

## December 2023 Quarterly Activities Report

### Key Highlights

- Upper and lower extension drilling of prior high grade intersections at B2 has extended strike continuity by 500m with results received to date<sup>1</sup> including:
  - DDED23-131 intersected **158.5m at 0.30% Ni** and 0.012% Co starting from 157.5m, **including 7.5m at 0.40% Ni** and 0.014% Co from 231m, **and 13m at 0.41% Ni** and 0.016% Co from 258m
  - DDED23-130 intersected **164.81m at 0.25% Ni** and 0.011% Co starting from 158.5m
  - DDED23-129 intersected **225m at 0.28% Ni** and 0.011% Co starting from 134m and **remains open ended**
  - B2 Prospect drilled to date has discovered significant volumes of nickel mineralisation exceeding 800m in length and includes a high grade (> 0.4% Ni) zone associated with a major fault zone that mimics that seen at the Bardwell Prospect
- 10 drillhole (2,550m) program at Bardwell increases confidence and confirms continuity in **near surface nickel sulphide mineralisation along a 1km strike length**<sup>2</sup>
  - Core logging has confirmed all holes intersected continuous mineralisation of similar widths to previous deeper holes drilled in Bardwell and confirms mineralisation comes closer to surface beneath shallow till cover
  - All 10 holes intersected disseminated to interstitial sulphides within the peridotite/dunite unit
  - Internal conceptual pit optimisation study to be completed to determine pit geometry, tonnes and grades on receipt of all assays
- Scoping study metallurgical work underway for Edleston Nickel Project
- SGS Lakefield have completed metallurgical program on core from Edleston Main gold resource<sup>3</sup> designed to confirm gravity gold and conduct ore leachability testwork<sup>4</sup>
  - Testing represents first material from Edleston Main Zone to undergo leaching analysis and further optimisation potential identified
  - **Recoveries** for gravity and leach processing ranged between **89.1% and 93.3%**
  - **Head grades** ranged between **0.92g/t Au and 1.21g/t Au**

<sup>1</sup> ASX Announcement 4 October 2023: B2 Prospect assays extend Nickel Cobalt Sulphide Mineralisation along strike by 500m

<sup>2</sup> ASX Announcement 14 November 2023: Shallow infill drill program confirms sulphide mineralisation extends from depth to below till cover and continues along 1km strike length

<sup>3</sup> ASX Announcement 19 January 2023: Maiden Gold Mineral Resource of 1.5 Moz Au Delineated at Edleston Project, Ontario, Canada Indicated 14.0Mt at 0.90 g/t Au for 400,200oz; Inferred 34.1Mt at 1.00 g/t Au for 1,099,800oz; Global 48.1Mt at 1.00 g/t Au for 1,500,100oz

<sup>4</sup> ASX Announcement 23 January 2024: Further metallurgical testing of gold at Edleston Main Zone achieves up to 93.3% recovery

**Aston Managing Director, Russell Bradford, commented:** "The team has been busy over the last quarter with metallurgical work progressing on both the gold resource and the nickel resource. With our 2023 drilling programs completed with no safety or social incidents, we are looking forward to the results coming through to allow an update to the geological and grade block model. This will be part of an exercise to determine open pit potential at Bardwell, using modifying factors from laboratory work and other benchmarked inputs."

Aston Minerals (**Aston or the Company**) (ASX:ASO) is pleased to provide a summary of work conducted over the quarter ending 31 December 2023.

### Edleston Project, Ontario, Canada (100% ASO)

The Edleston Project in Ontario, Canada, is approximately 60km to the south of the town of Timmins and 80 km to the West of the town of Kirkland Lake. Both towns are home to the headquarters of significant mining and exploration companies, and therefore well placed to provide skilled labour and specialised services to support Edleston. The Edleston Project currently hosts a **maiden nickel-cobalt resource of 1.044 billion tonnes** across the Boomerang Target<sup>5</sup> and a **1.5Moz maiden gold resource** at Edleston and Sirola<sup>6</sup>.

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Figure 1: Edleston Project Location Plan

### B2 Drilling Program

<sup>5</sup> ASX announcement 21 February 2023: 1.044 Billion Tonne Maiden Nickel-Cobalt Mineral Resource Estimate Defined Across Boomerang Indicated: 155Mt at 0.28% Ni, 0.011% Co; Inferred 889Mt at 0.27% Ni, 0.011% Co for a total of 1,044Mt at 0.27% Ni, 0.011% Co

<sup>6</sup> ASX Announcement 19 January 2023: Maiden Gold Mineral Resource of 1.5 Moz Au Delineated at Edleston Project, Ontario, Canada Indicated: 14.0Mt at 0.90g/t Au for 400,200oz Au; Inferred: 34.1Mt at 1.00g/t Au for 1,099,800oz Au for a total of 48.1Mt at 1.00g/t Au for 1,500,100oz Au

The extensional drilling underway across B2 zone within the Boomerang Nickel-Cobalt target has shown the mineralisation to be similar in tenor and geology to the large scale Bardwell nickel mineralised zone and significantly extends the strike length of the deposit and is remains open along strike at both ends of the deposit.

Assay results have been received for three holes to date:

- DDED23-131 intersected **158.5m at 0.30% Ni** and 0.012% Co starting from 157.5m, **including 7.5m at 0.40% Ni** and 0.014% Co from 231m, **and 13m at 0.41% Ni** and 0.016% Co from 258m
- DDED23-130 intersected **164.81m at 0.25% Ni** and 0.011% Co starting from 158.5m
- DDED23-129 intersected **225m at 0.28% Ni** and 0.011% Co starting from 134m

All 3 holes recorded intersections of sulphur to nickel grades in the order > 0.6:1 which should complement the recently commenced metallurgical test program using industry standard flotation technology to recover nickel and cobalt from the sulphide mineralisation.

DDED23-129, whilst still open ended, significantly extends mineralisation along strike and is located 300m from DDED22-107, which returned results of 181m at 0.28% Ni. DDED23-131 is 500m from DDED22-105 which returned 85.5m at 0.33% Ni, including 2m at 1.37% Ni (ending in mineralisation).

Assay results are still pending for DDED23-132 and DDED23-133 from the B2 drilling campaign.



**Figure 2: DDED23-131 interstitial to disseminated sulphide mineralisation**

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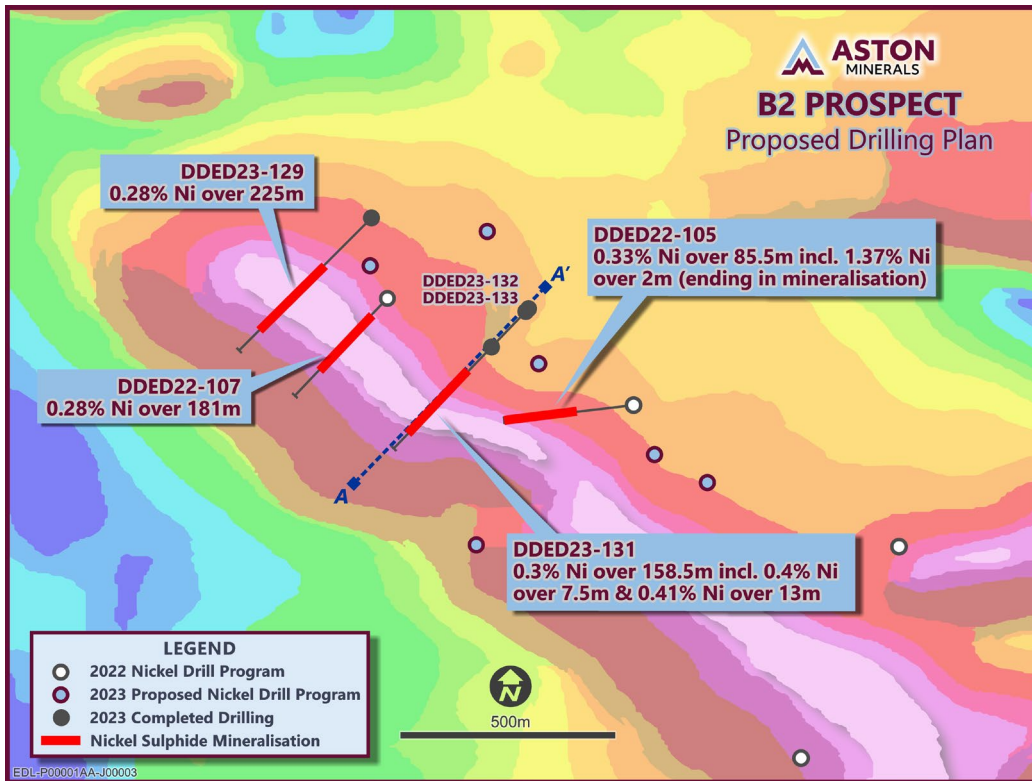


Figure 3: Plan view of the current drill program at the B2 Prospect

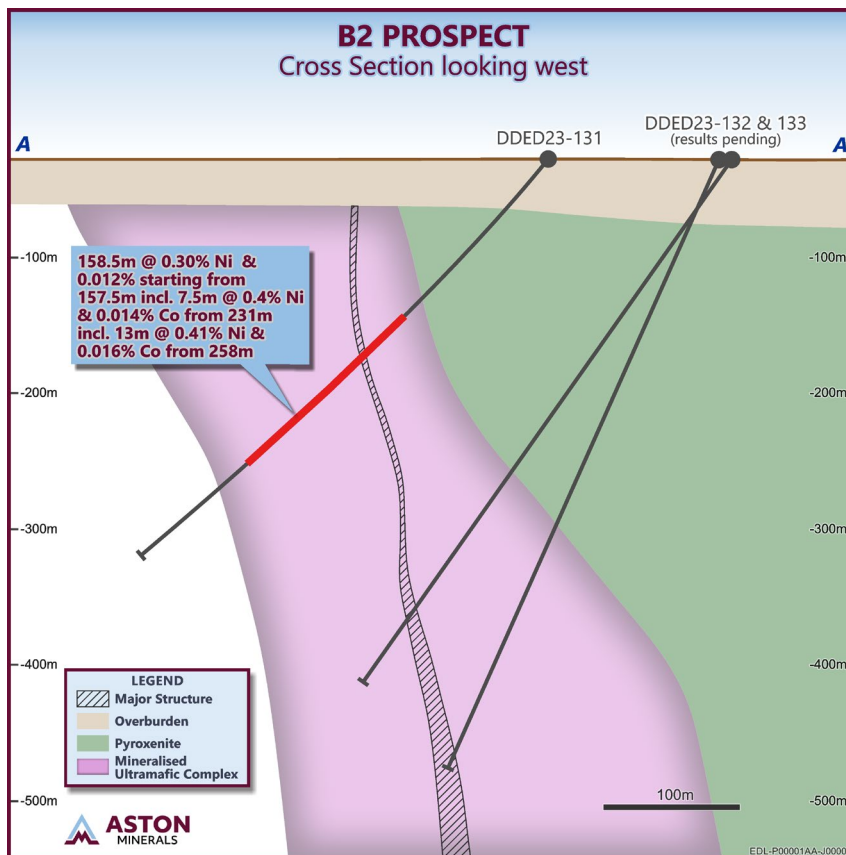


Figure 4: Section through A-A

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## Bardwell Drilling Program

In November 2023, the Company announced the success of the shallow infill drilling program at Bardwell, with all 10 holes intersecting near surface nickel mineralisation along a 1km strike length.



Figure 5: DDED23-143 nickel sulphides (pentlandite-pyrrhotite) in altered peridotite

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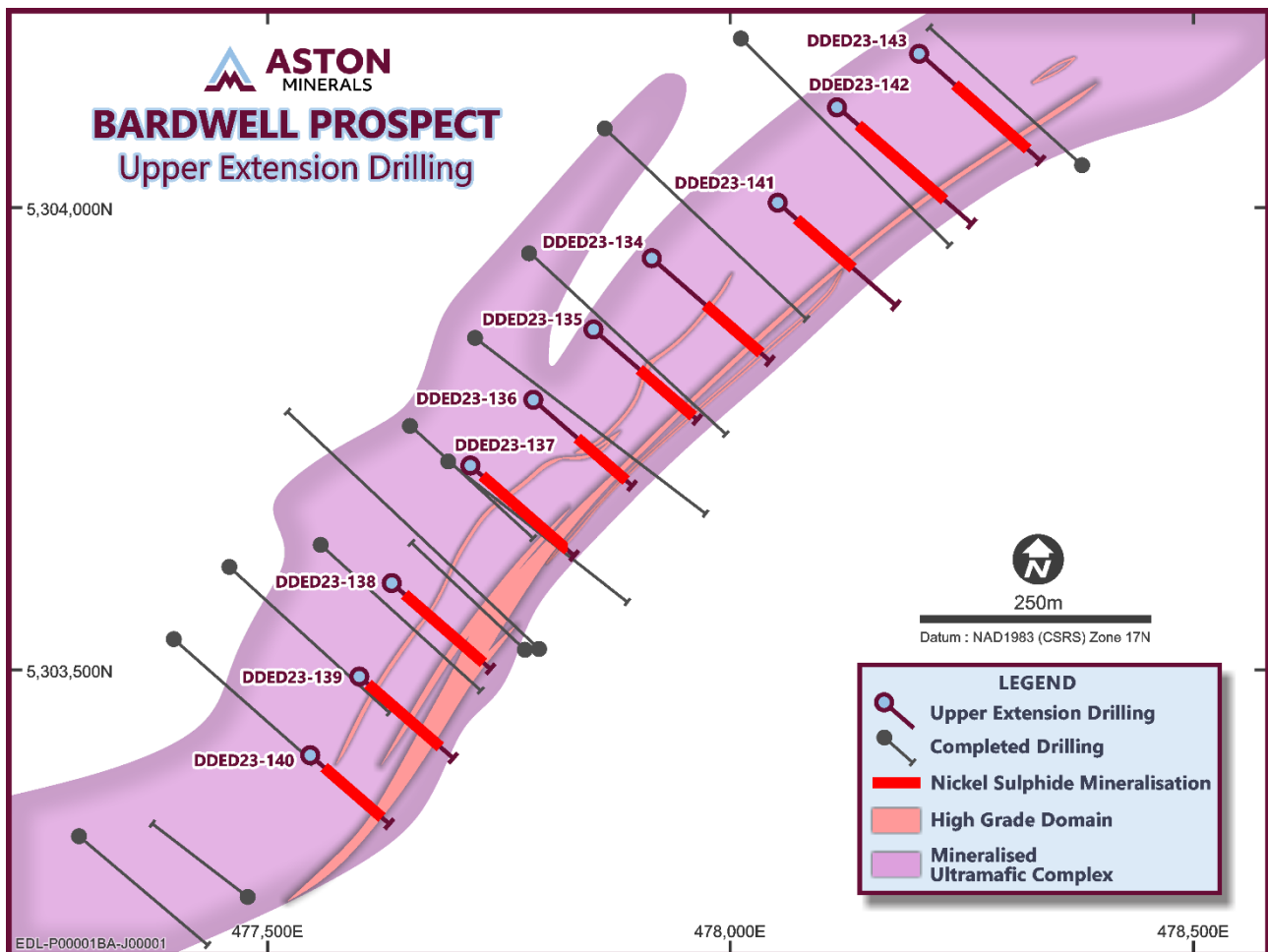


Figure 6: Plan view of the recent near surface nickel drill program at Bardwell

The upper extension drilling at Bardwell was drilled over 1km strike and to a vertical depth of 200m. The mineralised peridotite/ dunite unit is interpreted from the recent drilling to be exposed under a 20-40m till cover and demonstrates potential for continuation to the north-east.

Assays are currently pending for the drill program and we look forward to releasing results as they become available, with the first results expected to be received later this quarter.

## Nickel Metallurgical Testwork

As announced on 2 August 2023, Corem, a nickel-experienced metallurgical laboratory based in Quebec, has been appointed and has now commenced analysing drill core selected from mineralised zones from the Boomerang target at the Edleston Nickel Project. Corem were selected in part due to their knowledge in flowsheet development of nickel deposits of a similar nature to Boomerang.

The testwork program is being managed by Greg Lane, Chief Technology Officer at Ausenco, a global EPCM services business with offices in Toronto to service eastern Canada.

The testwork program will focus on key process parameters that define metallurgical recovery and nickel concentrate grade using a lock cycle program. The outcome of the program will define the technical parameters relating to comminution, metal recoveries and costs which will feed into the capital and operating costs of the Scoping Study. Over 1.5 tonnes of core has been selected from across the mineralised deposit and shipped to Corem. The core represents a range of Ni, S, MgO and Fe grades, and was selected to represent the broad cross section of the mineralisation.

The work program will include:

- Mineralogy
- Comminution testwork to determine ore hardness and target grind size
- Flotation testwork to assess flowsheet options and variability in process response
- Assessment of the inputs for cut-off grade determination and a basis for further economic assessment

The full testwork program is expected to take seven months to complete, however, the Company will be able to report on nickel recovery and grade results as they become available. All the flowsheet development will feed into feasibility studies.

## Gold metallurgical testwork

A total of 11 gold bearing core samples taken from previous drilling at Edleston Main and included in the current 1.5Moz gold Resource were selected to be used in a metallurgical test program to be conducted at SGS Lakefield, an industry leader in metallurgical and mineralogical testing based in Ontario. Composites were put together based on depth in increments of 50 metres. SGS created four composites which were then used for the metallurgical head assays, gravity work and cyanide leach. These four samples were split for duplicate testing which allowed eight tests to be performed. See Appendix 1 for sample weights.

Mill grind for the tests was  $P_{80} 75_{\mu m}$  and leach time 48 hours. Air sparging was used on three composites and oxygen addition on one composite. Oxygen addition improved the leach time as well as the recovery by 4%. From the results, leaching was completed after 24 hours.

This standard gold metallurgical test program has clearly demonstrated the gold associated with the Edleston deposit is susceptible to a particularly high rate of recovery. The testing utilised was aimed at modulating conventional gold recovery methods and industry standard reagent additions and residence times.

This exercise has now demonstrated that Aston has a significant gold deposit that can be recovered through

conventional mill gravity circuit and a carbon-in-leach plant at an energy efficient grind size.

These results now allow the Aston Board to consider options on the deposit which may include development or potential sale which will be value accretive to shareholders.”

## Remaining Project Portfolio

**Slovak Cobalt-Nickel-Copper Portfolio, Joughineva Cobalt-Copper Gold Project and Swedish Cobalt ± Copper ± Nickel ± Gold Project**

The Company is working towards divesting the non-core assets and no field work was completed during the quarter.

This report has been authorised for release by the Board.

## Contacts

**For further information, please contact:**

**Russell Bradford**

*Managing Director*

[russell@astonminerals.com](mailto:russell@astonminerals.com)

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### **Competent Persons' Statements**

The mineral resource estimates in this announcement were reported by the Company in accordance with listing rule 5.8 on 19 January 2023 (gold) and 21 February 2023 (nickel-cobalt). The Company confirms it is not aware of any new information or data that materially affects the information included in the previous announcements and that all material assumptions and technical parameters underpinning the estimates in the previous announcements continue to apply and have not materially changed.

The explorations results in this announcement were reported by the Company in accordance with listing rule 5.7. The Company confirms it is not aware of any new information or data that materially affects the information included in the previous announcement.

### **Appendix 1: Related Party Payments**

In line with its obligations under ASX Listing Rule 5.3.5, Aston Minerals Limited notes that the only payments to related parties of the Company, as advised in the Appendix 5B for the period ended 31 December 2023, pertain to payments to directors for fees, salary and superannuation and to Executive Mining Group Ltd, an entity associated with Peter Breese, for geological and project consulting.

### **Appendix 2: Expenditure Information**

The Company advises that in accordance with the additional reporting requirements of ASX Listing Rules 5.3.1 and 5.3.2, the Company spent approximately \$1.864 million during the quarter on exploration and evaluation activities. No expenditure was incurred on development or production activities during the quarter. Expenditure on exploration and evaluation activities related to drilling and associated preparation, assaying, geological consultants and metallurgical consultants.

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### Appendix 3: Tenement Schedule

In line with obligations under ASX Listing Rule 5.3.3, Aston Minerals Limited provides the following information with respect to its Mining Tenement holdings as at 31 December 2023. The Company notes that no tenements were disposed of or acquired during the quarter.

#### Edlestone Project, Ontario Canada – 100% interest, all granted

Claim Identification Numbers					
100789-100792	149584-149585	197703	234046	271239-271240	315038
104781-104782	150138	198493	235000	271653-271654	315416
104804-104807	150615	198694	239445	273834	315433
105644	156624	198909	233974	280848-280849	316459 - 316461
106128-106129	154452-154453	201508	234046	281136-281137	319396
108337-108338	155112	201510	235000	281959	324763-324765
108729	156203-156204	201512-201513	239445	281997	326614
109281-109282	15778	202907-202908	240408	285869	327126
109504	158101-158102	203240-203241	240594	286626-286627	327360
110872-110873	158432	204027	240706	287879	328400-328401
112030	159246	204480	240798	288103	330742-330743
113725	160394-160395	205241	240967-240968	288210	331883-331884
114516	162229	206185	241015	288605	332871
114773	165041-165042	208438	241336-241338	289227	333389
115253	166388-166389	209563	242664	290047	335880
117629	167299	209572-209573	243981	290063	336237
119426	168680	210073	245856	290156	336975
119947	172435	211263	245940-245941	291071-291072	339757-339758
121839-121840	172717	211746	246936	293612	340811
122129	172850	214431	247502	293982	342665
122322	173713	215123	248133-248136	293983	343128
122685	173982	215407	248452	294096	344470-344471
122943	174596-174598	216455	248465	294952	344984-344985
126743	174845-174846	216897	248564	295239	566393
126917	175938	216987	248987	295855	582951-582952
126919	176398	219882	249066-249067	296115	592768 – 593035
127324-127325	178150	221639	249500	297194	593786 - 593799
127916	178899-178900	221642	251403	299460	594573
127939	179374	222520-222522	251981	300620	594576
129302	179406	222540	252346-252347	302189	594580
132923-132924	181092	224085	255039	302491	594594 – 594642
134141	182322	227352	256688	304326	594663 – 595083
134194-134195	186332	227464	258479	306078-306081	595987 -596003
134430	188934	228124	258787	306773	596013 - 596033
137622	190057	228555	260029	307740	596004 - 596011
138031	190279-190281	228670-228671	260456	307846-307847	596012
138790-138792	190763	228918	260475-260476	307979-307980	611945 - 611952
139409	191291-191292	228920	261638	309399	611956 - 611986
139772-139773	191393	230015	261945	309747-309748	612743 - 612767
140781	191424	230539	264177	312043-312044	641082 – 641101
140802	191936	230740	265154	312046	642377 – 642503
140818	194367	233160	267721-267722	313845	642568 – 642598
144094-144095	197660	233974	271066	314589-314591	654902 - 654956

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European Assets

Project	Country	Tenement Identification	Status	Interest
Dobsina	Slovakia	2466/2017-5.3	Granted	100%
Rejdova	Slovakia	7007/2017-5.3	Granted	100%
Rakovec	Slovakia	7586/2017-5.3	Granted	100%
Gapel	Slovakia	7926/2017-5.3	Granted	100%
Kolba	Slovakia	4207/2017-5.3	Granted	100%
Kotlinec	Slovakia	4314/2018-5.3	Granted	100%
Medzev	Slovakia	4316/2018-5.3	Granted	100%
Fabianka	Slovakia	10240/20185.3	Granted	100%
Jouhineva	Finland	ML2017:0030	Granted	100%
Basinge	Sweden	Basinge nr 1	Granted	100%
Ekedalsgruvan	Sweden	Ekedalsgruvan nr 1	Granted	100%
Ruda	Sweden	Ruda nr 3	Granted	100%

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## Appendix 5B

### Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

ASTON MINERALS LIMITED

ABN

63 144 079 667

Quarter ended ("current quarter")

31 DECEMBER 2023

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
<b>1.</b>	<b>Cash flows from operating activities</b>		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	(1,864)	(4,779)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(237)	(402)
	(e) administration and corporate costs	(318)	(935)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	30	56
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other (provide details if material)	-	-
<b>1.9</b>	<b>Net cash from / (used in) operating activities</b>	<b>(2,389)</b>	<b>(6,060)</b>

<b>2.</b>	<b>Cash flows from investing activities</b>		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) exploration & evaluation	-	-
	(e) investments	-	-
	(f) other non-current assets	-	-

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>	-	-

<b>3.</b>	<b>Cash flows from financing activities</b>		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	1,175	11,000
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(10)	(739)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
<b>3.10</b>	<b>Net cash from / (used in) financing activities</b>	<b>1,165</b>	<b>10,261</b>

<b>4.</b>	<b>Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1	Cash and cash equivalents at beginning of period	7,057	1,624
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(2,389)	(6,060)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	-	-
4.4	Net cash from / (used in) financing activities (item 3.10 above)	1,165	10,261

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	(5)	3
<b>4.6</b>	<b>Cash and cash equivalents at end of period</b>	<b>5,828</b>	<b>5,828</b>

5. Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts		Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	5,828	7,057
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other	-	-
<b>5.5</b>	<b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>5,828*</b>	<b>7,057</b>

\* This does not include a \$603,000 (\$CAD541,000) Canadian HST refund received on 10 January 2024.

6. Payments to related parties of the entity and their associates		Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	322
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-

*Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.*

Amounts shown at item 6.1 comprise director fees and fees paid to Executive Mining Group Ltd.

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

7. <b>Financing facilities</b>	<b>Total facility amount at quarter end \$A'000</b>	<b>Amount drawn at quarter end \$A'000</b>
<i>Note: the term "facility" includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.</i>		
7.1 Loan facilities	-	-
7.2 Credit standby arrangements	-	-
7.3 Other (please specify)	-	-
7.4 <b>Total financing facilities</b>	-	-
7.5 <b>Unused financing facilities available at quarter end</b>		-
7.6 Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		

8. <b>Estimated cash available for future operating activities</b>	<b>\$A'000</b>
8.1 Net cash from / (used in) operating activities (item 1.9)	(2,389)
8.2 (Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	-
8.3 Total relevant outgoings (item 8.1 + item 8.2)	(2,389)
8.4 Cash and cash equivalents at quarter end (item 4.6)	5,828
8.5 Unused finance facilities available at quarter end (item 7.5)	-
8.6 Total available funding (item 8.4 + item 8.5)	5,828
8.7 <b>Estimated quarters of funding available (item 8.6 divided by item 8.3)</b>	2.44
<i>Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.</i>	
8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:	
8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?	
Answer: N/A	
8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?	
Answer: N/A	
8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?	
Answer: N/A	
<i>Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.</i>	

## Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: **31 January 2024**

Authorised by: **The Board of Aston Minerals Limited**

## Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.