

11 December 2023  
ASX Announcement

Green Bay Copper-Gold Project, Canada

# Exceptional high-grade copper and gold intersections point to rapid resource growth

Results of up to 9.4% copper and 4.7g/t gold from outside the existing Resource

## Key Points

- FireFly Metals has completed analysis for copper, gold, silver and zinc on historic 2022 drillholes that were only assayed for copper by the previous operator
- In addition to the known high-grade copper, these new results demonstrate significant quantities of precious (gold and silver) and base metals (zinc) in the high-grade VMS zone. Results<sup>1</sup> include:
  - 9.3m @ 9.4% Cu, 4.7 g/t Au, 20.5g/t Ag, 1.3% Zn (13.6% CuEq) *RM22-795-15*
  - 16.8m @ 6.7% Cu, 3.5 g/t Au, 24.8g/t Ag, 4.9% Zn (11.2% CuEq) *RM22-795-10*
  - 41.2m @ 5.9% Cu, 1.3 g/t Au, 13.3g/t Ag (7.1% CuEq) *RM22-795-06*
  - 47.2m @ 4.7% Cu, 2.2 g/t Au, 14.3g/t Ag (6.8% CuEq) *RM22-795-14*
  - 18.4m @ 4.6% Cu, 1.9 g/t Au, 10.9g/t Ag (6.3% CuEq) *RM22-795-02*
  - 31.6m @ 3.6% Cu, 1.1 g/t Au, 9.8g/t Ag (4.6% CuEq) *RM22-795-08*
- Importantly, these results are from extensions of the high-grade VMS lode and are therefore outside the Resource
- As part of its Resource growth strategy, FireFly has commenced an underground exploration drill drive as well as its 40,000m underground diamond drilling programme; Assays are expected in coming weeks
- FireFly is fully-funded with A\$24m to complete the first year of its resource growth and exploration drilling plan
- *“This strategy is aimed at achieving rapid growth in the Resource, which will in turn confirm Green Bay is a major high-grade copper-gold project with extensive existing infrastructure in a tier-one location”. FireFly MD Steve Parsons*

<sup>1</sup> All reported results are downhole widths. Drilling metal equivalents have been calculated at a copper price of US\$8,300/t, gold price of US\$2,000/oz, silver price of US\$25/oz and zinc price of US\$2,500/t. Copper equivalent was calculated based on the formula  $CuEq (\%) = Cu(\%) + (Au (g/t) \times 0.77472) + (Ag (g/t) \times 0.00968) + (Zn (\%) \times 0.3012)$ . No metallurgical recovery factors have been applied to the calculation. All elements included in the calculation have a reasonable probability of being recovered and sold.

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FireFly Metals Ltd (formerly “AuTECO Minerals Ltd”) is pleased to report significant copper, gold, silver and zinc results from the analysis of 18 diamond drill holes completed in 2022 by the previous operator of the Ming Mine within the Green Bay project in Newfoundland, Canada.

These holes were previously tested for copper only. Analysis for other key economic metals was not completed due to the former operator entering the Canadian Companies’ Creditors Arrangement Act (“CCAA”) process.

FireFly acquired Green Bay in October this year. The project has a Resource of 39.2Mt at 2.1% for 811,000t of CuEq.<sup>2</sup> The mineralisation remains open and the Company’s immediate strategy centres on an extensive drilling program designed to grow the inventory rapidly.

The drill holes reported here were aimed at testing down-plunge continuity of the high-grade upper volcanogenic massive sulphide (VMS) style mineralisation and stringer mineralisation in the footwall immediately adjacent to the VMS contact.

The program not only successfully proved continuity of the VMS zone but demonstrated the significant concentration of precious and base metals in the system in addition to the high-grade copper.

Notable results include dill hole RM22-795-10, which returned an intersection of 16.8m @ 11.2% CuEq, consisting of 6.7% copper, 3.5g/t gold, 24.8g/t silver and 4.9% zinc.

FireFly resumed underground diamond drilling at the Green Bay project in late October 2023. First assay results from the initial drilling are expected in coming weeks.

Furthermore, mining of the 750m exploration drill drive is underway. This platform will be positioned to test both the VMS and Footwall Zone mineralisation extensions at optimal drill angles. It is anticipated that a second drill rig will mobilise in January with a third rig soon after.

**FireFly Managing director Steve Parsons said: “These latest assays confirm there is extensive high-grade mineralisation well outside the existing Resource.**

**“We are well into a major 40,000m underground drilling program designed to continue extending this known mineralisation. The underground exploration drive now being constructed will enable us to do this even faster, more accurately and more efficiently.**

**“This strategy is aimed at achieving rapid growth in the Resource, which will in turn confirm Green Bay is a major high-grade copper-gold project with extensive existing infrastructure in a tier-one location”.**

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<sup>2</sup> The Company first announced the foreign estimate for the Green Bay Project on 31 August 2023. The foreign estimate is prepared in accordance with Canadian National Instrument 43-101 and has not been reported in accordance with JORC 2012. A competent person has not done sufficient work to classify the foreign estimates in accordance with the JORC Code and it is uncertain that following evaluation and or further exploration that a foreign estimate will be able to be reported in accordance with the JORC Code. Further information on the foreign estimate is set out in Appendix A.

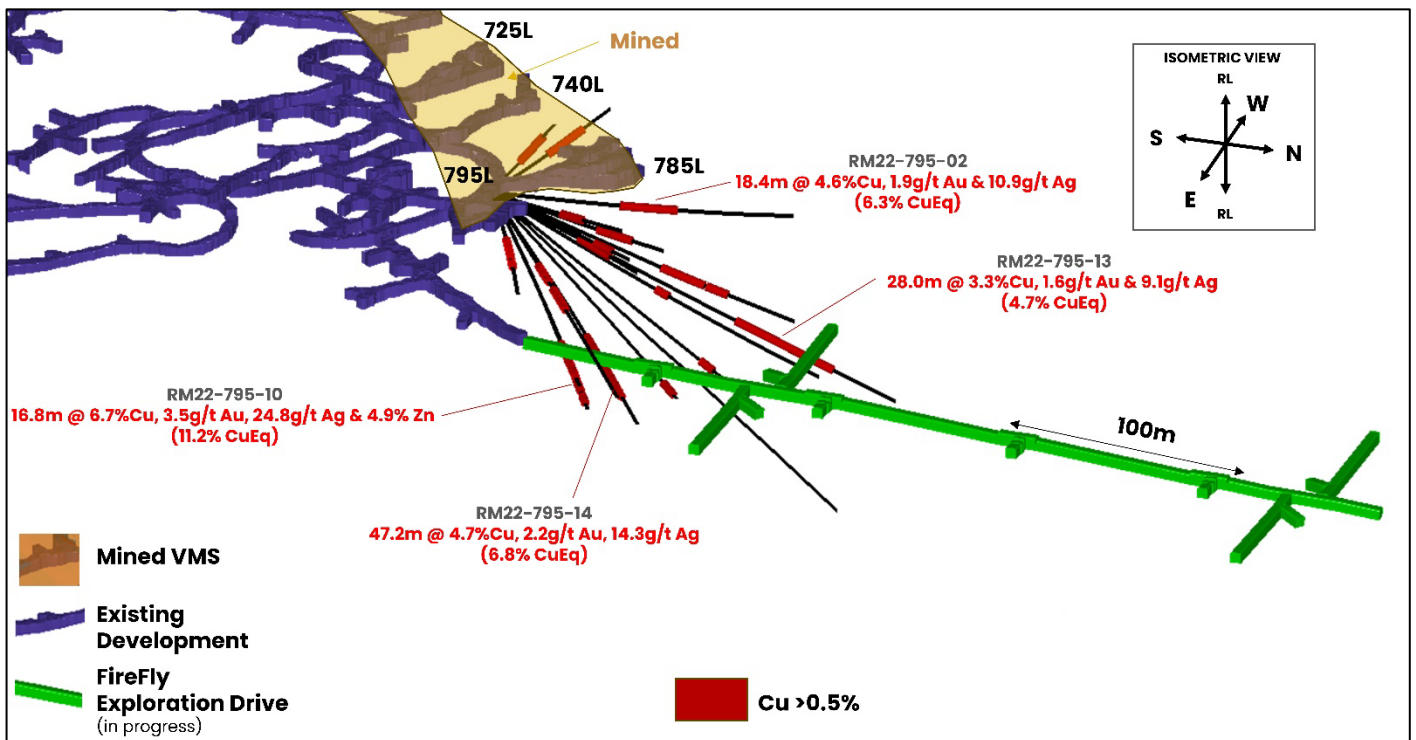
## About the Drill Results

In 2022, 18 holes were drilled for 2,690m of core from the 795 Level of the Ming Mine. The purpose of the drilling was to test the down plunge extension and continuity of the upper high-grade copper-gold VMS horizons.

Due to cost constraints, the samples were analysed for copper only by the on-site laboratory at the Nugget Pond processing plant. Pulps were then dispatched to a commercial laboratory for multi-element analysis, however these were never completed due to the previous company filing for protection under the Canadian CCAA.

Since acquiring the Green Bay copper-gold project, FireFly Metals submitted the pulps to the ISO accredited Eastern Analytical Laboratory in Springdale, Newfoundland, for analysis.

The results demonstrated the continuity of the mineralised system and also confirmed a significant quantity of precious and base metals associated with the high-grade copper-rich upper VMS mineralisation.



Isometric view of the 2022 drilling completed from the 795 Level to test the extensions of the high-grade Ming North VMS system. All results are from unmined zones. The planned FireFly exploration drive is shown in green.

Significant drill results include:

- 47.2m @ 4.71% Cu, 2.2g/t Au & 14.3g/t Ag (6.82% CuEq) from 108.09m in hole R22-795-14
- 41.2m @ 5.85% Cu, 1.3g/t Au, & 13.2g/t Ag (7.1% CuEq) from 64.4m in hole R22-795-06
- 31.5m @ 3.61% Cu, 1.1g/t Au & 9.8g/t Ag (4.64% CuEq) from 52.7m in hole R22-795-08
- 28.0m @ 3.27% Cu, 1.6g/t Au & 9.1g/t Ag (4.70% CuEq) from 135.7m in hole R22-795-13
- 18.4m @ 4.6% Cu, 1.9g/t Au & 10.9g/t Ag (6.28% CuEq) from 61.5m in hole R22-795-02
- 16.8m @ 6.7% Cu, 3.5g/t Au, 24.8g/t Ag & 4.9% Zn (11.2% CuEq) from 119.3m in hole R22-795-10
- 16.6m @ 2.62% Cu, 1.6g/t Au & 13.4g/t Ag (4.06% CuEq) from 97m in hole R22-795-12
- 10.9m @ 2.37% Cu, 1.0g/t Au & 8.8g/t Ag (3.34% CuEq) from 35m in hole R22-795-01
- 9.3m @ 9.35% Cu, 4.7g/t Au, 20.5g/t Ag & 1.3% Zn (13.6% CuEq) from 145.5m in hole R22-795-15
- 8.0m @ 3.33% Cu, 1.6g/t Au & 9.0g/t Ag (4.71% CuEq) from 41m in hole R22-795-04

Mining of the exploration drill drive commenced in late November 2023. The drive is positioned to enable drill testing of extensions of upper VMS mineralisation in addition to Lower Footwall stringer zone. As mining progresses and drill platforms become available, further rigs will be deployed to fast-track potential resource growth.

This announcement has been authorised by the Board of Directors.

#### **Steve Parsons**

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## **ABOUT FIREFLY METALS**

FireFly Metals (formerly AuTECO Minerals Ltd) (ASX:AUT) is an emerging copper-gold company focused on advancing the high-grade Green Bay Copper-Gold project in Newfoundland, Canada. The **Green Bay Copper-Gold Project** currently hosts a mineral resource prepared in accordance with Canadian NI 43-101 of **39.2Mt at 2.1% for 811,000t CuEq**. The Company has a clear strategy to rapidly grow the copper-gold resource to demonstrate a globally significant copper-gold asset. FireFly has commenced a 40,000m diamond drilling program.

FireFly holds a 70% interest in the high-grade **Pickle Crow Gold Project** in Ontario. The current Inferred Resource stands at **11.9Mt at 7.2g/t for 2.8Moz gold**, with exceptional discovery potential on the 500km<sup>2</sup> tenement holding.

The Company also holds a 90% interest in the **Limestone Well Vanadium-Titanium Project** in Western Australia.

For further information regarding FireFly Metals Ltd please visit the ASX platform (ASX:AUT) or the Company's website [www.fireflymetals.com.au](http://www.fireflymetals.com.au)

## COMPLIANCE STATEMENTS

The Company first announced the foreign estimate for the Green Bay Project on 31 August 2023. The Company confirms that the supporting information included in the announcement of 31 August 2023 continues to apply and has not materially changed.

Metal equivalents for drilling results in this release have been calculated at a copper price of US\$8,300/t, gold price of US\$2,000/oz, silver price of US\$25/oz and zinc price of \$2,500/t. Individual grades for the metals are set out at Appendix A of this announcement. Copper equivalent was calculated based on the formula  $CuEq (\%) = Cu(\%) + (Au (g/t) \times 0.77472) + (Ag (g/t) \times 0.00968) + (Zn (\%) \times 0.3012)$ . No metallurgical recovery factors have been applied to the in-situ resource nor drill hole results. It is the Company's view that all elements in the copper equivalent calculation have a reasonable potential to be recovered and sold.

Historical exploration results at the Green Bay Project referred to in this announcement were first reported in accordance with ASX Listing Rule 5.7 in FireFly's ASX release dated 31 August 2023.

The Mineral Resource Estimate for the Pickle Crow Project referred to in this announcement was first reported in the Company's ASX release dated 4 May 2023, titled "High-Grade Inferred Gold Resource Grows to 2.8Moz at 7.2g/t".

FireFly confirms that it is not aware of any new information or data that materially affects the information included in the original announcements and that all material assumptions and technical parameters underpinning the estimates in the original announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the original market announcement.

## COMPETENT PERSONS STATEMENT

The Exploration Results and information in this report provided under Listing Rules 5.12.2 to 5.12.7 that relates to Foreign Mineral Resources is based on information compiled by Mr Darren Cooke, and is an accurate representation of the available data and studies for the projects.

Mr Cooke is a full-time employee of FireFly Metals Ltd and is a member of the Australasian Institute of Geoscientists. Mr Cooke has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Australasian Code for the Reporting of Exploration Results and Mineral Resources, and Ore Reserves. Mr Cooke consents to the inclusion in the report of the matters based on the information in the form and context in which it appears. Mr Cooke does hold securities in FireFly Metals Ltd.

## FORWARD LOOKING INFORMATION

This announcement may contain certain forward-looking statements and projections, including statements regarding FireFly's plans, forecasts and projections with respect to its mineral properties and programs. Although the forward-looking statements contained in this release reflect management's

current beliefs based upon information currently available to management and based upon what management believes to be reasonable assumptions, such forward looking statements/projections are estimates for discussion purposes only and should not be relied upon. They are not guarantees of future performance and involve known and unknown risks, uncertainties and other factors many of which are beyond the control of the Company. The forward-looking statements/projections are inherently uncertain and may therefore differ materially from results ultimately achieved. For example, there can be no assurance that FireFly will be able to confirm the presence of Mineral Resources or Ore Reserves, that FireFly's plans for development of its mineral properties will proceed, that any mineralisation will prove to be economic, or that a mine will be successfully developed on any of FireFly's mineral properties. The performance of FireFly may be influenced by a number of factors which are outside the control of the Company, its directors, staff or contractors. The Company does not make any representations and provides no warranties concerning the accuracy of the projections, and disclaims any obligation to update or revise any forward looking statements/projects based on new information, future events or otherwise except to the extent required by applicable laws.

## APPENDIX A – GREEN BAY COPPER-GOLD PROJECT MINERAL RESOURCES

### GREEN BAY COPPER-GOLD PROJECT MINERAL RESOURCES

Ming Deposit as at 31 March 2022

	MEASURED			INDICATED			INFERRED			TOTAL RESOURCE		
	Tonnes	Grade	Metal	Tonnes	Grade	Metal	Tonnes	Grade	Metal	Tonnes	Grade	Metal
<b>Copper</b>	8.4Mt	1.71%	144kt	15.3Mt	1.85%	284kt	6.4Mt	1.86%	120kt	30.2Mt	1.81%	547kt
<b>Gold</b>		0.5g/t	124koz		0.3g/t	148koz		0.4g/t	79koz		0.4g/t	351koz
<b>Silver</b>		3.6g/t	962koz		2.4g/t	1,164koz		2.6g/t	537koz		2.7g/t	2,664koz

Little Deer Complex (Little Deer & Whalesback Mine) as at 31 December 2021

	MEASURED			INDICATED			INFERRED			TOTAL RESOURCE		
	Tonnes	Grade	Metal	Tonnes	Grade	Metal	Tonnes	Grade	Metal	Tonnes	Grade	Metal
<b>Copper</b>	-	-	-	2.9Mt	2.13%	62kt	6.2Mt	1.78%	110kt	9.1Mt	1.90%	172kt
<b>Gold</b>	-	-	-		0.1g/t	9koz		0.1g/t	10koz		0.1	19koz
<b>Silver</b>	-	-	-		3.4g/t	318koz		2.2g/t	430koz		2.6	748koz

### TOTAL MINERAL RESOURCES

	MEASURED			INDICATED			INFERRED			TOTAL RESOURCE		
	Tonnes	Grade	Metal	Tonnes	Grade	Metal	Tonnes	Grade	Metal	Tonnes	Grade	Metal
<b>Copper</b>	8.4Mt	1.71%	144kt	18.2Mt	1.89%	345kt	12.6Mt	1.82%	230kt	39.2Mt	1.83%	718kt
<b>Gold</b>		0.5g/t	124koz		0.3g/t	157koz		0.2g/t	88koz		0.3	370koz
<b>Silver</b>		3.6g/t	962koz		2.5g/t	1,482koz		2.4g/t	968koz		2.7	3,413koz

1. FireFly Metals Ltd cautions that mineral resources for the Green Bay Copper-Gold project, incorporating the Ming Deposit and Little Deer Complex, are not reported in accordance with the JORC Code (2012 Edition). A Competent Person has not yet completed sufficient work to classify the resources as mineral resources that satisfy the guidelines provided in the JORC Code (2012 Edition).
2. All resources have been prepared in accordance with Canadian National Instrument 43-101. Please refer to ASX announcement dated 31 August 2023 for additional technical information relating to the foreign estimate.
3. A competent person has not done sufficient work to classify the foreign estimates in accordance with the JORC Code and it is uncertain that following evaluation and or further exploration that a foreign estimate will be able to be reported in according with the JORC Code.
4. Mineral resources have been reported at a 1.0% copper cut-off grade.

## APPENDIX B – Table 1: Significant Intersection Table

Collar co-ordinates and orientation are listed in the local Ming Mine grid, which is rotated +35 degrees from NAD83 True North.

Hole Number	Easting	Northing	RL	Azi	Dip	Drilled Length (m)	From (m)	To (m)	Width (m)	Assay				CuEq
										Cu %	Au g/t	Ag g/t	Zn %	
R22-795-01	1029.8	1580.2	-792.1	325.9	-28.4	61	35.0	45.9	10.9	2.37	1.0	8.8	0.36	3.34
R22-795-02	1031.4	1579.7	-794.1	352.8	6.5	132	61.5	79.9	18.4	4.60	1.9	10.9	0.35	6.28
R22-795-03	1032.8	1579.4	-794.5	33.5	12.8	83	57.0	65.5	8.5	2.20	1.3	5.4	0.04	3.27
R22-795-04	1032.8	1579.4	-794.5	31.7	0	75	41.0	49.0	8.0	3.33	1.6	9.0	0.18	4.71
R22-795-05	1032.9	1579.3	-794.1	33.1	7.6	81	65.6	68.8	3.2	0.75	2.3	27.7	3.19	3.73
R22-795-06	1033.1	1578.2	-794.1	63.3	9.6	191	64.4	105.7	41.2	5.85	1.3	13.2	0.40	7.07
R22-795-07	1033.1	1578.2	-794.1	63.2	19	153	143.6	147.0	3.4	1.81	2.3	5.9	0.27	3.73
R22-795-08	1033.4	1577.9	-794.1	76	0.4	116.1	52.7	84.2	31.6	3.61	1.1	9.8	0.26	4.64
R22-795-09	1032.4	1579.5	-794.3	20.5	7.6	86	57.0	69.5	12.5	1.73	1.9	4.8	0.30	3.35
R22-795-10	1034.1	1578.6	-794.4	66.3	14	152	119.3	136.0	16.8	6.72	3.5	24.8	4.90	11.16
R22-795-10	1034.1	1578.6	-794.4	66.3	14	152	143.0	145.1	2.1	1.61	1.0	12.9	0.94	2.78
R22-795-11	1031.9	1578.4	-791.9	10.4	-50.4	46	22.0	35.0	13.0	2.11	1.9	13.0	0.22	3.73
R22-795-12	1032.1	1579.5	-794.4	10.3	18.6	146	89.0	91.5	2.5	2.47	1.9	20.0	0.22	4.22
R22-795-12	1032.1	1579.5	-794.4	10.3	18.6	146	97.0	113.6	16.6	2.62	1.6	13.4	0.36	4.06
R22-795-13	1032.0	1579.8	-794.7	6.5	25	200	126.5	128.0	1.5	1.51	0.5	3.9	0.10	1.94
R22-795-13	1032.0	1579.8	-794.7	6.5	25	200	135.7	163.7	28.0	3.27	1.6	9.1	0.26	4.70
R22-795-14	1033.8	1578.8	-794.5	58.2	17.3	177	108.1	155.3	47.2	4.71	2.2	14.3	0.86	6.82
R22-795-15	1033.4	1579.0	-794.5	49.6	19.9	158	145.5	154.8	9.3	9.35	4.7	20.5	1.32	13.57
R22-795-16										Awaiting Assays				
R22-795-17	1032.8	1579.2	-794.5	32.7	22.9	165				No significant assays				
R22-795-18	1032.4	1579.4	-794.4	20.5	23	171	85.0	91.8	6.8	1.17	0.3	2.2	0.03	1.44



**APPENDIX C – JORC CODE, 2012 EDITION**

**Table 1**

**Section 1 Sampling Techniques and Data** (Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where ‘industry standard’ work has been done this would be relatively simple (eg ‘reverse circulation drilling was used to obtain 1m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>All historical drilling conducted at the Ming Mine site was completed under the supervision of a registered professional geologist as a Qualified Person (QP) who is responsible and accountable for the planning, execution, and supervision of all exploration activity as well as the implementation of quality assurance programs and reporting.</li> <li>All reported historical Rambler diamond drilling include in this release is surface and underground diamond drilling a mix of BQ (36.5 mm diameter) mainly grade control and NQ (47.8 mm diameter) for exploration and infill drilling.</li> <li>The following is a summary of the Rambler core sampling procedure: <ul style="list-style-type: none"> <li>All sample collection, core logging, and specific gravity determinations were completed by Rambler under the supervision of a professionally qualified registered geologist.</li> <li>NQ core was marked for splitting during logging and is sawn using a diamond core saw with a mounted jig to assure the core is cut lengthwise into equal halves. Whole core sampling was used for BQ grade control core.</li> <li>Half of the cut core is placed in clean individual plastic bags with the appropriate sample tag.</li> <li>QA/QC samples are inserted into the sample stream at prescribed intervals.</li> <li>The samples are then placed in rice bags for shipment to the offsite laboratories’ facility.</li> <li>The remaining half of the core is retained and incorporated into Rambler’s secure, core library located on the property.</li> </ul> </li> <li>Samples are delivered to the in-house laboratory by Rambler staff or the Eastern Analytical independent accredited laboratory by bonded courier, where the samples are dried, crushed, and pulverised. Samples are crushed to approximately -10 mesh and split using a riffle splitter to approximately 300 g. A ring mill is used to pulverize the sample split to 98% passing -150 mesh. Sample pulps and rejects are picked up at Eastern by Rambler staff and returned directly to the Project site. During the period 2003 to 2009, sample pulps were delivered to Actlabs after being checked and packed, then sent by bonded courier for final analyses. Sample rejects are securely stored at the Rambler site.</li> </ul>

Criteria	JORC Code explanation	Commentary
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>Holes reported in this release were NQ (47.8 mm diameter)</li> <li>Historical drilling from 2005 to 2023, completed by Rambler was diamond drilling with two core sizes, a mix of BQ (36.5 mm diameter) mainly grade control and NQ (47.8 mm diameter) for exploration and infill drilling.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>Recoveries are measured via measurement of the core between blocks.</li> <li>Core loss is measured as a percentage of recovered length.</li> <li>Historical holes reported demonstrate good recoveries (&gt;95% average)</li> </ul>
Logging	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>The following steps are completed during the core logging procedure:</li> <li>Sample security and chain of custody start with the removal of core from the core tube and boxing of drill core at the drill site.</li> <li>The boxed core remains under the custody of the drill contractor until it is transported from the drill to the secure onsite core facility.</li> <li>Core boxes are opened and inspected to ensure correct boxing and labelling of the core by the drill contractor.</li> <li>The drill core is geologically logged, photographed, and then marked and tagged for sampling and splitting.</li> <li>Core logging describes variations in lithology, alteration, and mineralization.</li> <li>Data associated with core logging and related assay results and other downhole information including orientation surveys are recorded in Fusion™ by Century System.</li> <li>Measured parameters include structural orientation with respect to core axis, lost core as a percentage of recovered length, and fracture density which are determined by the intensity and thickness of mineralization at specific intervals.</li> <li>Each core sample is assigned a tag with a unique identifying number. Sample lengths are typically one metre but can be depending on zone mineralogy and boundaries.</li> <li>Sample core that is not mineralized is marked in 1.5 metre lengths.</li> <li>Wing samples are marked at 0.5 metres and sampled at the extremities of mineralized intervals to ensure anomalous grades do not continue into the surrounding wall rock.</li> </ul>

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>Historical drilling completed by Rambler is in.NQ diameter (47.6mm) drill and BQ (36.5 mm diameter)</li> <li>For NQ diameter the core was sawn in half following a sample cutting line determined by geologists during logging and submitted for analysis on nominal 1m intervals or defined by geological boundaries determined by the logging geologist.</li> <li>Each core sample is assigned a tag with a unique identifying number. Sample lengths are typically one metre but can be depending on zone mineralogy and boundaries.</li> <li>Sample core that is not mineralized is marked and sampled in 1.5 metre lengths.</li> <li>Wing samples are marked at 0.5 metres and sampled at the extremities of mineralized intervals to ensure anomalous grades do not continue into the surrounding wall rock.</li> <li>For BQ diameter same sampling practice was completed except that the whole core was crushed for the assays.</li> <li>This sampling technique is industry standard and deemed appropriate.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>Samples are delivered to the in-house laboratory by Rambler staff or the Eastern Analytical independent accredited laboratory by bonded courier, where the samples are dried, crushed, and pulverized. Samples are crushed to approximately -10 mesh and split using a riffle splitter to approximately 300 g. A ring mill is used to pulverize the sample split to 98% passing -150 mesh. Sample pulps and rejects are picked up at Eastern Analytical by Rambler staff and returned directly to the Project site. During the period 2003 to 2009, sample pulps designated for Actlabs were checked, packed, and sent by bonded courier for final analyses.</li> <li>All results reported in this release were analysed by Eastern Analytical in Springdale, NL.</li> <li>34 elements were determined by Inductively Coupled Plasma (ICP). A 200mg subsample is totally dissolved in four acids and analysed by ICP-OES. Gold assays were determined by fire assay with atomic adsorption finish.</li> <li>As part of the QA/QC program duplicate, blank and Certified Reference Material (CRM) samples are inserted alternately, one per ten samples.</li> <li>In addition to the Company QAQC samples (described earlier) included within the batch the laboratory included its own CRM's (Certified Reference Materials), blanks and duplicates.</li> <li>Sample assay results continue to be evaluated through control charts, log sheets, sample logbook and signed assay certificates to determine the nature of any</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>anomalies or failures and failures were re-assayed at the laboratory.</p> <ul style="list-style-type: none"> <li>• Sample preparation, analytical procedures and QA/QC used on the property were reviewed by independent consultants WSP, stating in their report that sampling practices and QA/QC meet industry standards and display acceptable levels of accuracy and precision.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>• The verification of significant intersections by either independent or alternative company personnel.</li> <li>• The use of twinned holes.</li> <li>• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>• Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>• Original copper assays from the on-site laboratory facility were compared to results received from Eastern Analytical. No material variance was noted.</li> <li>• There are no purpose twinned holes in the dataset but a comparison of the results of different drilling generations showed that results were comparable.</li> <li>• All logging data was completed, core marked up, logging and sampling data was entered directly into the MX deposit database.</li> <li>• The logged data is stored on the site server directly.</li> <li>• FireFly is not aware of any adjustments made by Rambler to the assay data. WSP completed an independent audit where a representative number of assay certificates were compared to digital assay database and no discrepancies were found.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>• Specification of the grid system used.</li> <li>• Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>• Surface drill collars were surveyed by the Rambler mine survey crew upon completion of the drill program.</li> <li>• The set-ups for the underground drill collars were marked by Rambler mine survey crew, and the drilling contractor were expected to set up properly on line. A Rambler geologist checked the underground drill set-up during the drilling program to ensure accuracy.</li> <li>• Downhole surveys are completed using a Reflex EZ-Shot® multi-shot instrument to provide azimuth and dip reading down the hole. Readings were collected on a time basis not distance, resulting in an almost continuous reading downhole. The Reflex EZ-Shot is calibrated at least once a year to ensure accuracy of results.</li> <li>• The entire drill campaigns used Reflex EZ-Shot® single-shot electronic instrument with readings collected at intervals of approximately every 30 m downhole plus a reading at the bottom of the hole.</li> <li>• Directional surface holes completed using Devico® technology.</li> <li>• Survey data was collected in mine grid and in UTM grid (NAD83 Zone 21).</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> <li>• Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> </ul>	<ul style="list-style-type: none"> <li>• Due to the nature of mineralisation and a mix of underground and surface drilling the hole spacing is highly variable.</li> <li>• Data spacing is considered sufficient to establish geological and grade continuities for mineral resource estimation at the Inferred and Indicated category.</li> <li>• No sample compositing was applied.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Whether sample compositing has been applied.</li> </ul>	
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>Historical surface drill hole orientations were designed to test perpendicular or sub-perpendicular to the orientation of the intersected mineralisation. Drilling was typically oriented perpendicular to the trend of geophysical anomalism and the mapped strike and dip of observed mineralisation on surface and elsewhere in the project area.</li> <li>Underground drill hole orientation was sub-perpendicular to the mineralisation but variable in places where low angle drilling to the mineralisation has been completed in zones without suitable drilling platforms.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Core was placed in wooden core boxes close to the drill rig by the drilling contractor. The core was collected daily by the drilling contractor and delivered to the secure core logging facility on the Ming Mine site. Access to the core logging facility is limited to Rambler employees or designates.</li> <li>In the historical drilling completed by Rambler once the core samples are cut, bagged and sealed with zip ties, ten samples are put into rice bags which are sealed and secured with numbered security tags. Once samples arrive at the laboratory the security tags and corresponding samples were verified against onsite logs. Prior to shipment samples are stored in a locked building onsite. For all other historical drillholes the measures taken to ensure sample security are unknown.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>An audit and review of sampling techniques and data was conducted as part of NI-43-101 resource estimation by independent consultants WSP in 2018. It is WSP's opinion that the drilling, sampling and logging procedures put in place by Rambler meet acceptable industry standards and that the information can be used for geological and resource modelling.</li> </ul>

**Section 2 Reporting of Exploration Results** (Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>FireFly owns a mineral land assembly consisting of one map-staked mineral license (023175M) and two mining leases (141L and 188L) totalling 955.4 ha and registered in the name of FireFly Metals Canada Limited, a wholly owned subsidiary of FireFly Metals Limited. All of these mineral lands are contiguous and, in some cases, overlapping and are located in the area of the former Ming and Ming West mines. In early 2015 the mineral license 023175M replaced the original license 014692M by claim reduction as requested by Rambler. All lands are in good standing with the Provincial Government, and FireFly is up to date with respect to lease payments (for leases) and required exploration expenditure (for licenses).</li> <li>FireFly holds all the permits required to operate the Ming Mine.</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Ming Mine Early History: Auriferous sulphides and copper was found in the area in 1905 by Enos England.</li> <li>The Main Mine sulphide zone was found in 1935 about 600ft north of the Enos England discovery. In 1940, the Newfoundland government drilled eighteen diamond drill holes totalling 5,000ft.</li> <li>An airborne electromagnetic survey was flown from 1955 to 1956.</li> <li>The Ming Mine was discovered in 1970 by a helicopter borne AEM system. A large low grade stringer type copper deposit was later discovered in the footwall 300ft to 500ft below the Ming orebody during mining operations and delineated by thirty-six diamond drill holes. Mining ceased at the Ming Mine in 1982 because of low copper prices.</li> <li>In 1988, the property was awarded to the Rambler Joint Venture Group (a Consortium of Teck Exploration, Petromet Resources Ltd, and Newfoundland Exploration Company Ltd). Exploration consisted of ground geophysics and soil geochemistry, resulting in discovery of the Ming West deposit. Forty-eight diamond drill holes (25,534ft) were completed</li> <li>Altius Minerals Corporation: Under the terms of an option to purchase agreement with Ming Minerals, Altius conducted exploration on the Rambler property in 2001, 2003, and 2004. In 2001, a lithochemical program was initiated to chemically fingerprint rocks of the hanging wall and footwall to the sulphide deposits.</li> <li>Rambler Metals and Mining PLC: Rambler Metals and Mining is a UK-based company listed on London's Alternate Investment Market (AIM). Rambler holds a 100% interest in the Ming property and between 2005 and 2023 and conducted a multi-phase diamond drilling program consisting of surface drilling, directional drilling, and underground delineation drilling. A total of 220,704m from 1,365 diamond drill</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>holes were completed by Rambler. Between 2012 and 2022 the Ming mine produced 3Mt at 1.86% Cu and 0.71 Au for total of 55Kt of copper and 68Koz of gold.</p> <ul style="list-style-type: none"> <li>The Ming mine was placed on care and maintenance in February 2023.</li> <li>In October 2023, AuTECO Minerals (FireFly Metals) acquired the project from administration.</li> </ul>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The Rambler project is a Noranda-type Volcanogenic Massive Sulfide (VMS) hosted by Cambrian-Ordovician metavolcanic and metasedimentary rocks of the Pacquet Harbour Group. The style of mineralization, alteration, host rock, and tectonism most closely resembles other VMS deposits throughout the world. The deposit consists of several individual massive sulphide lens and their underlying stockwork zones. It is thought that the stockwork zone represents the near surface channel ways of a submarine hydrothermal system and the massive sulphide lens represents the accumulation of sulphides precipitated from the hydrothermal solutions, on the sea floor, above and around the discharge vent. The Rambler deposits are polymetallic (Cu, Au, Ag ± Zn) massive sulphides that occur along the flank of a felsic dome. The Rambler deposits have undergone strong deformation and upper greenschist to amphibolite facies metamorphism. The massive sulphide bodies are now thin and elongate down the plunge of the regional lineation (30-35°NE). Typical aspect ratios of length down-plunge to width exceed 10:1, and the bodies exhibit mild boudinage along the plunge. The foot wall stock work comprises mainly of quartz-sericite-chlorite schist, which hosts disseminated and stringer pyrite and chalcopyrite with minor sphalerite, galena, and pyrrhotite with locally significant gold contents that could represent a discordant stockwork stringer feeder zone. The mineralization is crosscut by younger mafic dykes.</li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in meters) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the</li> </ul>	<ul style="list-style-type: none"> <li>Refer to Appendix B in this release</li> </ul>

Criteria	JORC Code explanation	Commentary
	report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>All drill hole intersections are reported above a lower cut-off grade of 1% copper. A maximum of 3m internal waste was allowed.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>All intersections reported in the body of this release are down hole.</li> <li>The majority of the drill holes are drilled as close to orthogonal to the plane of the mineralized lodes as possible. A number of drill holes have intersected the mineralisation at high angles.</li> <li>Only down hole lengths are reported.</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>Maps and sections are included in the body of this release as deemed appropriate by the competent person.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>All significant assays received from the drill program have been reported in Appendix B.</li> <li>The total historic database contains a total of 230,736 meters of historic drilling in 1,388 holes. This release relates to 10 holes for 5,632.1m from the main identified mineralized lenses outside historical mined voids.</li> <li>No fixed cut-off grade or objective parameter was applied to the selection of appropriate drill holes. The selection was determined by the Company in attempting to select the most relevant information for assessing future drill targets and should not be taken to be representative of the available assay database.</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test</li> </ul>	<ul style="list-style-type: none"> <li>Appropriate plans are included in the body of this release.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<p>results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</p>	
Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>FireFly Metals will be conducting drill testing of additional mineralisation as well as step out drilling of existing lodes to further enhance the resources quoted in this release. More information is presented in the body of this report.</li> <li>Diagrams in the main body of this release show areas of possible resource extension on existing lodes. The company has commenced mining an exploration drive to enable effective drill testing of down plunge extensions.</li> </ul>