

# **MANAGEMENT'S DISCUSSION & ANALYSIS**

Year ended December 31, 2023



# MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS FOR THE YEAR ENDED DECEMBER 31, 2023

The following management discussion and analysis (the "MD&A") of the operations and financial position of Niobay Metals Inc. ("NioBay" or the "Company") for the year ended December 31, 2023, should be read in conjunction with NioBay's audited consolidated financial statements as at and for the year ended December 31, 2023 (the "Financial Statements"). The Financial Statements have been prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board ("IFRS Accounting Standards"). Consequently, all comparative financial information presented in the MD&A reflects the consistent application of IFRS Accounting Standards.

NioBay's management ("Management") is responsible for the preparation of the financial statements and other financial information relating to the Company included in this MD&A. The Board of Directors (the "Board") is responsible for ensuring that Management fulfills its responsibilities for financial reporting. In furtherance of the foregoing, the Board has appointed an Audit Committee composed entirely of independent directors. The Audit Committee meets with Management in order to discuss results of operations and the financial condition of the Company prior to making recommendations and submitting the financial statements to the Board for its consideration and approval for issuance to shareholders. The information included in the MD&A is as of April 18, 2024, the date when the Board approved the Financial Statements, following the recommendation of the Audit Committee. All monetary amounts included in this report are expressed in Canadian dollars ("C\$"), the Company's reporting and functional currency, unless otherwise noted.

# **DESCRIPTION OF BUSINESS**

NioBay is a mineral resource company. The business of the Company consists of acquiring, exploring, evaluating and developing mining properties. NioBay has not yet determined whether its properties contain economically viable mineral deposits. NioBay aims to become a leader in the development of mine(s) with low carbon consumption and responsible water and wildlife management practices while prioritizing the environment, social responsibility, good governance, and the inclusion of all stakeholders. The Company's top priority, which is critical to our success, is the consent and full participation of the Indigenous communities in whose territories and/or on ancestral lands we operate.

NioBay's assets are all located in Canada. The Company owns a 100% interest in the James Bay Niobium Project located 42 km south of Moosonee, Ontario (the "James Bay Project" or the "Project"). NioBay also holds through its 72.5%-owned subsidiary Crevier Minerals Inc ("CMI"), the Crevier niobium and tantalum project (the "Crevier Project") located 53 km north of the municipality of Girardville, Québec.

The Company's common shares ("Common Shares") are listed on the TSX Venture Exchange ("TSX-V") under the symbol "NBY" and on the OTCQB Venture Market, a U.S. market operated by OTC Markets Group Inc. in New York, under the symbol "NBYCF".

# JAMES BAY NIOBIUM PROJECT

In June 2016, the Company acquired the James Bay Project from Barrick Gold Inc., James Bay Columbium Ltd. and Goldcorp Inc. This property is located in the James Bay Lowlands in northeastern Ontario, and covers an area of 8,833 ha. These property rights are held through a Crown mining lease recorded in the name of the Company. As of March 1, 2018, the mining lease was renewed for a term of ten (10) years. Osisko Gold Royalties Ltd owns a 1.0% royalty on all products to be produced from the James Bay Project.

The James Bay Project was discovered in 1966 by Consolidated Morrison Explorations Limited. At that time, exploratory and detailed drilling totaled over 14,000 meters, outlining the deposit to a maximum depth of 275 meters. The deposit was drilled along a strike of 730 meters. An exploration shaft was sunk to investigate ground conditions and to provide a 225 ton bulk sample. Subsequent pilot plant operations demonstrated an excellent quality pyrochlore concentrate with low impurities, with a high recovery rate of 78%.

Following the acquisition of the James Bay Project, the Company gathered and compiled all of the historical data. Geologists cleaned and re-logged the historical drill core and over 600 samples from twelve (12) representative historical drill holes were re-assayed. In May 2017, the Company reported the results of preliminary metallurgical testing conducted by SGS Lakefield ("SGS") using core from the historical drilling program. In November 2017, the Company announced an initial Mineral Resource Estimate ("MRE") which estimate was updated in November 2018 (the "2018 MRE") and in July 2020 (the "2020 MRE") as described below under the "*Mineral Resource Estimate*" heading. In November 2020, the Company filed a National Instrument 43-101 *Standards of Disclosure for Mineral Projects* ("NI 43-101") independent Preliminary Economic Assessment ("PEA") on the James Bay Project as described below under the "*Preliminary Economic Assessment*" heading.



# The Protection Agreement

The Company concluded a protection agreement with the Moose Cree First Nation (the "MCFN") which was updated in February 2021 (the "Updated PA") and December 7, 2021. These agreements provide a framework for the building of a mutually cooperative, respectful, and beneficial relationship between the Company and the MCFN (collectively, the "Parties"), including a mechanism for effective communication, information exchange, environmental protection and the inclusion of MCFN businesses while respecting MCFN aboriginal and treaty rights.

On March 17, 2022, the Company received a letter ("Band Council Resolution") from the MCFN announcing the result of a small survey of the population which indicated an intent to preserve the South Bluff Creek area from any development. This area is where NioBay's mining lease for the James Bay Project is located and where drilling activities were ongoing. Based on the results of this small survey, the MCFN requested a meeting with NioBay regarding ceasing its permitted exploration. In order to address the MCFN concerns and evaluate all options to the Company, NioBay suspended all of its exploration activities at the James Bay Project pending a meeting with MCFN. Subsequent to this meeting and following support received from certain MCFN members, NioBay tabled a request of support and a plan to return to complete the exploration work originally expected to be completed in 2022. Following the latest Ontario Provincial election, NioBay and the Ontario Ministry of Mines held discussions to identify areas where the Provincial Government can facilitate in the consultation process between the Company and the MCFN and that the Company was entitled to return to the field and continue its exploration work. In December 2022, Ontario's Minister of Mines, George Pirie invited NioBay to join the Minister's Mining Industry Council (MMIC). NioBay has had a constant presence at Moose Factory since early January 2023 and the Company has maintained its facilities. Following these discussions with Ontario's Ministry of Mines, the Company has applied for a three year extension to its exploration permit.

# Exploration Drilling Programs

On December 7, 2021, NioBay and MCFN signed the Updated PA to cover the exploration work to be completed in 2022 (the "2022 Drill Program"). On February 23, 2022, the Company announced that Forage G4 Drilling, with the support of Expedition Helicopters and Expedition Camps and Logistics had completed the mobilisation of the first drill rig and commenced drilling. All three companies are in joint ventures with MCFN registered businesses.

The 2022 Drill Program, estimated at 12,000 metres, targeted a potentially high-grade zone to the north in an unexplored zone at vertical depths between 200 and 400 metres. The 2022 Drill Program was primarily an infill drill program to be used to maximize the conversion of resources from the inferred to indicated category, as required for prefeasibility reporting. This infill drill program was initiated in February 2022 and was expected to be completed in the second quarter of 2022, prior to its suspension as described under the "*The Protection Agreement*" heading above.

On August 11, 2022, the Company announced the discovery of significant extensions to the mineralized zone at the James Bay Project, from the results obtained from the 2022 Drill Program's first 3 holes, which confirmed:

- Presence of high-grade mineralization and intersections in the unexplored zone at depth to the north;
- Expansion of the mineralized zone;
- The presence of mineralization (in field) on the west side of the deposit;
- Potential to significantly increase the resource.

A surface plan showing the location of drilled and planned holes is shown in Figure 1 and Table 1 provides details of the drill results.



# Figure 1: James Bay Niobium Project Geological Surface Plan



# Table 1: Significant intervals in diamond drilling assay results

Name of hole	<u>From (m)</u>	<u>To (m)</u>	Length (m)	<u>% Nb<sub>2</sub>0<sub>5</sub></u>
NBY-22-08	178.2	225.8	47.6	0.33
NBY-22-08	293.0	342.0	49.0	0.32
NBY-22-08	361.0	461.6	100.6	0.49
Including	404.0	459.3	55.3	0.59
NBY-22-09	161.0	218.0	57.0	0.32
NBY-22-09	224.0	299.5	75.5	0.43
Including	227.0	253.7	26.7	0.55
NBY-22-10	53.4	132.5	79.1	0.56
Including	53.4	75.0	21.6	0.76
Including	90.0	114.0	24.0	0.68

Hole NBY-22-08, drilled on section 8N, 60 meters north of the last section drilled in 2020, demonstrates the extension at depth of the East and West branches of the deposit, with a widening and high grade of the West branch.

Holes NBY-22-09 and NBY-22-10, 60 meters further north on section 10N, confirm the extension of the East branch at depth and a significant enrichment in  $Nb_2O_5$  for the West branch compared to the results obtained in the 60s.

The high-grade mineralized zone (0.50 to 0.70% Nb<sub>2</sub>O<sub>5</sub>) which dips to the north was not intercepted by these three holes which were mainly aimed at extending the indicated resources. Deeper drilling is planned on sections 4N, 6N, 8N and 10N will aim at this target.

Visual observations of the drill core continue to indicate the presence of very coarse grains of pyrochlore, the niobium mineral, which portends an exceptional recovery, as shown by previous metallurgical tests.



# Mineral Resource Estimate

In November 2017, the Company had reported an initial MRE for its James Bay Project prepared in accordance with NI 43-101 following the re-logging and re-sampling program of representative historical drill holes. In November 2018, the Company reported an increase to the initial MRE due to a revised tonnage factor. The initial, 2018 and 2020 MREs were prepared by Roscoe Postle Associates Inc. ("RPA"). The effective date of the 2020 MRE is July 9, 2020 and the supporting NI 43-101 technical report is filed on SEDAR+ (www.sedarplus.ca).

#### Highlights of the 2020 MRE:

Category	Tonnes (Mt)	Grade (%Nb <sub>2</sub> O <sub>5</sub> )	Contained Nb₂O₅ (Mkg)
 Indicated	29.7	0.53	158
Inferred	33.8	0.52	177

Notes:

CIM (2014) Definitions Standards were followed for Mineral Resources. 1

2. Mineral Resources are reported at a cut-off grade of 0.3% Nb<sub>2</sub>O<sub>5</sub> based on an underground mining scenario, an operating cost of C\$70/tonne and a metallurgical recovery of 70%.

3. Mineral Resources are estimated using a long-term niobium price of US\$40/kg and a US\$/C\$ exchange rate of 1:1.2.

4 Bulk density of 2.93 g/cm<sup>3</sup> was used.

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A minimum mining width of approximately 7.5 m was used. Resources situated in a 46 m thick crown pillar have been excluded. 6.

The RPA Qualified Persons for the estimate are Dorota El Rassi, P.Eng. and Paul Chamois, P.Geo. 7.

#### Preliminary Economic Assessment

On November 27, 2020, NioBay filed the PEA for the James Bay Project which was prepared with the independent engineering firm G Mining Services Inc. ("G Mining"). Because of the geometry and location of the deposit, supported by the Company's ESGI principles, three mining scenarios were evaluated: open pit (scenario #1), underground (scenario #3) and a hybrid of both mining methods (scenario #2). Details of the financial and technical highlights of all three scenarios are available on the Company's website and the supporting NI 43-101 technical report is filed on SEDAR+ (www.sedarplus.ca).

#### **PEA Highlights**

	Open Pit	Open Pit + UG	Underground
Pre-Tax Internal Rate of Return (IRR)	33.6%	33.4%	26.0%
Pre-Tax Net Present Value (NPV) 8%	\$1,475 M	\$1,268 M	\$1,104 M
Pre-Tax Payback (years)	2.6 years	2.5 years	3.8 years
After-Tax IRR	27.5%	27.0%	21.6%
After-Tax NPV 8%	\$1,008 M	\$856 M	\$733 M
After-Tax Payback (years)	3.2 years	3.1 years	4.3 years
Pre-Production CAPEX (incl. 25% Contingency)	\$510.5 M	\$482.0 M	\$579 M
Life of Mine ("LOM")	30 years	23 years	23 years
Average Annual LOM Niobium Production	5,470 t Nb	6,213 t Nb	6,283 t Nb
Total Mineral Resources Mined	70.8 Mt	53.7 Mt	53.6 Mt
Average Grade Mined	0.44 % Nb2O5	0.51 % Nb <sub>2</sub> O <sub>5</sub>	0.51 % Nb <sub>2</sub> O <sub>5</sub>
Gross Revenue After Royalties (LOM)	\$9,264 M	\$8,360	\$8,454
After-tax Operating Cash Flow (LOM)	\$3,581 M	\$2,696 M	\$2,536 M
C1 Costs over LOM*	US\$16.10/kg Nb	US\$18.45/kg Nb	US\$19.11/kg Nb
	\$48.48/t	\$63.85/t	\$66.94
All in Costs (sustaining CAREX + Closure + OREX)	US\$17.58/kg Nb	US\$20.52/kg Nb	US\$21.43/kg Nb
AII-III COSIS (SUSIAIIIIII) CAFEX + CIUSULE + OFEX)	\$52.93/t	\$70.98/t	\$75.08/t
LOM Niobium Price	US\$45/kg Nb	US\$45/kg Nb	US\$45/kg Nb
Exchange Rate (C\$/US\$)	1.30	1.30	1.30

\*C1 Cost is mine site and transport

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# Capital Costs

Capital Costs by Area (in C\$M)	Open Pit	OP + UG	Underground
Infrastructure	133.58	133.58	112.61
Power & Electrical	31.49	31.49	31.49
Water & Tailings	31.41	13.58	20.48
Mining Equipment OP	29.41	29.41	-
Process Plant	69.99	69.99	99.99
Other Equipment	5.61	5.61	5.61
Construction Indirect	35.02	32.70	34.77
General Services	40.41	37.73	40.12
Pre-Prod, Startup, Commission	31.46	31.49	117.73
Contingency	102.09	96.39	115.74
Total CAPEX	510.45	481.95	578.69
Sustaining Costs	283.16	359.12	416.08
Closure Costs	32.42	23.99	20.69

# **Operating Costs**

Operating Costs by Area (C\$/t)	Open Pit	OP + UG	Underground
Mining Costs*	12.39	26.47	29.44
Processing Costs	14.60	14.62	14.62
Converter Costs	11.48	12.76	12.89
G&A	10.00	10.00	10.00
Total	48.47	63.85	66.94
US\$/kg Nb	16.10	18.45	19.11

\*Unit mining cost of \$4.43/t based on 1.8 strip ratio and including stockpile rehandle.

The PEA is preliminary in nature, includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the PEA will be realized. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

# **Opportunities to Enhance Value**

Trade-off studies will be performed to determine the most suitable mining scenario among the three contemplated. Below are examples of items and programs to enhance the Project's value to be included in an eventual feasibility study:

- Initial metallurgical results indicate that there is a likelihood to improve the overall recovery rate above 80%.
- The Federal & Provincial governments announced a billion-dollar program to support infrastructure development in northern Ontario. The Company believes that capital costs associated with the road access and power line may qualify for these programs.
- Future drilling programs will test the high-grade zone raking north as described below, under "*Exploration Potential*" heading. This high grade zone may lead us to work the underground scenario.
- Geotechnical studies and drilling will be required to establish design criteria for open pit slopes which could potentially steepen angles and reduce the strip ratio (scenarios #1 and #2). Similarly, for the underground, the crown pillar thickness will be evaluated, and could potentially be reduced and increase ore recovery (scenario #3).
- Incorporation of automation to reduce personnel requirements (scenarios #2 and #3). It is believed that the underground scenario will be more socially accepted.
- Mine production is expected to be set at a maximum of 5% of the ferro-niobium world market share. However, the deposit is suitable to provide additional material to market to maintain market share in a growing market.



# Mining

The PEA detailed the open pit mining under scenario #1 using an owner operated fleet, however, the two other mining scenarios are as interesting as the scenario #1.

Open pit mining is possible given that the orebody sub-crops in the basement formation overlain by sediments and overburden ranging from 10 to 20 meters in thickness. A stream flows over the deposit which will require relocation to the north outside of the mining footprint by the third year of operation.

The open pit will be mined for 24 years during which time low grade material will be stockpiled and processed at the end of the mine life. A cut-off grade of 0.12% Nb<sub>2</sub>O<sub>5</sub> was applied for the open pit resulting in 70.8 Mt of mill feed. A total of 198 Mt of material will be mined for an average LOM strip ratio of 1.8.

During pre-production a total of 5 Mt is mined to supply construction materials for the tailings storage facility and to strip overburden. The initial mining rate is then established at 7 Mt/year for the first 4 years and increases to a peak of 10 Mt/year by the 8<sup>th</sup> year of operation. The mining fleet will consist of 64 t rigid trucks matched with hydraulic excavators with 7 m<sup>3</sup> buckets supported by front-end loaders.

# Metallurgy and Processing

The selected process has been developed using available technology and retaining some aspects of past work done. The process flowsheet and design criteria are based on the interpretation of preliminary metallurgical test work results and industry practice. The process scenario description is for a nominal throughput of 2.4 Mt/yr and a process plant availability of 93%. The scenario retained includes an intermediary gravity circuit removing close to 42% of the mass with limited niobium losses. This particularity of the process minimizes energy requirements and considerably reduces the volume of pulp thereby lowering reagent costs. The reagents consumption has been estimated on the preliminary metallurgical results.

The low grinding index of the ore and coarse grind required for good liberation of the niobium mineral minimizes the power requirement for grinding. A total of 1,900 kw has been estimated for the entire grinding stage to prepare the ore for processing. The process will have two stages of grinding with the gravity interstage followed by pulp desliming, magnetic separation, three steps of specific minerals removal prior to the niobium flotation. The niobium concentrate will be leached, filtered and a gravity separation will be done to generate two different concentrate grades. The final concentrates will be dried and bagged to respond to the feed of a converter process.

A series of metallurgical tests were performed at SGS in 2022 with results confirming a recovery rate of 78% and high niobium grade in the concentrate and low impurities, item as the pilot plant results performed in the 1960's. NioBay has succeeded in producing Niobium Oxyde when performing bench tests (small scale) with the ore obtained in previous drilling campaigns. A new series of metallurgical test work will be planned with ore from future drill programs.

# Proposed Infrastructure

Access to the mine site will be via a 38.0 km all season road from Moose River East bank south of Moosonee. A 4.0 km one lane tunnel is planned to cross Moose River and a final 2.6 km road segment will connect to the existing road to Moosonee near the Hydro One Renison substation. From Moosonee, the Ontario Northland Railway connects to Cochrane and from there onto the Ontario Highway 11.

Power will be provided from the Hydro One grid with a connection from the Renison substation. This substation provided power onto the Five Nations Energy Inc. transmission line servicing the now closed DeBeers Victor Diamond Mine.

The mining activities and processing facility will be supported by ancillaries located at site including a maintenance shop, warehouse, mine dry, explosives storage, fuel storage, administration building, and an operations camp. Other infrastructure is planned to be in Moosonee such as a material transit terminal, laboratory, and administrative building for support functions such as accounting, human resources and other.



# Environment and Closure Plan

It is anticipated that this project will require a review under the Federal Impact Assessment Act coordinated along with provincial Class Environmental Assessment. NioBay would be proposing the active participation of identified impacted First Nation communities in the design, baseline data collection and follow up environmental monitoring. Only under Scenario #1 is it anticipated to be a federal Department of Fisheries and Oceans permit for a creek re-alignment. Examples of other provincial permits that will be required would include: Permit(s) to Take Water; Lands and Rivers Improvement Act; and Environmental Compliance Approval(s)(air and water). Depending on project decisions related to the creeks located on the project site, a review from the Federal Impact Assessment team may not be necessary.

In Ontario, Canada a mine must file a closure plan prior to commencing construction. It is anticipated that with the active participation of identified impacted First Nation communities, the closure plan will be integrated into the mine design and initial environmental approvals. The closure plan must also include financial assurance that the operation will be closed out and remediated.

# Stakeholder Engagement

Stakeholder engagement includes individuals and communities interested in or impacted by the potential development. However, there will be a distinct negotiated engagement plan with potentially impacted First Nation communities. This is in recognition of their established Treaty and Aboriginal Rights. NioBay will collaborate with the First Nation community to design a plan of engagement to ensure that the environmental approvals are fully aligned with their values. As future exploration and/or baseline environmental work proceeds, the MCFN may want another longer-term agreement that speaks to both their environmental and business involvement with the Project.

NioBay provided updates to the MCFN in relation to drilling and other potential activities at site, as discussed above under the heading, "*The Protection Agreement*". Additional efforts have been made to provide project information (flyers) directly to MCFN members and NioBay also increased activities on social media and on the corporate web site. The Company has had a constant presence at Moose Factory since early January 2023 with several meetings being held with MCFN members in order to provide information on the James Bay Project and discuss the important qualities of niobium.

Following the June 2023 elections in the MCFN community, the Company delivered a letter to the new Chief in order to respectively establish contact and have an opportunity to meet. NioBay's intention is to restore a relationship with the MCFN in order to have the opportunity to re-introduce the Company and discuss the remaining drill campaign required to fulfill the objectives established under the signed Protection Agreement. This step is necessary for the Company to complete an eventual pre-feasibility study and to establish with the Chief and Council the successive stages in the development of this critical metal. The Chief confirmed his intention to meet with NioBay, in addition to the Ontario Ministry of Mine.

NioBay believes that its projects can support the Truth and Reconciliation Commission call for economic reconciliation.

#### Independent Qualified Persons

The PEA was prepared for NioBay by G Mining, and other industry consultants, all Qualified Persons ("QP") under NI 43-101. The Company and independent QPs include:

- G Mining: Louis-Pierre Gignac P. Eng, M.Sc.A, CFA, Antoine Champagne P. Eng, Paul Murphy, P. Eng., Carl Michaud P. Eng.
- NioBay: Jacquelin Gauthier, P. Geo, Pierre Pelletier P. Eng (Consultant Metallurgy). Effective October 23, 2022, Jacquelin Gauthier ceased to act as Vice President, Geology of NioBay.

# **CREVIER PROJECT**

The Crevier Project is held through CMI, a private company 72.5% owned by the Company and 27.5% owned by Niobec Inc., a whollyowned subsidiary of Magris Resources Inc. and is located north of Lac St-Jean in the MRC Maria Chapdelaine, Québec. The Crevier deposit was discovered in 1975 by SOQUEM. In 2010, a PEA of the development of the niobium-tantalum resource was prepared by Met-Chem Canada Inc. after which several feasibility-stage studies were conducted including a pilot plant process.

In January 2019, the Company initiated desktop evaluation work on the Crevier Project. Following this work, NioBay initiated a series of metallurgical tests to test innovative technologies with a focus on pre-concentration technologies and new reagents developed over the last few years. The additional metallurgical testing to be performed use new and innovative techniques and equipment, with a view of increasing niobium and tantalum grades in concentrates and overall recovery.



Following the work completed in 2021, NioBay commenced new testwork with SGS to confirm some successful recipes on a larger scale, which may lead the Company to conduct a larger program in the future. In parallel, in October 2021, NioBay returned to this property in order to produce a 9 mt bulk sample for future use by SGS.

On January 25, 2023, the Company announced significant improvements in metallurgical testing on the known area of the Crevier Project. The table below shows the historical work and results obtained by SGS:

Year	Grade Nb <sub>2</sub> O <sub>5</sub>	Recovery
1985	7.5%	67.2%
2012*	21.9%	47.9%
2013*	13.9%	26.7%
2021**	22%	44.6%
2022**	24.4%	64%
2022**	38.7%	65%***

\* Feed material consisting of 0.21% Nb2O5

\*\* Feed material consisting of 0.22% Nb2O5

\*\*\* Actual estimation from the open circuit

At surface, the Crevier Project benefitted from major forestry activity that facilitated site access. In September 2022, NioBay commenced a drilling campaign using the services of First Nations Drilling of Mashteuiash on the Crevier Property Extension (the "2022 Crevier Program"). Several new drill targets had been identified following assay results of up to 0.30% Nb<sub>2</sub>O<sub>5</sub> and 200 ppm Ta<sub>2</sub>O<sub>5</sub> in newly discovered carbonate boulders and carbonate dykes. These boulders and dykes were identified in the vicinity of topographic lineaments sub-parallel to the Main Zone, within a radius of 0.5 to 2.0 km from the Main Zone. The 43-101 resource estimate for the Main Zone totals 25.4 Mt at 0.20% Nb<sub>2</sub>O<sub>5</sub> and 234 ppm Ta<sub>2</sub>O<sub>5</sub> (Measured and Indicated - SGS July 2010). The 2022 Crevier Program used a diamond drill and the geological supervision was entrusted to the firm IOS Services Géo Scientifique, who were also involved in the drilling campaign of the Main Zone approximately ten years ago.

The 2022 Crevier Program followed up very encouraging prospecting results from the summer of 2022. Angular glacial boulders and small dykes were discovered in the vicinity of major topographic lineaments, such as lakes, rivers and streams, all sub-parallel to the Main Zone. The samples collected were mainly composed of more or less carbonated syenite. These lineaments are topographic troughs that could be occupied by more strongly carbonated rocks and/or carbonatites. The various glacial events that impacted the region could have deepened these rock types which are much softer than the surrounding rocks. These lineaments have therefore become new priority drilling targets.

A total of 32 samples were sent to ALS laboratories for multi-element (ppm) geochemical analysis. All results of greater than 1,000 ppm Nb and more than 100 ppm Ta were reanalyzed quantitatively, for Nb<sub>2</sub>O<sub>5</sub> and Ta<sub>2</sub>O<sub>5</sub> respectively, for confirmation (%).

Drilling at the Crevier Project was completed on November 5, 2022, with a total 4,000 meters (10 drill holes) of drilling. On April 20, 2023, and August 29, 2023, NioBay shared the assay results received from the 2022 Crevier Program (see Table 2).

Table 2 - Complete	drill results	from the	2022	Crevier	Program
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Hole ID	from	to	Length	Nb <sub>2</sub> 0 <sub>5</sub> **	Ta <sub>2</sub> 0 <sub>5</sub> **	Mn	Sr
THORE TO	m	m	m	ppm	ppm	ppm	ppm
1532-22-01	9.55	49.55	40	482.38	35.56	2320.00	2564.69
1532-22-01	53	77.2	24.2	420.17	36.06	1395.23	2621.28
1532-22-01	107.2	117.95	10.75	433.80	67.09	840.00	2216.93
1532-22-01	122.35	123.05	0.7	557.00	86.00		2260.00
1532-22-01	127.7	228.33	100.63	405.27	46.93	1533.09	3220.58
1532-22-01	230.63	326.41	95.78	307.65	17.98		3783.45
1532-22-01	329.41	378.06	48.65	259.19	19.53		2645.42
1532-22-01	381.45	386.63	5.18	120.54	10.19		2910.06
1532-22-01	393.31	401.98	8.67	184.66	12.72		2424.58
1532-22-02	12	15	3	472.67	69.67	1530.00	3413.33
1532-22-02	23.85	29.2	5.35	135.21	9.35	1439.35	3288.22
1532-22-02	32.2	44	11.8	198.98	15.74	1062.87	2567.25
1532-22-02	47	48	1	215.00	22.00	990.00	2350.00



1532-22-02	50.5	51.18	0.68	72.00	5.00	760.00	2190.00
1532-22-02	75	77	2	165.50	24.00	1145.00	2680.00
1532-22-02	82	83	1	166.00	11.00	2250.00	3500.00
1532-22-02	86.95	90.68	3.73	75.80	7.17	2204.83	5879.36
1532-22-02	100.2	106.5	6.3	141.75	12.84	899.37	2359.21
1532-22-02	109	123.3	14.3	168.73	19.25	991.01	2510.90
1532-22-02	126	126.5	0.5	40.00	4.00	1450.00	3170.00
1532-22-02	130	131	1	93.00	10.00	1830.00	4210.00
1532-22-02	141.86	143.45	1.59	41.00	4.00	670.00	2230.00
1532-22-02	160.75	164.45	3.7	102.50	9.86	1042.70	3073.24
1532-22-02	167.85	169.8	1.95	207.67	21.64	1465.13	3437.18
1532-22-02	175.34	177.05	1.71	91.46	5.51	1078.54	3059.59
1532-22-02	186.23	187.51	1.28	91.00	12.00	760.00	2420.00
1532-22-02	188.88	189.95	1.07	52.00	4.00	770.00	2310.00
1532-22-02	191.32	192.15	0.83	101.00	7.00	590.00	2060.00
1532-22-02	216.97	222	5.03	141.40	10.39	1179.72	3192.35
1532-22-02	262.1	267.93	5.83	98.95	6.46	1347.07	3929.19
1532-22-02	272.28	273	0.72	31.00	3.00	3030.00	8280.00
1532-22-03	4.25	5.25	1	131.00	27.00	810.00	2210.00
1532-22-03	65.06	71	5.94	200.59	28.87	1777.24	4311.07
1532-22-03	87.12	88.89	1.77	150.99	40.75	1330.06	4035.48
1532-22-03	117.05	118.05	1	137.00	15.00	650.00	2100.00
1532-22-03	139.05	140.05	1	144.00	32.00	710.00	2240.00
1532-22-03	153.8	158.8	5	107.20	11.80	818.00	2758.00
1532-22-03	171.8	177.75	5.95	123.19	25.59	811.51	2550.92
1532-22-03	186.6	192.6	6	143.75	20.25	1282.50	3985.00
1532-22-03	197.6	201.6	4	101.75	9.75	625.00	2290.00
1532-22-03	205.6	207.6	2	133.50	9.00	760.00	2215.00
1532-22-03	208.6	214.6	6	109.67	14.67	736.67	2426.67
1532-22-03	218.6	221.6	3	126.00	12.67	776.67	2460.00
1532-22-04	21.8	23.47	1.67	151.17	17.82	1197.25	3202.63
1532-22-04	35.1	36.95	1.85	95.35	16.92	1477.57	4137.57
1532-22-04	42.85	45.35	2.5	112.20	18.80	712.00	2082.00
1532-22-04	51.67	55.41	3.74	83.23	8.95	741.55	2622.09
1532-22-04	62.5	65.5	3	166.67	47.00	1130.00	3073.33
1532-22-04	90.62	91.73	1.11	145.00	21.00	1660.00	4570.00
1532-22-04	100	103	3	223.67	59.67	973.33	3363.33
1532-22-04	107	107.5	0.5	200.00	37.00	1430.00	3880.00
1532-22-04	117.25	118.25	1	383.00	170.00	750.00	2400.00
1532-22-04	154	158	4	200.00	21.00	1692.50	3702.50
1532-22-04	183.25	184.25	1	102.00	35.00	620.00	2190.00
1532-22-04	191.16	192.3	1.14	179.00	60.00	780.00	2850.00
1532-22-04	202.6	203.6	1	122.00	18.00	980.00	3440.00
1532-22-04	263	266.5	3.5	146.57	23.00	1257.14	3375.71
1532-22-04	291.5	292	0.5	367.00	80.00	900.00	2100.00
1532-22-04	294.65	297	2.35	512.04	119.81	939.15	2006.38
1532-22-04	300.95	303	2.05	368.00	96.68	1249.02	3890.00
1532-22-04	309.82	310.82	1	112.00	11.00	1190.00	4030.00
1532-22-04	321.35	326	4.65	135.41	13.53	926.99	2848.60
1532-22-04	341	342	1	121.00	11.00	10/0.00	3120.00
1532-22-04	358.25	358.75	0.5	1/1.00	53.00	1360.00	3480.00
1532-22-04	3/0./5	3/1./5	1	151.00	10.00	810.00	2280.00
1532-22-04	378.15	3/9.65	1.5	126.00	15.33	803.33	2640.00
1532-22-04	385.45	387.5	2.05	121.61	10.00	/45.12	2345.61
1532-22-04	391.55	393	1.45	101.78	9.13	1208.34	4222.83



1532-22-05	13.85	21.85	8	146.39	13.84	2260.94	6375.38
1532-22-05	29.4	34.65	5.25	141.10	15.14	1136.48	2737.81
1532-22-05	37.9	40.7	2.8	148.07	14.30	1005.89	2563.57
1532-22-05	48.95	56.95	8	228.91	51.03	879.15	2536.03
1532-22-05	59.71	61.4	1.69	115.63	21.05	1260.12	3727.28
1532-22-05	72.8	78.16	5.36	163.52	12.71	1631.57	4410.82
1532-22-05	80.28	82	1.72	248.93	16.05	1643.31	2925.99
1532-22-05	89.25	91.75	2.5	199.00	20.93	1536.32	3915.84
1532-22-05	97.12	103.4	6.28	139.59	28.72	1284.04	4047.17
1532-22-05	119	123.15	4.15	195.19	29.07	929.76	2724.60
1532-22-05	125.5	127.83	2.33	179.43	41.88	737.81	2252.49
1532-22-05	136.14	143.73	7.59	180.03	37.56	933.53	2355.94
1532-22-05	160.7	161.5	0.8	200.00	64.00	2580.00	4650.00
1532-22-05	185.1	186.2	1.1	79.00	8.00	1260.00	3820.00
1532-22-05	197.35	198.85	1.5	264.00	72.00	1470.00	3520.00
1532-22-05	202.75	204	1.25	269.00	62.00	1010.00	2760.00
1532-22-05	207.85	216.15	8.3	167.66	31.09	1158.55	3480.60
1532-22-05	219	220.05	1.05	181.00	42.00	1110.00	2320.00
1532-22-06	34	36	2	275.00	23.00	2270.00	4690.00
1532-22-06	109	117	8	334.75	65.00	1641.25	3495.00
1532-22-06	122.82	124.85	2.03	71.70	14.70	2132.86	4871.72
1532-22-06	139.64	149.31	9.67	385.53	59.70	1224.47	2267.82
1532-22-06	153.31	154.31	1	446.00	88.00	820.00	2090.00
1532-22-06	166.52	167.52	1	202.00	54.00		2720.00
1532-22-06	194.35	195.35	1	197.00	32.00		2110.00
1532-22-06	207.11	207.85	0.74	330.00	40.00		2030.00
1532-22-06	208.58	211.27	2.69	442.22	116.22	886.65	2107.96
1532-22-06	213.69	214.69	1	108.00	25.00		2100.00
1532-22-06	220.35	221.35	1	946.00	195.00	840.00	2000.00
1532-22-06	235.06	236.06	1	195.00	34.00		3810.00
1532-22-06	239.31	240.23	0.92	156.00	20.00		6400.00
1532-22-06	248.95	249.96	1.01	162.00	9.00		2360.00
1532-22-06	262.89	267.7	4.81	485.61	139.40	1034.32	3638.07
1532-22-06	322.93	323.93	1	176.00	17.00		2310.00
1532-22-06	325.35	326.34	0.99	372.00	77.00		2760.00
1532-22-06	332.87	333.87	1	192.00	15.00		2170.00
1532-22-06	341.63	344.81	3.18	957.78	168.26	2260.00	3241.13
1532-22-06	354.83	356.23	1.4	289.00	64.69		2039.14
1532-22-06	358.24	359	0.76	418.00	98.00	1020.00	2260.00
1532-22-06	369.82	370.83	1.01	1035.00	276.00	1420.00	2780.00
1532-22-06	391.93	392.43	0.5	481.00	98.00		6790.00
1532-22-06	426.18	426.97	0.79	260.00	33.00	1220.00	2460.00
1532-22-06	437.82	438.62	0.8	603.00	98.00	2070.00	5450.00
1532-22-07	24	26.8	2.8	121.86	14.86	863.21	2543.21
1532-22-07	71.5	93.65	22.15	292.72	17.04	1718.71	3411.29
1532-22-07	101.25	111.9	10.65	240.73	14.91	1758.22	4375.92
1532-22-07	119.3	121.1	1.8	316.00	22.33	1838.89	4097.78
1532-22-07	123.11	129.55	6.44	254.05	19.47	1887.04	4651.44
1532-22-07	134.33	135.35	1.02	351.00	22.00	1610.00	2010.00
1532-22-07	138.25	144	5.75	282.68	19.98	1509.57	3303.83
1532-22-07	154.95	158.68	3.73	135.93	8.92	1516.01	4765.74
1532-22-07	168.62	1/4.6	5.98	98.54	16.08	1067.79	3356.07
1532-22-07	216.92	221.16	4.24	87.20	11./3	1481.79	5328.58
1532-22-07	228.8	229.65	0.85	108.00	29.00	1240.00	24/0.00
1532-22-07	241.93	246.3	4.37	118.68	14.27	935.26	2806.77



1532-22-07	253.65	254.65	1	246.00	22.00	990.00	2020.00
1532-22-07	255.6	256.6	1	282.00	28.00	1220.00	2170.00
1532-22-07	265.95	271.65	5.7	188.32	38.47	1506.58	3309.12
1532-22-07	278.35	288	9.65	161.26	14.76	1180.86	3170.37
1532-22-07	307	309	2	229.50	36.00	1395.00	3525.00
1532-22-07	317	326.7	9.7	161.43	12.08	940.45	2863.78
1532-22-07	329.8	332.95	3.15	113.24	11.37	1036.06	3504.57
1532-22-07	361.39	363.4	2.01	193.31	30.15	835.82	2097.61
1532-22-07	366	372	6	184.84	18.36	967.91	2471.38
1532-22-07	379.2	380.2	1	210.00	12.00	1480.00	3770.00
1532-22-07	384.5	386.63	2.13	316.03	94.08	848.12	2153.85
1532-22-07	396.5	397.55	1.05	392.00	42.00	1260.00	2110.00
1532-22-07	422.93	424.11	1.18	133.00	32.00	780.00	2140.00
1532-22-07	433.23	437.73	4.5	216.17	26.09	1041.73	2140.93
1532-22-07	451.6	453.74	2.14	95.93	8.40	978.13	3723.27
1532-22-07	469.5	484.25	14.75	201.01	20.76	1005.72	2717.86
1532-22-07	490.35	496.6	6.25	223.22	16.21	1352.07	3750.00
1532-22-07	535.3	536.95	1.65	330.61	46.94	1707.27	3190.30
1532-22-07	542.2	551.1	8.9	203.87	20.85	1165.11	2504.49
1532-22-07	554.4	558.52	4.12	145.48	29.03	873.01	2305.90
1532-22-08	60	61.5	1.5	38.00	3.00	2950.00	9210.00
1532-22-08	79.1	81.35	2.25	133.00	10.44	2987.78	7891.11
1532-22-08	99.4	100.4	1	40.00	3.00	3070.00	8370.00
1532-22-08	123.05	124.05	1	243.00	14.00	1080.00	2290.00
1532-22-08	134.4	136.32	1.92	131.58	11.28	1479.79	3398.75
1532-22-08	149	153.3	4.3	284.23	16.95	1327.56	2330.93
1532-22-08	160.1	162.2	2.1	98.19	8.52	1231.43	3046.67
1532-22-08	176.15	178.05	1.9	241.74	18.68	1026.84	2204.21
1532-22-08	201.45	202.15	0.7	3.00	1.00	2790.00	8510.00
1532-22-08	206.65	208.56	1.91	102.11	7.61	839.95	2292.72
1532-22-08	209.4	210.4	1	156.00	32.00	1060.00	2920.00
1532-22-08	225.8	226.92	1.12	94.00	12.00	780.00	2560.00
1532-22-08	229.55	230.1	0.55	44.00	4.00	3140.00	/160.00
1532-22-08	236	239	3	66.33	6.00	626.67	2126.67
1532-22-08	252.25	255.9	3.65	157.97	12.74	1350.68	3934.52
1532-22-08	259.25	259.98	0.73	310.00	25.00	1050.00	2380.00
1532-22-08	271.05	273.5	2.45	328.00	29.57	890.00	2527.14
1532-22-08	283	284	1	487.00	47.00	600.00	2110.00
1532-22-08	297.1	301.1	4	32.00	0.00	3140.00	8145.00
1532-22-08	307.30 212 E	308.5 214 E	1.14	282.00	32.00	1090.00	3160.00
1527_77 00	210.7E	220.0		200.00	21.00	900.00	2200.00
1532-22-08	320.23	320.9	0.03	239.00	20.00	520.00	2210.00
1532-22-08	225.5	324.0	1.45	121.00	16.00	720.00	2130.00
1532-22-08	331.93	333.25	1.45	121.00	15.00	720.00	2030.00
1532-22-08	348.6	349.6	1.52	125.00	33.00	1610.00	4480.00
1532-22-08	357 5	358 5	1	163.00	18.00	730.00	2200.00
1532-22-08	362 5	363 5	1	248.00	31 00	1040.00	2480.00
1532-22-08	385.5	386.5	1	228.00	29.00	930.00	2070.00
1532-22-08	410.63	411.55	0.92	323.00	22.00	2470.00	2060.00
1532-22-08	420.5	422.5	2.52	107.00	8.00	655.00	2210.00
1532-22-08	444.3	446.3	2	100.00	19.00	420.00	2130.00
1532-22-08	451	452	1	222.00	32.00	550.00	2080.00
1532-22-08	481.15	482.37	1.22	130.00	15.00	620.00	2200.00
1532-22-08	486.3	487.4	1.1	198.00	19.00	890.00	2130.00



1532-22-09	20.32	21.82	1.5	312.25	52.79		2721.47
1532-22-09	51.97	53.51	1.54	211.91	34.36	1344.55	3325.45
1532-22-09	57.65	58.66	1.01	314.00	35.00		2460.00
1532-22-09	78.41	79.38	0.97	226.00	44.00	2320.00	6670.00
1532-22-09	85.86	86.86	1	248.00	58.00		2070.00
1532-22-09	93.8	94.8	1	609.00	205.00		2560.00
1532-22-09	98.71	99.45	0.74	1778.00	545.00	1950.00	6000.00
1532-22-09	104.54	105.3	0.76	73.00	14.00		2420.00
1532-22-09	113	114	1	274.00	40.00		2100.00
1532-22-09	118.1	125.48	7.38	403.14	68.40	728.26	2295.77
1532-22-09	129.15	135.15	6	262.00	55.67	1030.00	2885.00
1532-22-09	142.4	147.6	5.2	173.87	46.23	1355.63	3915.02
1532-22-09	150.6	157.6	7	460.86	51.57		2393.57
1532-22-09	163.6	164.6	1	288.00	21.00		3170.00
1532-22-09	166.5	167.5	1	353.00	45.00	890.00	2020.00
1532-22-09	220.5	221.5	1	255.00	44.00	560.00	2290.00
1532-22-09	229	235	6	217.00	43.00	1006.00	2722.00
1532-22-09	320.5	321.5	1	98.00	25.00	750.00	2340.00
1532-22-09	324.8	325.8	1	21.00	4.00	730.00	2430.00
1532-22-09	327.88	329.64	1.76	164.81	25.48	935.57	2578.75
1532-22-09	351.5	352.5	1	113.00	18.00	1590.00	2630.00
1532-22-09	365.8	366.45	0.65	147.00	11.00	1520.00	2280.00
1532-22-09	372.41	373.4	0.99	328.00	46.00	840.00	2370.00
1532-22-09	419.56	422.43	2.87	69.46	12.31	2245.96	6627.98
1532-22-09	455.97	457.44	1.47	194.00	23.00	1170.00	3910.00
1532-22-10	15	15.95	0.95	112.00	23.00	840.00	2410.00
1532-22-10	43.05	44.05	1	210.00	48.00	770.00	2170.00
1532-22-10	58.37	59.04	0.67	364.00	25.00	1520.00	2390.00
1532-22-10	68	69	1	148.00	31.00	1140.00	2450.00
1532-22-10	129.68	130.28	0.6	263.00	37.00	500.00	2420.00
1532-22-10	161.9	164.15	2.25	253.31	50.37	1358.44	2934.89
1532-22-10	169.88	170.88	1	445.00	97.00	1360.00	3210.00
1532-22-10	193.9	194.37	0.47	89.00	19.00	1050.00	2310.00
1532-22-10	196.07	199	2.93	62.08	9.66	749.04	2288.26
1532-22-10	212	212.85	0.85	99.00	21.00	770.00	2240.00
1532-22-10	223.5	225	1.5	174.00	40.00	1190.00	3050.00
1532-22-10	288.8	291.8	3	322.33	76.00	1840.00	4860.00
1532-22-10	297.87	298.9	1.03	154.00	26.00	1020.00	2420.00

\* Best intersection according to 0.2% (2000 ppm) Sr COG (cut-off grade)

\*\* Nb205 and Ta205 are calculated oxide equivalent based on the Nb an Ta elements lab results

Uncapped composite

No minimum length

Maximum of 2 metre consecutive dilution

No maximum dilution

Missing intervals are sterilized with 0 ppm Sr assigned grades



On February 28, 2023, the Company and Pekuakamiulnuatsh Takuhikan announced the signing of a cooperation agreement for the advanced exploration and development of the Crevier Project. The cooperation agreement was signed in Mashteuiatsh, in the presence of the Chief of the Pekuakamiulnuatsh Nation, Gilbert Dominique and Serge Savard, Chairman of the Board, with the aim of providing a framework for future work that will assist in the development of the Crevier Project. Members of the Katakuhimatsheta (council of elected officials) of the Pekuakamiulnuatsh Nation and members of the Board also attended the signing.

Given the results of the Crevier Project's 2022 drill campaign, on August 29, 2023, the Company announced the start of a drill program (the "2023 Program"), with the purpose of testing the presence of Niobium at depth of the main zone. This program was carried out using a diamond drill by First Nations Drilling of Mashteuiatsh and geological supervision carried out by IOS Services Géoscientifiques. The Company completed the 2023 Program at the end of September 2023. This eight-hole campaign (2,700 m), consisted of verifying the continuity of the mineralization in the northwest, southeast and at depth sectors of the main area. This campaign noted the presence of tantalum mineralization in the northwest extension of the main zone and a higher concentration of niobium towards the southeast. In addition, the last hole shows mineralization, leaving this area open (see results in Table 3).

# Table 3 – Composites of intercepted mineralization from the 2023 Program

Hole ID	From (m)	To (m)	Length Nb₂O₅ (m)	Nb <sub>2</sub> O <sub>5</sub> (%)	Length Ta₂O₅ (m)	Ta₂O₅ (%)
	0,45	1,45	1,00	0,83		
	5,45	10,30	4,85	0,27	4,85	0,03
	16,00	24,50	8,50	0,35	8,50	0,04
	18,50	21,00	2,50	0,53	2,50	0,06
	20.00	33,24	2,34	0,45		
	30,90	37,28			6,38	0,03
	20.00	40,00	1,00	0,29		
	39,00	44,25			5,25	0,03
1522 22 011	45,25	52,00	6,75	0,22		
1552-25-011	46,25	49,25			3,00	0,03
	51,00	52,00			1,00	0,02
	53,50	57,00	3,50	0,24		
	59,30	60,30	1,00	0,38	1,00	0,03
	72,86	75,27			2,41	0,02
	93,70	99,50			5,80	0,03
	126,00	127,00			1,00	0,02
	170,00	171,00			1,00	0,03
	230,00	232,00			2,00	0,25
	90,00	93,87	3,87	0,21		
	95,55	96,70	1,15	0,30		
	98,75	99,75	1,00	0,22		
	104.90	107,00	2,20	0,38		
	104,00	112,20			7,40	0,03
1522 22 012	109,50	114,40	4,90	0,26		
1552-25-012	119,50	104.05	4,85	0,31		
	121,35	124,35			3,00	0,04
	128.00	132,70	3,80	0,29		
	120,90	129,9			1,00	0,03
	149,50	154.02	5,43	0,31		
	153,00	154,93			1,93	0,02



	160,00	161,70	1,70	0,45	1,70	0,04
	164,50	173,00	8,50	0,31	8,50	0,03
	174,00	400.00			6,00	0,06
	175,00	180,00	5,00	0,50		
	175,00	176,00	1,00	1,06	1,00	0,13
	178,00	180,00	2,00	0,60	2,00	0,08
	181,00	186,40	5,40	0,22	5,40	0,03
	381,70	382,80			1,10	0,03
	392,30	393,30			1,00	0,03
	115,45	124,05			8,60	0,04
	116,45	122,40	5,95	0,22		
	122,80	124,05	1,25	0,28		
1532-23-013	127,50	130,50	3,00	0,20	3,00	0,02
	153,50	154,50	1,00	0,20	1,00	0,03
	166,50	400.50			3,00	0,04
	168,50	169,50	1,00	0,30		
	146,00	147,25			1,25	0,04
	264,55	265,65			1,10	0,03
1532-23-014	277,40	281,40			4,00	0,02
	290,40	299,20			8,80	0,03
	302,20	303,20			1,00	0,02
	24,10	29,90			1,60	0,04
	220.05	321,65	1,00	0,29		
	320,05	325,50			4,85	0,03
1532-23-015	326,50	331,60			5,00	0,02
	335,60	339,60			4,00	0,03
	343,60	240.60			6,00	0,02
	347,60	549,00	2,00	0,24		
	202.00	293,05	1,05	0,24		
1522-22-16*	292,00	297,00			5,00	0,02
1332-23-10	301	302,05			1,05	0,03
	340,5	343,5			3,00	0,03
	76.8	77,8			1,00	0,03
1532-23-17*	70,0	82,75	5,95	0,23		
1332 23 17	83,8	85.8	2,00	0,25		
	84,8	05,0			1,00	0,03
	81,00	82,00	1,00	0,28		
	146,10	148,70	2,60	0,22		
	175,75	186.00	10,25	0,37		
1532-23-018	177,00				9,00	0,04
	182,00	186,00	4,00	0,55	4,00	0,05
	188.00	194,05	6,05	0,22		
	100,00	192,00			4,00	0,02



196,05	197,05	1,00	0,29	1,00	0,03

\* Re-analysis was requested for certain intersections

\*\* Nb<sub>2</sub>O<sub>5</sub> and Ta<sub>2</sub>O<sub>5</sub> are oxide equivalents calculated based on laboratory results of the elements Nb and Ta.

# Figure 2: Map of the 2023 drill campaign





# **OPTION AGREEMENT WITH VIOR INC ("VIOR")**

On February 21, 2024, the Company closed a definitive option agreement (the "Option Agreement"), with Vior to acquire an 80% undivided interest in Vior's Foothills Project (the "Foothills Project").

The Foothills Project is located north of St. Urbain, 100km north of Québec City and 90km south of Saguenay (La Baie area), Québec. The Project covers an area of approximately  $285 \text{km}^2$  and is comprised of 5 separate claims blocks. It covers most of the contact of the intrusive zone known as the St. Urbain anorthosite. This zone has demonstrated the presence of rutile-ilmenite with results up to 57% of titanium dioxide (TiO<sub>2</sub>), as well as apatite (Note: Vior referred to as phosphate). Of 139 outcrop samples collected, 67 contain P<sub>2</sub>O<sub>5</sub> values of 4.0 to 6.3%, and boulder samples reveal some historic higher-grade mineralization of over 10% P<sub>2</sub>O<sub>5</sub> (Sigeom, QC, *See Vior Press Release, September 20, 2023*).

The Option Agreement provides for the following terms and schedule:

Period	Cash Payments	Share Payments	Minimum Work Expenditures
Closing Date	\$40,000	1,250,000 Common Shares	N/A
December 31, 2024	\$40,000	1 250 000 Common Shares	\$400,000
		\$150,000 in Common Shares, subject to a	
December 31, 2025	\$60,000	minimum of 1,000,000 Common Shares	\$1,100,000
		\$250,000 in Common Shares, subject to a	
December 31, 2026	\$60,000	minimum of 1,000,000 Common Shares.	-
		\$500,000 in Common Shares, subject to a	
December 31, 2027	\$200,000	minimum of 1,000,000 Common Shares	\$2,500,000

Installments are payable in Common Shares at a price per share equal to a 10-day VWAP, subject to a minimum issue price of \$0.055 per Common Shares. In accordance with the Option Agreement, NioBay Metals made the initial \$40,000 cash payment and issued 1,250,000 Common Shares which are subject to a four-month hold period under applicable securities laws.

The effective date for a contractual joint venture between Niobay and Vior (the "Joint Venture") will be the date on which the Option will be completed. The Option Agreement provides that once one party's interest in the Foothills Project and/or the Joint Venture falls below 10%, this interest will transferred to the other party and converted into a 1.5% NSR (Net Smelter Return) on precious and base metals and a 1.5% GRR (Gross Revenue Royalty) on mineral substances other than precious or base metals), with a 0.5% NSR/0.5% GRR being collectively redeemable for an aggregate amount of \$1,500,000.

# **OTHER PROPERTIES**

The Company staked mining claims northwest of its Crevier Project in the Lac-St-Jean region of Québec (see Figure 3). Work commenced at the end of May 2023, however, it was put on hold in June 2023 in accordance with a directive from the Ministère des Ressources Naturelles et des Forêts to help combat forest fires across the province. The Company completed its regional exploration program at the end of the summer of 2023. The field work consisted of mapping, identifying and sampling outcropping zones on the various claims, with a view to find critical and strategic minerals. Following this field work, the Company identified zones of interest with potential targets for future drilling. Results indicated the presence of silver and gold, as well as critical and strategic minerals such as platinum, palladium, manganese, chromium, vanadium, titanium, magnesium and nickel from the Company's North Crevier, Albanel 2, Isabelle and Blue properties.



# Figure 3: Map of regional exploration campaign



# **BATTERY GRADE NIOBIUM**

In April 2021, the Company announced the beginning of a series of hydrometallurgical process testing for the production of battery grade niobium at the James Bay Project. NioBay further announced the initiation of additional test work to produce precursor material for niobium batteries from the Crevier Project. This first phase of testing, performed by SGS Lakefield Inc, consisted of producing a niobium concentrate, similar to the previous tests done on the James Bay Project's ore.

The results demonstrated a 3% improvement from the Company's PEA recovery, reaching up to 81.3% while producing a niobium concentrate of 61.7%. In addition, the lack of deleterious material and low silicate content should translate in a significant reduction in acid consumption for the battery-grade niobium oxide production. The first phase of metallurgical testing also contributed to optimizing the parameters and flowsheet design.

The second phase of the metallurgical program will focus on the optimisation of the beneficiation flow-sheet from the previous metallurgical test work and also to work on the production of niobium battery grade and consist of a hydrometallurgical treatment to purify the concentrate to +99% Nb<sub>2</sub>O<sub>5</sub> (battery-grade Niobium oxide), at a larger scale. This phase of the metallurgical program will commence subsequent to the completion of additional drilling at the James Bay Project.



# NIOBAY RESEARCH PROJECTS

NioBay continues its support of various Canadian universities by taking part in research and development work to develop the use of niobium and tantalum in various technologies that will help decarbonize our economy.

Current projects include:

- Development of Niobium-based Bipolar Plates for Proton-Exchange Membrane (PEM) Fuel Cells (University of Waterloo)
- Development of a new Niobium-based porous transport layer for PEM water electrolysis (Université du Québec à Trois-Rivières (UQTR))
- Valorization of Niobium and Tantalum for the Production of Low Carbon Intensity Fuels: Water Electrolysis and CO2 Conversion into Value Added Products (Institut national de la recherche scientifique (INRS))

Furthermore, the tests carried out at the University of Waterloo, have met the criteria of the United States Department of Energy (DOE), achieving a corrosion protection efficiency of 99.98% in PEM fuel cells.

It should be noted that niobium is seen as a potential substitute for the platinum group elements (PGEs) usually used in these technologies, making them more affordable.

# QUALIFIED PERSON

Mr. Jean-Sebastien David, P. geo, acted as the QP as defined in NI 43-101. He reviewed and approved the technical and scientific content of this MD&A. Mr. David is NioBay's President and Chief executive officer ("CEO").

# **NIOBIUM MARKET**

Niobium is used in various forms such as oxide, pure metal, nickel master-alloys and alloys with other noble metals and in its most used form, ferro-niobium, representing approximately 90% of the production of niobium. Ferro-niobium ("FeNb") is used as an additive in the production of high-quality steels which are used mostly in the manufacturing of automobiles, bridges, skyscrapers and other large steel structures, pipelines and stainless steels. The addition of niobium in steel reinforces and lightens the steel, makes it more resistant to corrosion, facilitates its welding and helps it withstand forces under high pressure and high temperature. The addition of niobium therefore has a positive impact on the reduction of CO<sub>2</sub> emission in the atmosphere which gives it a "green" metal recognition. The demand for niobium is thus directly related to the manufacture of these steels and the development of new specialty steels.

Also, recent developments in battery manufacturing technology have involved using niobium as an anode material and as coating material for cathode materials, which provides an indication of an increase in the demand for battery grade niobium. The potential increase in market demand could be significant, and the Company intends to become an active participant in the electrification of vehicles and/or other devices.

Today, 100% of the Niobium Oxide is been produced by one supplier; CBMM. Customers will require other sources of Niobium Oxide supply to remain competitive. NioBay is aiming to become this new source of supply.

Niobium is classified as a critical and strategic metal for the United States, Canada, Europe and certain Asian countries. There are only three major producers, CBMM and Catalao in Brazil and Niobec in Canada.

# FINANCING

On July 20, 2023, the Company closed a private placement (the "Offering").

Under the Offering, the Company raised gross proceeds of \$871,520, from the sale of the following:

- 3,514,999 Quebec-eligible flow-through units of the Company (each, a "Quebec FT Unit") at a price of \$0.12 per Quebec FT Unit for gross proceeds of \$421,800;
- 2,452,000 flow-through units of the Company (each, a "National FT Unit") at a price of \$0.11 per National FT Unit for gross
  proceeds of \$269,720; and
- 1,800,000 units of the Company at a price of \$0.10 per unit (each, a "Unit"), for gross proceeds of \$180,000.

There were no cash commissions or finder's fees paid in connection with the Offering.



Each Quebec FT Unit consists of one Common Share issued as a "flow-through share" within the meaning of the *Income Tax Act* (Canada) and the *Taxation Act* (Quebec) and one half of one Warrant. Each National FT Unit consists of one Common Share issued as a "flow-through share" within the meaning of the *Income Tax Act* (Canada) and one half of one Warrant. Each Unit consists of one Common Share and one Warrant. Each whole Warrant shall entitle the holder to purchase one Common Share at a price of \$0.14 at any time on or before July 21, 2025.

Insiders of the Company participated in the Offering and were issued an aggregate of 270,000 Quebec FT Units and 200,000 Units for gross proceed of \$52,400.

# LIQUIDITY AND CAPITAL RESOURCES

As at December 31, 2023, the Company had a working capital of \$3,411,161, which includes cash and cash equivalents of \$3,089,859. The majority of the Company's financial liabilities have contractual maturities of less than 30 days and are subject to normal trade terms.

The Company has no history of revenues from its operating activities. The Company is not in commercial production on any of its mineral properties and accordingly does not generate cash from operations. The Company anticipates it will have negative cash flow from operating activities in future years.

The Company has, in the past, financed its activities by raising capital through equity issuances. Until NioBay can generate a positive cash flow position in order to finance its exploration programs, the Company will remain reliant on the equity markets for raising capital, in addition to adjusting spending, disposing of assets, and obtaining other non-equity sources of financing.

The Company believes it has sufficient cash resources to meet its exploration and administrative overhead expenses and maintain its planned exploration activities for at least the next 12 months. However, there is no guarantee that the Company will be able to maintain sufficient working capital beyond that horizon with the planned expenditures due to market, economic, and commodity price fluctuations.

# OUTLOOK

The Company's strategy is focused on the exploration and development of economic critical & strategic mineral deposits. Management, while implementing its development strategy, will take into account the context of global market conditions and the stock market.

As previously discussed in this MD&A, subsequent to the filing of the PEA on the James Bay Project, NioBay planned the next steps in the development of the James Bay Project includes the completion of the 2022 Drill Program, which consisted of a 13,000 m infill drill program (originally initiated in early 2022) which was expected to be completed in Q2-2022, prior to its suspension in March 2022. Following discussions with Ontario's Ministry of Mines, the Company has applied for a three-year extension to its exploration permit at the James Bay Project. In addition, the Company plans to advance its metallurgical testing, complete a new resource calculation and to implement certain environmental and cultural baseline studies to be included in an eventual pre-feasibility study. NioBay intends to work with the MCFN in order to return to the James Bay Project and complete the 2022 Drill Program as soon as possible. The core from this program will be used to continue metallurgical test work which will be required for a pre-feasibility study.

Concurrently, throughout 2023, the Company has continued to work with Blue Heron Environmental to collect data as part of the environmental baseline study of the area at the James Bay Project. Inventories on water, large mammals (such as caribou, moose and wolverines) were carried out and filed with the Ontario government.

Subsequent to the closing of the Option Agreement with Vior, NioBay's objective is to complete exploration work at the Foothills Project with the objective to discover a homogeneous zone, supported by a resource calculation, and thus prove the mineral potential of this sector.

NioBay is also focusing on the potential production of battery-grade niobium from its James Bay and Crevier projects. The concentrate produced at the Crevier Project was sent to UQAT (Université du Québec en Abitibi-Témiscamingue) for the production of ANO (a type of niobium oxide in use for the battery). This work is ongoing.

NioBay completed advanced prospecting work at the QTZ, Albanel and Isabelle zones (see Figure 3) in the summer of 2023. The work consists of an access inventory, sampling and mapping of previously identified areas. The Company is evaluating the next steps which may include some stripping into the end of the summer of 2024.



The Company will continue its collaboration with the UQTR (Université du Québec à Trois-Rivières), which has started research on the production of green hydrogen ("Developing novel and cost-effective niobium-based porous transport layers to be used in proton exchange membrane water electrolysis for renewable hydrogen production").

NioBay will also continue our collaboration with the University of Waterloo ("UW") in the context of their work on fuel cells. UW is working to develop niobium-based bipolar plates to increase the efficiency and performance of proton exchange membrane fuel cells. The tests, carried out at UW have met the criteria of the United States Department of Energy (DOE), achieving a corrosion protection efficiency of 99.98% in PEM fuel cells.

# **Selected Annual Financial Information**

A summary of selected annual financial information for the last three years, is outlined below:

	2023	2022	2021
	\$	\$	\$
Cash and cash equivalents	3,089,859	4,529,611	10,181,558
Investments	10,498	20,995	46,027
Working capital	3,411,161	4,767,618	9,708,428
Total assets	4,055,803	6,166,998	11,133,256
Cash flows used in operating activities	2,213,682	6,174,975	3,832,832
Cash flows (used in) from investing activities	(25,000)	449,804	569,779
Cash flows from financing activities	798,917	73,250	271,914
Total revenue	-	-	-
Net loss	2,322,244	4,877,611	4,071,230
Basic and diluted loss per share	0.03	0.06	0.06

Since its incorporation, the Company has not paid any cash dividend on its outstanding Common Shares. Any future dividend payments will depend on the Company's financial needs to fund its exploration and evaluation programs and any other factor that the board of directors may deem necessary to consider. It is highly unlikely that any dividends will be paid in the near future.

# **EXPLORATION AND EVALUATION EXPENSES**

The Company incurred the following exploration and evaluation expenses by project:

Year ended December 31, 2023	James Bay Crevie		Others	Total	
	\$	\$	\$	\$	
Drilling	26,998	674,163	139,567	840,728	
Studies and analysis	135,463	89,333	69,820	294,616	
Wages and consulting	68,894	55,084	-	123,978	
Mineral claims	17,454	7,581	71,576	96,611	
Contractors	82,750	6,864	-	89,614	
Administrative and others	44,828	17,949	-	62,777	
Transportation	1,997	-	5,000	6,997	
Tax credits, net	-	(108,437)	(106,891)	(215,328)	
Total	378,384	742,537	179,072	1,299,993	





Year ended December 31, 2022	James Bay	Crevier	Others	Total
	\$	\$	\$	\$
Drilling	978,041	699,948	174,511	1,852,500
Wages and consulting	591,777	-	113,528	705,305
Studies and analysis	430,635	284,886	-	715,521
Transportation	587,120	-	10,201	597,321
Contractors	319,503	185,516	-	505,019
Mineral claims	-	11,710	1,860	13,570
Administrative and others	35,816	30,280	-	66,096
Tax credits, net	-	225,956	-	225,956
Total	2,942,892	1,438,296	300,100	4,681,288

# FINANCIAL REVIEW

NioBay is in the exploration and evaluation phase and does not yet have revenue-generating activities. Accordingly, the Company's financial performance is largely a function of the level of exploration and evaluation activities undertaken on its projects and the management and administrative expenses required to operate and carry out its activities.

Results for the year ended December 31, 2023 ("YTD-2023") compared to the year ended December 31, 2022 ("YTD-2022")

The Company incurred a net loss of \$2.3 million during YTD-2023 (\$0.03 per share) compared to a net loss of \$4.9 million in YTD-2022 (\$0.06 per share). The net loss attributable to shareholders of the Company totaled \$2.1 million in YTD-2023 compared to \$4.5 million in YTD-2022. The operating loss for YTD-2023 was \$2.6 million and decreased by \$2.6 million as compared to YTD-2022. This decrease from YTD-2022 is primarily due to the lower exploration and evaluation expenses incurred for the Company's 2023 exploration program as compared to the 2022 exploration program. Evaluation and evaluation expenditures totaled \$1.3 million in YTD-2023 (\$4.7 million YTD-2022), the details of which can be seen in the tables above.

Management and administration expenses totaled \$1.1 million in YTD-2023 and were consistent with YTD-2022. Share-based compensation totaled \$0.1 million during YTD-2023 (\$0.2 million in YTD-2022). The decrease in share-based compensation between periods is due to the lower degree of vesting associated with stock options granted in the prior periods.

As discussed above under the "SOQUEM Joint Venture" heading, in YTD-2022 the Company sold properties to SOQUEM and recognized a gain of \$950,000, which was offset by an impairment on exploration and evaluation assets (\$80,000). No comparable transactions were completed in YTD-2023.

In addition, NioBay realized \$166,580 of finance income in YTD-2023 (\$132,652 in YTD-2022), with the increase resulting from higher interest rates, offsetting lower liquidities held in YTD-2022. Income related to the recognition of the deferred premium on flow-through shares in YTD-2023 amounted to \$91,953 (\$255,137 in YTD-2022).

Results for the three-months ended December 31, 2023 ("Q4-2023") compared to the three-months ended December 31, 2022 ("Q4-2022")

The Company incurred a net loss of \$0.2 million during Q4-2023 (\$0.00 per share) compared to a net loss of \$1.5 million in Q4-2022 (\$0.02 per share). The net loss attributable to shareholders of the Company totaled \$0.2 million in Q4-2023 compared to a net loss of \$1.3 million in Q4-2022. The operating loss for Q4-2023 was \$0.2 million and decreased by \$1.3 million as compared to Q4-2022. This decrease from YTD-2022 is primarily due to reduced exploration and evaluation expenses incurred as compared to the exploration activities completed at NioBay's projects in Q4-2022.

Management and administration expenses totaled \$0.2 million in Q4-2023 and was consistent with Q4-2022.

The Company realized \$41,204 as finance income in Q4-2023 (\$127,477 in Q4-2022), with the decrease resulting from lower liquidities held in in Q4-2022. Other income related to the recognition of the government grants in Q4-2023 amounted to \$27,750 (\$ nil in Q4-2022). Income related to the recognition of the deferred premium on flow-through shares in Q4-2023 amounted to \$13,793 (\$35,000 in Q4-2022).



# Selected Quarterly Financial Information

The following is a summary of the Company's financial results for the past eight quarters:

			Net loss	
			attributable to	Basic and
	Net finance	Net	shareholders of	diluted loss
	income (loss)	loss	the Company	per share
Period ended	\$	\$	\$	\$
December 31, 2023	41,204	(204,135)	(199,762)	(0.00)
September 30, 2023	42,010	(934,395)	(773,715)	(0.01)
June 30, 2023	42,015	(548,284)	(527,883)	(0.01)
March 31, 2023	41,351	(635,430)	(600,588)	(0.01)
December 31, 2022	116,477	(1,506,627)	(1,252,258)	(0.02)
September 30, 2022	(31,957)	(921,947)	(799,773)	(0.01)
June 30, 2022	26,505	(1,301,646)	(1,282,662)	(0.02)
March 31, 2022	21,627	(1,147,391)	(1,129,333)	(0.02)

The elevated net losses in during the periods above coincide with the completion of drill programs at the James Bay and Crevier Projects.

#### Capital Management

In managing its capital, the objective of the Company is to preserve its ability to continue its mining exploration while maintaining the current exploration programs and evaluation of mining assets, to provide sufficient working capital to meet its current commitments and to pursue potential investments. At December 31, 2023, the capital of the Company consists of equity attributable to shareholders of the Company of \$4,611,721 (\$5,874,208 at December 31, 2022). The Company manages its capital structure and makes adjustments in accordance with the aforementioned objectives, as well as in light of changes in economic conditions and the risk characteristics of the underlying assets.

# Transactions with Related Parties

The remuneration awarded to directors and to key management personnel, including the President and CEO and the Chief Financial Officer, is as follows:

	Years ended	December 31,
	2023	2022
	\$	\$
Salaries, professional fees and other short-term benefits	380,000	362,000
Share-based compensation	80,000	190,000
	460,000	552,000

# **Off-Balance Sheet Arrangements**

As at April 18, 2024, the Company has no off-balance sheet arrangements.

#### Outstanding Share Data

As at April 18, 2024, the Company has 80,318,523 Common Shares, 4,783,499 Warrants and 3,140,000 stock options outstanding.



# OTHER RISKS AND UNCERTAINTIES

An investment in the Company's common shares is subject to a number of risks and uncertainties. An investor should carefully consider the risks described below and the other information filed with the Canadian securities regulators SEDAR+ (www.sedarplus.ca), before investing in the Company's common shares. If any of the described risks occur, or if others occur, the Company's business, operating results and financial condition could be seriously harmed and investors may lose a significant proportion of their investment.

The following risk factors may not be a definitive list of all risk factors associated with an investment in NioBay or in connection with the business and operations of NioBay.

#### Industry Conditions

The exploration for and development of mineral deposits involve significant risks and while the discovery of an ore body may result in substantial rewards, few properties that are explored are ultimately developed into producing mines. All of NioBay's properties are in the exploration stage and NioBay is presently not exploiting any of its properties and its future success will depend on its capacity to generate revenues from an exploited property.

The discovery of mineral deposits depends on a number of factors, including the professional qualification of its personnel in charge of exploration. Whether a mineral deposit will be commercially viable depends on a number of factors, some of which are the particular attributes of the deposit, such as size, grade and proximity to infrastructure, as well as metal prices which are highly cyclical and government regulations, including regulations relating to prices, taxes, royalties, land tenure, land use, importing and exporting of minerals and environmental protection. In the event that NioBay wishes to commercially exploit one of its properties, the exact effect of these factors cannot be accurately predicted, but the combination of these factors may result in NioBay not receiving an adequate return on invested capital. NioBay's operations will be subject to all the hazards and risks normally encountered in the exploration and development of mineral deposits. Mining operations generally involve a high degree of risk, including unusual and unexpected geologic formations. There can be no guarantee that sufficient quantities of minerals will be discovered or that one of NioBay's properties will reach the commercial production stage.

# Regulatory Matters

NioBay's activities are subject to governmental laws and regulations. These activities can be affected at various levels by governmental regulation governing prospecting and development, price control, taxes, labour standards and occupational health, expropriation, mine safety and other matters. Exploration and commercialization are subject to various federal, provincial and local laws and regulations relating to the protection of the environment. These laws impose high standards on the mining industry to monitor the discharge of wastewater and report the results of such monitoring to regulatory authorities, to reduce or eliminate certain effects on or into land, water or air, to progressively rehabilitate mine properties, to manage hazardous wastes and materials and to reduce the risk of worker accidents.

Failure to comply with applicable laws and regulations may result in civil or criminal fines or penalties or enforcement actions, including orders issued by regulatory or judicial authorities enjoining or curtailing operations or requiring corrective measures, installation of additional equipment or remedial actions, any of which could result in significant expenditures. NioBay may also be required to compensate private parties suffering loss or damage by reason of a breach of such laws, regulations or permitting requirements. It is also possible that future laws and regulations, or more stringent enforcement of current laws and regulations by governmental authorities, could cause additional expense, capital expenditures, restrictions on or suspensions of NioBay's activities and delays in the exploration of properties.

Amendments to current laws, regulations and permits governing operations and activities of mining companies, or more stringent implementation thereof, could have a material adverse impact on NioBay and cause increases in capital expenditures or production costs or reduction in levels of production at producing properties or require abandonment or delays in development of new mining properties.

#### NioBay's operations are subject to financing risks and additional financing may result in dilution or partial sale of assets

NioBay's operations are subject to financing risks. At the present time, NioBay does not have any producing projects and no sources of revenue. NioBay's ability to explore for and find potential economic projects, and then to bring them into production, is highly dependent upon its ability to raise equity and debt capital in the financial markets. Any projects that NioBay develops will require significant capital expenditures. To obtain such funds, NioBay may sell additional securities including, but not limited to, NioBay common shares or some form of convertible security, the effect of which could result in a substantial dilution of the equity interests of the NioBay Shareholders. Alternatively, NioBay may also sell a part of its interest in an asset in order to raise capital. There is no assurance that NioBay will be able to raise the funds required to continue its exploration programs and finance the development of



any potentially economic deposit that is identified on acceptable terms or at all. The failure to obtain the necessary financing could have a material adverse effect.

#### Economics of developing mineral properties

Mineral exploration and development is speculative and involves a high degree of risk. While the discovery of an ore body may result in substantial rewards, few properties which are explored are commercially mineable and ultimately developed into producing mines. There is no assurance that any exploration properties will be commercially mineable.

Should any mineral resources exist, substantial expenditures will be required to confirm mineral reserves which are sufficient to commercially mine and to obtain the required environmental approvals and permitting required to commence commercial operations. The decision as to whether a property contains a commercially viable mineral deposit and should be brought into production will depend upon the results of exploration programs and/or feasibility studies, and the recommendations of duly qualified engineers and/or geologists, all of which involves significant expense. This decision will involve consideration and evaluation of several significant factors including, but not limited to: (a) costs of bringing a property into production, including exploration and development work, preparation of production feasibility studies and construction of production facilities; (b) availability and costs of financing; (c) ongoing costs of production; (d) metal prices; (e) environmental compliance regulations and restraints (including potential environmental liabilities associated with historical exploration activities); and (f) political climate and/or governmental regulation and control. Development projects are also subject to the successful completion of engineering studies, issuance of necessary governmental permits, and availability of adequate financing. Development projects have no operating history upon which to base estimates of future cash flow.

#### Community relations, social license and land claim

Maintaining a positive relationship with the communities in which NioBay operates is critical to its business operations and the development of the James Bay Project.

NioBay may come under pressure to demonstrate that other stakeholders (including employees, communities surrounding operations and the countries in which they respectively operate) benefit and will continue to benefit from its commercial activities, and/or that it operates in a manner that will minimize any potential damage or disruption to the interests of those stakeholders.

Erosion of social licence or activities of third parties seeking to call into question social licence may have the effect of slowing down the development of new projects and potentially may increase the cost of constructing and operating these projects. Productivity may be reduced due to restriction of access, proceedings initiated or delays in permitting and there may also be extra costs associated with improving the relationship with the surrounding communities.

While the Company is committed to operating in a socially responsible manner there is no guarantee that its efforts will meet all of third parties' expectations, which could have a material adverse effect on the Company's business, financial position and operations.

#### Competition

NioBay's activities are directed towards the exploration and evaluation of mineral deposits. There is no certainty that the expenditures to be made by NioBay will result in discoveries of commercial quantities of mineral deposits. There is aggressive competition within the mining industry for the discovery and acquisition of properties considered to have commercial potential. NioBay will compete with other interests, many of which have greater financial resources than it will have, for the opportunity to participate in promising projects. Significant capital investment is required to achieve commercial production from successful exploration efforts, and NioBay may not be able to successfully raise funds required for any such capital investment.

#### NioBay may be subject to liability or sustain loss for certain risks and hazards against which it does not or cannot economically insure

Mining is capital intensive and subject to a number of risks and hazards, including environmental pollution, accidents or spills, industrial and transportation accidents, labour disputes, changes in the regulatory environment, natural phenomena (such as inclement weather conditions, earthquakes, pit wall failures and cave-ins) and encountering unusual or unexpected geological conditions. Such risk and hazards might impact NioBay's business. Consequently, many of the foregoing risks and hazards could result in damage to, or destruction of, NioBay's mineral properties or future processing facilities, personal injury or death, environmental damage, delays in or interruption of or cessation of their exploration or development activities, delay in or inability to receive required regulatory approvals, or costs, monetary losses and potential legal liability and adverse governmental action. NioBay may be subject to liability or sustain loss for certain risks and hazards against which it does not or cannot insure or against which it may reasonably elect not to insure because of the cost. This lack of insurance coverage could result in material economic harm to NioBay.



# Information systems and cyber security

NioBay relies on its IT infrastructure to meet its business objectives. NioBay uses different IT systems, networks, equipment and software and has adopted security measures to prevent and detect cyber threats. However, NioBay and third-party service providers and vendors may be vulnerable to cyber threats, which have been evolving in terms of sophistication and new threats are emerging at an increased rate. Unauthorized third parties may be able to penetrate network security and misappropriate or compromise confidential information, create system disruptions or cause shutdowns to NioBay or its counterparties. Although NioBay has not experienced any losses relating to cyber-attacks or other information security breaches, there can be no assurance that there will be no such loss in the future. Significant security breaches or system failures of NioBay or its counterparties, especially if such breach goes undetected for a period of time, may result in significant costs, fines or lawsuits and damage to reputation. The significance of any cyber security breach is difficult to quantify, but may in certain circumstances be material and could have a material adverse effect on NioBay's business.

# Infectious Disease Outbreaks

NioBay faces risks related to health epidemics, pandemics and other outbreaks of infectious diseases, which could significantly disrupt, directly or indirectly, its operations and may materially and adversely affect its business and financial conditions.

NioBay's business could be adversely impacted by the effects of the coronavirus or other epidemics or pandemics. The extent to which an epidemic or pandemic impacts NioBay's business, including its operations and the market for its securities, will depend on future developments, which are highly uncertain and cannot be predicted at this time, and include the duration, severity and scope of an outbreak and the actions taken to contain or treat such outbreak. In particular, the continued spread of the coronavirus globally could materially and adversely impact NioBay's business including without limitation, employee health, workforce productivity, increased insurance premiums, limitations on travel, the availability of industry experts and personnel, operations and business of third party operators, and other factors that will depend on future developments beyond NioBay's control, which may have a material and adverse effect on its business, financial condition and results of operations. There can be no assurance that NioBay's personnel will not be impacted by these pandemic diseases and ultimately see its workforce productivity reduced or incur increased medical costs / insurance premiums as a result of these health risks.

In addition, a significant outbreak of infectious diseases could result in a widespread global health crisis that could adversely affect global economies and financial markets resulting in an economic downturn that could have an adverse effect on the demand for precious metals and NioBay's future prospects.

# Fluctuation in market value of NioBay common shares

The market price of NioBay common shares is affected by many variables not directly related to the corporate performance of NioBay, including the strength of the economy generally, the availability and attractiveness of alternative investments, and the breadth of the public market for the stock. The effect of these and other factors on the market price of the NioBay common shares in the future cannot be predicted.

# Factors beyond the control of NioBay

The potential profitability of mineral properties is dependent upon many factors beyond NioBay's control. For instance, world prices of and markets for minerals are unpredictable, highly volatile, potentially subject to governmental fixing, pegging and/or controls and respond to changes in domestic, international, political, social and economic environments. Another factor is that rates of recovery of minerals from mined ore (assuming that such mineral deposits are known to exist) may vary from the rate experienced in tests and a reduction in the recovery rate will adversely affect profitability and, possibly, the economic viability of a property. Profitability also depends on the costs of operations, including costs of labour, equipment, electricity, environmental compliance or other production inputs. Such costs will fluctuate in ways NioBay cannot predict and are beyond NioBay's control, and such fluctuations will impact profitability and may eliminate profitability altogether. Additionally, due to worldwide economic uncertainty, the availability and cost of funds for development and other costs have become increasingly difficult, if not impossible, to project. These changes and events may materially affect the financial performance of NioBay and they may also negatively impact the project schedule.



# **Financial Risks**

The Company's activities expose it to a variety of financial risks: market risks (including foreign currency risk), credit risk and liquidity risk. The Company's overall risk management program focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on the Company's performance.

A description of the financial risks is included in the Financial Statements, filed on SEDAR+ (www.sedarplus.ca).

#### **Internal Control Disclosure**

In November 2007, the Canadian Securities Administrators exempted issuers on the TSX-V, such as the Company, from certifying disclosure controls and procedures, as well as internal controls over financial reporting as of December 31, 2007, and thereafter. The Company is required to file basic certificates. The Company makes no assessment relating to establishment and maintenance of disclosure controls and procedures as defined under National Instrument 52-109.

#### **Basis of Presentation of Financial Statements**

The Financial Statements have been prepared in accordance with the IFRS Accounting Standards. The accounting policies, methods of computation and presentation applied in the Financial Statements are consistent with those of the previous financial year.

The Board has approved the Financial Statements on April 18, 2024.

The significant accounting policies of NioBay, as well as the accounting standards issued but not yet effective, are detailed in the notes to the Financial Statements, filed on SEDAR+ (www.sedarplus.ca).

#### **Critical Accounting Estimates and Judgments**

Estimates and assumptions are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. The determination of estimates requires the exercise of judgment based on various assumptions and other factors such as historical experience and current and expected economic conditions. Actual results could differ from those estimates.

Critical judgments in applying the Company's accounting policies are detailed in the Financial Statements, filed on SEDAR+ (www.sedarplus.ca).

# Financial Instruments

All financial instruments are required to be measured at fair value on initial recognition. The fair value is based on quoted market prices, unless the financial instruments are not traded in an active market. In this case, the fair value is determined by using valuation techniques like the Black-Scholes option pricing model or other valuation techniques. Measurement in subsequent periods depends on the classification of the financial instrument.

A description of financial instruments and their fair value is included in the in the Financial Statements filed on SEDAR+ (www.sedarplus.ca).



# **Cautionary Statement Regarding Forward-Looking Statements**

Statements contained in this document that are not historical facts are regarded as forward-looking statements. These statements may involve risk, uncertainties and other factors that could cause actual results to differ materially from those expressed or implied by such forward-looking statements. Many factors could cause such differences, including: volatility in market metal prices; changes in foreign currency exchange rates and interest rates; unexpected variations in geological conditions of a property or erroneous geological data; environmental risks including increased regulatory constraints; unexpected adverse mining conditions; adverse political conditions, and changes in government regulations and policies. Although NioBay has attempted to identify important factors that could cause actual plans, actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause plans, actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking statements will prove to be accurate, as actual plans, 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 and Continuous Disclosure

This MD&A has been prepared as at April 18, 2024. Additional information on the Company is available through regular filings of press releases, financial statements and MD&A on SEDAR+ (www.sedarplus.ca) and on the Company's website (<u>www.niobaymetals.com</u>).

<u>(Signed) Jean-Sebastien David</u> Jean-Sebastien David President & Chief Executive Officer

April 18, 2024

(Signed) Anthony Glavac Anthony Glavac Chief Financial Officer

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# **Corporate Information**

# Administrative Office

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# Directors

Serge Savard, Chairman Dawn Madahbee Leach Jean-Sébastien David Raymond Legault Mathieu Savard

# Officers

Jean-Sebastien David, President and Chief Executive Officer Anthony Glavac, Chief Financial Officer Marc Pothier, Corporate Secretary

Auditors PricewaterhouseCoopers LLP/s.r.l./s.e.n.c.r.l.

Transfer Agent TSX Trust Company

Exchange listing TSX-V: NBY OTCQB: NBYCF