FireFly METALS

ASX FFM

29 October 2024

ASX Announcement

Green Bay Copper-Gold Project, Canada

Resource increases 42% to 1.2Mt of contained metal at 2% Copper Eq[1]

"This outstanding result confirms Green Bay's status as one of the fastest-growing high-grade copper projects with genuine scale in the western world." – FireFly MD Steve Parsons

KEY POINTS

- **Green Bay Resource grows to 59Mt at 2% CuEq, reflecting the results of the highly successful 2023-2024 underground drilling campaign**
- **The updated Resource sees significant increases in tonnes and contained copper metal while maintaining high grade of 2% CuEq; 41% is now in the Measured and Indicated category**
- **Total contained metal now stands at 1.2Mt CuEq, comprised of 1Mt copper (+39% increase), 550koz gold (+48% increase) and 5.4Moz silver (+57% increase)**
- **The Resource in the high-grade VMS zone increases to 6Mt at 4.3%CuEq and remains open**
- **The additional resource was discovered at low all-in costs[2] of only A$79 (US$53) per tonne of copper metal equivalent**
- **The bulk mining potential of Green Bay is evident when evaluating the deposit at lower cutoff grades; at a 0.5% copper cutoff the Resource increases to 93Mt @ 1.6%CuEq**
- **This Resource increase is driven mainly by mineralisation from the large-scale footwall copper zone due to the Phase 1 drill platform locations; Phase 2 is now well underway with drilling targeting the high-grade copper-gold VMS zones which are expected to underpin the next round of Resource growth**
- **Both the large-scale footwall copper zone and the high-grade copper-gold VMS zones remain open, with the deepest hole to date in the footwall returning 61.8m @ 1.8% CuEq ~ true thickness (refer ASX 3/10/2024)**
- **Drill drive development and four underground drill rigs to continue into the foreseeable future. Further step-out drill results expected in coming weeks**

[1] Metal equivalent for the Resource Estimate has been calculated at a copper price of US$8,750/t, gold price of US$2,500/oz and silver price of US$25/oz. Metallurgical recoveries have been set at 95% for copper and 85% for both gold and silver. CuEq(%) = Cu(%) + (Au(g/t) x 0.82190) + (Ag(g/t) X 0.00822). In the opinion of the Company, all elements included in the metal equivalent calculation have a reasonable potential to be sold and recovered based on current market conditions, metallurgical test work, and the Company's operational experience.

[2] All in discovery costs include drilling, assays, geology staff, geophysics and all mining costs of developing the exploration drill drive.

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- **Downhole electro-magnetic (DHEM) geophysical testing demonstrates potential mineralisation extends beyond the updated Resource**
- **In light of the success in growing the Resource to this size, FireFly intends to undertake engineering studies in 2H CY25; these will take into account the results of the coming phase of growth and discovery drilling**
- **The Company remains well funded to accelerate resource growth following the recent highly successful A$65M institutional placement and a further A$8M from the SPP**

FireFly Managing Director Steve Parsons said: *"This outstanding result confirms Green Bay's status as one of the fastest-growing high-grade copper projects with genuine scale in the western world.*

"To achieve such immense growth in such a short time and for so little cost highlights the top-shelf quality of Green Bay, the skill of our team and the Company's commitment to multi-rig drilling programs.

"These same factors will drive the next round of resource growth, enabling us to capitalise on the open nature of the mineralisation and the potential for new discoveries as highlighted by the recent geophysical results".

FireFly Metals Ltd (ASX: FFM) ("Company" or "FireFly") is pleased to announce a 42 per cent increase in the Mineral Resource Estimate ("Resource") at its Green Bay copper-gold project in Newfoundland, Canada.

The total Resource is now 59Mt at 2% copper-equivalent for 1.2Mt of contained metal. Copper is the dominant contained metal in the Resource (1Mt) with significant quantities of gold (550koz) and silver (5.4Moz) as co-products.

The Resource consists of two components, namely the Ming Mine (49.9Mt @ 2.0% CuEq) and the Little Deer deposit (9.1Mt @ 2.0% CuEq). Both have now been prepared in accordance with the JORC Code (2012 Edition) and estimated by external independent consulting groups. FireFly is also preparing technical reports in accordance with Canadian National Instrument 43-101.

The increase in the Resource has been driven primarily by the successful growth strategy implemented by FireFly since it acquired Green Bay in October 2023. Over 1,400m of underground development has been mined at Green Bay's Ming deposit to position the drill rigs to effectively test down-plunge extensions of the high-grade volcanogenic massive sulphide ("VMS") mineralisation and broad footwall copper stringer zone ("FWZ"). Up to four rigs have been operating and approximately 40,000m of diamond drilling completed so far. To date, the total discovery cost per estimated tonne of CuEq metal added is an industry-low A$79 (US$53) per tonne.

This exploration drilling has successfully demonstrated that the Resource at the Ming mine extends over considerable distances, now reaching a strike length of approximately 2 km. Both the high-grade massive sulphide zones and broad footwall stringer zones remain open, with downhole geophysical surveys indicating probable extensions to the mineralisation.

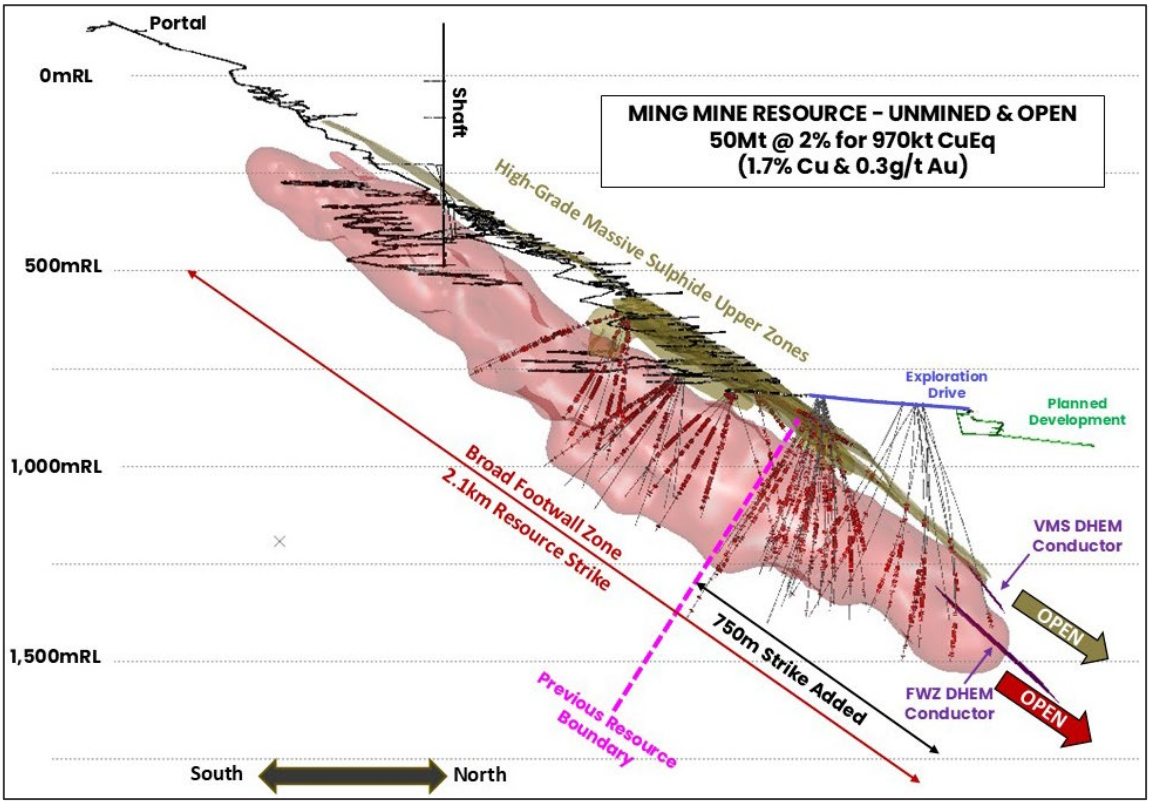

Figure 1: Long section of Ming mine resource extent and drilling completed by FireFly in 2023-2024 to inform the estimate. The resource remains open and recent geophysical DHEM conductors indicate the mineralisation continues down plunge. Red wireframes denote footwall stringer zone mineralisation and gold wireframes are the upper high-grade copper-gold volcanogenic massive sulphide (VMS) lodes. Red on the drillholes are assays >0.5% copper.

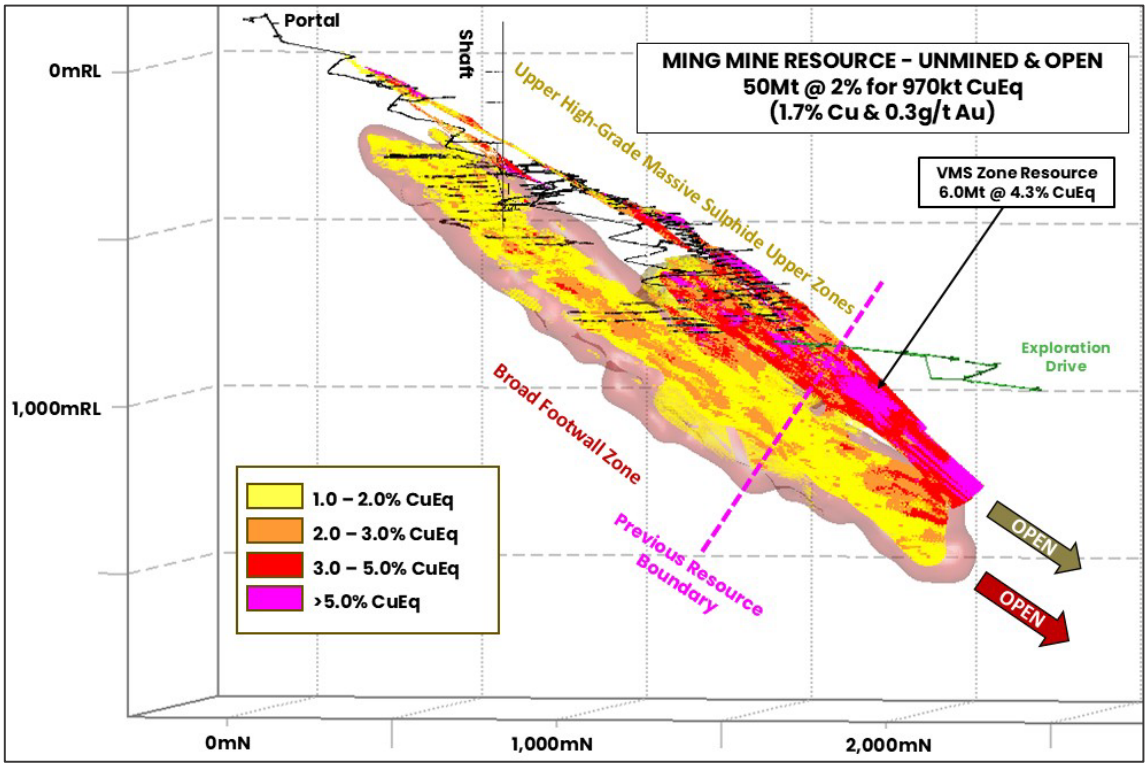

Figure 2: Isometric view of the Ming mine Resource model showing all blocks above 1% copper. The resource consists of a very high-grade upper volcanogenic massive sulphide (VMS) zone of 6Mt @ 4.3%CuEq and broad footwall copper stringer style mineralised zone (FWZ).

Table 1: Mineral Resource Estimate for the Green Bay Copper Gold Project at 3 October 2024

	MEASURED			INDICATED			INFERRED			TOTAL RESOURCE		
	Tonnes	**Grade**	**Metal**	**Tonnes**	**Grade**	**Metal**	**Tonnes**	**Grade**	**Metal**	**Tonnes**	**Grade**	**Metal**
Copper		1.7%	77kt		1.7%	328kt		1.7%	592kt		**1.7%**	**997kt**
Gold	4.7Mt	0.3g/t	45koz	19.7Mt	0.2g/t	154koz	34.5Mt	0.3g/t	348koz	**58.9Mt**	**0.3g/t**	**547koz**
Silver		2.3g/t	0.3Moz		2.6g/t	1.6Moz		3.1g/t	3.4Moz		**2.8g/t**	**5.4Moz**
CuEq	**4.7Mt**	**1.9%**	**89kt**	**19.7Mt**	**1.9%**	**371kt**	**34.5Mt**	**2.0%**	**690kt**	**58.9Mt**	**2.0%**	**1,150kt**

Note: The resource is reported at a 1% copper cutoff. This is the same cutoff grade used for the previous resource reported in August 2023. Refer to following sections of this release and Appendix B 'JORC Table 1' for further details on the Mineral Resource Estimate. Please note totals may vary due to rounding. Please refer to the compliance statements for details on parameters used to calculate metal equivalents.

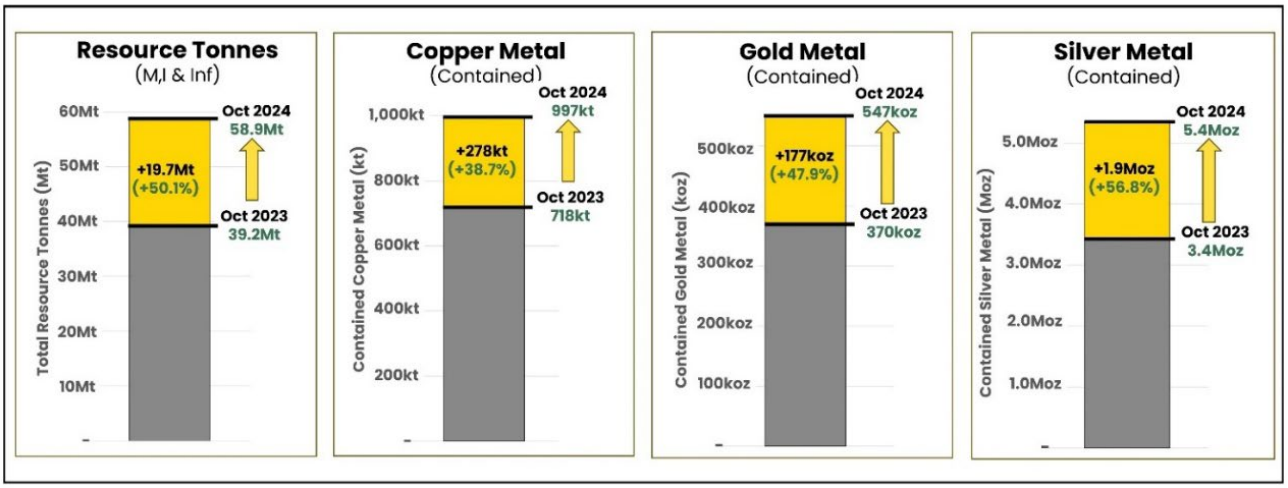

Figure 3: Comparison with previous resource estimate for the Green Bay Copper-Gold Project. (August 2023 vs October 2024). **Note:** The previous estimate is considered a foreign estimate and was not prepared in accordance with the JORC Code (2012 Edition). Refer to ASX release dated 31 August 2023 for further details of the Foreign Estimate. The current Resource was prepared in accordance with the JORC Code (2012 Edition). Both resource estimates have been reported at a 1% copper cutoff grade.

The Green Bay Resource was reported using a 1% copper cutoff grade, the same as the previous Foreign Estimate reported in August 2023. Sensitivity analysis (**Table 2**) demonstrates that the potential scale of the project increases significantly as the cutoff grade is lowered. At a 0.5% copper cutoff, the estimate increases to 93.3Mt at 1.6% CuEq for ~1.5Mt of copper, ~700koz of gold and ~7Moz of silver. Both bulk and selective mining options will be contemplated as part of future economic evaluations.

Table 2: Cutoff grade sensitivity for the Green Bay Copper-Gold Project October 2024 Resource

		Grade			Metal			CuEq	
Cut Off (Cu %)	**Tonnes**	**Cu (%)**	**Au (g/t)**	**Ag (g/t)**	**Cu (kt)**	**Au (koz)**	**Ag (Moz)**	**Grade (%)**	**Metal (kt)**
0.5	**93.3**	1.3	0.2	2.3	1,259	707	7.0	**1.6**	**1,458**
0.7	**80.7**	1.5	0.3	2.5	1,183	651	6.5	**1.7**	**1,366**
0.9	**66.5**	1.6	0.3	2.7	1,069	583	5.8	**1.9**	**1,233**
1	**58.9**	1.7	0.3	2.8	997	547	5.4	**2.0**	**1,151**
1.3	**38.3**	2.0	0.3	3.3	762	424	4.1	**2.3**	**881**
1.5	**27.4**	2.2	0.4	3.7	608	339	3.2	**2.6**	**703**
1.9	**13.5**	2.8	0.5	4.8	377	235	2.1	**3.3**	**443**

Note: The current Resource has been reported at the 1% copper cutoff. The table above is prepared on the basis of the assumptions referred to under *Ming Resource Cut Off Grade* and *Modifying Mining and Metallurgical Factors.*

Forward Work Plan

Recent drilling confirms that the Ming deposit remains open down-plunge, with the deepest hole in the Footwall Zone returning an intersection of 61.8m @ 1.8% CuEq on the limit of the Resource boundary (see ASX release dated 3 October 2024, intersection is ~ true thickness). As such, the Company will continue with its low-cost rapid resource growth strategy, with the underground exploration drill drive to be extended to allow effective drill testing down plunge as well as discovery drilling utilising DHEM for new parallel and repeat lodes at the Ming deposit during 2025.

Four drill rigs remain underground at the Ming mine to ensure the growth objectives are delivered. To date, ~40,000m of the planned 130,000m drill program has been completed. The remainder of the underground drill program for 2024-2025 has three clear strategic components:

- **Resource extension:** Test the down-plunge continuation of both the high-grade copper-gold VMS zones as well as the broad footwall copper stringer zone: ~40,000m of drilling (**Figure 4**);
- **Infill drilling:** Convert inferred areas of the Resource to indicated for inclusion in future mining studies; and
- **Discovery drilling:** Drilling to explore for parallel high-grade VMS lodes and additional broad footwall stringer-style mineralisation and possible 'feeder' zone style mineralisation within 600m of the underground infrastructure.

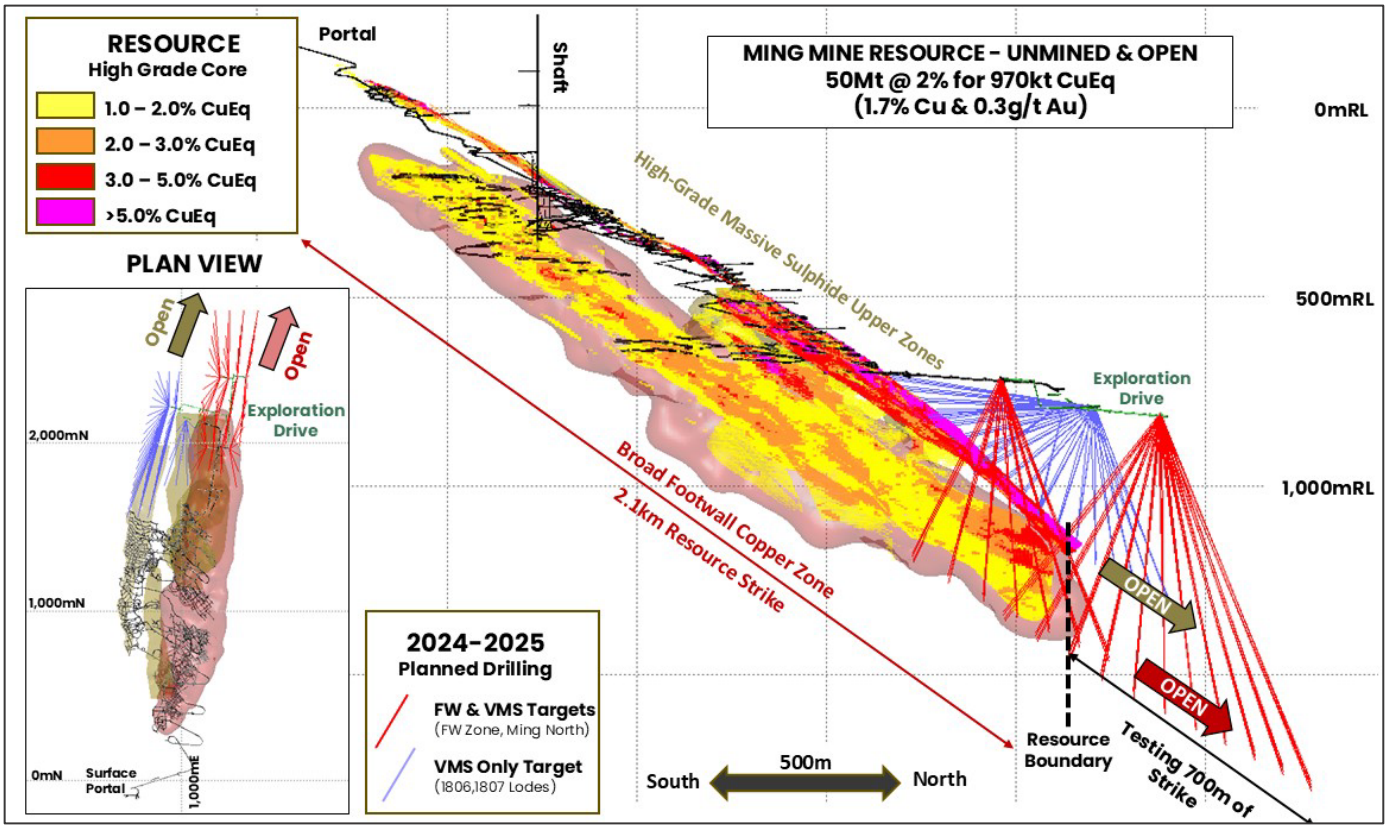

Figure 4: Planned 2024-2025 Resource extensions drilling at the Ming mine. This is expected to add additional high-grade VMS as well as broad footwall stringer extensions to the Resource. Note that new discovery drilling and infill drilling is not shown on this image, only extension drilling.

Further Resource updates are planned for 2025, with the first in the second quarter of CY2025 expected to potentially include additional high-grade copper and gold rich massive sulphide lenses. The second update is scheduled for late 2025 and will include potential resource extensions from the second phase of the drill drive.

Work has commenced on engineering studies to evaluate various scenarios for an up-scaled restart to operations, which will incorporate the expected 2025 resource updates once finalised. Upscaled studies can be completed very quickly once final resource update numbers are available given the level of detail going into the current engineering assessments, but with the huge success of the drilling programs the Company does not want to limit the size of any future potential upscaled mining operation until it has completed the next phase of growth drilling.

FireFly is well funded through 2025 with the recent institutional Placement and Share Purchase Plan raising an additional A$73M.

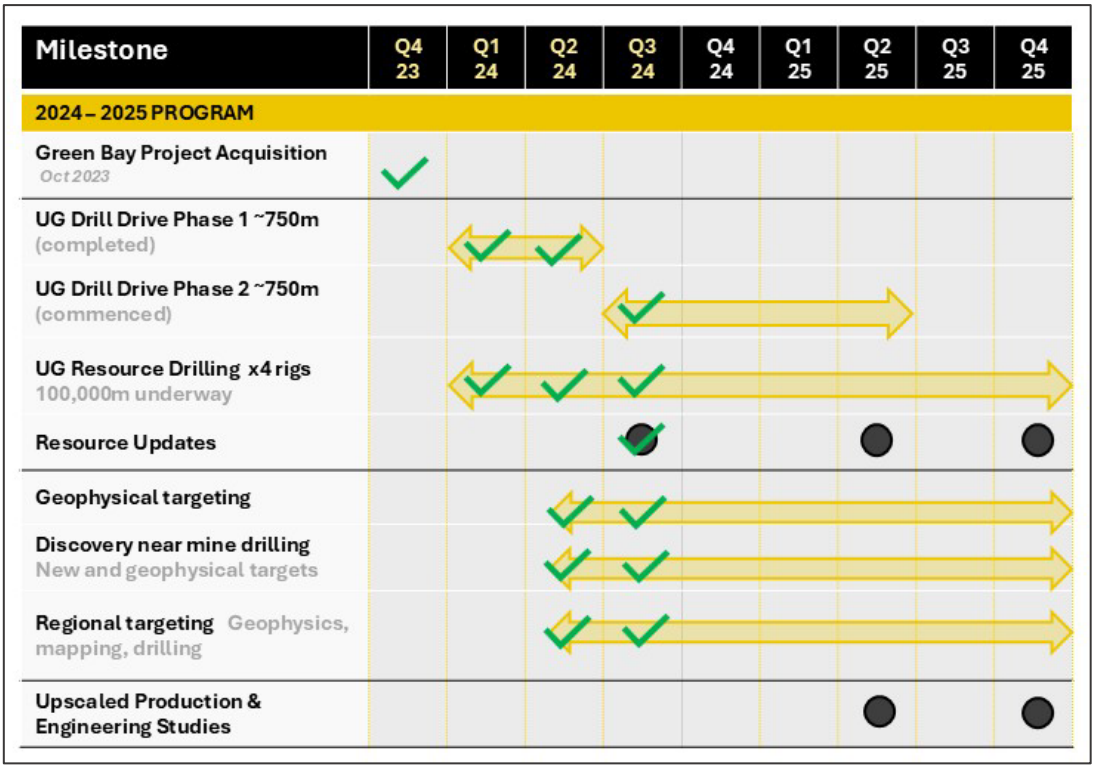

Figure 5: Key 2024-2025 milestones for the Green Bay Copper-Gold Project. Please note that timelines are indicative and may be subject to change.

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About the Mineral Resource Estimate

Green Bay Copper-Gold Project

FireFly Metals Ltd's Green Bay copper-gold project is located in the northern coastal region of central Newfoundland, Canada (**Figure 6**). FireFly holds ~211km^2 of prime mineral claims in the heart of the prolific Baie Verte mineral district, which hosts numerous base metal volcanogenic massive sulphide ("VMS") and orogenic gold deposits.

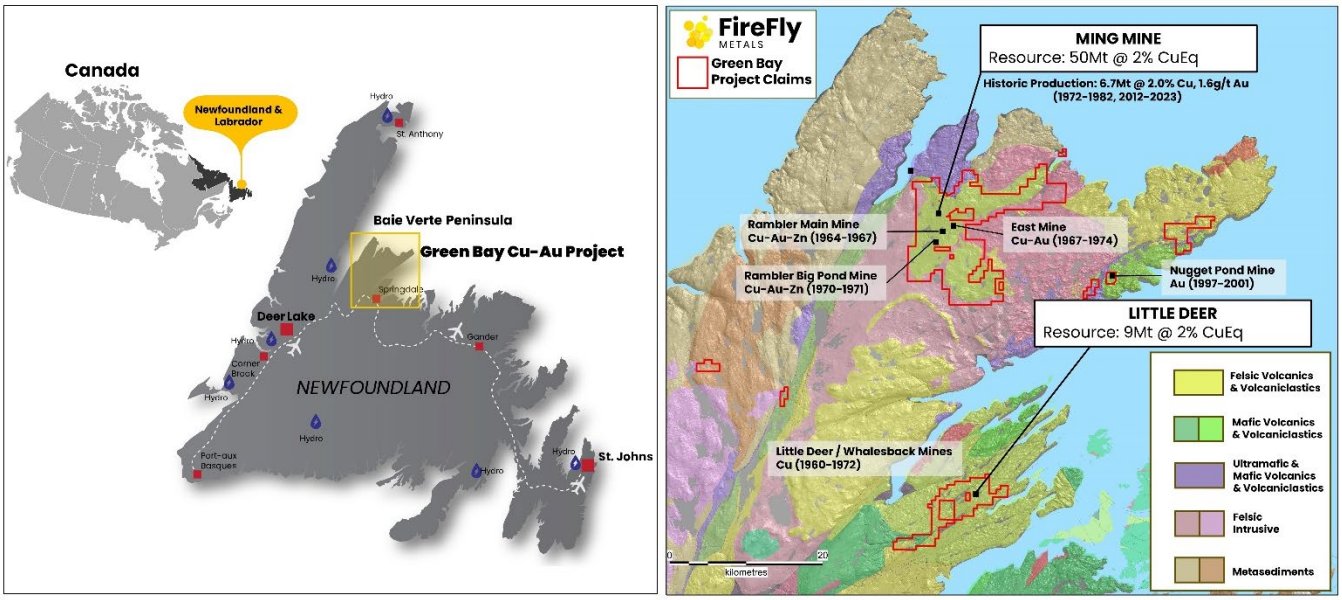


Figure 6: (Left) Location of the Green Bay copper-gold project in Newfoundland, Canada; **(Right)** FireFly's mineral claims and simplified geology of the Baie Verte mineral district

Green Bay Mineral Resource Estimate

The Green Bay Resource consists of the Ming Deposit (50Mt @ 2% CuEq) and Little Deer (9Mt @ 2% CuEq). The Green Bay Mineral Resource Estimate by source is shown in **Table 3**.

The Ming and Little Deer Resource estimates have been prepared in accordance with the JORC Code (2012 Edition) by independent external consultants in close collaboration with FireFly personnel.

The growth in the global resource has come exclusively from the Ming deposit which has been the focus of drilling and underground development activities over the past year. No additional information was collected from the Little Deer deposit.

Table 3: October 2024 Mineral Resource Estimate for the Green Bay copper-gold project

Ming Deposit Mineral Resource Estimate

	MEASURED			INDICATED			INFERRED			TOTAL RESOURCE		
	Tonnes	Grade	Metal	Tonnes	Grade	Metal	Tonnes	Grade	Metal	Tonnes	Grade	Metal
Copper		1.7%	77kt		1.6%	266kt		1.7%	482kt		**1.7%**	**825kt**
Gold	4.7Mt	0.3g/t	45koz	16.8Mt	0.3g/t	145koz	28.3Mt	0.4g/t	338koz	**49.9Mt**	**0.3g/t**	**528koz**
Silver		2.3g/t	0.3Moz		2.4g/t	1.3Moz		3.3g/t	3.0Moz		**2.9g/t**	**4.6Moz**
CuEq	**4.7Mt**	**1.9%**	**89kt**	**16.8Mt**	**1.8%**	**307kt**	**28.3Mt**	**2.0%**	**576kt**	**49.9Mt**	**2.0%**	**972kt**

Little Deer Mineral Resource Estimate

	MEASURED			INDICATED			INFERRED			TOTAL RESOURCE		
	Tonnes	Grade	Metal	Tonnes	Grade	Metal	Tonnes	Grade	Metal	Tonnes	Grade	Metal
Copper		-	-		2.1%	61kt		1.8%	110kt		**1.9%**	**172kt**
Gold	-	-	-	2.9Mt	0.1g/t	9koz	6.2Mt	0.1g/t	10koz	**9.1Mt**	**0.1g/t**	**19koz**
Silver		-	-		3.4g/t	0.3Moz		2.2g/t	0.4Moz		**2.6g/t**	**0.7Moz**
CuEq	**-**	**-**	**-**	**2.9Mt**	**2.2%**	**65kt**	**6.2Mt**	**1.8%**	**114kt**	**9.1Mt**	**2.0%**	**178kt**

GREEN BAY PROJECT TOTAL MINERAL RESOURCE ESTIMATE

	MEASURED			INDICATED			INFERRED			TOTAL RESOURCE		
	Tonnes	Grade	Metal	Tonnes	Grade	Metal	Tonnes	Grade	Metal	Tonnes	Grade	Metal
Copper		1.7%	77kt		1.7%	328kt		1.7%	592kt		**1.7%**	**997kt**
Gold	4.7Mt	0.3g/t	45koz	19.7Mt	0.2g/t	154koz	34.5Mt	0.3g/t	348koz	**58.9Mt**	**0.3g/t**	**547koz**
Silver		2.3g/t	0.3Moz		2.6g/t	1.6Moz		3.1g/t	3.4Moz		**2.8g/t**	**5.4Moz**
CuEq	**4.7Mt**	**1.9%**	**89kt**	**19.7Mt**	**1.9%**	**371kt**	**34.5Mt**	**2.0%**	**690kt**	**58.9Mt**	**2.0%**	**1,150kt**

Note: Please note totals may vary due to rounding.

Variance to Previous Estimate

Table 4: Green Bay Global Resource: October 2024 Resource vs August 2023 Foreign Resource

	MEASURED			INDICATED			INFERRED			TOTAL RESOURCE		
	Tonnes	Grade	Metal	Tonnes	Grade	Metal	Tonnes	Grade	Metal	Tonnes	Grade	Metal
Copper	-3.7Mt (-45%)	-0.06% (-4%)	-67kt (-47%)	+1.5Mt (+8%)	-0.23% (-12%)	-17kt (-5%)	+21.9Mt (+174%)	-0.1% (-6%)	+362kt (158%)	**+19.7Mt (+50%)**	**-0.14% (-8%)**	**+278kt (+38%)**
Gold		-0.16g/t (-34%)	-79koz (-64%)		-0.03g/t (-10%)	-3koz (-2%)		+0.1g/t (+44%)	+260koz (+293%)		**0.04g/t (-1.5%)**	**+177koz (+48%)**
Silver		-1.3g/t (-37%)	-0.6Moz (-65%)		-0.03g/t (+1%)	+0.1Moz (+9%)		+0.7g/t (+28%)	+2.4Moz (+251%)		**+0.12g/t (+4%)**	**+1.9Moz (+57%)**

Note: Both estimates use a 1% lower cutoff grade. Upper figure shows the quantity of change, with the percentage difference below in brackets. Please see ASX release dated 31 August 2023 for details on the foreign estimate.

The change between the August 2023 and October 2024 resource estimates is shown in **Figure 7.**

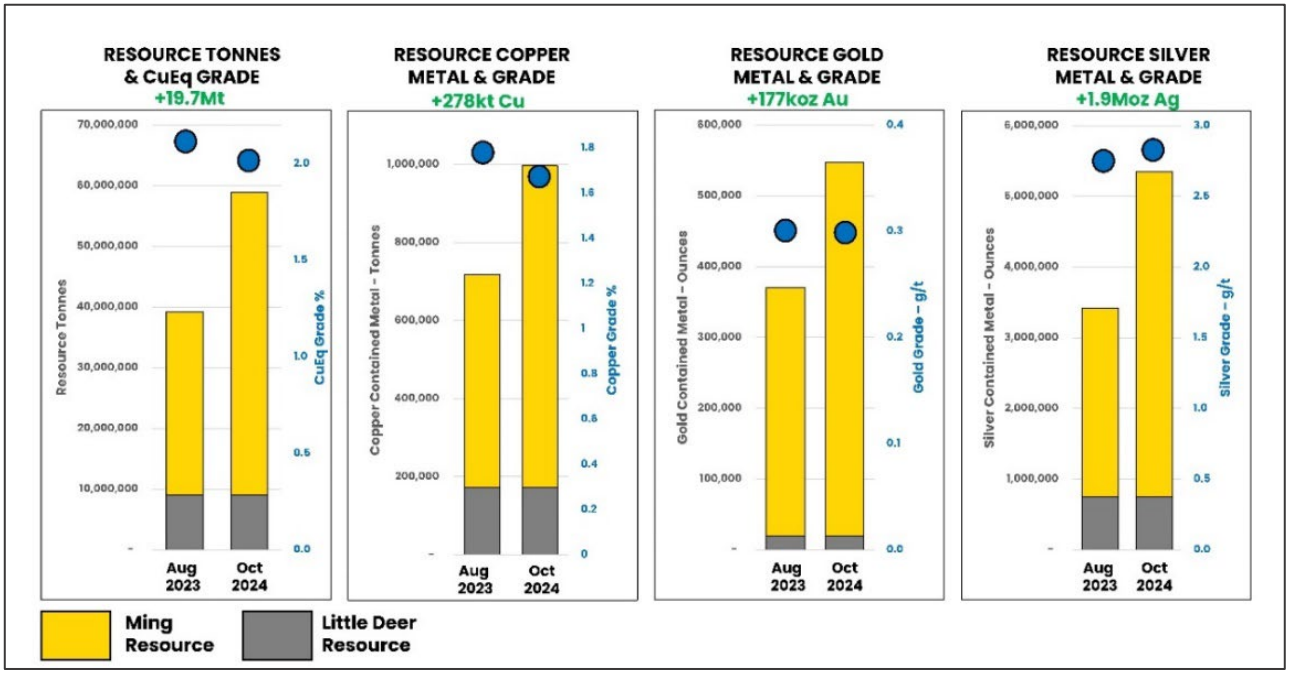


Figure 7: Comparison between Aug 2023 and Oct 2024 Resource estimates for the Green Bay Copper-Gold Project. Both Resources used a lower 1% copper cutoff grade.

The October 2024 resource estimate shows a significant increase in tonnes and metal with grade being maintained within 8% (**Table 4**). The Little Deer estimate has not changed as no additional data was added during 2023 and 2024.

Key reasons for the change in the resource at Ming include, but are not limited to:

- Additional data; ~40,000m of diamond drilling completed underground at Ming;
- Discovery of ~750m of extensions to both the high-grade VMS and broad Footwall stringer zone at the Ming mine resulting in a significant increase to the quantity of inferred resources;
- Grade was slightly down at Ming due to Resource extension drilling being predominantly in the broad footwall stringer zone and less in the higher-grade VMS zone during the Phase 1 drill program. Drill platforms are being positioned to test other higher grade VMS lodes (e.g., 1807) in future updates as part of the Phase two drill program;
- Indicated resource tonnes also increased due to some validation and infill resource drilling;
- Revised geological modelling of mineralised and waste domains at Ming;
- Adjustments in estimation parameters; and
- Change in Resource classification methodology. The 45% reduction in Measured Resources was the result of the application of more stringent requirements to be considered a Measured Resource. Additionally measured material in the previous estimate around historic workings was downgraded to a lesser confidence category. It is still expected that remnant material will be effectively extracted by utilising paste fill in a future mining operation.

Sensitivity Analysis

The Green Bay mineral resource estimate is sensitive to the lower cutoff grade applied. This will be considered in future mining studies, with unit costs heavily influenced by the selected mining method and eventual processing capacity.

The grade-tonnage sensitivity analysis is presented in **Figure 8**.

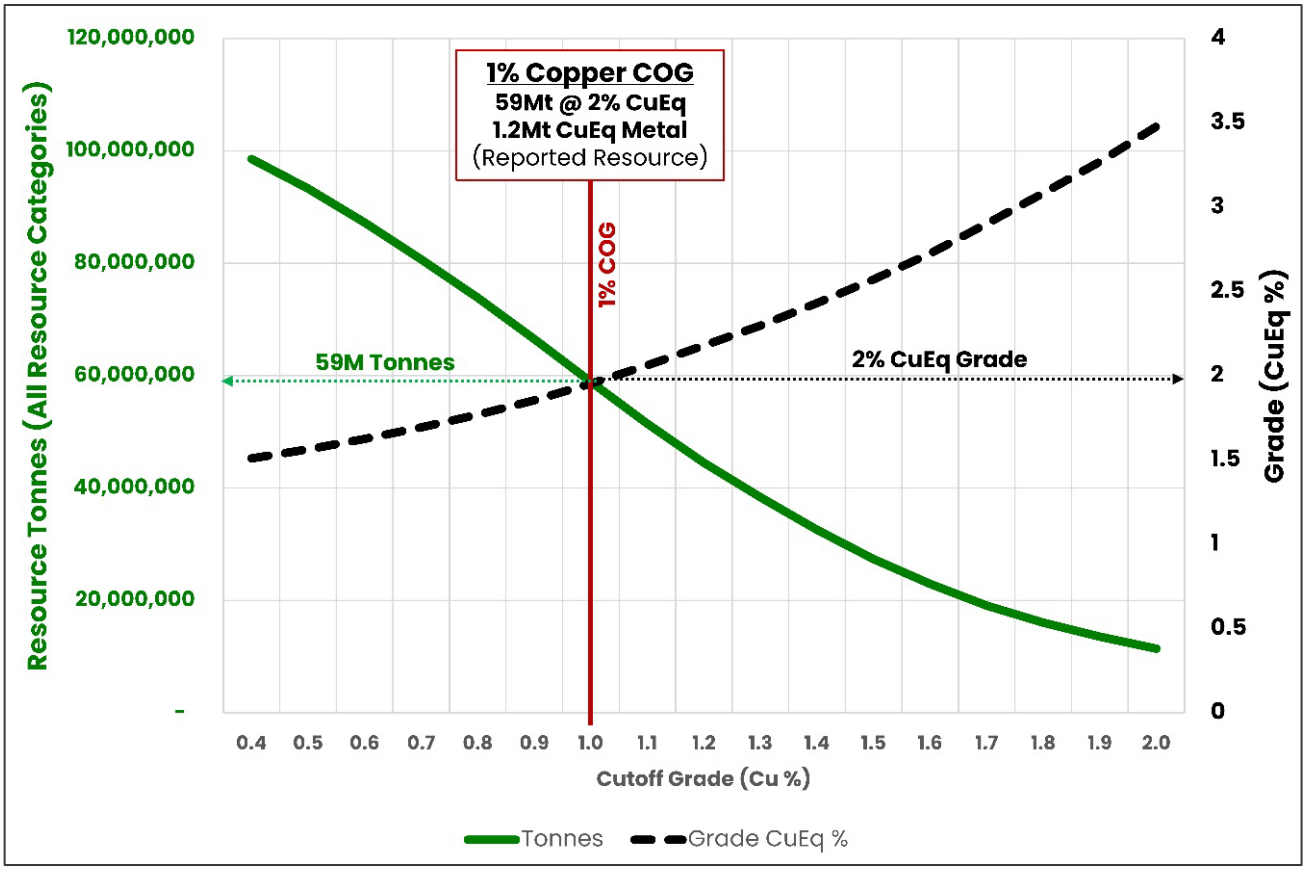


Figure 8: Green Bay Resource Grade-Tonnes sensitivity analysis at various copper cut off grades. Please refer to the compliance statement in this release for parameters used to calculate the copper equivalent grade.

Ming Deposit Resource Estimate

The Ming October 2024 Resource update (**Table 5**) was prepared in accordance with the JORC Code (2012 Edition) by independent consultants International Resource Solutions Pty Ltd., in close collaboration with FireFly geological personnel.

Table 5: October 2024 mineral resource estimate for the Ming Deposit

	MEASURED			INDICATED			INFERRED			TOTAL RESOURCE		
	Tonnes	Grade	Metal	Tonnes	Grade	Metal	Tonnes	Grade	Metal	Tonnes	Grade	Metal
Copper		1.7%	77kt		1.6%	266kt		1.7%	482kt		**1.7%**	**825kt**
Gold	4.7Mt	0.3g/t	45koz	16.8Mt	0.3g/t	145koz	28.3Mt	0.4g/t	338koz	**49.9Mt**	**0.3g/t**	**528koz**
Silver		2.3g/t	0.3Moz		2.4g/t	1.3Moz		3.3g/t	3.0Moz		**2.9g/t**	**4.6Moz**
CuEq	**4.7Mt**	**1.9%**	**89kt**	**16.8Mt**	**1.8%**	**307kt**	**28.3Mt**	**2.0%**	**576kt**	**49.9Mt**	**2.0%**	**972kt**

Additional data informing the updated Ming Resource

Drilling at the Ming underground copper-gold mine recommenced following the acquisition of the Green Bay copper-gold project by FireFly in October 2023. The Company completed 79 drill holes for 37,110m of diamond core to the beginning of October 2024 from underground development.

At the data cut-off date for the Resource estimate (3 October 2024), assays for the first 68 holes had been received and were used to inform the updated Ming Resource Estimate (**Figure 9**). All results have been previously reported in FireFly's ASX releases.

Most of the drilling was completed from the exploration drill drive mined by FireFly, with over 1,400m of underground development completed by the owner-operator mining team since November 2023. The drill platform was specifically designed to position drill rigs at favourable orientations sub-perpendicular to mineralisation.

Approximately 5,000m of drilling was conducted to validate historical information and infill data gaps within the previous foreign estimate.

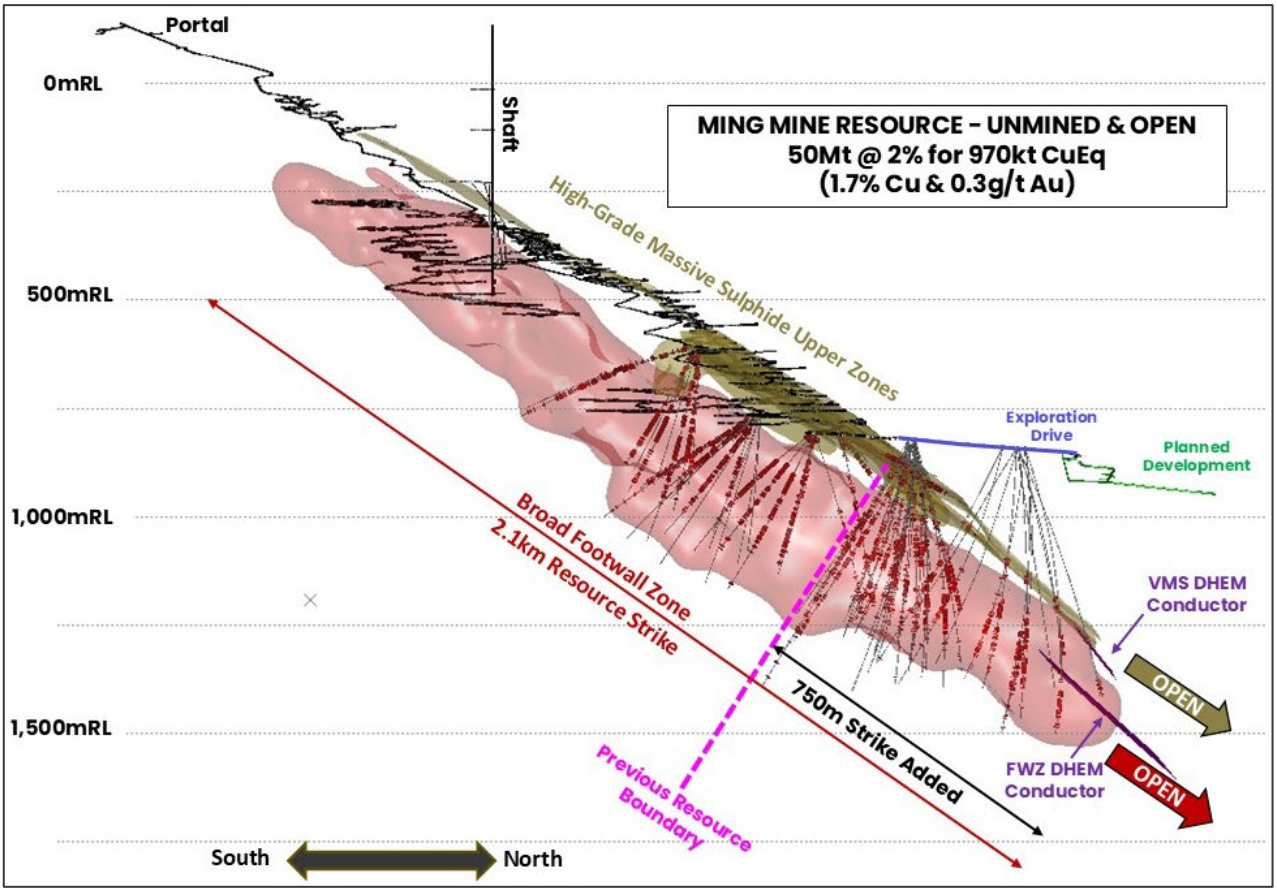


Figure 9: Long section showing new drill data acquired by FireFly since October 2023 to inform the updated mineral resource estimate. Red on the drill traces are assays >0.5% copper.

Ming Geology and Geological Interpretation

The Ming deposit is classified geologically as a volcanogenic massive sulphide (VMS) mineralised system. The Ming mineralisation is typically located at the regional contact between Cambrian-Ordovician aged felsic volcanics (rhyolite) and mafic volcanics.

Hydrothermal fluids migrated towards the surface via deep-tapping growth faults, driven by the heat generated from the tectonic collision and subduction of ancestral North America (Laurentia) beneath proto-Europe (Gondwana). The conceptual deposit model proposed by Pilote et al. (2016) is presented in **Figure 10** along with the current mineralisation domains for the October 2024 resource model.

Mineralisation is locally intersected by post-mineral mafic gabbro dykes which can contain structurally controlled quartz-carbonate veins with remobilised sulphides.

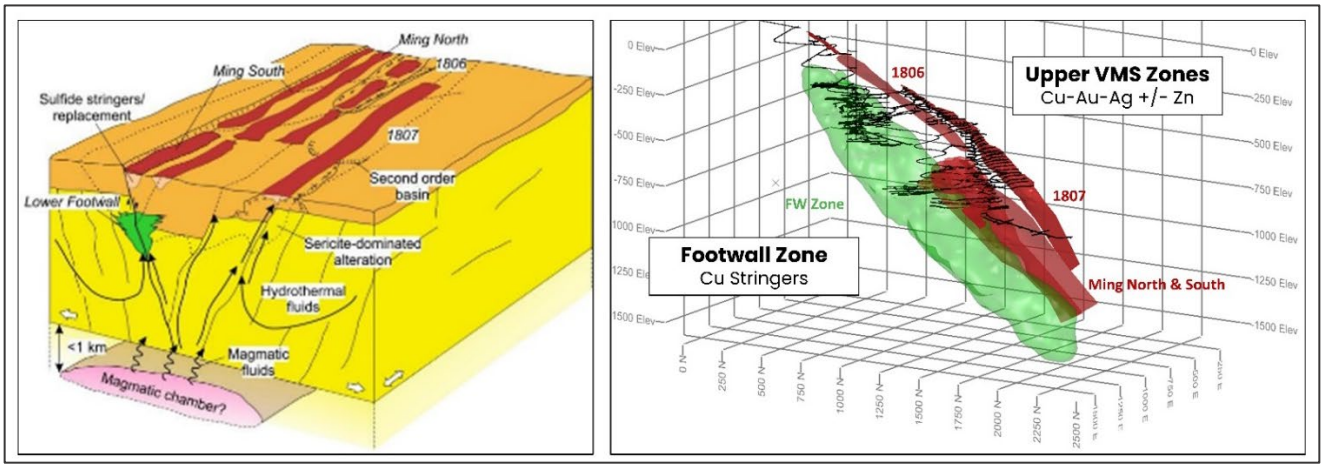


Figure 10: Ming Mineralisation model and interpretation for the October 2024 resource update. The copper-dominated stringer style Footwall mineral zones are shown in green. The upper high-grade Cu-Au-Ag massive sulphides lenses are shown in red. **(Left)** Conceptual geological model for the Ming Deposit proposed in Pilote et. al (2016). **(Right)** Mineralisation domains for the October 2024 resource model.

There are two distinct styles of mineralisation at the Ming deposit:

- **Broad Footwall Stringer-Style Mineralisation:** centimetre-scale veins of pyrite and chalcopyrite interpreted to have formed as part of the hydrothermal feeder system below the sea floor (**Figure 11**). The sulphide stringers have been locally deformed and characteristically follow the foliation. The host rock is typically rhyolite that is intensely chlorite-altered reflecting the temperature and fluid pressure at formation. The zone of stringer mineralisation can be up to 300m wide, 200m in height, with grades locally reaching beyond 2% copper.

Figure 11: Stringer-style Footwall mineralisation from the 735 Level in the Ming Mine (photograph taken in September 2024). The mineralisation consists of individual mm to cm scale chalcopyrite-pyrite veins hosted within highly chloritized rhyolite. This mineralisation is amenable to large-scale mining and often bulks out to grades exceeding 2% copper.

- **Polymetallic Volcanogenic Massive Sulphides:** Polymetallic Cu-Au-Ag dominated massive sulphides lenses formed on the sea floor via the accumulation of precipitated sulphides around subaqueous volcanic vents. The sulphides are dominantly pyrite and chalcopyrite with lesser sphalerite. The channel-like geometry results in lenses that are between 3m and 15m in true thickness and widths of 100m laterally. The strike of these lenses at Ming now exceeds 2km and remains open. Mineralisation from the Ming North is shown in **Figure 12**.

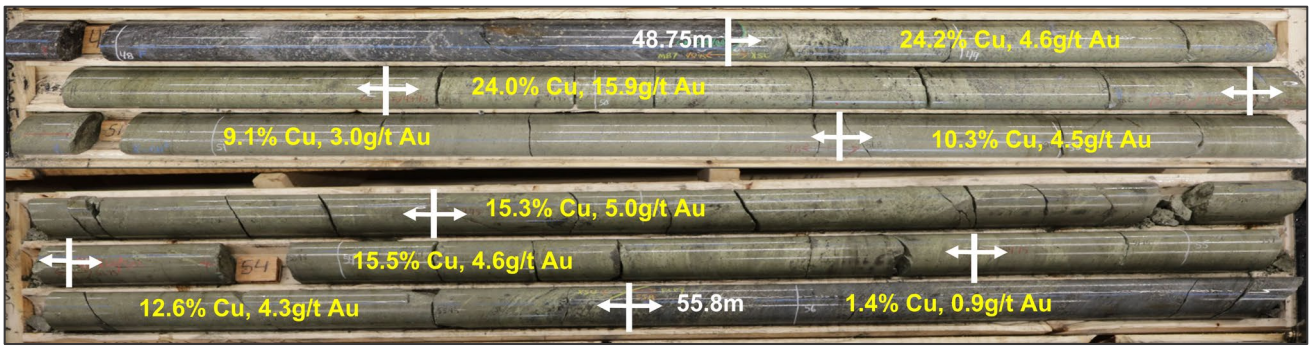


Figure 12: Massive sulphide copper-gold rich mineralisation intersected in FireFly resource extension drilling (MUG24-030). The core photograph shown (48.75m to 55.8m) is part of a broader reported **intersection of 13.1m @ 14.3% CuEq (10.7% Cu & 4.1g/t Au) true thickness**. The mineralisation is predominantly pyrite and chalcopyrite with lesser local sphalerite. Refer to FireFly's ASX release dated 19 June 2024.

Ming Drilling and Sampling Techniques

The Ming deposit has been sampled exclusively by diamond drilling. A total of 1,334 holes for a total drilled meterage of 233,380m was used to inform the October 2024 resource model.

Historic drill core was predominantly NQ (47.8mm diameter) with some BQ sized core (36mm diameter). All 37,110m of diamond drilling completed by FireFly was NQ2 (50.6mm diameter) and oriented using the Reflex Act III core orientation tool.

Core was sampled to a maximum length of 1m. The minimum sample length was 0.3m to accommodate for geological boundaries or changes in mineralisation. All FireFly core was cut in half, with the non-assayed portion stored for future reference if required.

For further detail regarding drilling and sampling, please refer to Appendix B 'Table 1 – Section 1 (Ming Resource)'.

Analytical Techniques

All assays completed by FireFly were undertaken at Eastern Analytical Ltd. in Springdale, Newfoundland. The laboratory is ISO 17025 accredited and utilises industry-standard preparation and analytical methodologies.

Sample preparation consisted of drying at 60° followed by crushing to ~80% passing -10 mesh. A riffle splitter was used to collect a representative 250g to 300g subsample. A ring mill is then used to pulverise the sample split to 95% passing -150 mesh.

Initial analysis for 34 elements was determined by Inductively Coupled Plasma (ICP). A 200mg subsample is totally digested in four acids and analysed by ICP-OES.

Where the upper detection limits were reached for select ore grade elements (Cu, Ag, Zn, Pb and Fe), the samples were then dissolved in a three-acid digest and analysed by atomic adsorption (AA). Gold content was determined by fire assay with AA finish.

All samples submitted by FireFly were subjected to rigorous internal and external QA/QC protocols. These include the routine inclusion of certified reference materials (standards), blank samples and duplicate samples. Sample pulps were also analysed at another independent laboratory (SGS) to confirm validity.

For further detail regarding analytical techniques, please refer to Appendix B 'Table 1 – Section 1 (Ming Resource)'.

Ming Resource Estimation Methodology

Domains

Leapfrog software was used for lithology and mineralisation domain wireframing.

Twenty-two mineralisation domains are defined in the current model. These domains were based on mineralisation style and statistical analysis.

The Lithology model comprises a surface that delineates the boundary between the hanging wall mafic and footwall felsic packages, along with twenty gabbro dykes and three felsic intrusives. The dykes are primarily generated using Leapfrog software, which is well-suited for their tabular geometry. Narrower and shorter-range dykes are also apparent in the structural data, generally with a flatter orientation. In cases where gabbro intervals cannot be confidently included in explicit wireframes, the intrusion function has been applied guided by structural data and confined to the footwall zone. A prominent and well-defined gabbro occurrence in the Ming North lode has been sub-domained using a constrained boundary to prevent grade smearing into potentially barren volumes.

Data Treatment

The Mineral Resource estimation utilises 2m composites for all DD sampling data, composite residuals smaller than 0.3m have been removed from the estimation.

Detailed exploratory data analysis, variography, and model validation was carried out using Isatis and other software.

Treatment of extreme high grades were dealt with by using a cap grade strategy.

Industry-standard 3D geological modelling software was used for data compilation, calculating and coding composite values, estimating and reporting.

Estimation

All lodes were estimated using ordinary kriging (OK) with the same domains used to estimate Cu, Au, Ag and Zn. OK estimation was completed using an oriented search ellipsoid. A two-pass search strategy was employed for each estimated variable, with search directions aligned to the major, semi-major, and minor axes of the variogram. During the first pass, a search radius of 100 meters by 100 meters by 30 meters was utilized, with a requirement of a minimum of 8 and a maximum of 12 composites. A maximum of 3 composites per drillhole was allowed. For the second pass, the search radius was expanded to 400 meters by 400 meters by 120 meters, and the minimum sample requirement was reduced to 4 composites.

The block model is based on a 10mX by 10mY by 5mZ parent block size and sub-blocks of 2.5mX by 2.5mY by 2.5mZ. Block model volumes were compared to wireframe volumes to validate sub-blocking.

Ming Resource Classification

Mineral Resources have been classified based on confidence in the geological and grade continuity using the drilling density and the distance to sample selections. These were evaluated individually for each of the 22 mineralisation domains.

Measured Mineral Resources have been defined generally where the closest drillhole sample is within 15m and the average distance to samples used for estimation within 20m.

Indicated Mineral Resources where the closest drillhole sample is within 30m and the average distance to samples used for estimation within 40m.

Inferred Mineral Resources where the closest drillhole sample is within 90m or greater if there is enough geological and grade continuity. Resources outside 90m are constrained by boundary strings and flagged as unclassified resource category. Distance to historical workings have been used to down grade the resource category where required.

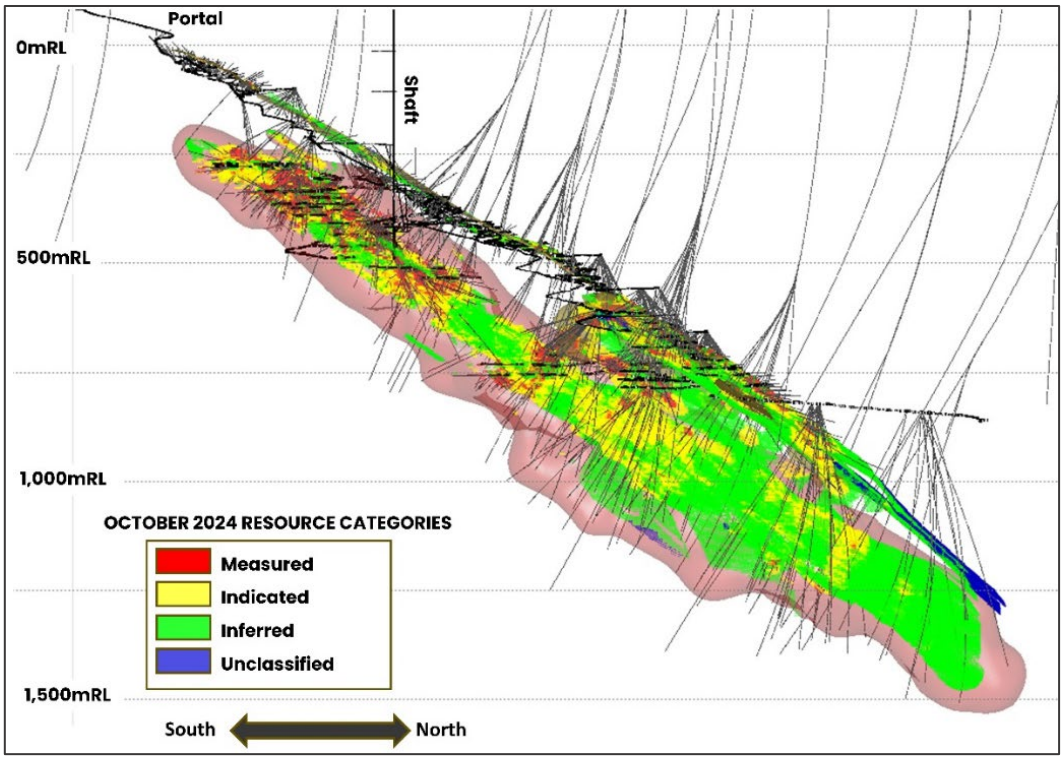


Figure 13: Resource categories and drill data in long section for the Ming October 2024 Resource.

Ming Resource Cut Off Grade

The cut-off grade of 1% Cu has been calculated based on the likely input components of mining, processing, recovery and administration costs. Benchmark industry averages and forward-looking forecast costs and physicals form the basis of the cut-off grade calculations including:

- Cu price of US$8,750 and 95% metallurgical recovery
- Au price US$2,500 and 85% metallurgical recovery
- Ag price US$25 and 85% metallurgical recovery

Modifying Mining and Metallurgical Factors

The mineral resource is reported in-situ, however conservative economic factors and cut-off grades were applied. The cutoff grade used was 1% copper. Mining costs assumed in the cut-off grade calculation assume a combination of transverse and longitudinal long hole open stoping (LHOS) with paste backfill. Processing costs were guided by benchmarked operations that utilise floatation to produce a copper-gold concentrate for external extraction.

Recovery assumptions are based on the previous operations at Ming. Economic evaluation studies are in progress to further increase confidence in the cut-off grade and refine modifying factors applied.

In the opinion of the Company, all elements included in the metal equivalent calculation have a reasonable potential to be sold and recovered based on current market conditions, metallurgical test work, and the Company's operational experience.

Little Deer Resource Estimate

The Little Deer mineral resource estimate as of October 2024 is presented in **Table 6**. This estimate was initially prepared as a Foreign Estimate prepared in accordance with Canadian National Instrument 43-101 (refer to ASX announcement dated 31 August for further details).

No additional new data was collected since the previous foreign estimate. Employees of independent consulting group P&E Mining Consultants Inc. have in conjunction with FireFly employees verified that the Little Deer resource estimate meets the criteria as defined in the JORC Code (2012 Edition). For further information on the Little Deer resource estimate, please refer to Appendix B JORC Table 1.

	MEASURED			INDICATED			INFERRED			TOTAL RESOURCE		
	Tonnes	**Grade**	**Metal**	**Tonnes**	**Grade**	**Metal**	**Tonnes**	**Grade**	**Metal**	**Tonnes**	**Grade**	**Metal**
Copper		-	-		2.1%	61kt		1.8%	110kt		**1.9%**	**172kt**
Gold	-	-	-	2.9Mt	0.1g/t	9koz	6.2Mt	0.1g/t	10koz	**9.1Mt**	**0.1g/t**	**19koz**
Silver		-	-		3.4g/t	0.3Moz		2.2g/t	0.4Moz		**2.6g/t**	**0.7Moz**
CuEq	**-**	**-**	**-**	**2.9Mt**	**2.2%**	**65kt**	**6.2Mt**	**1.8%**	**114kt**	**9.1Mt**	**2.0%**	**178kt**

Table 6: Little Deer Mineral Resource Estimate as at October 2024

Little Deer Geology and Geological Interpretation

The Little Deer deposits consist of two components, namely the Little Deer and Whalesback mines. These were historically joined by an underground decline and mined in the late 1960s and early 1970s.

Both Little Deer and Whalesback are geologically classified as copper-rich ophiolite-hosted Volcanogenic Massive Sulphide (VMS) deposits formed at or near the sea floor. The host rocks are typically mafic volcanics, intrusions and volcaniclastic sediments. Areas proximal to the deposit have typically undergone intense chloritic alteration.

The deposits were subject to deformation as the oceanic floor was accreted onto the ancestral North American continent ~480 million years ago.

The Little Deer deposit contains mainly stringer and disseminated sulphide mineralisation with lesser amounts of massive sulphides. The predominant sulphide species present are pyrrhotite, chalcopyrite, pyrite and sphalerite. The Whalesback Deposit contains mainly veins and pods of disseminated sulphide mineralisation that form 0.3m to 15 m lenses.

The simplified geology of the Little Deer-Whalesback area is presented in **Figure 14**.

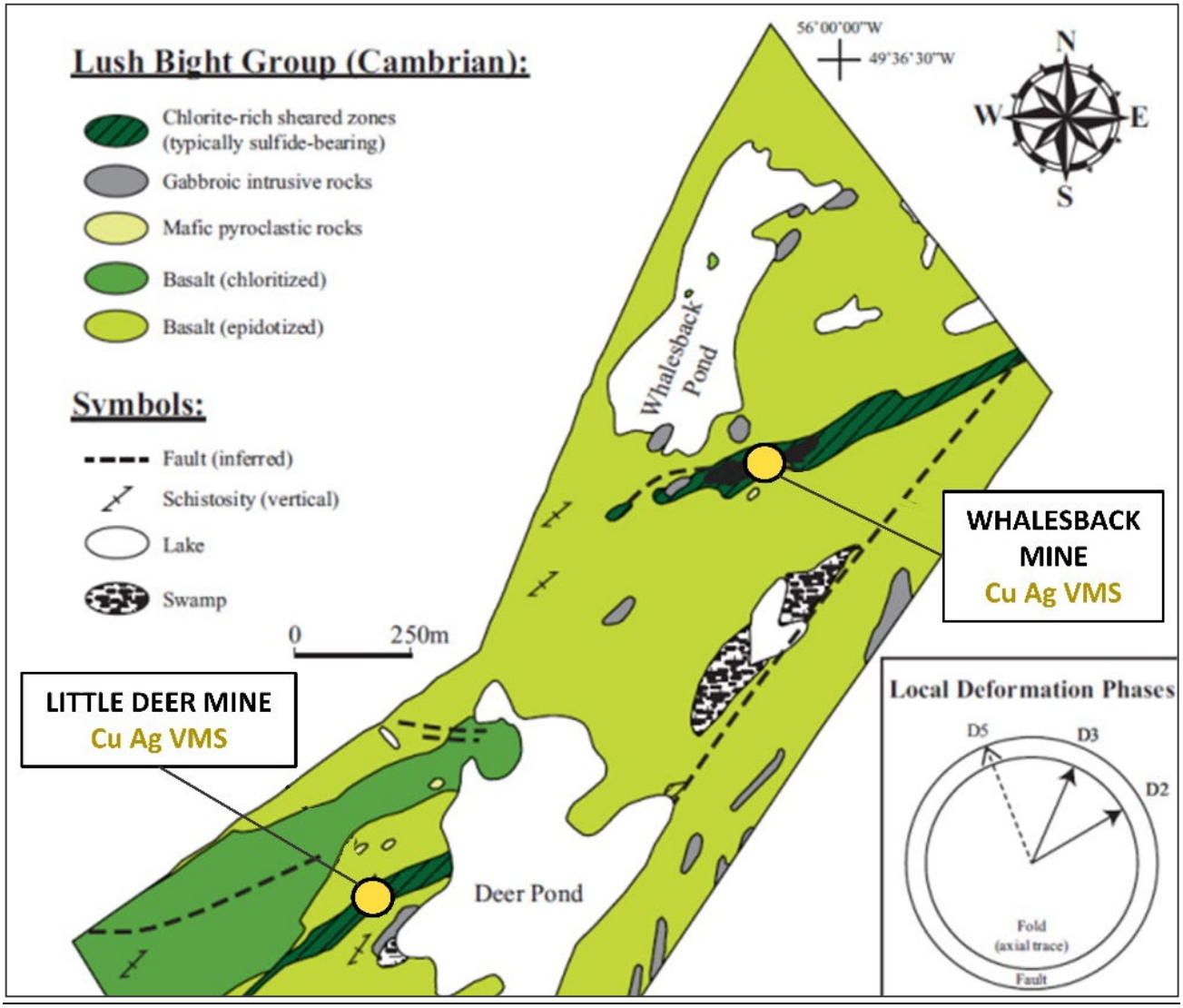


Figure 14: Simplified geology of the Little Deer-Whalesback mine area. Modified after Cloutier et. al., 2015.

Little Deer Drill Data and Sampling Techniques

The Little Deer drill database contains 622 drill holes totalling 132,972m. Of the drilling validated, 564 drillholes were deemed suitable for inclusion in the resource estimate based on the opinion of the competent person. All drilling was completed prior to FireFly's acquisition of the project.

A composite long projection of drill data used in the mineral resource estimate is shown in **Figure 15**.

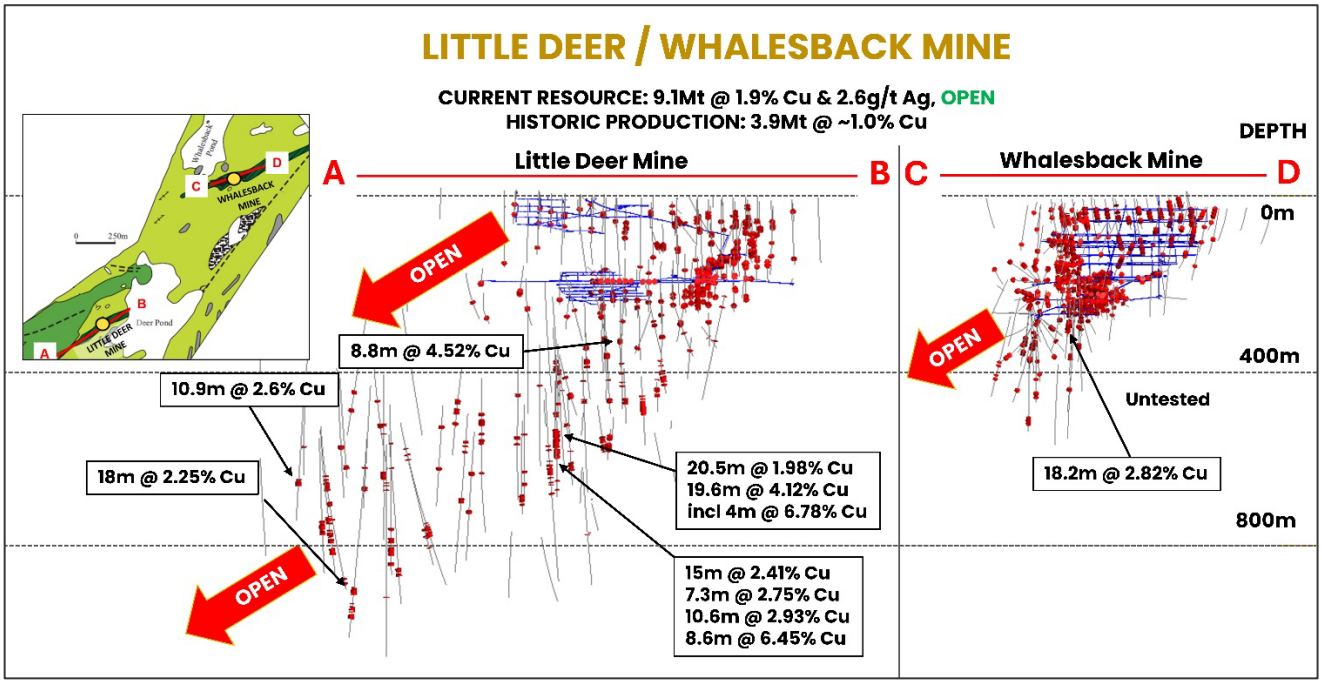


Figure 15: Long Projection of the Little Deer and Whalesback mines.

The Little Deer Complex drill holes were drilled using NQ sized (47.8mm diameter) diamond drill core.

Sample lengths collected from the drill core were variable. The average sample width was 1.44m due to many composite samples. The core was selectively sampled with only rock with indications of mineralisation sent for analysis.

For further information on drilling and sampling, please refer to **Appendix B**.

Analytical Techniques

Drilling from the early 2000s onwards was analysed by Eastern Analytical Ltd. in Springdale, Newfoundland. Sample preparation consisted of initial coarse crush to -10 mesh. A representative split was collected, and a 300g split was ring pulverised to 98% passing -150 mesh.

All samples were analysed using a 30-element aqua regia digest (ICP-OES). Overlimit material for copper, lead, zinc, cobalt, or silver were subjected to ore grade analysis via 3 acid digestion before analysis by atomic absorption. Gold was analysed in 30g aliquots by fire assay with ICP-AES finish.

QA/QC consisted of inserting blanks and standards every with each batch for small shipments and every 20th samples for larger batches. Certified blanks were used.

P&E Consultants completed verification sampling in 2011 at AGAT Laboratories in Mississauga, Ontario, Canada. Further pulp re-assays were conducted in 2021, with no issues indicated.

Little Deer Resource Estimation Methodology

Domains

Domains for the Resource (**Figure 16**) are based on both geology and visible mineralisation. Geological interpretation is based on extensive mining history which provides a high level of confidence in the interpretation of geological and grade continuity.

Mineral Resource estimation for the Little Deer and Whalesback deposit is based on identification and modelling of distinct geological structures and incorporated into five individual mineralised domains.

Grade and geological continuity are a function of local structures, which are incorporated into the estimation process.

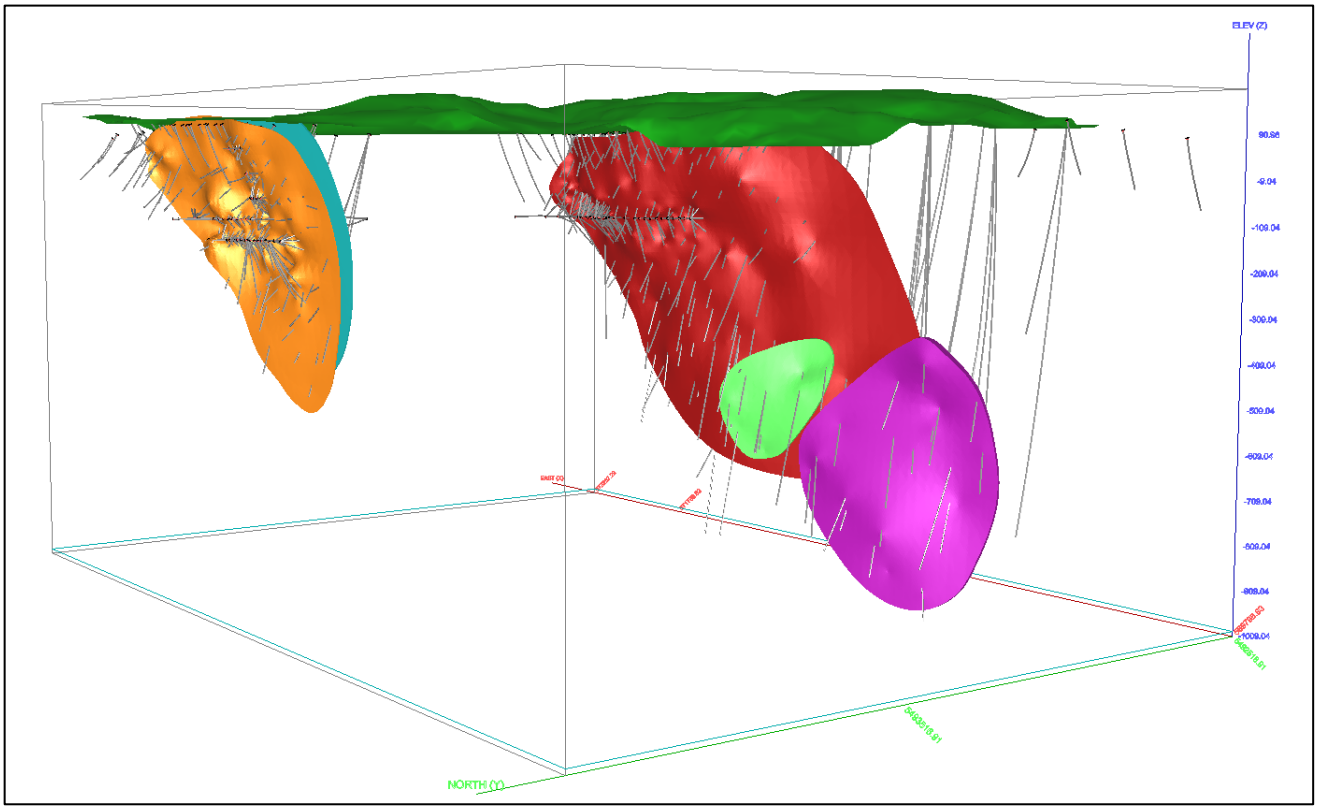


Figure 16: Mineralised domains and drillhole data for the Little Deer / Whalesback Resource Estimates.

Data Treatment

Detailed geostatistical analysis was completed for each modelling domain. The influence of high-grade outliers has been restricted by capping composite grades above a threshold value prior to estimation. Log normal histograms of Cu composites were generated for each mineralised zone for the Little Deer and Whalesback Deposit.

Estimation

The Inverse Distance Squared (ID^2) estimation method was used to estimate Copper block grades. Other elements (gold, silver and cobalt) were estimated using Inverse Distance Cubed (ID^3).

The block model was constructed using Genovia Gems modelling software. Mineral Resource block model size and orientation are based on the general size and geometry of the deposit. Block models are based on a 5 m x 2.5 m x 5 m block size for the Little Deer and Whalesback deposits.

Classification

Classification of the Resource was based on both the number of samples informing the estimate, distance to the nearest drilling and observed geological continuity. All blocks within 40m of 2 or more drillholes were classified as Indicated, and all other estimated blocks were classed as Inferred. Isolated, or artifact, blocks were removed via selection pass after the initial classification.

Little Deer Resource Cut Off Grade

The cut-off grade of 1% Cu has been calculated based on the likely input components of mining, processing, recovery and administration costs. Benchmark industry averages and forward-looking forecast costs and physicals form the basis of the cut-off grade calculations including:

- Cu price of US$8,750 and 95% metallurgical recovery
- Au price US$2,500 and 85% metallurgical recovery
- Ag price US$25 and 85% metallurgical recovery

Modifying Mining and Metallurgical Factors

The mineral resource is reported in-situ, however conservative economic factors and cut-off grades were applied. The cutoff grade used was 1% copper. Mining costs assumed in the cut-off grade calculation assume longitudinal long hole open stoping (LHOS) with paste backfill . Processing costs were guided by benchmarked operations that utilise floatation to produce a copper-gold concentrate for external extraction.

Recovery assumptions are based on the previous operations at Little Deer. Economic evaluation studies are in progress to further increase confidence in the cut-off grade and refine modifying factors applied.

In the opinion of the Company, all elements included in the metal equivalent calculation have a reasonable potential to be sold and recovered based on current market conditions, metallurgical test work, and the Company's operational experience.

ABOUT FIREFLY METALS LTD

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 the JORC Code (2012 Edition) of **59Mt at 2% for 1.2Mt 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 130,000m 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^2 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 www.fireflymetals.com.au

COMPLIANCE STATEMENTS

Foreign Resource Estimate – Green Bay Project (August 2023)

The Company first announced the foreign estimate of mineralisation for the Green Bay Project on 31 August 2023. At that time, the resource was a Foreign Estimate prepared in accordance with Canadian National Instrument 43-101. A competent person had not done sufficient work to classify the Foreign Estimate as Mineral Resources in accordance with the JORC Code. It was uncertain that following evaluation and/or further exploration work that the Foreign Estimate would be able to be reported as Mineral Resources in accordance with the JORC Code.

This foreign resource has now been superseded by the Mineral Resource Estimate prepared in accordance with the JORC Code (2012 Edition) presented in this release. The foreign estimate is referenced in this release for comparative purposes only.

Please refer to the ASX announcement dated 31 August 2023 titled 'AuTECO to acquire Green Bay Copper-Gold Project in Newfoundland, Canada' for supporting information and details regarding the Foreign Estimate.

Metal equivalents

Metal equivalents for the Mineral Resource Estimate mineralisation have been calculated at a copper price of US$8,750/t, gold price of US$2,500/oz and silver price of US$25/oz. Individual Resource grades for the metals are set out at **Appendix A** of this announcement.

Metallurgical factors have been applied to the metal equivalent calculation. Copper recovery used was 95%. Historical production at the Ming Mine has a documented copper recovery of ~96%. Precious metal metallurgical recovery was assumed at 85% on the basis of historical recoveries achieved at the Ming mine in addition to historical metallurgical test work to increase precious metal recoveries.

In the opinion of the Company, all elements included in the metal equivalent calculation have a reasonable potential to be sold and recovered based on current market conditions, metallurgical test work, and the Company's operational experience.

Copper equivalent was calculated based on the formula CuEq(%) = Cu(%) + (Au(g/t) x 0.82190) + (Ag(g/t) X 0.00822).

Exploration results

Previously reported 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, 4 March 2024, 21 March 2024, 29 April 2024, 19 June 2024, 3 September 2024, 16 September 2024 and 3 October 2024.

Mineral Resources Estimate – Pickle Crow Project

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".

Compliance Statements

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 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 announcement that relates to the **Ming Mineral Resource Estimate** is based on and fairly represents information and supporting information compiled by Mr Brian Wolfe. Mr Wolfe is a director and full-time employee of International Resource Solutions Pty Ltd, who specialises in mineral resource estimation, evaluation and exploration. Neither Mr Wolfe nor International Resource Solutions Pty Ltd holds any interest in FireFly Metals Ltd, its related parties, or in any of the mineral properties that are the subject of this announcement. Mr Wolfe is a member of the Australian Institute of Geoscientists and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person (or "CP") as defined in the 2012 Edition of the Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). Mr Wolfe has reviewed the contents of this ASX announcement and consents to the inclusion in this announcement of all technical statements based on his information in the form and context in which they appear.

The information in this announcement that relates to the **Little Deer Mineral Resource Estimate** is based on and fairly represents information and supporting information compiled by Mr Eugene Puritch, P.Eng., FEC, CET. Mr Puritch is President and a full-time associate of P&E Mining Consultants

Inc. P&E Mining Consultants Inc., who specialises in mineral resource estimation, evaluation, mining and exploration. Neither Mr Puritch nor P&E Mining Consultants Inc. holds any interest in FireFly Metals Ltd, its related parties, or in any of the mineral properties that are the subject of this announcement. Mr Puritch is a member of the Professional Engineers Ontario and Professional Engineers and Geoscientists Newfoundland and Labrador and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person (or "CP") as defined in the 2012 Edition of the Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). Mr Puritch has reviewed the contents of this ASX announcement and consents to the inclusion in this announcement of all technical statements based on his information in the form and context in which they appear.

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 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

Ming Deposit Mineral Resource Estimate

	MEASURED			INDICATED			INFERRED			TOTAL RESOURCE		
	Tonnes	**Grade**	**Metal**	**Tonnes**	**Grade**	**Metal**	**Tonnes**	**Grade**	**Metal**	**Tonnes**	**Grade**	**Metal**
Copper		1.7%	77kt		1.6%	266kt		1.7%	482kt		**1.7%**	**825kt**
Gold	4.7Mt	0.3g/t	45koz	16.8Mt	0.3g/t	145koz	28.3Mt	0.4g/t	338koz	**49.9Mt**	**0.3g/t**	**528koz**
Silver		2.3g/t	0.3Moz		2.4g/t	1.3Moz		3.3g/t	3.0Moz		**2.9g/t**	**4.6Moz**
CuEq	**4.7Mt**	**1.9%**	**89kt**	**16.8Mt**	**1.8%**	**307kt**	**28.3Mt**	**2.0%**	**576kt**	**49.9Mt**	**2.0%**	**972kt**

Little Deer Mineral Resource Estimate

	MEASURED			INDICATED			INFERRED			TOTAL RESOURCE		
	Tonnes	**Grade**	**Metal**	**Tonnes**	**Grade**	**Metal**	**Tonnes**	**Grade**	**Metal**	**Tonnes**	**Grade**	**Metal**
Copper		-	-		2.1%	61kt		1.8%	110kt		**1.9%**	**172kt**
Gold	-	-	-	2.9Mt	0.1g/t	9koz	6.2Mt	0.1g/t	10koz	**9.1Mt**	**0.1g/t**	**19koz**
Silver		-	-		3.4g/t	0.3Moz		2.2g/t	0.4Moz		**2.6g/t**	**0.7Moz**
CuEq	**-**	**-**	**-**	**2.9Mt**	**2.2%**	**65kt**	**6.2Mt**	**1.8%**	**114kt**	**9.1Mt**	**2.0%**	**178kt**

GREEN BAY PROJECT TOTAL MINERAL RESOURCE ESTIMATE

	MEASURED			INDICATED			INFERRED			TOTAL RESOURCE		
	Tonnes	**Grade**	**Metal**	**Tonnes**	**Grade**	**Metal**	**Tonnes**	**Grade**	**Metal**	**Tonnes**	**Grade**	**Metal**
Copper		1.7%	77kt		1.7%	328kt		1.7%	592kt		**1.7%**	**997kt**
Gold	4.7Mt	0.3g/t	45koz	19.7Mt	0.2g/t	154koz	34.5Mt	0.3g/t	348koz	**58.9Mt**	**0.3g/t**	**547koz**
Silver		2.3g/t	0.3Moz		2.6g/t	1.6Moz		3.1g/t	3.4Moz		**2.8g/t**	**5.4Moz**
CuEq	**4.7Mt**	**1.9%**	**89kt**	**19.7Mt**	**1.9%**	**371kt**	**34.5Mt**	**2.0%**	**690kt**	**58.9Mt**	**2.0%**	**1,150kt**

1. FireFly Metals Ltd Resources for the Green Bay Copper-Gold project, incorporating the Ming Deposit and Little Deer Complex, are reported in accordance with the JORC Code (2012 Edition);
2. Mineral resources have been reported at a 1.0% copper cut-off grade.
3. Metal equivalents for the Resource Estimate has been calculated at a copper price of US$8,750/t, gold price of US$2,500/oz and silver price of US$25/oz. Metallurgical recoveries have been set at 95% for copper and 85% for both gold and silver. CuEq(%) = Cu(%) + (Au(g/t) x 0.82190) + (Ag(g/t) X 0.00822)
4. Totals may vary due to rounding

APPENDIX B – JORC CODE, 2012 EDITION

Table 1 – Ming Mine

Section 1 - Sampling Techniques and Data: Ming mine (Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• Nature and quality of sampling (e.g. 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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.	• This deposit is sampled by diamond drilling (DD) drilling completed by FireFly and by previous operators. A total of 1,334 drillholes for a total of 233,380m at depths ranging from 10 to 1,771m. Included within these figures, FireFly drilled 72 DD (30,640m). • DD sample intervals are based on geological observations. All the core is sampled in 1m intervals with some smaller samples down to minimum core length of 0.3m to accommodate geological and mineralization contacts. Half NQ diamond drill core was submitted for analysis. • DD sampling by previous operators assumed to be to industry standard at that time. 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 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 samples are then placed in rice bags for shipment to the offsite laboratory's facility. • The remaining half of the core is retained and incorporated into Firefly's secure, core library located on the property. • FireFly drill analysis was completed at ISO-certified Eastern Analytical laboratories. 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 FireFly staff and returned directly to the Project site. Sample rejects are securely stored at the FireFly site.
Drilling techniques	• Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details	• Historic diamond drilling was predominately NQ (47.8 mm diameter) with some BQ(36mm) where grade control programs.

Criteria	JORC Code explanation	Commentary
	(e.g. 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).	• FireFly diamond drilling exclusively NQ2 (50.6mm diameter) size with core oriented by REFLEX ACT III core orientation tool.
Drill sample recovery	• Method of recording and assessing core and chip sample recoveries and results assessed. • 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.	• Historic diamond drilling was predominately NQ (47.8 mm diameter) with some BQ(36mm) where grade control programs. FireFly diamond drilling exclusively NQ2 (50.6mm diameter) size with core oriented by REFLEX ACT III core orientation tool. • All care is taken to ensure the full recovery of the core, yet certain drilling conditions, such as broken ground, can impede 100% recovery. • There is no known relationship between sample recovery and grade. Drilling conditions have been noted to be competent in historical reports. FireFly core recovery averages >95%.
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 core is meter marked, cleaned and oriented with the orientation line drawn using the marks form REFLEX ACT III core orientation tool. • 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 the Acquire database 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 mineralised is marked in 1.5 metre lengths.

Criteria	JORC Code explanation	Commentary
		• Wing samples are marked at 0.5 metres and sampled at the extremities of mineralised intervals to ensure anomalous grades do not continue into the surrounding wall rock. • 100% of the core is logged
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. • 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.	• Most FireFly drilling is NQ2. A single drillhole was completed with a BQ tail. • 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. • Historic diamond drilling has been half core sampled. • Samples are dried at approximately 60°C , crushed and pulverised. Samples are crushed in a Rhino jaw crusher to approximately 80% -10mesh, and split using a riffle splitter to approximately 250-300g. The remainder of the sample is bagged, labelled and stored as coarse reject. A ring mill is used to pulverise the sample split to 95% passing -150 mesh. Sample pulps are picked up at Eastern Analytical by FireFly staff and returned directly to the Project site. • For pre-FireFly samples, sample preparation, analytical procedures and QA/QC used on the property were reviewed by independent consultants WSP in 2018, stating in their report that sampling practices meet industry standards and display acceptable levels of accuracy and precision. • All core sampled in the prospective intervals when required wing samples are marked from 0.5 metres up to 5m and sampled at the extremities of mineralised intervals to ensure anomalous grades do not continue into the surrounding wall rock. • No purpose lab audit has been completed. FireFly personnel has visited the Eastern analytical facilities on several occasions and observed that lab practices, equipment overall cleanliness meets industry standards. • Pre-FireFly BQ core was entirely crushed for the assays. • Field duplicates were completed using ¼ core and inserted into the sample series at a rate of 2% of samples. Analysis results were acceptable considering the style of mineralization being heterogeneous with stockwork stringers of chalcopyrite

Criteria	JORC Code explanation	Commentary
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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	• All FireFly and Rambler 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. • Ore grade elements, Cu, Zn, Pb, Fe and Ag are dissolved via 3 acid digestion and analysed by atomic adsorption (AA). • 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. Blanks are inserted one every 50 samples. CRMs are inserted every 20 samples. Field duplicates are taken approximately one every 40 samples. Blanks and CRMs are also randomly inserted in zones of suspected high grades. The minimum insertion rate for CRMs is 5%, which FireFly adheres to. Historical data collected by Rambler Metals and Mining was also subject to a similar rigorous QA/QC regime. • 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.
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.	• FireFly routinely sends sample pulps for independent umpire lab check to SGS laboratory in Burnaby. Results correlate very well with Eastern Analytical results. • There are no purpose twinned holes in the dataset but a comparison of the results of different drilling generations showed that results were comparable. • FireFly logging data, assay certificates and other relevant information are stored in an AcQuire database and on a site server. • All pre-FireFly logging data was completed, core marked up, logging and sampling data was entered directly into an MX deposit or Fusion database. • FireFly is not aware of any adjustments made by Rambler to the assay data. WSP completed an independent audit in 2018 where a representative number of assay certificates were compared to

Criteria	JORC Code explanation	Commentary
		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 surveys), trenches, mine workings and other locations used in Mineral Resource estimation. • Specification of the grid system used. • Quality and adequacy of topographic control.	• Drill collars were surveyed by the FireFly mine survey crew upon completion of the drill program. • The set-ups for the underground drill collars were marked by the FireFly mine survey crew, and the drilling contractor were expected to set up properly on line. A FireFly geologist checked the underground drill set-up during the drilling program to ensure accuracy. • Downhole surveys are completed using a Reflex Sprint IQ gyro multi-shot instrument to provide azimuth and dip reading down the hole. The Reflex Sprint IQ gyro instrument is calibrated at least once a year to ensure accuracy of results. • Previous drilling has been set-out and picked up in both national and local grids using a combination of GPS and Survey instruments and are assumed to be to industry standards. Directional surface holes completed using Devico® technology. • The underground development has been picked up by surveyors creating high confidence in the topographic control which drillholes, both historical and recent, are referenced against. • Collar coordinates are recorded in local mine grid. Survey data was collected in mine grid and in UTM grid (NAD83 Zone 21). • Topographic control is from Digital Elevation Contours (DEM) 2019 and site surveyed DGPS pickups.
Data spacing and distribution	• Data spacing for reporting of Exploration Results. • 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. • Whether sample compositing has been applied.	• Mineral Resources are based on a maximum of 90m drill spacing. The data spacing and distribution is considered sufficient to establish geological and/or grade continuity appropriate for the Mineral Resource and classifications to be applied. • Core is sampled to geology contacts; sample compositing is not applied until the estimation stage.
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. • 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.	• 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. • The drill orientation to mineralised structures is not thought to make a material difference in the Resource estimation as intercept widths are interpreted to be close to true width.

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.	• Regular reviews of DD sampling techniques are completed by Senior Geologists and Resource Geologists and conclude that sampling techniques are satisfactory and industry standard. • All recent FireFly sample data has been extensively QAQC reviewed internally and externally. • Pre FireFly data audits were conducted as part of NI-43-101 resource estimation by independent consultants WSP in 2018. It was WSP's opinion that the drilling, sampling and logging procedures put in place by Rambler met acceptable industry standards and that the information can be used for geological and resource modelling.

Section 2 - Reporting of Exploration Results: Ming mine (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. • FireFly holds all the permits required to operate the Ming Mine. • 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.

Criteria	JORC Code explanation	Commentary
		• 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 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 conducted drilling to test down plunge extent of VMS and footwall stringer lodes. • An underground exploration drive is in progress to allow further drilling at more favourable drill angles.
Geology	• Deposit type, geological setting and style of mineralisation.	• The Green Bay project is a Noranda-type Volcanogenic Massive Sulphide (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

Criteria	JORC Code explanation	Commentary
		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 ○ elevation or RL (Reduced Level – elevation above sea level in meters) of the drill hole collar ○ dip and azimuth of the hole ○ down hole length and interception depth ○ 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.	• No new exploration results are reported. Please refer to the Compliance Statements in this release for details of previous exploration results reported.
Data aggregation methods	• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	• No new exploration results are reported. Please refer to the Compliance Statements in this release for details of previous exploration results reported. • Metal equivalent results have been calculated at a copper price of US$8,750/t, gold price of US$2,500/oz, silver price of US$25/oz

Criteria	JORC Code explanation	Commentary
	• 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.	• Metallurgical recoveries have been set at 95% for copper and 85% for both gold and silver. These assumptions are made of the basis of historical production at the Ming mine and additional metallurgical test work. • CuEq(%) = Cu(%) + (Au(g/t) x 0.82190) + (Ag(g/t) X 0.00822)
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 (e.g. 'down hole length, true width not known').	• No new exploration results are reported. Please refer to the Compliance Statements in this release for details of previous exploration results 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.	• No new exploration results are reported. Please refer to the Compliance Statements in this release for details of previous exploration results reported.
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; potential deleterious or contaminating substances.	• No new exploration results are reported. Please refer to the Compliance Statements in this release for details of previous exploration results reported.
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	• FireFly 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.

Criteria	JORC Code explanation	Commentary
	information is not commercially sensitive.	• The Company has continued to mine an exploration drive to enable effective drill testing of down plunge extensions.

Section 3 – Estimation and Reporting of Mineral Resources: Ming mine (Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Database Integrity	• Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. • Data validation procedures used.	• FireFly sampling and logging data is digitally entered into AcQuire database using a laptop. There are checks in place to avoid duplicate holes and sample numbers. • All holes used in the resource estimate have been validated individually for collar, downhole survey, geology and sample integrity by FireFly geologists.
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits. • If no site visits have been undertaken indicate why this is the case.	• The Competent Person for the Ming Resource visited the deposit site in July 2024. • The Competent Person reviewed site procedures and processes related to data collection for the preparation of the Resource estimate. The Competent Person also viewed to mineralisation underground and confirmed it is consistent with the geological interpretation.
Geological interpretation	• Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. • Nature of the data used and of any assumptions made. • The effect, if any, of alternative interpretations on Mineral Resource estimation. • The use of geology in guiding and controlling Mineral Resource estimation. • The factors affecting continuity both of grade and geology.	• The geological framework and the factors influencing mineralization are comprehensively understood, attributable to an extensive mining history and parallels to other regional deposits. • Validated diamond drill hole data was used to inform the interpretation including lithological, alteration, weathering, mineralization and structural logging. The same data was used in the resource estimation. • The Competent Person believes that, given the characteristics of the deposit, alternative geological interpretations are unlikely to significantly differ from the present model. • Diamond core enabled characterisation of mineralisation, geological and structural contacts orientation measurements helped to inform orientation of lodes. Stacked massive sulphide lodes are consistently correlated across drill holes based on an orientation that is similar to the neighbouring contact between the footwall felsic tuff and hanging wall mafic volcanics. The lower footwall stockwork envelopes are defined by alteration assemblages, dominant sulphide species, the frequency of sulphide stringers and grade distribution and continuity. • Post-mineralisation mafic dykes cross-cut the mineralised domains . Dykes typically occur in

Criteria	JORC Code explanation	Commentary
		consistent orientations with different intrusive generations able to be characterized by multi-element data.
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	• The extent of mineralisation is 2,200m along the down dip direction, 500m along strike and 400m wide. • The mineralisation is contained within 3 sulphide stringer envelopes and 14 individual massive to semi-massive and stringer sulphides tabular lodes that vary between 1 to 18m in thickness. • There are width and grade variations in all modelled and estimated structures along strike and down-dip. The deposit remains open at depth with strike potential.

Estimation and modelling techniques	• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.
	• The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.
	• The assumptions made regarding recovery of by-products.
	• Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).
	• In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.
	• Any assumptions behind modelling of selective mining units.
	• Any assumptions about correlation between variables.
	• Description of how the geological interpretation was used to control the resource estimates.
	• Discussion of basis for using or not using grade cutting or capping.
	• The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.
		• FireFly geological staff used Leapfrog software for lithology and mineralisation domain wireframing. The subsequent wireframe interpretations were reviewed and validated by the CP and minor adjustments were made prior to using the interpretations as input to Resource.
		• The Lithology model comprises a surface that delineates the boundary between the hanging wall mafic and footwall felsic packages, along with twenty gabbro dykes and three felsic intrusives.
		• Twenty-two mineralisation domains are defined in the current model:
		  • Twelve of these represent massive sulphide and stringer deposits along and below the felsic contact (vein style domains).
		  • Six east dipping feeder structures (vein style domains).
		  • Two envelopes to capture the lower grade stringer mineralisation around massive sulphide and feeder zones described above (intrusion style domains).
		  • Two lower footwall zone (LFZ) domains, including an inner core of high-grade (LFZ_HG) and an outer medium-grade (LFZ_MG) domain.
		• The overall stockwork zone is delineated based on logged alteration and sulphide content. The LFZ high-grade was generated using a 0.7% Cu lower cutoff to delineate the core of the higher-grade mineralisation.
		• The Mineral Resource estimation utilises 2m composites for all DD sampling data, composite residuals smaller than 0.3m have been removed from the estimation.

Criteria	JORC Code explanation	Commentary
		• Detailed exploratory data analysis, variography, and model validation is carried out using Isatis and industry standard software, including Vulcan. • Data compilation, calculating and coding composite values, estimating and reporting was completed utilising industry-standard software. • All lodes are estimated using ordinary kriging (OK) with the same domains used to estimate Cu, Au, Ag and Zn. OK estimation was completed using an oriented search ellipsoid. A two-pass search strategy was employed for each estimated variable, with search directions aligned to the major, semi-major, and minor axes of the variogram. During the first pass, a search radius of 100 meters by 100 meters by 30 meters was utilized, with a requirement of a minimum of 8 and a maximum of 12 composites. A maximum of 3 composites per drillhole was allowed. For the second pass, the search radius was expanded to 400 meters by 400 meters by 120 meters, and the minimum sample requirement was reduced to 4 composites. • Block model volumes were compared to wireframe volumes to validate sub-blocking. • Where OK estimates were used, treatment of extreme high grades were dealt with by using a cap grade strategy. • Previous descriptions and photographs of sulphide mineralisation and dyke geometries have informed the interpretation of geological domains. These historical records have been utilized to refine the understanding of the spatial distribution and orientation of mineralised zones. The data obtained from previous descriptions and estimates have been integrated into the current model, ensuring that critical geological features influencing resource estimation are accurately represented. Necessary adjustments were made where contemporary data and advanced modelling techniques provided an opportunity for refinement. • Gold and silver were recovered historically and therefore justified for inclusion in Cu equivalent calculation. • No deleterious elements have been modelled. • The parent block sizes of 10m(X) x 10m(Y) x 5m(Z) represents 30 to 50% of the average drill spacing in the zone classified as indicated. Parent blocks have been sub-celled to 2.5m x 2.5m x 2.5m. • Block sizes reflect the selective mining units (SMU) that are appropriate based on anticipated the mining method of long hole open stoping (LHOS).

Criteria	JORC Code explanation	Commentary

		• No assumptions have been made about correlation between variables in the estimate.
		• Hard boundaries were utilized for all domains, with the exception of the LFZ. For the LFZ, a soft boundary was applied in the form of a 10-meter thick buffer zone (LFZ_soft) between the LFZ_HG and LFZ_MG domains. Samples within this buffer were included in the search neighbourhood for either of the adjacent domains.
		• Blocks coded as post-mineralisation gabbro or felsic intrusive units were not estimated in the model.
		• Top cuts were applied in the Estimation stage and determined by a range of statistical techniques including: Disintegration analysis of Histogram, Log-probability, Mean-CV and Cumulative metal plots.
		• Top cuts vary by domain and element. Top cuts are considered light and have a minimal effect on the global outcome.
		• The Mineral Resource Estimate was validated based on a combination of visual, graphical and reconciliation style validations summarised as:
		  • Visual validation of the lode and lithology coding of both the composite data and the block model.
		  • Comparison of lode wireframe volumes to block model volumes.
		  • Visual validation of Mineral Resource Estimate against composite data in plan, section, and in 3D.
		  • Statistical comparison of composites versus all estimates in block model: trend analysis plots for each domain are produced by Northing / Easting / RL. The Mineral Resource Estimate generally shows a reasonable reflection of the composites where there are high numbers of composites used in the estimate. Where smaller numbers of composites are input to the block estimate, local differences may be seen between the block and composite grades however the global estimates remain robust.

Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	• Tonnages are reported on a dry basis with sampling and analysis having been conducted to avoid water content density issues.
Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied.	• The cut-off grade of 1% Cu has been calculated based on the key input components of mining, processing, recovery and administration costs. Benchmark industry averages and forward-

Criteria	JORC Code explanation	Commentary
		looking forecast costs and physicals form the basis of the cut-off grade calculations including: ○ Cu price of US$8,750 and 95% metallurgical Recovery. ○ Au price US$2,500 and 85% metallurgical Recovery ○ Ag price US$25 and 85% Metallurgical Recovery
Mining factors or assumptions	• Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	• The anticipated mining method is a combination of transverse and longitudinal long hole open stoping (LHOS). This mining method has been used to identify sensible SMU units when determining block sizes in the model. • Total extraction has been assumed with a future paste backfill system likely. • This has been factored into the cutoff grade calculations.
Metallurgical factors or assumptions	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	• A review of historical recoveries and metallurgical analysis was completed by WSP in 2020. • Significant data was collected over the years which shows that coarser grind and ore feed rate to the mill had moderate impact on the overall recoveries. In general, copper recovery did not vary with head grade and mostly between 95% to 97% copper. • Gold and silver recoveries increased as head grades increased with historical recoveries range between 65% and 75% for gold and silver, however studies have been undertaken to improve precious metal recoveries.
Environmental factors or assumptions	• Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a green fields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be	• The Ming Mine was in operation from 2012 to 2023 and is currently on care and maintenance. It is considered that there are no significant environmental factors affecting the Ming property at this time. • The mine is currently fully permitted for operations at 500ktpa.

Criteria	JORC Code explanation	Commentary
	reported with an explanation of the environmental assumptions made.	
Bulk density	• Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. • The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit. • Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	• A bulk density database, comprising a total of 12,467 measurements, was used to inform densities used in the model. Of these, 8,070 were collected historically and 4,397 collected by FireFly. • The water displacement method was used to determine bulk density, a sample is weighted to determine the dry mass and weighted submerged in water to determine the volume using the Archimedes principle. The data was categorized into groups based on mineralization and lithological domains, and statistical analysis was conducted to compare historic and FireFly datasets. The results demonstrated good consistency between the two datasets. • Individual bulk densities are applied in accordance with specific lithologies and mineralization domains based on calculated mean and median of the overall density dataset.
Classification	• The basis for the classification of the Mineral Resources into varying confidence categories. • Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). • Whether the result appropriately reflects the Competent Person's view of the deposit.	• Mineral Resources have been classified on the basis of confidence in the geological and grade continuity using the drilling density, and the distance to sample selections. These were evaluated individually for each mineralisation domain. • Measured Mineral Resources have been defined generally where the closest drillhole sample is within 15m and the average distance to samples used for estimation within 20m. • Indicated Mineral Resources where the closest drillhole sample is within 30m and the average distance to samples used for estimation within 40m. • Inferred Mineral Resources where the closest drillhole sample is within 90m or greater if there is enough geological and grade continuity. Resources outside this criteria are constrained by boundary strings and flagged as unclassified resource category. Distance to historical workings have been used to down grade the resource category where required. • This classification is considered appropriate given the confidence that can be gained from the existing data density and results from drilling. • The reported resource appropriately reflect the Competent Person's view of the deposit and the current level of risk associated with the project to date.
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	• The mineralisation domaining, estimation parameters, classification and reporting have reviewed internally by FireFly employees.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	• Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. • The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. • These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	• There is good confidence in the data quality, drilling methods and analytical results. The available geology and assay data correlate well, and the geological continuity has been demonstrated. • The Mineral Resources constitute a global resource estimate.

Table 1 – Little Deer Deposit

Section 1 - Sampling Techniques and Data: Little Deer (Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• Nature and quality of sampling (e.g. 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 (e.g. 'reverse circulation drilling was used to obtain 1m samples from	• Firefly have not conducted any drilling or exploration work on the Little Deer Complex Property. The work summarized here was conducted by Rambler and Thundermin in 2014, who were joint venture partners at the time. • The Mineral Resource estimation database was created from a total of 662 drill holes, of which 564 were available for Mineral Resource modelling. The database contained 3,008 assays for Cu, Co, Ag and Au. • Nominal sample lengths ranged from 0.10 to 5.30 m with an average sample length of 1.44 m. • Unmineralised core was not sampled. Half core was sampled.

Criteria	JORC Code explanation	Commentary
	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 (e.g. submarine nodules) may warrant disclosure of detailed information.	
Drilling techniques	• Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. 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).	• The Little Deer Complex drill holes were drilled using NQ sized diamond drill core standard-tube (3 m), wire line equipment. • Rambler and Thundermin and Cornerstone and Thundermin used downhole survey systems for their oriented core programs. Downhole surveys for the drilling were completed by acid test prior to 2000 and by Tropari from 2000 onwards. • Core was systematically hand oriented in the core box with respect to downhole core orientation and oriented core markings (if taken) before being marked for cutting.
Drill sample recovery	• Method of recording and assessing core and chip sample recoveries and results assessed. • 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 recovery in drill holes at the Little Deer Complex Project was >95 percent, including the mineralised intervals. • There is no known relationship between sample recovery and grade.
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.	• Drill core has been geologically and geotechnically logged to support Mineral Resource estimation. • Core logging was carried out by company geologists, who delineated intervals on geological, structural, alteration and (or) mineralogical boundaries, to industry standard. • Logging is quantitative and qualitative and includes documentation of the rock types, alteration and structures and estimates of sulphide content. • Visual estimates are logged of sulphide, quartz, alteration, as percentages. 100% of the drill core was logged. • The drill core from the 2007 to 2014 drilling programs was photographed.

Criteria	JORC Code explanation	Commentary
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. • 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.	• Core was sawn and half core was taken. • External laboratory sample preparation is adequate. Each entire sample was crushed to -10 mesh, and then a 300 g split was ring milled to 98% passing -150 mesh material and the pulp packet is stored awaiting collection. • All samples are sampled dry. • Sample weights varied from 0.27 to 14.31 kg, with average 3.89 kg. This size and the sample preparation procedures are broadly used by mining companies in Canada and elsewhere and represents the industry standard approach. • Assay repeatability for copper for the Little Deer Complex 2011 site visits showed strong correlation between historical samples and P&E ¼ core verification sampling, as demonstrated in Figures B.1. • Flooding prevented access to the drill core for the 2021 site visit, so a total of 24 archived pulp and reject samples were taken from 12 Thundermin-Cornerstone drill holes for independent assay verification. Correlation was excellent between the original samples and the P&E verification sampling, as demonstrated in Figure B.2. • Target mineralization was veins, pods, disseminated and massive sulphides; therefore, sample size was appropriate to the grain size of the material being sampled.
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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	• Cornerstone and Thundermin drilling, 2007 through 2011: The drill core samples were prepared and assayed at Eastern Analytical Ltd., an independent and ISO/IEC 17025:2017 accredited analytical laboratory. Each entire sample was crushed to -10 mesh, and then a 300 g split was ring milled to 98% passing -150 mesh material. All samples were analyzed using a 30-element aqua regia digestion/ICP-OES suite. Overlimit material for copper, lead, zinc, cobalt, or silver were subjected to ore grade analysis via 3 acid digestion before analysis by atomic absorption. Gold was analyzed in 30 g aliquots by fire assay with ICP-AES finish. • QA/QC consisted of inserting blanks and standards every with each batch for small shipments and every 20th samples for larger batches. Certified blanks were used. • P&E verification sampling from 2011 was carried out at AGAT Laboratories in Mississauga, Ontario, Canada. • P&E verification sampling from 2021 was carried out at Eastern Analytic Limited in Springdale, Newfoundland, Canada.

Criteria	JORC Code explanation	Commentary
		• Eastern Analytical Limited was not accredited by the Canadian Association for Laboratory Accreditation (CALA) until February 2014, but had provided independent laboratory services to the mining exploration industry since 1987. The laboratory is now ISO/IEC 17025:2017 accredited.
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.	• Calculations of significant intersections are carried out by a company Competent Person. • Database verification was conducted by checking digital database against copies of original laboratory certificates or the supplied database. • The historical information was recovered from the archives of the Newfoundland and Labrador Department of Natural Resources in St. John's, Newfoundland and Labrador, and checked against the electronic database. • Electronic data from external laboratories is stored and reported under the control of a geological database specialist. • No adjustments to assay data are carried out.
Location of data points	• 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. • Specification of the grid system used. • Quality and adequacy of topographic control.	• All coordinates are quoted in NAD 27 UTM Zone 21 North. • Historical collars were surveyed with a Total Station in 2009. • The topography and overburden surfaces were created using drill hole collars and geology logs from the drill holes.
Data spacing and distribution	• Data spacing for reporting of Exploration Results. • 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. • Whether sample compositing has been applied.	• Data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource. • Sample compositing was used within the Mineral Resource wireframe.
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. • 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.	• The primary mineralization style of principal relevance to the Little Deer Complex Project is mafic volcanic-hosted copper sulphides in veins, pods, disseminated and massive sulphides associated with VMS type deposits. • The spatial distribution of the drill holes provides good spatial coverage of the entire strike length of the mineralised zone. • No material sampling bias has been introduced by the drilling direction.

Criteria	JORC Code explanation	Commentary
Sample security	• The measures taken to ensure sample security.	• Drill core samples for all projects are selected, cut and bagged in tied numbered plastic bags, and then grouped in rice bags with a sample submission sheet. The bags were shipped to Eastern Analytical, an accredited laboratory since 2014. • All sample submissions are documented, and all assays are returned via email. • Coarse rejects and pulp splits for past drill programs are stored at the Rambler Mine site. • Coarse rejects and pulp splits for the P&E verification sampling are stored in a safe area by P&E. • This is considered to be a secure and reasonable procedure and no instances of tampering with samples was evident.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• Review of sampling procedures for the Property was completed in 2011 and 2021 by P&E Mining Consultants. No material issues were raised.

Section 2 - Reporting of Exploration Results: Little Deer (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.	• The Property comprises two mineral licenses containing a total of 162 staked claims covering a total area of approximately 4,040 ha. They are 100% owned by subsidiaries of Firefly Metals Ltd. • Mineral License No. 010215M is owned 50% by Rambler Metals and Mining Canada Limited and 50% by 1948565 Ontario Inc., subsidiaries of Firefly Metals Ltd and covers the Little Deer Deposit. • Mineral License No. 027468M is owned 100% by Firefly Metals Canada, subsidiary of Firefly Metals Ltd and covers the Whalesback Deposit. • Both of the Little Deer Complex mineral licenses are in good standing as of the effective date of this Report.
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	• External contractors were utilized to run geophysical surveys on the Little Deer and Whalesback deposits.
Geology	• Deposit type, geological setting and style of mineralisation.	• The primary mineralization style of principal relevance to the Little Deer Complex is ophiolite-hosted volcanogenic massive sulphides • The Little Deer Deposit contains mainly stringer and disseminated sulphide mineralization with smaller amounts of massive sulphides. The predominant sulphides are pyrrhotite, chalcopyrite, pyrite and sphalerite

Criteria	JORC Code explanation	Commentary
		• The Whalesback Deposit contains mainly veins, pods disseminated sulphide mineralization that form 0.3 to 15 m lenses. • The Whalesback massive sulphide lenses are located in the central and hanging wall portions of a chlorite shear zone that plunges approximately 50° southwest.

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
	  ○ elevation or RL (Reduced Level – elevation above sea level in meters) of the drill hole collar
	  ○ dip and azimuth of the hole
	  ○ down hole length and interception depth
	  ○ 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.
		• The supplied database contains 622 drill holes records totalling 132,972 m.
		• 48 drill holes had no associated assays, one had no Cu assays, and one had an erroneous collar location.
		• Two wedge drill holes were excluded from modelling and an additional six drill holes were outside the immediate area of the deposits.
		• 564 drill holes available for Mineral Resource modelling.
		• No new exploration results are reported.
		• See below this table for plan view of the drill collars used in the Little Deer Resource.

Data aggregation methods	• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. 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.	• Grade capping is implemented in the Mineral Resource model to limit the inclusion of isolated, anomalous high-grade values of Cu, Co, Ag and Pu in the deposit. • The determination of capping thresholds is based on the decomposition of individual composite log-probability distributions. • The capping threshold is applied to the assay samples in the following manner: • Capped grade = Original sample value if the original assay value is less than or equal to the capping grade. • Capped grade = Capped grade value if the original assay value is greater than the capping grade. • Metallurgical recoveries have been set at 95% for copper and 85% for both gold and silver. These assumptions are made on the basis of historical production and advancement in processing technology since historic mining. • CuEq(%) = Cu(%) + (Au(g/t) x 0.82190) + (Ag(g/t) X 0.00822)

Criteria	JORC Code explanation	Commentary
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 (e.g. 'down hole length, true width not known').	• At Whalesback, it was thought that the apparent thickness was close to true thickness. • True thicknesses at Little Deer were undetermined and highly variable due to the stringer style of mineralization.
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.	• A longitudinal projection of the Little Deer and Whalesback deposits are included in the body of this release. • Drill hole locations are presented in plan view following this report
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 intersections within the mineralised wireframe, both high and low grade, are utilised in the Mineral Resource Estimate.
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; potential deleterious or contaminating substances.	• Borehole geophysics was conducted for the 1998-2000 drilling. • Borehole geophysics using pulse EM was conducted on drill holes in 2008-2010. • An Induced Polarization survey was conducted in 2010.
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.	• Infill drilling to continue the conversion of Inferred to Indicated Mineral Resources; • Delineation drilling to further define the down-dip and along strike extensions of the mineralised zones; • Exploration drilling to identify close-proximity targets to the mine footprint; • Borehole EM surveys on selected exploration drill holes; • Differential GPS surveys of the collar location of all new drill holes; • Updated Mineral Resource Estimate, following completion of all the recommended drill programs; • Access and mine road improvement work; • Metallurgical testing on representative samples of the mineralised zone(s), to assess and confirm

Criteria	JORC Code explanation	Commentary
		metal recoveries, reagent usages, process flow sheets, and additional associated operating issues. • Mineralised material sorting test work should also be undertaken; and • Baseline studies on brownfield characteristics and evaluation of reclamation work completed to date.

Section 3 – Estimation and Reporting of Mineral Resources: Little Deer (Criteria in this section apply to all succeeding sections)

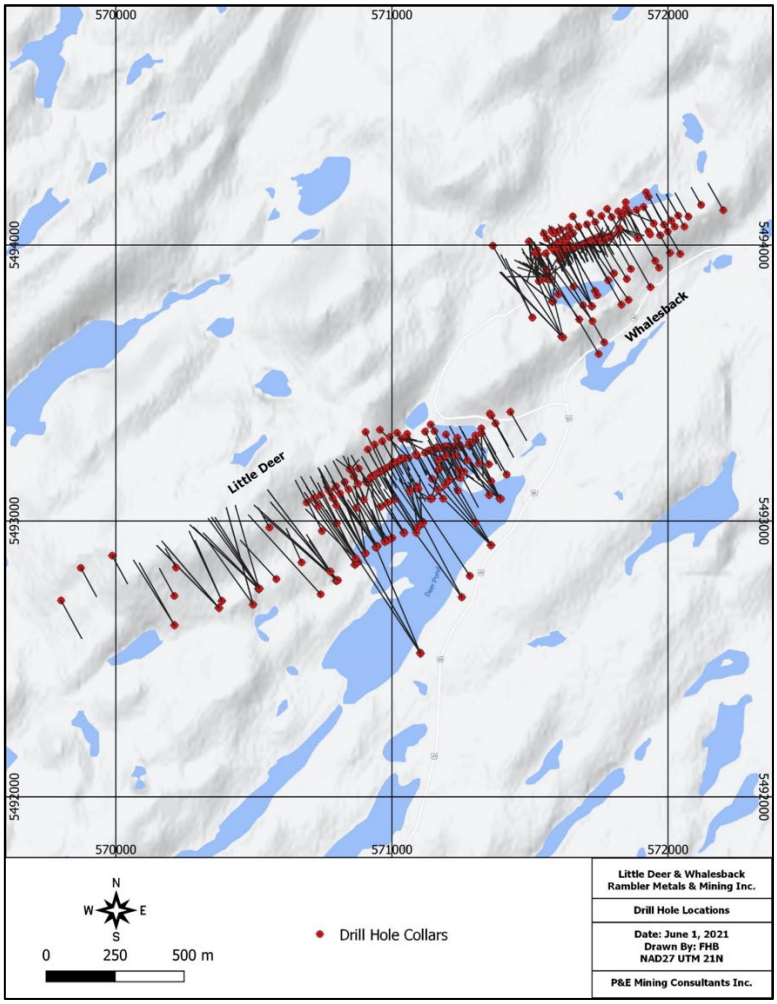
Criteria	JORC Code explanation	Commentary
Database Integrity	• Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. • Data validation procedures used.	• All drilling and assay data were provided in the form of Excel data files by Firefly Metals Canada Limited. The Geovia GemsTM V6.8 database for this Mineral Resource Estimate, was compiled by P&E. • P&E conducted verification of the drill hole assay database by comparison of the database entries with assay certificates provided directly from Eastern Analytical in digital format. • The historical information was recovered from the archives of the Newfoundland and Labrador Department of Natural Resources in St. John's, Newfoundland and Labrador, and was verified against the drill hole database. No assay entry errors were detected and no significant validation errors were noted.
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits. • If no site visits have been undertaken indicate why this is the case.	• Mr. Eugene Puritch, P.Eng., of P&E and a Qualified Person under the terms of NI 43-101, conducted a site visit to the Property on May 16, 2011. A data verification sampling program was conducted on-site. Mr. Puritch collected 13 samples from 11 drill holes. The samples were delivered by Mr. Puritch directly to AGAT Laboratories in Mississauga, Ontario for analysis. • Mr. Tim Froude, P.Geo., an independent consultant and a Qualified Person under the terms of NI 43-101, conducted a site visit on June 15, 2021 that was impeded due to flooding. He selected a total of 24 archived pulp and reject samples from 12 Thundermin-Cornerstone drill holes for independent verification sampling. Samples were taken by Mr. Froude and submitted to Eastern Analytical Laboratories in Springdale, Newfoundland for analysis.
Geological interpretation	• Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	• Geological interpretation is based on extensive mining history which provides a high level of confidence in the interpretation of geological and grade continuity.

Criteria	JORC Code explanation	Commentary
	• Nature of the data used and of any assumptions made. • The effect, if any, of alternative interpretations on Mineral Resource estimation. • The use of geology in guiding and controlling Mineral Resource estimation. • The factors affecting continuity both of grade and geology.	• Mineral Resource estimation for the Little Deer and Whalesback deposit is based on identification and modelling of distinct geological structures and incorporated into five individual mineralised domains. • Grade and geological continuity are a function of local structures, which are incorporated into the estimation process.
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	• Whalesback (area 100) – 620 m strike length, 750m down dip length, 6m average width. • Whalesback (area 110) – 640 m strike length, 700m down dip length, 6 m average width. • Little Deer (area 200) – 1,100 m strike length, 875m down dip length, 5 m average width. • Little Deer (area 210) – 510 m strike length, 625m down dip length, 10m average width. • Little Deer (area 220) – 310 m strike length, 300m down dip length, 8m average width.
Estimation and modelling techniques	• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. • The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. • The assumptions made regarding recovery of by-products. • Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). • In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. • Any assumptions behind modelling of selective mining units. • Any assumptions about correlation between variables. • Description of how the geological interpretation was used to control the resource estimates.	• Inverse distance squared estimation is used for Cu block grades. • Inverse distance cubed estimation is used for Au, Ag, Co block grades. • The block model was constructed using Genovia GemsTM modelling software. • Mineral Resource block model size and orientation are based on the general size and geometry of the deposit. Block models are based on a 5 m x 2.5 m x 5 m block size for the Little Deer and Whalesback deposits. • The Mineral Resource model consists of a block with attributes estimated grades, volume percent wireframe inclusion, rock codes, bulk density and classification attributes. • There is a moderate correlation between Cu and Co, Au, and Ag grades. • The influence of high-grade outliers has been restricted by capping composite grades above a threshold value prior to estimation. Log normal histograms of Cu composites were generated for each mineralised zone for the Little Deer and Whalesback Deposit.

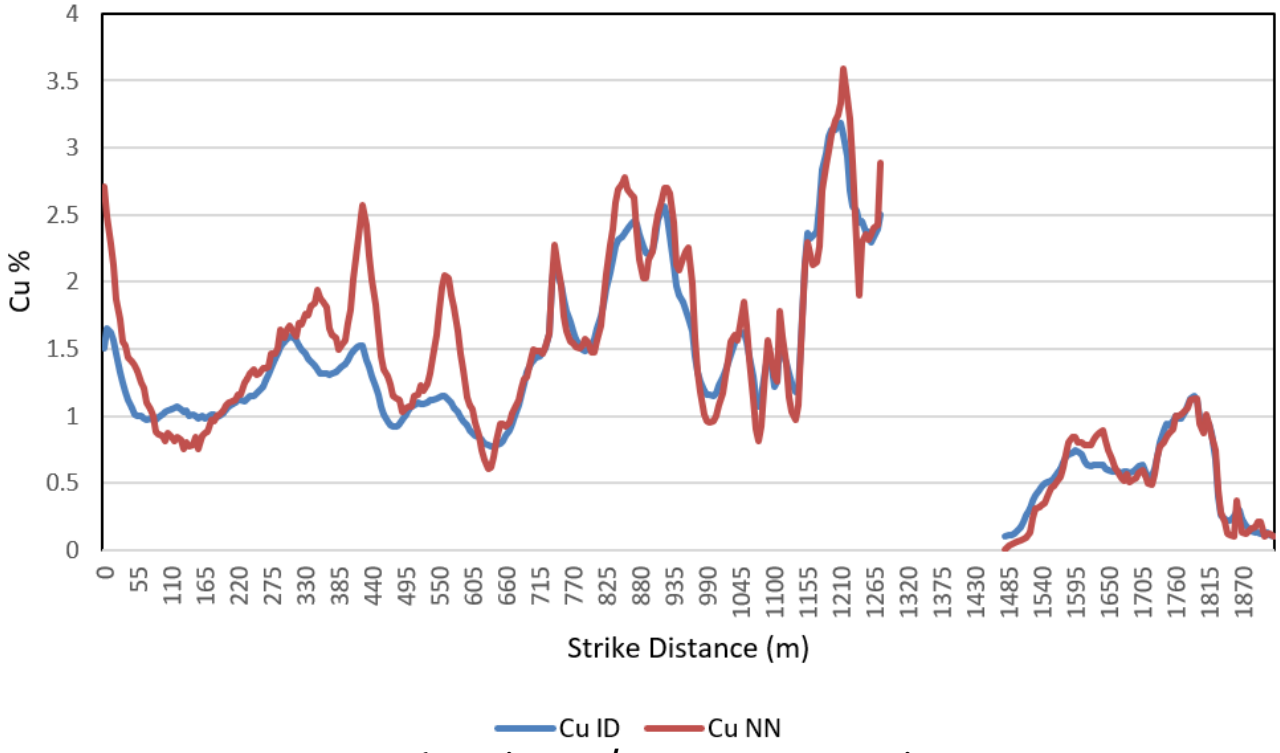
Criteria	JORC Code explanation	Commentary
	• Discussion of basis for using or not using grade cutting or capping. • The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	
Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	• Tonnages are estimated on a dry basis.
Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied.	• The cut-off grade of 1% Cu has been calculated based on the key input components of mining, processing, recovery and administration costs. Benchmark industry averages and forward-looking forecast costs and physicals form the basis of the cut-off grade calculations including: ○ Cu price of US$8,750 and 95% metallurgical Recovery. ○ Au price US$2,500 and 85% metallurgical Recovery ○ Ag price US$25 and 85% Metallurgical Recovery
Mining factors or assumptions	• Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	• Underground mining at Whalesback and Little Deer was conducted by BRINEX. A 1,044 m drift at a depth of 244 m on Little Deer served as the main haulage. There were no accurate production records from this time. • The Little Deer Mine was re-opened in 1973-1974 by the Green Bay Mining Co. Development was limited to shallow, low-grade copper resources that were accessible from a 329 m ramp driven from surface. There were no accurate production records from this time.
Metallurgical factors or assumptions	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	• SGS Mineral Services of Lakefield, Ontario was retained by Thundermin Resources in 2010 to complete a characterization and flotation concentration test program on a 200 kg representative composite sample from the Little Deer Deposit. • The composite material graded 2.43% Cu and the Cu occurred almost exclusively as chalcopyrite. Approximately 10.5% of the mass was iron sulphides; of which 85% was pyrrhotite and 15% was pyrite. The non-sulphides were mainly chlorite (51%), quartz (15%), and plagioclase (7%). • Based on data from the historical (2010) test work, the expected metallurgical performance could be:

Criteria	JORC Code explanation	Commentary
		Concentrate Grade: 28% Cu, 0.06% Co, 0.3 g/t Au. Copper Recovery was 97%. • The flotation response indicated that mineralised material from Little Deer would be a suitable feed for an existing process plant in the region. A minor modification to the existing circuit could include the installation of a small concentrate regrind mill.
Environmental factors or assumptions	• Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a green fields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	• There are no known environmental impacts affecting the Little Deer Complex Property at this time. • The historical Whalesback Mine concentrator has been removed from site. • The tailing storage area exists in the north part of the property. The liability for the historical tailings sits with province of Newfoundland and Labrador.
Bulk density	• Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. • The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit. • Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	• The bulk density used for the Mineral Resource model was supplied by previous operators (Rambler Metals and Mining). • 1,865 bulk density measurements collected from drill core. The average bulk density measured is 3.0 t/m3 • Bulk density was determined by the weighing in air and weighing in water method. Void spaces were determined to <5% and were not taken into consideration. All mineralised portions of the Resource Estimate were measured for bulk density.
Classification	• The basis for the classification of the Mineral Resources into varying confidence categories. • Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). • Whether the result appropriately reflects the Competent Person's view of the deposit.	• Mineral Resources have been classified based on geological and grade continuity, and areas of low geological confidence have been appropriately down-graded or excluded from the estimates. • The Mineral Resource model consists of a block with attributes estimated grades, volume percent wireframe inclusion, rock codes, bulk density and classification attributes • All relevant factors regarding tonnage and grade estimates, the quality and distribution of data and confidence in local geological structures has been taken into account.

Criteria	JORC Code explanation	Commentary
		• Estimation methodology is based on detailed knowledge of the local geological structures. • The estimated tonnage and grade of the Mineral Resources appropriately reflects the Competent Person's view of the deposit.
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	• P&E prepared the Mineral Resource Estimate and considers that the methodology used for the Little Deer Complex Project represents a generally prudent and moderately conservative approach to the Mineral Resource Estimate and that the Mineral Resource reported is in conformity with the requirements of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves ("JORC").
Discussion of relative accuracy/ confidence	• Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. • The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. • These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	• A check for local estimation bias was completed by plotting vertical swath plots of the estimated ID3 block grade and the Nearest Neighbour grade. The results demonstrate a reasonable level of smoothing for the ID estimate. • See below for the Swath plot



Plan view of drill data at Little Deer



Swath plot for the Little Deer / Whalesback Resource Estimate