



21 March 2024 ASX Announcement

Green Bay Copper-Gold Project, Canada

More wide zones grading 4% copper continue to grow known mineralisation

Latest outstanding results pave way for significant resource update in Sept quarter

Key Points

- Green Bay hosts two distinct styles of copper mineralisation: One contains extremely highgrade copper-gold massive sulphide zones (see ASX 16/01/24) and the other is a large-scale, copper-rich Footwall Zone (see ASX 4/03/24). The results in this release come from this largescale Footwall Zone ('FWZ')
- Latest results from drilling into the large-scale FWZ continue to demonstrate exceptional grades over substantial widths. Results include:
 - Hole MUG24-004 (true widths):
 - 9.0m at 4.0% CuEq <u>and</u>
 - 63.1m at 2.2% CuEq including a zone of 12.4m at 3.1% CuEq
 - Hole MUG24-009 (true widths):
 - 51.0m at 2.2% CuEq including zones of 5.3m at 3.3% CuEq and 4.9m at 3.2% CuEq
 - Hole MUG24-003 (true widths):
 - 9.8m at 3.7% CuEq <u>and</u>
 - 17.8m at 1.8% CuEq
- Drilling results from the FWZ highlight the significant potential to grow the current resource of 39.2Mt at 2.1% for 811,000t CuEq resource¹
- These latest results follow the first footwall zone results reported by FireFly earlier this month, with results including 18m at 3.3% CuEq, 47.1m at 2.4% CuEq and 67.8m at 1.6% CuEq²

¹ 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. ² Refer to FFM's ASX release dated 4 March 2024 for details of drill results.

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- The first massive sulphide-style intersections were reported by FireFly in January,³ which included 46.4m at 5.6% CuEq, 17.8m at 6.6% CuEq and 14.7m at 7.5% CuEq
- Drilling from the new underground exploration platforms continues with two rigs; further assays expected in coming weeks
- Underground drill drive is well advanced with ~500m completed of the 750m exploration drive planned in Phase 1
- FireFly remains fully-funded for Phase 1 of its growth strategy with \$17.2M in cash at the end of December 2023

FireFly Metals Ltd (ASX: FFM) is pleased to announce more outstanding wide high-grade copper-gold intersections from its drilling program at the Green Bay project in Canada.

There are two distinct styles of mineralisation at the Ming underground mine at Green Bay. One comprises the upper copper-gold rich Volcanogenic Massive Sulphide ('VMS') lenses. This sits above a broad copper stringer zone known as the Footwall Zone ('FWZ').

The first results from FireFly drilling into the VMS zones were released in January this year, with exceptional results including 46.4m @ 5.6% CuEq (refer ASX release dated 16/01/2024).

In early March, FireFly released exceptional results from the Company's first drilling into the FWZ 'stringer' style mineralisation, which included intersections of 41.1m @ 2.3% CuEq including 18.0m @ 3.3% CuEq and 47.1m @ 2.4% CuEq including 18.8m @ 3.5% CuEq (refer to release dated 04/03/2024).

The results in this release come from further drill holes completed by FireFly into the FWZ stringer mineralisation. These results not only validate historical drilling in the zone but continue to demonstrate the potential for further resource growth and significantly up-scaled mining.

Wide zones of consistent chalcopyrite-dominated stringers were encountered in hole MUG24-004, as demonstrated by an intersection of 63.1m @ 2.2% CuEq (true thickness). Within this zone were local areas of significantly higher grade, including 9.0m @ 4.0% CuEq and 12.4m @ 3.1% CuEq. In hole MUG24-003, a further high-grade zone of 9.8m @ 3.7% CuEq was intersected.

Drilling is now being conducted from the underground exploration platform which forms a key part of the Company's accelerated resource growth strategy. The first results from drilling on the exploration drive are expected in the coming weeks.

FireFly Managing Director Steve Parsons said: *"We continue to grow the known extent of the mineralisation with wide intersections and strong grades.*

"This all demonstrates the growing size of the system and points to a substantial resource update in the September quarter.

"It also highlights the immense potential to increase the scale of mining at Green Bay".

³ Refer to FFM's ASX release dated 16 January 2024 for details of drill results.



Green Bay Copper-Gold Project

FIPEFIY METALS FireFly

A large-scale VMS mineralised system with two distinct mineralised zones

Zone 1: High-grade massive sulphide copper and gold zone – Unmined and OPEN 12

46.4m @ 5.6% CuEq (4.6% Cu & 1.2g/t Au) FireFly drilling 16/1/24 MUG23-004 20.7m @ 6.4% CuEq (4.4% Cu & 2.1g/t Au) R19-745-04 9.3m @ 13.6% CuEq (9.4% Cu & 4.7 g/t Au) RM22-795-15 17.8m @ 6.6% CuEq (4.4% Cu & 2.2g/t Au) FireFly drilling 16/1/24 MUG23-003 16.8m @ 11.2% CuEq (6.7% Cu & 3.5 g/t Au) RM22-795-10 14.7m @ 7.5% CuEq (2.6% Cu & 5.5 g/t Au) FireFly drilling 16/1/24 MUG23-003 18.4m @ 6.3% CuEq (4.6% Cu & 1.9 g/t Au) RM22-795-02	28.0m @ 4.7% CuEq (3.3% Cu & 1.6g/t Au) R22-795-13 2.7m @ 19.4% CuEq (13.5% Cu & 7.0 g/t Au) FireFly drilling 16/1/24 MUG23-006 41.2m @ 7.1% CuEq (5.9% Cu & 1.3 g/t Au) RM22-795-06 31.6m @ 4.6% CuEq (3.6% Cu & 1.1 g/t Au) RM22-795-08 13.5m @ 6.4% CuEq (3.2% Cu & 4.0 g/t Au) RM22-795-08
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Figure 1: Green Bay hosts two distinct styles of copper mineralisation: One contains extremely high-grade copper-gold in massive sulphide zones (see ASX 16/01/24) and the other is a large-scale, copper-rich Footwall Zone (see ASX 04/03/2024). The results in this release come from the Footwall Zone.

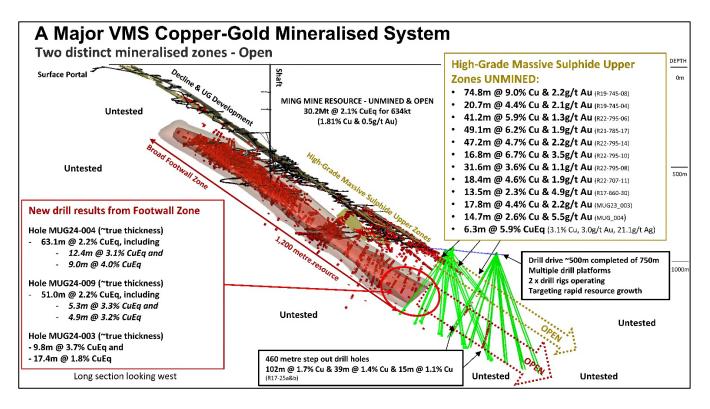


Figure 2: Long Section through the Green Bay Ming underground mine showing the location of the FireFly Metals Footwall Zone drilling and planned drilling for 2024. Refer to ASX releases dated 31/8/23, 11/12/23, 16/1/24 and 4/3/24 for details of previous results.





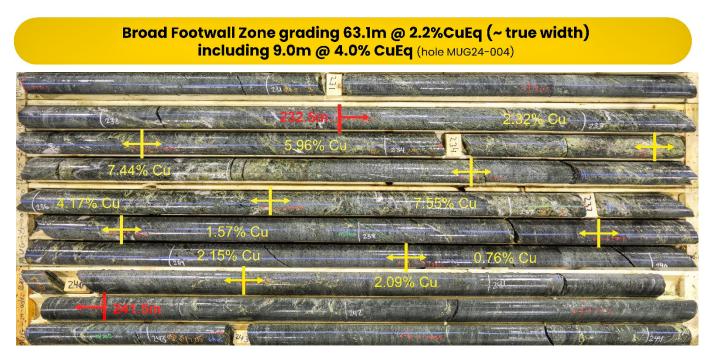


Figure 3: Core photograph showing the Footwall Zone mineralisation in drill hole MUG24-004. The intersection shown of **9.0m @ 4.0% CuEq is part of a broader zone grading 63.1m @ 2.2% CuEq**. The downhole widths are approximate true thickness of the mineralised zone.

About the Drill Results

Drilling at the Ming underground copper-gold mine recommenced in October 2023 following the acquisition of the Green Bay copper-gold project by FireFly Metals. In total, the Company has completed 28 drill holes for 10,750m of diamond core to date from existing underground development. Assays have been received for the first 15 holes drilled by FireFly. Logging and analysis of the remaining 13 drill holes is ongoing, with details to be reported regularly as results are received.

There are two distinct styles of mineralisation present at the Green Bay Ming Mine, consisting of a series of upper copper-gold rich Volcanogenic Massive Sulphide ('VMS') lenses underlain by a broad copper stringer zone, known as the Footwall Zone ('FWZ').

The new results reported in this release are from the first holes completed by FireFly Metals into the broad stringer-style mineralisation of the FWZ.

The Footwall Zone is extensive, with the stringer mineralisation observed over thicknesses of ~150m and widths exceeding 200m. The known strike of mineralisation to date is ~1.6km and remains open down plunge.





Significant results⁴ include:

- 63.1m @ 2.03% Cu, 0.1g/t Au, 2.0g/t Ag (2.15% CuEq) from 191.6m in hole MUG24_004, including:
 - o 12.4m @ 3.0% Cu, 0.2g/t Au, 3.0g/t Ag from 191.6m
 - o 9.0m @ 3.78% Cu, 0.2g/t Au, 3.6g/t Ag from 232.5m (refer Figure 3)
- 51.0m @ 2.07% Cu, 0.1g/t Au, 2.2g/t Ag (2.20% CuEq) from 213.3m in hole MUG24_009, including:
 - o 4.9m @ 3.12% Cu, 0.1g/t Au, 3.4g/t Ag from 222.3m
 - o 5.3m @ 3.15% Cu, 0.2g/t Au, 3.3g/t Ag from 242.6m
- 17.4m @ 1.6% Cu, 0.2g/t Au, 2.0g/t Ag (1.8% CuEq) from 162.6m in hole MUG24_003,
- 9.8m @ 3.48% Cu, 0.2g/t Au, 4.8g/t Ag (3.72% CuEq) from 354.3m in hole MUG24_003

Growth Outlook

The FireFly resource growth plan remains on track, with an updated resource expected in the September 2024 quarter. The development of a 750m exploration drive is well underway, with the owner-operator mining crew having completed almost 500m of development to date. Resource growth drilling from the underground development delivers significant cost and time savings in comparison to completing the drilling from surface.

Two rigs are currently drilling from the drive with further assays expected in coming weeks.

This announcement has been authorised by the Board of Directors.

Steve Parsons

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⁴ All reported widths are approximate true thickness.





ABOUT FIREFLY METALS

FireFly Metals Ltd (formerly AuTECO Minerals Ltd) (ASX:FFM) 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 500km² 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:FFM) or the Company's website <u>www.fireflymetals.com.au</u>

COMPLIANCE STATEMENTS

The Company first announced the foreign estimate of mineralisation 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 the foreign estimate of mineralisation and drilling at the Green Bay Project 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) x 0.77472) + (Ag (g/t) x 0.00968) + (Zn (%) x 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.

Previous historical and new 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 releases dated 31 August 2023, 11 December 2023, 16 January 2024 and 4 March 2024.

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 information in this release that relates to new Exploration Results is based on information compiled by Mr Darren Cooke, a Competent Person who is a member of the Australasian Institute of Geoscientists. Mr Cooke is a full-time employee of FireFly Metals Ltd and holds securities in FireFly Metals Ltd. Mr Cooke has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Cooke consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

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

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

Ming Deposit as at 31 March 2022

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
Copper	-	-	-		2.13%	62kt		1.78%	110kt		1.90%	172kt
Gold	-	-	-	2.9Mt	0.1g/t	9koz	6.2Mt	0.1g/t	10koz	9.1Mt	0.1	19koz
Silver	-	-	-		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
Copper		1.71%	144kt		1.89%	345kt		1.82%	230kt		1.83%	718kt
Gold	8.4Mt	0.5g/t	124koz	18.2Mt	0.3g/t	157koz	12.6Mt	0.2g/t	88koz	39.2Mt	0.3	370koz
Silver		3.6g/t	962koz		2.5g/t	1,482koz		2.4g/t	968koz		2.7	3,413koz

 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 resources have been prepared in accordance with Canadian National Instrument 43-101. A competent person has not done sufficient work to classify the foreign estimates in accordance with the JORC Code (2012 Edition) 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. Please refer to ASX announcement dated 31 August 2023 for additional technical information relating to the foreign estimate.

2. Mineral resources have been reported at a 1.0% copper cut-off grade.

ASX FFM



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. Significant intersections reported are those above a 1% copper cut-off and contain a maximum of 3 metres of internal waste. Please refer to the compliance statement for further details on parameters used in the copper equivalent calculation. All results are approximate true thickness.

FireFly Metals Drilling

Hole Number	Eacting	Northing	RL	Azi	Dip	Drilled	From	То	Width		As	say		CuEa
Hole Nulliber	Easting	Northing	RL	AZI	υр	Length (m)	(m)	(m)	(m)	Cu %	Au g/t	Ag g/t	Zn %	CuEq
MUG24_003	1093.0	1565.0	-806.0	30	-71	481	12.0	18.0	6.0	1.49	0.2	2.6	0.11	1.72
							28.5	32.9	4.4	1.51	0.3	2.1	0.05	1.79
							135.4	141.8	6.4	1.62	0.1	2.3	0.01	1.75
							162.6	180.0	17.4	1.58	0.2	2.0	0.02	1.80
							354.3	364.0	9.8	3.48	0.2	4.8	0.02	3.72
							381.0	394.3	13.3	1.35	0.1	2.2	0.01	1.41
							406.3	408.3	1.9	1.43	0.1	2.5	0.01	1.57
MUG24_004	993	1242.0	-608	21	-57	390	99.6	104.0	4.5	1.09	0.2	1.3	0.02	1.26
							172.3	176.1	3.8	1.21	0.1	0.5	0.02	1.30
							191.6	254.7	63.1	2.03	0.1	2.0	0.01	2.15
						Including	191.6	204.0	12.4	2.95	0.2	3.0	0.02	3.11
						Including	232.5	241.5	9.0	3.78	0.2	3.6	0.02	4.01
							279.5	281.5	2.0	2.68	0.3	3.4	0.02	2.95
							304.7	308.7	4.0	1.28	0.0	1.0	0.01	1.32
							359.0	360.0	1.0	5.72	0.1	5.3	0.04	5.89
MUG24_009							85.2	87.1	1.9	1.56	0.4	2.0	0.04	1.86
							204.2	205.8	1.7	3.10	0.3	4.9	0.10	3.39
							213.3	264.3	51.0	2.07	0.1	2.2	0.02	2.20





	Fasting	Northing	ы		zi Dip L	Drilled	From	То	Width		As	say		CuEr
Hole Number	Easting	Northing	RL	AZI		Length (m)	n (m) (m)	(m)	(m)	Cu %	Au g/t	Ag g/t	Zn %	CuEq
MUG24009						Including	222.3	227.3	4.9	3.12	0.1	3.4	0.02	3.23
Continued						Including	242.6	247.9	5.3	3.15	0.2	3.3	0.02	3.33
							272.3	277.3	5.0	1.88	0.1	1.6	0.01	1.94
							297.3	307.3	10.0	1.52	0.1	1.7	0.01	1.60
							335.3	339.6	4.3	2.02	0.3	2.6	0.01	2.30





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	 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. 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. 	 All current 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. All FireFly drilling reported is NQ. The following is a summary of the core sampling procedure: All sample collection, core logging, and specific gravity determinations were completed by FireFly under the supervision of a professionally qualified registered geologist. 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. Half of the cut core is placed in clean individual plastic bags with the appropriate sample tag. QA/QC samples are inserted into the sample stream at prescribed intervals. The remaining half of the core is retained and incorporated into FireFly's secure, core library located on the property. All FireFly drill analysis was completed at ISO-certified Eastern Analytical laboratories. The samples are dried, crushed, and pulverised. Samples are crushed 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 FireFly site.
Drilling techniques	 Drill type (eg core, reverse circulation, openhole 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). 	 Holes reported in this release were NQ (47.8 mm diameter).
Drill sample recovery	• Method of recording and assessing core and chip sample recoveries and results assessed.	Recoveries are measured via measurement of the core between blocks.





Criteria	JORC Code explanation	Commentary
	 Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. 	 Core loss is measured as a percentage of recovered length.
Logging	 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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	 The following steps are completed during the core logging procedure: 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. The boxed core remains under the custody of the drill contractor until it is transported from the drill to the secure onsite core facility. Core boxes are opened and inspected to ensure correct boxing and labelling of the core by the drill contractor. The drill core is geologically logged, photographed, and then marked and tagged for sampling and splitting. Core logging describes variations in lithology, alteration, and mineralization. Data associated with core logging and related assay results and other downhole information including orientation surveys are recorded in Fusion™ by Century System. 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. 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. Sample core that is not mineralized is marked in 1.5 metre lengths.
		 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.
Sub-sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. 	 All FireFly drilling is NQ2. 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. 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.



Criteria	JORC Code explanation	Commentary
	 Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 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. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 Sample core that is not mineralized is marked and sampled in 1.5 metre lengths. 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. For BQ diameter same sampling practice was completed except that the whole core was crushed for the assays. This sampling technique is industry standard and deemed appropriate.
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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. 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. 	 Samples are delivered to 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 FireFly staff and returned directly to the Project site. All results reported in this release were analysed by Eastern Analytical in Springdale, NL. 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. As part of the QA/QC program duplicate, blank and Certified Reference Material (CRM) samples are inserted alternately, one per ten samples. 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. Sample assay results continue to be evaluated through control charts, log sheets, sample logbook and signed assay certificates to determine the nature of any anomalies or failures and failures were re-assayed at the laboratory. 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.
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 Where used, original copper assays from the on-site laboratory facility were compared to results received from Eastern Analytical. No material variance was noted. There are no purpose twinned holes in the dataset but a comparison of the results of different drilling generations showed that results were comparable.



Criteria	JORC Code explanation	Commentary
		 All logging data was completed, core marked up, logging and sampling data was entered directly into the MX deposit database.
		• The logged data is stored on the site server directly.
		 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.
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole 	 Drill collars were surveyed by the FireFly mine survey crew upon completion of the drill program.
	surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	 The set-ups for the underground drill collars were marked by FireFly mine survey crew, and the drilling contractor were expected to set up properly on line. A
	Specification of the grid system used.Quality and adequacy of topographic	FireFly geologist checked the underground drill set-up during the drilling program to ensure accuracy.
	control.	 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.
		 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.
		 Directional surface holes completed using Devico[®] technology.
		 Survey data was collected in mine gird and in UTM grid (NAD83 Zone 21).
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing, and distribution 	 Due to the nature of mineralisation and a mix of underground and surface drilling the hole spacing is highly variable.
	is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve	 Data spacing is considered sufficient to establish geological and grade continuities for mineral resource estimation at the Inferred and Indicated category.
	estimation procedure(s) and classifications applied.	 No sample compositing was applied.
	 Whether sample compositing has been applied. 	
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 	 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
	 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. 	platforms.



Criteria	JORC Code explanation	Commentary
Sample security	 The measures taken to ensure sample security. 	 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 FireFly employees or designates.
Audits or reviews	 The results of any audits or reviews of sampling techniques and data. 	 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.





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	 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. 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. 	 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). FireFly holds all the permits required to operate the Ming Mine.
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	 Ming Mine Early History: Auriferous sulphides and copper was found in the area in 1905 by Enos England. 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.
		 An airborne electromagnetic survey was flown from 1955 to 1956. 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.
		 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
		 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 lithogeochemical program was initiated to chemically fingerprint rocks of the hanging wall and footwall to the sulphide deposits.
		 Rambler Metals and Mining PLC: Rambler Metals and Mining is a UK-based company listed on London's Alternate Investment Market (AIM). Rambler held 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





Criteria	JORC Code explanation	Commentary
		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.
		 The Ming mine was placed on care and maintenance in February 2023.
		 In October 2023, AuTECO Minerals (FireFly Metals) acquired the project from administration.
		 FireFly Metals conducted drilling to test down plunge extent of VMS lodes.
		 An underground exploration drive is in progress to allow further drilling at more favorable drill angles.
Geology	 Deposit type, geological setting and style of mineralisation. 	 The Green Bay 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 Ming deposits are polymetallic (Cu, Au, Ag ± Zn) massive sulphides that occur along the flank of a felsic dome. The Ming 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.
Drill hole Information	 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: easting and northing of the drill hole collar 	Refer to Appendix B in this release
	 elevation or RL (Reduced Level – elevation above sea level in meters) of the drill hole collar 	
	o dip and azimuth of the hole	
	 down hole length and interception depth 	



Criteria	JORC Code explanation	Commentary
	 hole length. 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 report, the Competent Person should clearly explain why this is the case. 	
Data aggregation methods	 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. 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. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	 All drill hole intersections are reported above a lower cut-off grade of 1% copper. A maximum of 3m internal waste was allowed. 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 \$2,500/t. Copper equivalent was calculated based on the formula CuEq (%) = Cu(%) + (Au (g/t) x 0.77472) + (Ag (g/t) x 0.00968) + (Zn (%) x 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.
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 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'). 	 All intersections reported in the body of this release are down hole, however approximate the true thickness of mineralisation. The majority of the drill holes in the database 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. Only down hole lengths are reported.
Diagrams	 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. 	 Maps and sections are included in the body of this release as deemed appropriate by the competent person.
Balanced reporting	 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. 	 All significant assays (above a 1% copper cut-off and containing a maximum of 3m of internal waste) received from the current drill program have been reported in Appendix B.
Other substantive exploration data	 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 results; bulk density, groundwater, geotechnical and rock characteristics; 	 Appropriate plans are included in the body of this release.





Criteria	JORC Code explanation	Commentary
	potential deleterious or contaminating substances.	
Further work	 The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 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. 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.

