 2019	40,000	(2)
On or before January 1, 2020	20,000	(1)	On or before December 31, 2020	60,000	(2)
On or before December 31, 2020	60,000	(1)	-	-	
On or before January 1, 2021	22,500	(1)	-	-	
On or before April 1, 2021	22,500	(1)	-	-	
On or before July 1, 2021	22,500	(1)	-	-	
On or before October 1, 2021	22,500	(1)	On or before December 31, 2021	80,000	(2)
On or before January 1, 2022	25,000	(1)	-	-	
On or before April 1, 2022	25,000	(3)	-	-	
On or before July 1, 2022	25,000	(4)	-	-	
On or before October 1, 2022	25,000	(5)	On or before December 31, 2022	100,000	
On or before January 1, 2023	110,000		On or before December 31, 2023	120,000	
On or before January 1, 2024	120,000		On or before December 31, 2024	140,000	
On or before January 1, 2025	130,000		On or before December 31, 2025	160,000	
On or before January 1, 2026	140,000		On or before December 31, 2026	180,000	
On or before January 1, 2027	150,000		On or before December 31, 2027	200,000	
Total	1,053,000				

<sup>(1)</sup> Paid to December 31, 2021

Cumulative

<sup>(2)</sup> Incurred to December 31, 2021

<sup>(3)</sup> Paid on March 31, 2022



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(4) Paid on June 27, 2022

(5) Paid on September 29, 2022

At any time during the life of the NL Agreement, the Company can elect to purchase the claim group outright from the Optionors, for sums ranging from US\$1,500,000 to US\$1,950,000. The Optionors do not retain an NSR, and the yearly expenditures are cumulative, meaning that any excess expenditure can be carried through to subsequent years. The Nev-Lorraine Property is in the AOI, and is included in the Willow Project as AP, under the terms of the Willow Option Agreement.

### Jersey Valley Project:

This property was drill tested in Q1 2021, but the results were uneconomic, with little alteration typical of gold systems identified in the holes. As the Company could not identify any remaining untested targets, the property was returned to the vendor in September of 2021. During the year ended December 31, 2021, the Company elected not to renew the lease on Jersey Valley; as such, the Company wrote off \$65,973 in acquisition costs related to the Jersey Valley property on December 31, 2021.

#### **Ajax Project:**

Abacus acquired holdings in the Ajax area in 2002 from Teck-Cominco (now Teck) and explored the property from 2005 to 2010. The core Ajax copper-gold property comprises eight Crown grants including the historic Ajax East and West pits. The Ajax project site is located at the southern extremity of the boundaries of the City of Kamloops, B.C. and is accessed along an existing haul road from the Afton mill. It includes shop facilities, a tailings area, and water rights which Abacus purchased in 2005 from Teck-Cominco. The Ajax East and West pits were in production under Teck ownership from 1989-1991 as part of the Afton Mine.

On July 31, 2009 Abacus filed a NI 43-101 compliant positive preliminary economic analysis (PEA) on the Ajax property, after a series of successful drill programs from 2005-2008, and based upon an initial resource estimate released earlier that same year. The preliminary analysis on Ajax underscored the potential for a robust mining operation.

On May 4, 2010 an investment agreement to develop the property was signed between Abacus and KGHM Polska Miedz S.A. ("KGHM"). Abacus, in its continuing role as operator of the project, initiated an independent Feasibility Study ("FS") that same month, which was completed in January 2012.

On June 28, 2010, KGHM Ajax Mining Inc. ("KGHM Ajax") was incorporated to develop the Ajax copper-gold project (the "Ajax Project"). On June 29, 2010, Abacus transferred all of its mineral interests in the Ajax Project, with a fair value of \$37,429,581 (US\$35,549,020), to KGHM Ajax in exchange for 4,900 common shares of KGHM Ajax, representing a 49% interest.

On October 12, 2010, Abacus, KGHM and KGHM Ajax entered into the Definitive Joint Venture Shareholders' Agreement (the "Joint Venture Agreement"). Pursuant to the Joint Venture Agreement, KGHM subscribed for 5,100 common shares of KGHM Ajax, which represented a 51% interest for \$37,392,200 (US\$37,000,000). These funds were used by KGHM Ajax to fund exploration and evaluation activities during 2010 and 2011 required to produce the bankable feasibility study ("BFS").

On April 2, 2012, KGHM exercised its option to acquire an additional 29% of KGHM Ajax for US\$35,000,000,



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thereby increasing its ownership in KGHM Ajax to 80%. These monies were held in escrow to fund Abacus's share of KGHM Ajax expenditures. The Joint Venture Agreement includes provisions that prevent Abacus from being diluted below 20%. It also allows Abacus to fund its share of cash calls from the Ajax project through to production using loans from KGHM. Such loans will be repaid from Abacus's share of future revenues from the joint venture.

On September 1, 2012 KGHM exercised its option to appoint KGHM International Ltd. ("KGHMI") as the operator of the Ajax Project and a representative from KGHMI was appointed to KGHM Ajax's board of directors, thereby increasing KGHM's representatives on the board to three members and Abacus' representatives remaining at two.

After assuming operatorship, an extensive review was performed by KGHMI staff and outside consultants in late 2012 through to mid-2014 to optimize the Ajax mine plan including validation of the proposed capital and operating expenditures.

In May of 2014, KGHMI announced that it had made modifications to the site plan wherein several of the proposed mine's industrial facilities were moved farther from the City of Kamloops, including relocation of a waste rock storage facility, the mine processing plant, primary crusher and temporary ore stockpiles. These sites, formerly situated inside the City of Kamloops limits, would now be located more than 3.5 kilometers from the nearest city neighborhoods and outside of municipal boundaries. These changes were made to reduce the potential for adverse impacts from industrial activity to the city, nearby residents and other public infrastructure while optimizing the value of the project. The proposed mine site is not visible from the city. In addition, the tailings storage facility was redesigned from the previously proposed dry stack tailings to a more proven wet tailings technology.

A major work program was completed during the balance of 2014 and 2015 consisting of various permitting activities, continued drilling to confirm and improve the block model, detailed engineering work, metallurgical test work, optimization trade-off studies and drilling for exploration plus condemnation and geotechnical drilling. Capital cost estimates and a revised economic model were completed by year end.

Abacus elected to have the KGHM Group contribute its portion of the project expenditures starting with the April 2015 cash call, pursuant to the Joint Venture Agreement between the parties, the escrowed funds having been exhausted at this time. The funds are being provided by KGHM on behalf of Abacus as a loan, which is only repayable should commercial production commence.

The results of these technical studies were incorporated into an Environmental Assessment Application/ Environmental Impact Statement ("EA Application/EIS") which was filed in September 2015 with the British Columbia Environmental Assessment Office ("BCEAO") for a completeness review. The EA Application/EIS was then submitted on January 18, 2016 for technical review by the regulators, which was expected to conclude in late 2016. However, due to the large number of requests and questions from the public, First Nations and the working group reviewing the application on behalf of various governments, the review was suspended at the request of KGHM Ajax from May 4, 2016 until March 30, 2017.

KGHMI also completed an updated NI 43-101 compliant Feasibility Study (the "updated FS") for the Ajax deposit



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on January 13, 2016, which incorporated an updated reserve and significantly updated engineering. Several significant changes were introduced to the scope and layout of the project which yielded positive economic, processing and environmental parameters for the Ajax Project.

# Economic Highlights of the 2016 FS (in US\$ unless otherwise indicated)

- Total proven and probable mineral reserves of 426 million tones containing 2.7 billion lbs Cu, 2.6 million oz Au, and 5.3 million oz Ag, at an average life of mine (LOM) head grade of 0.29% Cu, 0.19 g/t Au, and 0.39g/t Ag\*
- 18-year mine life at an average nominal processing rate of 65,000 tonnes per day (t/d) at an overall stripping ratio of 2.65:1
- Average annual production of copper and gold in concentrate of 58,000 tonnes Cu and 125,000 oz Au
- Average mine operating costs of \$1.5/t; average process operating costs of \$4.31/t
- Initial capital expenditures of \$1.307 billion
- Pre-tax NPV (8%) = \$429.4 M Pre-tax NPV (5%) = \$872.5 M
- Pre-Tax IRR 13.4%; payback (years) 6.5

#### Key Changes in the 2016 FS from the 2012 FS include:

- Project site relocation from the north to the south side of the mine pit
- Change in tailings technology to thickened tailings
- Change in mining plans from 60,000 t/d to 65,000 t/d, and the replacement of the in-pit semi-mobile crushing stations with a single, fixed primary crushing station
- Addition of a fine ore stockpile
- Adjustments to the site water management plan to accommodate facility relocation and tailings storage facility redesign
- Further definition of mineral resource and mineral reserves

With an ongoing strategy of engaging the community and First Nations, KGHM Ajax has provided extensive information to the local community and First Nations groups. Agreements have been signed with the Stk'emlupsemente Secwepeme ("STS"), represented by the Tk'emlups and Skeetchestn First Nations bands for a Cultural Heritage Study and a Memorandum of Understanding ("MoU"). Consultations continue with the STS towards aligning an Impacts Benefits Project Agreement ("IBA"). The IBA would define the mutual responsibilities between KGHM Ajax and the STS in connection with the benefits, construction, operations, and closure of the Ajax project.

On March 29, 2017, the Ajax Project was notified by the BCEAO that, as a result of the satisfactory completion of information and materials in response to issues raised by multiple stakeholders, and in fulfilment of the requirements related to Aboriginal and public consultation, it had lifted its suspension of the 180-day time limit for the application review. This suspension was originally requested by KGHM Ajax to fulfill the requirements to the BCEAO's satisfaction.

The BCEAO also informed KGHM Ajax that, going forward, the CEAA and the BCEAO had agreed to seek a greater

<sup>\*</sup>Based on LOM metal prices of Cu: US\$3.21/lb, Au: US\$1,200/oz, Ag: US\$17/oz



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level of coordination and to prepare a joint assessment report. Throughout the year, the CEAA and the BCEAO acted in coordination on the Ajax Project, co-chairing a technical working group, participating in consultation with Aboriginal groups and coordinating public comment periods.

To provide the process certainty for the remainder of the EA and to ensure federal- provincial timeline alignment consistent with a coordinated process, the provincial review period was extended by an additional 110 days. This included a 30-day public comment period on the joint assessment report and any draft provincial EA Certificate conditions which concluded on October 10, 2017

In December 2017, the British Columbia Minister of Environment and Climate Change Strategy and Minister of Energy, Mines and Petroleum Resources announced that they had declined the issuance of an Environmental Assessment Certificate (EA Certificate) for the Ajax project. The Federal Minister of Environment and Climate Change Canada announced at the same time that the Project "is likely to cause significant adverse environmental effects and cumulative effects to Indigenous heritage and the current use of lands and resources for traditional purposes by Indigenous peoples". The Federal Minister referred the Project back to the responsible authorities, Fisheries and Oceans Canada and Natural Resources Canada (the "Federal Authorities"), who were tasked with seeking a final decision from Cabinet on whether the Project can proceed. In June of 2018, the Federal Authorities announced that they had rejected the proposed Ajax mine project "because the project is likely to cause significant adverse environmental effects that cannot be justified in the circumstances".

The Provincial and Federal decisions ("Decisions") follow a rigorous and comprehensive six-year environmental assessment review process that was formally initiated in February 2011, involving extensive engagement with provincial and federal government agencies, technical working and community advisory groups, First Nations and a broad array of stakeholder interest groups including thousands of community members who took part. The Decisions to reject the Ajax Project in view of the highest standards that were consistently met for public consultation and stakeholder engagement was a significant disappointment to the Company; however, in Management's view, the Project is technically sound, viable and economically beneficial for the Kamloops community, First Nations and for the Province of BC and Canada. The environmental review process also demonstrated that any environmental effects of the mine could be mitigated.

In Q3 2020, KGHM re-established an office in Kamloops and hired a new supervisor tasked with engaging local stakeholders in order to find a way to move the project forward and to potentially resubmit the environmental application.

# Investment in KGHM Ajax project:

KGHM Ajax was formed to facilitate the exploration and development of the Ajax Project. The Company owns 20% (KGHM: 80%) of the common and voting shares of KGHM Ajax and adjusts for its share of the profits and/or losses of KGHM Ajax as well as any distributions received from KGHM Ajax (none to date).

At September 30, 2022, the Company's investment in KGHM Ajax was \$4,910,464.

KGHM Loan: Under the terms of the JV Agreement, and without dilution to its 20% ownership of KGHM Ajax, the



Company requested, beginning in 2015, that KGHM provide the Company's funding of the operations at Ajax as a loan (the "KGHM Loan"). At September 30, 2022, the Company had principal and interest on funds provided by KGHM owing in the total amount of \$23,674,480. In connection with a subscription by the Company in the Common Shares of KGHM Ajax, for which KGHM Ajax has agreed to pay the subscription price on behalf of the Company, it was agreed to increase the principal amount of the Loan by \$768,240.

The KGHM Loan is non-revolving, bears interest of 10% per annum, is secured by the investment in KGHM Ajax, and had a maturity date of December 31, 2021. Under the terms of the JV Agreement, if, at the time of maturity of the loan, the commencement of commercial production and the distribution of dividends by the JV to the Company are not sufficient to repay the KGHM Loan, the parties must, in good faith, negotiate an extension. Additionally, should the Company incur additional debt or dispose of assets, in each case in excess of \$100,000, the funds borrowed or sales proceeds received must be used to make repayments on the KGHM Loan. During the year ended December 31, 2021, the maturity date of the KGHM Loan was extended to December 31, 2022.

#### **Exploration Expenditures:**

The following table shows the activity by category of exploration expenditures for the nine months ended September 30, 2022 and 2021:

	September 30, 2022	September 30, 2021
<b>Exploration and Evaluation Expenditures</b>	(\$)	(\$)
Consulting and project supervision	41,516	145,867
Other	8,956	36,211
Drilling	10,836	807,430
Claims maintenance	32,238	56,698
Total	93,546	1,046,205

# **Results of operations**

Activities of the Company for the nine months ended September 30, 2022 focused on advancing the Willow Project, and continuing to monitor the activities of KGHMI at the Ajax Project.

On March 10, 2022, the Company closed the first tranche of a non-brokered private placement ("Offering") for gross proceeds of \$700,000, pursuant to which the Company issued 11,666,667 common shares and warrants allowing for the purchase of up to, in the aggregate, 5,833,333 common shares at \$0.10 per common share until March 10, 2024. On March 16, 2022, the Company closed the second tranche of the Offering for gross proceeds of \$60,000, pursuant to which the Company issued 1,000,000 common shares and warrants allowing for the purchase of up to, in the aggregate, 500,000 common shares at \$0.10 per common share until March 16, 2024. In connection with the Offering, the Company paid finders' fees of \$11,088 and issued warrants allowing for the purchase of up to, in the aggregate, 92,400 common shares at \$0.10 per common share until March 10, 2024.



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Analysis of the results of operations for the three months ended September 30, 2022 (the "Quarter") as compared with the three months ended September 30, 2021 ("2021 Quarter")

General and administrative expenses for the Quarter were \$125,383 (2021 Quarter: \$583,832). Significant differences in the general and administrative expenses for the period include:

- Salaries and contract wages decreased to \$44,556 (2021 Quarter: \$55,002) due to a decrease in business activities.
- Exploration and evaluation expenditures decreased to \$38,970 (2021 Quarter: \$457,438 in respect of a drilling program at the Willow property).
- Travel and promotion decreased to \$1,450 (2021 Quarter: \$15,325 in respect of arrangements with various shareholder communications service providers).

During the Quarter, Abacus recorded its share of the loss incurred by KGHM Ajax in its equity investment in KGHM Ajax of \$156,071 (Quarter 2021: \$104,492). Interest expense increased in the Quarter to \$591,317 (Quarter 2021: \$505,408) in connection with the KGHM Loan.

Analysis of the results of operations for the nine months ended September 30, 2022 (the "Period") as compared with the nine months ended September 30, 2021 ("2021 Period")

General and administrative expenses for the Period were \$593,546 (2021 Period: \$1,928,343). Significant differences in the general and administrative expenses for the year include:

- Salaries and contract wages decreased to \$155,820 (2021 Period: \$173,327) due to a decrease in business activities.
- Legal expenditures decreased to \$9,153 in the Period (2021 Period: \$229,125) as a result of a decrease in corporate activities.
- Exploration and evaluation expenditures decreased to \$93,546 (2021 Period: \$1,046,206 in respect of a drilling program at the Willow and Jersey properties in 2021).
- Travel and promotion decreased to \$29,255 (2021 Period: \$99,262 in respect of arrangements with various shareholder communications service providers).
- Non-cash share-based payments expense of \$193,461 was recognized during the Period (2021 Period: \$267,869).

During the Period, Abacus recorded its share of the loss incurred by KGHM Ajax in its equity investment in KGHM Ajax, as to \$258,414 for the Period (2021 Period: \$870,785). Interest expense increased to \$1,681,904 (2021 Period: \$1,459,822) in connection with the KGHM Loan.



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# Summary of quarterly results

The selected information set out below has been gathered from the previous eight quarterly financial statements for each respective three-month financial period.

	Loss and Comprehensive Loss		Loss per share
_	Quarter	(\$)	(\$)
September 30, 2022	Q3/22	872,772	0.01
June 30, 2022	Q2/22	705,077	0.01
March 31, 2022	Q1/22	956,016	0.01
December 31, 2021	Q4/21	1,081,275	0.02
September 30, 2021	Q3/21	1,259,679	0.02
June 30, 2021	Q2/21	1,661,094	0.02
March 31, 2021	Q1/21	1,165,840	0.01
December 31, 2020	Q4/20	758,019	0.01

#### Liquidity

The Company's cash are comprised of bank deposits and a savings account. Accounts payable and accrued liabilities of \$296,083 are due in the fourth quarter of 2022. At September 30, 2022, the Company had cash and amounts receivable of \$316,177 and \$2,007, respectively. Cash used in operating activities for the nine months ended September 30, 2022 was \$350,416.

The ability of the Company to continue is dependent upon the Company's ability to generate future profitable operations and receive continued financial support from its development partner and shareholders, primarily by way of loans from KGHM and from equity financing. The Company will need to raise or borrow money for its activities. Current sources of future funding are undetermined, and management will continue to review potential financings options as the need arises. There is no certainty that the Company will be able to receive continued financial support in the future. Management believes that even with the financings completed during the Year, the Company will need external financings in order to fund further exploration. These material uncertainties may cast significant doubt about the Company's ability to continue as a going concern.

The Company's consolidated financial statements do not give effect to adjustments to the carrying values and classification of assets and liabilities that would be necessary should the Company be unable to continue as a going concern. Such adjustments could be material.

# **Capital resources**

The Company's objectives when managing capital are to safeguard the Company's ability to continue as a going concern in order to pursue the development of its exploration and evaluation assets and to maintain a flexible capital structure for its projects for the benefit of its stakeholders. As the Company is in the exploration stage, its principal source of funds is from the issuance of common shares.

In the management of capital, the Company includes the components of shareholders' equity. The Company



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manages the capital structure and makes adjustments to it in light of changes in economic conditions and the risk characteristics of the underlying assets. To maintain or adjust the capital structure, the Company may attempt to issue new shares, enter into joint venture property arrangements, acquire or dispose of assets or adjust the amount of cash and investments.

In order to facilitate the management of its capital requirements, the Company prepares annual expenditure budgets that are updated as necessary depending on various factors, including successful capital deployment and general industry conditions. The annual and updated budgets are approved by the Board of Directors.

There were no changes in the Company's approach to capital management during the period ended September 30, 2022 compared to the period ended September 30, 2021. The Company is not subject to externally imposed capital requirements.

#### Off balance sheet arrangements

The Company does not have any off-balance sheet arrangements.

# **Compensation of Key Management Personnel**

Key management personnel consist of Paul G. Anderson (President and CEO), Michael McInnis (Executive Chairman and a Director of the Company), Jeannine Webb (CFO and Corporate Secretary), and Thomas McKeever, Kerry Spong and John McConnell (independent, non-executive Directors of the Company).

The remuneration of key management personnel during the periods ended September 30, 2022 and 2021 is summarized as follows:

Management's and director's compensation	September 30, 2022	September 30, 2021
	(\$)	(\$)
Accounting	21,281	14,251
Consulting and contract wages	119,563	131,750
	140.844	146.001

During the period ended September 30, 2022, the Company was charged, by a company with directors in common, \$7,200 in respect of rent (2021: \$14,400).

At September 30, 2022 \$139,515 (December 31, 2021: \$158,787) was owed to various key management personnel in respect of consulting, contract wages and expenses incurred on behalf of the Company.



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#### **Outstanding share data**

#### Share issuances:

- On February 16, 2022, in connection with the Willow Option Agreement, the Company issued 166,666 common shares of the Company valued at \$10,833.
- On March 10, 2022, the Company closed the first tranche of a non-brokered private placement ("Offering") for gross proceeds of \$700,000, pursuant to which the Company issued 11,666,667 common shares and warrants allowing for the purchase of up to, in the aggregate, 5,833,333 common shares at \$0.10 per common share until March 10, 2024.
- On March 16, 2022, the Company closed the second tranche of the Offering for gross proceeds of \$60,000, pursuant to which the Company issued 1,000,000 common shares and warrants allowing for the purchase of up to, in the aggregate, 500,000 common shares at \$0.10 per common share until March 16, 2024. In connection with the Offering, the Company paid finders' fees of \$11,088 and issued warrants allowing for the purchase of up to, in the aggregate, 92,400 common shares until March 10, 2024.

#### Stock option grant:

On March 28, 2022 the Company granted options allowing for the purchase of up to, in the aggregate, 3,050,000 shares at \$0.07 per share until March 28, 2027, to employees, consultants, directors and officers of the Company. The options vested immediately, and the total amount of share-based payments expense was calculated at \$193,461, which was recognized during the period ended September 30, 2022.

# Report date:

As at the Report Date the Company had the following common shares, stock options and warrants outstanding:

Common shares	100,511,009
Stock options	8,203,750
Warrants	31,621,206

### **Proposed transactions**

There are no proposed transactions to be reported.

# **Subsequent Event**

There were no events subsequent to the date of this Report that have not already been included in this Report.



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#### **Financial instruments**

As at September 30, 2022, the Company's financial instruments consist of cash, amounts receivable, accounts payable and accrued liabilities, and the KGHM Ajax project loan. IFRS requires disclosures about the inputs to fair value measurements for financial assets and liabilities recorded at fair value, including their classification within a hierarchy that prioritizes the inputs to fair value measurement.

The three levels of hierarchy are:

- Level 1 Quoted prices in active markets for identical assets or liabilities;
- Level 2 Inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
- Level 3 Inputs for the asset or liability that are not based on observable market data.

As at September 30, 2022, the Company believes that the carrying values of amounts receivable and accounts payable and accrued liabilities approximate their fair values because of their nature and relatively short maturity dates or durations. Refer to the Financial Statements for disclosures in relation to the KGHM Ajax project loan.

#### Credit risk

Credit risk is the risk that the counterparty to a financial instrument will fail to meet their payment obligations, thus this risk is primarily attributable to cash. The Company's cash is held at large financial institutions such that counterparty risk is considered to be very low.

#### Interest rate risk

Interest rate risk is the risk that the fair values or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. As at September 30, 2022, this risk relates just to the Company's cash where interest rate risk is low due to the low prevailing interest rates. The Company is not susceptible to interest rate risk on financial liabilities since the KGHM loan is fixed at 10%.

# Changes in accounting policies

The Company's accounting policies for the period ended September 30, 2022 are described in Note 3 of the Financial Statements. There were no changes in the Company's accounting policies during the period ended September 30, 2022.

#### Risks and uncertainties

The Company's principal activity is mineral exploration and development, which is speculative and involves a high degree of risk. There is a significant probability that the expenditures made by the Company in the exploration of its properties will not result in discoveries of commercial quantities of minerals. A high level of ongoing expenditures is required to locate and estimate ore reserves, which are the basis for further development of a property. Capital expenditures to attain the commercial production stage are also very substantial. The Company has a history of incurring losses and deficits, and is subject to a number of risks and uncertainties due to the nature of its business and present stage of explorations, such as, but not limited to, exploration, market, commodity prices, Aboriginal land claims, title, limited financial resources, share price volatility, key personnel, competition, environmental and regulatory requirements, uninsurable risks and critical accounting estimates.

The following sets out the principal risks faced by the Company:



<u>Corona Virus (COVID-19):</u> The outbreak of the coronavirus (COVID-19) global pandemic has adversely affected workforces, economies, and financial markets globally. Since March 2020, governmental measures have been implemented and amended in Canada and the rest of the world in response to the pandemic. The Company continues to operate its business, and adheres to Canadian Federal and Provincial, and US Federal and State emergency measures as those are developed. COVID-19 and the various government measures, which could include government mandated temporary closures of international borders, of the Company or of its contractors, or restrictions on travel of various personnel, could impact the Company's ability to conduct its exploration programs in a timely manner. The Company continues to adapt to these changing circumstances and to evaluate the best way to move its exploration activities forward during current conditions.

International Conflict: International conflict and other geopolitical tensions and events, including war, military action, terrorism, trade disputes, and international responses thereto have historically led to, and may in the future lead to, uncertainty or volatility in global energy, supply chain and financial markets. Russia's recent invasion of Ukraine has led to sanctions being levied against Russia by the international community and may result in additional sanctions or other international action, any of which may have a destabilizing effect on commodity prices, supply chain and global economies more broadly. Volatility in commodity prices and supply chain disruptions may adversely affect the company's business and financial condition.

The extent and duration of the current Russian-Ukrainian conflict and related international action cannot be accurately predicted at this time and the effects of such conflict may magnify the impact of the other risks identified in this MD&A, including those relating to commodity price volatility and global financial conditions. The situation is rapidly changing and unforeseeable impacts may materialize, and may have an adverse effect on the Company's business, results of operations and financial condition.

<u>Title:</u> Although the Company has taken steps to verify the title to mineral properties in which it or KGHM Ajax have an interest in accordance with industry standards for the current stage of exploration of such properties, these procedures do not guarantee the title. Property title may be subject to unregistered prior agreements or transfers and title may be affected by undetected defects.

<u>Aboriginal Land Claims:</u> Aboriginal rights may be claimed on properties or other types of tenure with respect to which mining rights have been conferred. The Company is aware of the mutual benefits afforded by cooperative relationships with indigenous people in conducting exploration activity and is supportive of measures established to achieve such cooperation. The outcome of any aboriginal land claims cannot be predicted, and if successful, would have a significant adverse effect on the Company.

Foreign Countries and Regulatory Requirements: Currently, the Company holds claims, has entered into an exploration and option agreement to lease unpatented mining claims, and has entered into a right and option agreement to earn an interest in certain claims, in the United States. Consequently, the Company is subject to certain risks associated with foreign ownership, including currency fluctuations, inflation, and political risk. Mineral exploration and mining activities and production activities in foreign countries may be affected in varying degrees by political stability and government regulations relating to the mining industry. Any changes in regulations or shifts in political conditions are beyond the control of the Company and may adversely affect its business. Operations may be affected in varying degrees by government regulations with respect to disputes



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and/or conflicts between State and Federal legislations and regulations, community rights, restrictions on production, price controls, export controls, restriction of earnings, taxation laws, expropriation of property, environmental legislation, water use, labour standards and workplace safety.

Limited Financial Resources and Going Concern: The Company has no significant source of operating cash flow and no revenues from operations. The Company has limited financial resources, no operating revenues and its ability to continue operating as a going concern is dependent upon management's success in raising additional monies to sustain the Company until cash flow from operations is adequate to sustain the Company's viability. Substantial expenditures are required to be made by the Company and/or its development partners to establish ore reserves and develop a mining operation. Exploration and development of mineral deposits is an expensive process, and frequently the greater the level of interim stage success the more expensive it can become. At present, the Company has no producing properties and generates no operating revenues; therefore, for the foreseeable future, it will be dependent upon selling equity in the capital markets to provide financing for its continuing exploration budgets.

Failure to obtain additional financing could result in the delay or indefinite postponement of further exploration and development of the Company's projects and the Company may become unable to carry out its business objectives. The Financial Statements contain a note that indicates the existence of material uncertainties that raise substantial doubt about the Company's ability to continue as a going concern. The Company's ability to continue as a going concern is dependent upon its ability to obtain the financing necessary to fund its mineral properties through the issuance of capital stock or joint ventures, and to realize future profitable production or proceeds from the disposition of its mineral interests.

While the Company has been successful in obtaining financing from the capital markets for its projects in recent years, there can be no assurance that the capital markets will remain favourable in the future, and/or that the Company will be able to raise the financing needed to continue its exploration programs on favourable terms, or at all. Restrictions on the Company's ability to finance could have a materially adverse outcome on the Company and its securities, and its ability to continue as a going concern.

Exploration and Development of Properties and Operations: The property interests owned by the Company or KGHM Ajax, or in which it may have an interest, are currently in the exploration and evaluation stages and have no ongoing mining operations. Mineral exploration and development involves a high degree of risk and few properties are ultimately developed into producing mines. The Ajax Project is located on the southwest side of Kamloops, BC and is progressing through the preliminary steps of the environmental assessment process administered jointly by the provincial Environmental Assessment Office and the federal Canadian Environmental Assessment Agency. The proposed infrastructure will be located primarily on private land owned by KGHM Ajax, with some utilization of crown land. The Ajax Project has been designated as a Major Resource Project and constitutes a reviewable project under the Canadian Environmental Assessment Act, in addition to requiring a number of provincial permits before construction can begin. KGHM Ajax has engaged environmental experts and consultants and is committed to working in consultation with the community, First Nations and government agencies to identify areas of environmental concern, and to developing local policies and procedures that minimize the impact of mining on surrounding areas. There can be no assurance that any necessary



environmental approvals will be granted in a timely manner in respect of any property interests owned by the Company or KGHM Ajax, or in which the Company may have an interest.

Mineral exploration and mining operations generally involve a high degree of risk. The Company's operations are subject to all the hazards and risks normally encountered in the exploration, development and production of base metals and other minerals, including unusual and unexpected geologic formations, seismic activity, rock bursts, cave-ins, flooding and other conditions involved in the drilling and removal of material, any of which could result in damage to, or destruction of, mines and other producing facilities, damage to life or property, environmental damage and possible legal liability. The financing, exploration, development and mining of any of the Company's properties is furthermore subject to a number of macroeconomic, legal and social factors, including commodity prices, laws and regulations, political conditions, currency fluctuations, the ability to hire and retain qualified people, the inability to obtain suitable adequate machinery, equipment or labour and obtaining necessary services in jurisdictions in which the Company operates. Unfavourable changes to these and other factors have the potential to negatively affect the Company's operations and business.

KGHM Loan: At September 30, 2022, the KGHM Loan had a carrying value of \$23,674,480 (December 31, 2021: \$21,992,576). The KGHM Loan is secured by the investment in KGHM Ajax, is non-revolving, bears interest of 10% per annum, matures on December 31, 2022, and specifies the good faith commitment of the parties to negotiate for an extension of the maturity date, should the commencement of commercial production and the distribution of dividends, in an aggregate amount sufficient for purposes of repayment of the loan, not have occurred by the maturity date. At September 30, 2022 and as at the date of this Report, the Company does not have the funds available to satisfy the KGHM Loan. In December 2017, following a six-year environmental assessment review process, the British Columbia Minister of Environment and Climate Change Strategy and Minister of Energy, Mines and Petroleum Resources announced they had declined the issuance of an Environmental Assessment Certificate required for the Ajax Project to proceed toward commercial production. Because the KGHM project is currently not able to proceed, the Company will need to negotiate extensions to the term of the KGHM Loan. During the year ended December 31, 2021, the maturity date of the KGHM Loan was extended to December 31, 2022 (the "Extended Maturity Date"). There can be no assurance that the necessary environmental approvals will be granted prior to the date of maturity of the KGHM Loan, nor is there any assurance that an extension of the maturity date of the KGHM Loan will be negotiated prior to the Extended Maturity Date.

Share Price Volatility, Price Fluctuations and Commodity price: The price of the common shares, financial results and exploration, development and mining activities of the Company or KGHM Ajax may in the future be significantly adversely affected by declines in the prices of base and precious metals. Metal prices fluctuate widely and are affected by numerous factors beyond the Company's control. There can be no assurance that such price fluctuations will continue, or that investors' evaluations, perceptions, beliefs and sentiments will continue to impact these target commodities. An adverse change in these commodities' prices, or in investors' beliefs about trends in those prices, could have a material adverse outcome on the Company and its securities. There can be no assurance that these price fluctuations and volatility will not continue to occur.



#### Management's Discussion & Analysis for the nine months ended September 30, 2022

<u>Key personnel</u>: Other than in respect of the Joint Venture, the Company's operations are dependent to a large degree on the skills and experience of certain key personnel. The Company does not maintain "key man" insurance policies on these individuals. Should the availability of these persons' skills and experience be in any way reduced or curtailed, this could have a materially adverse outcome on the Company and its securities.

<u>Competition</u>: Significant and increasing competition exists for the opportunity to acquire or acquire an interest in the limited number of mineral properties available. As a result of this competition, some of which is with large established mining companies with substantial capabilities and greater financial and technical resources than the Company, the Company may be unable to acquire additional interests in attractive mineral properties on terms it considers acceptable.

Information Systems and Cyber Security: The Company's operations depend on information technology ("IT") systems. These IT systems could be subject to network disruptions caused by a variety of sources, including computer viruses, security breaches and cyber-attacks, as well as disruptions resulting from incidents such as cable cuts, damage to equipment, natural disasters, terrorism, fire, loss of power, vandalism and theft. The Company's operations also depend on the timely maintenance, upgrade and replacement of networks, equipment, IT systems and software, as well as pre-emptive expenses to mitigate the risks of failures. Any of these and other events could result in information system failures, delays and/or increase in capital expenses. The failure of information systems or a component of information systems could, depending on the nature of any such failure, adversely impact the Company's reputation and results of operations. Although to date the Company has not experienced any material losses relating to cyber-attacks or other information security breaches, there can be no assurance that the Company will not incur such losses in the future. The Company's risk and exposure to these matters cannot be fully mitigated because of, among other things, the evolving nature of these threats. As a result, cyber security and the continued development and enhancement of controls, processes and practices designed to protect systems, computers, software, data and networks from attack, damage or unauthorized access remain a priority. As cyber threats continue to evolve, the Company may be required to expend additional resources to continue to modify or enhance protective measures or to investigate and remediate any security vulnerabilities.

<u>Environmental and Other Regulatory Requirements</u>: The mining, processing, development and mineral exploration activities of the Company are subject to various laws governing prospecting, development, production, taxes, labour standards, mine safety, land use, toxic substances, land claims of local people and other matters. These laws and other governmental policies may affect investments of the Company and/or its shareholders.

The Company is subject to the laws and regulations relating to environmental matters in all jurisdictions in which it operates, including provisions relating to property reclamation, discharge of hazardous material and other matters. The Company may also be held liable should environmental problems be discovered that were caused by former owners and operators of its properties and properties in which it has previously had an interest. The Company conducts its mineral exploration activities in compliance with applicable environmental protection legislation. The Company is not aware of any existing environmental problems related to any of its current or former properties that may result in material liability to the Company.



#### Management's Discussion & Analysis for the nine months ended September 30, 2022

<u>Market</u>: The Company's securities trade on public markets and the trading value thereof is determined by the evaluations, perceptions and sentiments of both individual investors and the investment community taken as a whole. Such evaluations, perceptions and sentiments are subject to change, both in short-term time horizons and longer-term time horizons. An adverse change in investor evaluations, perceptions and sentiments could have a material adverse outcome on the Company and its securities.

<u>Uninsurable</u>: The Company and its subsidiaries may become subject to liability for pollution, fire, explosion and other risks against which it cannot insure or against which it may elect not to insure. Such events could result in substantial damage to property and personal injury. The payment of any such liabilities may have a material, adverse effect on the Company's financial position.

Critical Accounting Estimates: In the preparation of financial information, management makes judgments, estimates and assumptions that affect, amongst other things, the carrying value of its mineral property assets. All deferred mineral property expenditures are reviewed, on a property-by-property basis, to consider whether there are any conditions that may indicate impairment. When the carrying value of a property exceeds its net recoverable amount that may be estimated by quantifiable evidence of an economic geological resource or reserve, joint venture expenditure commitments or the Company's assessment of its ability to sell the property for an amount exceeding the deferred costs, a provision is made for the impairment in value. Management's estimates of exploration, operating, capital and reclamation costs, if any, are subject to certain risks and uncertainties which may affect the recoverability of mineral property costs. Although management has made its best estimate of these factors, it is possible that changes could occur in the near term that could adversely affect management's estimate of the net cash flow to be generated from its properties. The Company also uses the Black-Scholes Option Pricing Model in relation to share based payments. Option pricing models require the input of highly subjective assumptions including the expected price volatility. Changes in the subjective input assumptions can materially affect the fair value estimate, and therefore the existing models do not necessarily provide a reliable single measure of the fair value of the Company's stock options granted/vested during the period.

#### **Legal Proceedings**

On September 21, 2015, Chief Ignace and Chief Gottfriedson, on behalf of the Stk'emlùpsemcteSecwepemc of the Secwepemc Nation, (the "SSN") filed a Notice of Civil Claim in the BC Supreme Court, naming the Provincial and Federal governments and KGHM as defendants. SSN seeks declarations of Aboriginal rights and title over a portion of their traditional territory, focused on the Ajax Project area, damages for infringements of those Aboriginal rights and title, and interim and permanent injunctions preventing activities in relation to the Ajax Project. The Company is not a defendant, and has been advised that KGHM is receiving legal advice in respect of this matter.

On behalf of the Board,

"Paul G. Anderson"

Paul G. Anderson, President & CEO