

**ASX ANNOUNCEMENT** I 5 SEPTEMBER 2023

# GROWTH POTENTIAL FOR MT MARTIN GOLD MINE CONFIRMED

## ASX:LEX

### **HIGHLIGHTS**

- Total shallow Mineral Resource confirmed at Mt Martin Gold Mine as 501,175 oz Au (8.7Mt @ 1.79 g/t Au) and reported to JORC Code 2012 standards.
- Considerable resource growth and exploration upside identified in the first review of Mt Martin since 2013.
- Significant intersections remain open at depth, including 12m @ 6.65 g/t Au from 318.6m (AUZD03) and 33.15m @ 3.82g/t Au from 0m (MUG33).
- Resource and extensional drilling scheduled in Q4 CY23 to facilitate optimisation studies and the resumption of mining operations, focused on open cut mining before end of 2024.

Lefroy Exploration Limited ('Lefroy' or 'the Company') (ASX:LEX) is pleased to advise a review of the drilling database and resource model for the Mt Martin Gold Mine (Mt Martin) has validated the half million-ounce gold resource and the opportunity for considerable growth potential.

Mt Martin lies on the western boundary of freehold title, Location 45 (Figure 1 and 2), within Lefroy's 635km<sup>2</sup> greater Lefroy Gold Project (LGP). The LGP is strategically positioned in the highly endowed Kalgoorlie Terrane, surrounded by the infrastructure and haul roads of multiple other operating gold mines within the prolific Kalgoorlie-Kambalda mining district (Figure 6).

Lefroy acquired Mt Martin and Location 45 in May 2023 through a Mineral Rights Agreement between title holder Franco Nevada Pty Ltd (Franco) and Lefroy's wholly owned subsidiaries (refer to LEX ASX release 23 May 2023). In this agreement LEX, through its subsidiaries, acquired all mineral rights from Franco for an initial 21-year term in exchange for a minimum annual exploration expenditure of \$100,000 and 4% royalty upon production.

Since the acquisition, the Company has retrieved, compiled and reviewed a complete database of all drilling, mineral resource and exploration data for Mt Martin, obtained from previous rights holders, Westgold Resources Limited (ASX:WGX) and Northern Star Resources Limited (ASX:NST). The data validates an Indicated and Inferred resource of 501,175oz Au (8.7Mt @ 1.79 g/t Au), originally estimated by Alacer Gold Group in 2013<sup>1</sup>.



#### LEFROY MANAGING DIRECTOR WADE JOHNSON COMMENTED:

"Mt Martin has a long history of exploration and gold production but has not been subject to detailed analysis nor drilling for over 10 years. It is remarkable to now have such an asset in the portfolio with over 500,000 ounces of gold endowment in the Kalgoorlie-Kambalda sphere which has been left untouched for so many years.

Since obtaining all mineral rights to Location 45 this year, the Lefroy team has audited a large volume of historical gold exploration data that tells us Mt Martin presents a considerable value-add to LEX's growing metals portfolio in the Kalgoorlie-Kambalda region.

With the potential to significantly expand this resource, Lefroy is prioritising Mt Martin towards near term resumption on mining operations."



Figure 1 Interpreted bedrock geology map of Location 45 hosting Mt Martin Gold Mine and Goodyear Nickel Deposit



#### **RESOURCE GROWTH**

The review has highlighted significant potential for resource growth at Mt Martin based on drilling below the existing open pit, which returned multiple intercepts of high-grade gold (Figure 4 and Table 1), including:

- 12m @ 6.65 g/t Au from 318.6m (AUZD003)
- 33.15m @ 3.82g/t Au from 0m (MUG 33), including
  - o 10.35m @ 5.12g/t Au from 0m, and
  - o 3.95m @ 6.38g/t Au from 28.4m
- 52.9m @ 2.4g/t Au from 78.2m (MUG 33), including
  - o 7.66m @ 5.16g/t Au from 79.18m
- 5.49m @ 4.44 g/t Au from 129.88m (MM85)

These results highlight high-grade mineralisation close to the existing pit shell including within the East Lode up to an approximate depth of 350m from surface (Figure 3). These results have not been followed up for a decade owing to changes in ownership of the project over that time.

Shallow resources at Adelaide and Swift highlight the potential for additional mineralized structures in proximity to the Mt Martin resource (Figure 2). Limited shallow drilling has been conducted



**Figure 2** Plan of Mt Martin open pits, connecting haul roads, and neighbouring tenure on satellite imagery, highlighting section lines for Figures 3 and 4



outside of the immediate pit area and the Company believes these present significant near surface opportunities for additional discoveries and resource growth at Mt Martin.

Further resource validation and expansion drilling is currently being planned in Lefroy's next phase of activity at Location 45. The data review has highlighted the opportunity to construct detailed structural and geological models for the deposit to better understand the controls on mineralisation. This work will be completed as a first step in drill targeting.

A high-level review of the existing resource wireframes and estimation methodology has identified that the mineral wireframes exclude any assays below 0.5g/t Au. The estimation methodology subsequently allocates zero grade to all resource blocks outside of the mineralized wireframes. The Company believes there is significant upside potential in the resource by re-optimising the estimate to account for mineralisation outside the existing interpretations, along with targeted infill drilling.



#### **EXPLORATION UPSIDE**

**Figure 3** Long section of Mt Martin through resource looking east, showing direction of open mineralisation at depth (refer to Figure 2 for section location)

Previous exploration has been focused on the immediate Mt Martin mine area and no significant drilling has been conducted since late 2011 when Alacer Gold Limited drilled 8 diamond holes for 2,171m and 15 RC holes for 2,702m.

The remaining area of the Location 45 area is largely unexplored, with approximately 76km<sup>2</sup> of ground presenting significant potential for additional gold discoveries.

Gold mineralisation at the Mt Martin Mine is associated with a series of stacked westerly dipping (Figure 4), chloritic schist horizons that are intensely deformed and sandwiched between talc-carbonate ultramafic lithologies (Figure 5).



Ore zones are defined by sulphides, dominantly composed of pyrrhotite with varying amounts of arsenopyrite, pyrite and gersdorffite. Gold is strongly associated with arsenopyrite and mill reconciliation data from the Jubilee Mill and metallurgical test work indicates that good recoveries were achieved through conventional carbon in leach (CIL) circuit. Planned exploration drilling will include sampling for metallurgical testing to validate these findings.

Limited work has been done in the past to constrain the structural controls on mineralisation. Underground mining focused on a series of high-grade shoots that display a shallow plunge of approximately 30 degrees to the north-west and coincide with the intersection of the Main Shear and North Shaft Shear structures (Figure 4 and 5). There is also a series of late East-West striking steep fault structures that cross-cut both the mineralisation and later barren quartz veins.

The East Shear is a separate mineralized structure parallel to the main shear and had only limited underground mining. Deep drilling by previous explorers shows that the East Shear has significant strike and depth continuity which remains open (Figure 4). Both the East Shear and the high-grade shoots present priority targets for expanded open pit and underground resources.

The Company sees strong potential for additional discoveries on the Location 45 tenure through the application of modern geochemical and geophysical methods, combined with detailed structural interpretation to aid in defining priority targets. A 3D geological and structural model for Mt Martin will be developed as a priority to aid in exploration targeting.



**Figure 4** Mt Martin cross-section looking North, showing resource blocks, drilling and significant intersections. (refer to Figure 2 for section location)





**Figure 5** Schematic geology plan showing geological domains, controlling structures and ore zones at Mt Martin (adapted from AUZ).

#### **MT MARTIN GOLD MINE HISTORY**

Mt Martin is located towards the northwestern boundary of the Location 45 freehold property, 35km southeast of Kalgoorlie (Figure 6). It has been a focus for gold exploration and production activity for more than a century, however, limited exploration activity outside the immediate Mt Martin site has been undertaken.

Gold was first discovered at Mt Martin by a prospector in 1920. Small scale underground mines were first developed in 1923 and gold was initially produced from a set of four shafts. The last phase of underground mining was completed in 1992 with the deepest underground workings at 6 level, which is 165m below surface (Figure 3). Overall, the Mt Martin mine has produced approximately 200,000 ounces of gold to date.

In 1967 Mt Martin Gold Mines joint ventured into the freehold Location 45 with Great Boulder Mines where they deepened underground workings and assessed the area's nickel potential.



In 1984, AUR NL acquired a 65% interest in Mt Martin and mined underground until 1990, producing 970,000 tonnes of ore at 3.04g/t for 94,900oz Au.

Open pit mining was initially conducted by New Hampton Goldfields, producing 900,000 tonnes at 1.75g/t for 51,000 ounces Au, ceasing in 1997. The pit was extended by Harmony Gold Aust Pty Ltd during the period 2001 to 2004 over a length of 800m and to a depth of 80m.

Mineral rights ownership at Location 45 changed hands several times without mining activity until 2009 when Dioro Exploration Limited mined the open-pit to a maximum depth of 115m in the central portion of the open-pit and recovered a total of 743,000 tonnes at 1.5 g/t for 31,321 oz of gold.

Since then, no mining has occurred with the mineral rights to Location 45 under the management of Australian Mines Limited (2007-2011), Alacer Gold (2011-2013), Westgold Resources Ltd (2013-2018) and Northern Star Resources Ltd (2018-2021).

Lefroy's acquisition of mineral rights within the 76km<sup>2</sup> Location 45 extends its contiguous Lefroy Gold Project area to 635km<sup>2</sup> and takes total gold inventory to more than 1.1 million ounces (refer to ASX release <u>23 May 2023)</u>.

#### **NEXT STEPS**

Lefroy is currently planning a forward program of works for Location 45, with activities specific to Mt Martin including:

- Advancing gold exploration in ground surrounding the Mt Martin open pit concentrating on the east lode supported by a geological interpretation.
- Conducting resource definition and extension drilling program at Mt Martin as follows:
  - Stage 1-Targeted infill drilling to deliver additional shallow resources for open pit mining.
  - Stage 2- Focussed deeper drilling to materially increase mineable resources, both open cut and underground

Concurrent with these programs, Lefroy will continue discussions with nearby gold mills and operators regarding toll milling of ore sourced from Mt Martin.

#### -Ends-

This announcement has been authorised for release by the Board of Directors.

Wade Johnson.

Wade Johnson Managing Director



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#### **ABOUT LEFROY EXPLORATION LIMITED**

Lefroy Exploration Limited (ASX:LEX) is an active West Australian exploration company focused on expanding and developing its growing gold and critical minerals projects. The Company holds a diverse portfolio of high-quality projects, including the Lefroy Project (LP) located in the heart of the world-class Kalgoorlie-Kambalda gold and nickel mining district, in Western Australia. The LP is a commanding and contiguous land package of 635km<sup>2</sup> with a growing mineral resource inventory currently standing at 1.1 million ounces of gold, 58,000 tonnes of contained copper and 14,780 tonnes of contained nickel (as of August 2023).

This achievement is the culmination of several significant greenfields discoveries and strategic land acquisitions by the Company since its founding in 2016. This includes the Lucky Strike and Red Dale gold deposits, the Burns Gold-Copper (porphyry) Project, and the newly acquired freehold title, Location 45.

Lefroy's wholly owned subsidiary, Hampton Metals Ltd, is focused on the exploration and development of the Company's nickel assets. Its priority projects includes the Goodyear Nickel Deposit (Goodyear) within Location 45, Carnilya South 6km east of Goodyear, the Lake Johnston Project 120km west of Norseman, and the large 2872km2 Glenayle Project 210km north of Wiluna.



**Figure 6** Location of Mt Martin Gold Mine within freehold property, Location 45, in relation to Kalgoorlie, Kambalda and other Lefroy Gold Project assets of the 635km<sup>2</sup> contiguous land package



#### **TABLE 1 MT MARTIN SIGNIFICANT INTERSECTIONS**

Hole ID	Collar E (MGA)	Collar N (MGA)	Collar RL	Depth (m)	Dip	Azimuth	Depth From (m)	Depth To (m)	Downhole Intersection (m)	Au (g/t)
AUZD02	373856	6568267	351	363.5	-60.1	91.8	230.10	245.10	15.00	0.55
and							248.80	252.80	4.00	0.80
and							321.30	345.15	23.85	1.39
Including							332.75	343.10	10.35	2.74
AUZD03	373887	6568287	352	354.8	-58.2	91.6	0.00	2.00	2.00	0.98
and							163.00	170.00	7.00	1.05
and							197.36	199.40	2.04	0.88
and							202.40	223.50	21.10	1.94
Including							203.40	210.40	7.00	3.60
and							302.70	305.90	3.20	2.50
and							318.60	330.60	12.00	6.65
Including							324.50	327.50	3.00	10.87
MMADD002	373835	6568274	351	420.8	-75.4	63.8	241.00	248.00	7.00	0.36
and							336.50	341.00	4.50	2.13
and							346.00	349.50	3.50	0.69
MUG 33	373984	6568259	186	135.5	0.5	117.5	0.00	33.15	33.15	3.82
Including							0.00	10.35	10.35	5.12
Including							28.40	32.35	3.95	6.38
and							36.50	53.26	16.76	1.13
and							70.20	72.20	2.00	0.87
and							78.20	131.10	52.90	2.40
Including							79.18	86.84	7.66	5.16
and							94.20	98.40	4.20	3.62
and							109.46	110.32	0.86	7.17
MUG 49	374082	6568234	242	102.9	-24.0	72.0	2.75	11.38	8.63	0.94
and							16.31	25.76	9.45	0.85
and							29.76	51.00	21.24	4.32
Including							31.30	48.80	17.50	5.19
and							63.00	77.00	14.00	0.84
and							86.00	100.65	14.65	2.10
MM 88	374281	6568195	358	186	-90.0	0.0	129.88	135.37	5.49	4.44
Including							129.88	132.32	2.44	9.61
MM 75	374374	6568210	361	121.6	-90.0	0.0	73.46	77.11	3.65	7.21
and							81.92	83.13	1.21	8.53

\*Calculated with 0.25g/t Au lower cut-off and up to a maximum of 2m internal dilution. Note: MUG hole ID's are underground drill holes.



#### **COMPETENT PERSONS STATEMENT**

The information in this announcement that relates to exploration targets and exploration results is based on information compiled by Mr. Chris Hesford a competent person who is a member of the Australian Institute of Geoscientists (AIG). Mr. Hesford is employed by Lefroy Exploration Limited and has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the JORC Code. Mr. Hesford consents to the inclusion in this announcement of the matters based on his work in the form and context in which it appears.

#### SUPPORTING ASX ANNOUNCEMENTS

The following announcements were lodged with the ASX and further details (including supporting JORC Reporting Tables) for each of the sections noted in this Announcement can be found in the following releases. Note these announcements are not the only announcements released to the ASX but specific to mineral resource and exploration reporting by the Company at the Lefroy Gold Project.

- Lefroy Confirms High-Grade 15Kt Resource at Goodyear: 23 Aug 2023
- June 2023 Quarterly Activities Report: 01 Aug 2023
- Acquisition of Mineral Rights Transforms Lefroy: 23 May 2023

#### REFERENCES

<sup>1</sup>Refer to ASX Announcement - Alacer Gold Corp, April 2,2013 (AQG), "Alacer Gold Announces December 2012 Resource & Reserves Statement"

#### **APPENDIX A – MT MARTIN JORC 2012 Table 1**

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

Criteria	Explanation	Commentary			
Sampling techniques	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representativity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m 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.</li> </ul>	<ul> <li>A combination of sample types was used to collect material for analysis including underground and surface diamond drilling (DD) and surface reverse circulation drilling (RC). RAB holes were excluded from the estimate and where sufficient DD holes were present, some RC holes were excluded due to inadequate survey and assay methods.</li> <li>The estimate includes 285 diamond drill holes and 4,428 reverse circulation (RC) drill holes which includes Mt Martin open pit grade control drilling.</li> <li>Im interval samples were split to a 12.5% fraction using three tier riffle splitter or to a 12% fraction via a rig-mounted cone splitter.</li> <li>Diamond core was placed in core trays for logging and sampling. Half core samples were nominated by the geologist from diamond core with a minimum sample width of either 20 cm (HQ) or 30 cm (NQ2).</li> <li>RC sampling was split using a rig mounted cone splitter to deliver a sample of approximately 3 kg.</li> <li>DD drill core was cut in half using an automated core saw, where the mass of material collected will vary on the hole diameter and sampling interval.</li> <li>All samples were delivered to a commercial laboratory where they were dried, crushed to 95% passing 3 mm if required, at this point large samples may be split using a rotary splitter.</li> <li>For fire assay, pulverisation to 95% passing 75 µm and either a 30g or 50g charge was selected.</li> </ul>			
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.).	<ul> <li>Both RC and Diamond Drilling techniques were used to drill the Mt Martin deposit.</li> <li>Surface diamond drill holes were completed using NQ2 (47.6 mm) and HQ2 (63.5 mm} coring.</li> <li>RC Drilling was completed using 5.75" drill bit, downsized to 5.25" at depth.</li> </ul>			
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <li>RC drilling contractors adjust their drilling approach to specific conditions to maximize sample recovery.</li> <li>For diamond drilling the contractors adjust their rate of drilling and method if recovery issues arise. All recovery is recorded by the drillers on core blocks. This is checked and compared to the measurements of the core by the geological team. Any issues are communicated back to the drilling contractor.</li> <li>Historical drilling did not record sample recovery. Sample recovery and grade relationships cannot be assessed, a sample bias cannot be determined.</li> </ul>			
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.	<ul> <li>All diamond core is logged for oxidation, lithology, veining, alteration, mineralisation, and structure. Structural measurements of specific features are also taken through oriented zones.</li> <li>RC sample chips are logged in 1m intervals for the entire length of each hole. Regolith, lithology, alteration, veining, and mineralisation are all recorded.</li> <li>All logging codes for regolith, lithology, veining, alteration, mineralisation, and structure is entered into the database using suitable pre-set</li> </ul>			

Sub-sampling techniques and sample preparation	<ul> <li>quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>validated before upload to the primary database.</li> <li>All core logging is qualitative with mineralised zones assayed for quantitative measurements. Every core tray is photographed wet and dry.</li> <li>In all instances, the entire drill hole is logged.</li> <li>NQ2 and HQ diameter core is sawn half core using a diamond-blade saw, with one half of the core consistently taken for analysis. Smaller sized core (LTK48 and BQ) was whole core sampled. The un-sampled half of diamond core is retained for check sampling if required.</li> <li>Field staff collect the sample in pre-numbered calico sample bags which are then delivered to the laboratory for analysis.</li> <li>RC samples are collected at 1m intervals with the samples being riffle split through a three-tier splitter. The samples are collected by the RC drill crews in pre-numbered calico sample bags which are then collected by company staff for submission. Delivery of the sample to the laboratory is by a staff member.</li> <li>Upon delivery to the laboratory, the sample numbers are checked against the sample submission sheet. Sample numbers are recorded and tracked by the laboratory using electronic coding.</li> <li>Sample preparation techniques are considered appropriate for the style of mineralisation being tested for - this technique is industry standard across the Eastern Goldfields.</li> <li>Procedures are available to guide the selection of sample material in the field. Standard procedures are used for all process within the laboratory.</li> <li>For RC chips field duplicates are collected and analysed for significant variance to primary results.</li> <li>The sample sizes are considered appropriate for the material sampled.</li> <li>Only nationally accredited laboratories are used for the analysis of the samples collected.</li> </ul>
laboratory tests	<ul> <li>appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul> <li>The laboratory oven dries, jaw crushed, and if necessary (if the sample is &gt;3kg), riffle split the sample and then pulverised (the entire 3kg sample), in a ring mill to a nominal 90% passing 75 microns.</li> <li>All recent RC and Diamond core samples are analysed via Fire Assay, which involves either a 30g or 50g charge (sub-sampled after the pulverisation) of the analytical pulp being fused at 1050°c for 45 minutes with litharge. The resultant metal prill is digested in Aqua regia and the gold content determined by atomic adsorption spectrometry (AAS) - detection limit is 0.01 ppm Au.</li> <li>No geophysical tools were used to determine any element concentrations.</li> <li>Quality Assurance and Quality Control (QA/QC) samples are routinely submitted and comprise standards, blanks, assay pills, field duplicates, lab duplicates and repeat analyses. The results for these QA/QC samples are routinely analysed by Senior Geologists with any discrepancies dealt with in conjunction with the laboratory prior to the analytical data being imported into the database.</li> <li>There is limited information available on historic QA/QC procedures. LEX has accepted the available data at face value and will carry out data validation procedures as the deposit is re-evaluated.</li> <li>The analytical techniques used are considered appropriate for the style of mineralisation being tested for - this technique is industry standard across the Eastern Goldfields.</li> <li>Ongoing production data generally confirms the validity of prior sampling and assaying of the mined deposits to w1th1n acceptable limits of accuracy.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data</li> </ul>	<ul> <li>All data used in the calculation of resources are compiled in databases which are overseen and validated by senior geologists.</li> <li>Grade control drilling within the Mt Martin pit has overlapped existing historical exploration holes providing comparable mineralised intercepts.</li> <li>Primary data was collected using LogChief software. The information is imported into a SQL database server and verified.</li> <li>All data used in the calculation of resources are compiled in databases (underground and open pit) which are overseen and validated by senior geologists.</li> </ul>

	<ul> <li>No adjustment has been made to any assay data.</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down- hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> <li>Collar coordinates for surface RC and diamond drill-holes were generally determined by either RTK-GPS or a total station survey instrument.</li> <li>Underground drill-hole locations at Mount Manon were surveyed using a Leica reflector less total station.</li> <li>Recent surface diamond holes were surveyed during drilling with down- hole single shot cameras and then at the end of the hole by Gyro- inclinometer at 5m or 10m intervals.</li> <li>Holes not gyro-surveyed were surveyed using Eastman single shot cameras at 20m intervals. RC drill-holes utilised down-hole single shot camera surveys spaced every 15 to 30m down-hole.</li> <li>Down-hole surveys for underground diamond drill-holes were taken at 15 - 30 m intervals by Reflex single-shot cameras.</li> <li>The resource estimate is undertaken in MGA 94 grid.</li> <li>Topographic control is generated from ground-based surveys.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Drill spacing ranges from 10m x 5m grade control drilling to 100m x 100m at deeper levels of the resource.</li> <li>Interpretation of the area is well understood and is supported by the knowledge from open pit and underground operations.</li> <li>Data spacing is considered appropriate for the estimation of a Mineral Resource.</li> <li>No compositing was carried out</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> <li>Drilling intersections are nominally designed to be as perpendicular to the ore body as far as underground infrastructure constraints/ topography allows.</li> <li>It is not considered that drilling orientation has introduced an appreciable sampling bias.</li> <li>If the relationship between the drilling orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>
Sample security	<ul> <li>The measures taken to ensure sample security.</li> <li>Samples are delivered by field staff directly to the independent laboratory contractor. Samples are stored securely until they leave site.</li> <li>Sample security of historic data is unknown.</li> </ul>
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> <li>All drilling data and the parent geological data used for resource estimation is routinely reviewed by the Senior Geologist and Managing Director.</li> <li>The entire Mt Martin database was reviewed before loading to the Company master database. Holes with errors such as nominal RL's, missing downhole surveys and other missing data fields were flagged and highlighted for further review and validation. Any holes that cannot be validated are flagged as low confidence and excluded from resource estimation purposes.</li> </ul>

#### Section 2 - Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	Explanation	Commentary		
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>The Mt Martin deposit is situated on freehold land (Hampton East Location 45). The freehold title to Location 45 is held by Franco-Nevada Australia Pty Ltd (Franco-Nevada).</li> <li>Lefroy Exploration Limited (LEX) has acquired all mineral rights to Location 45 which are held by Monger Exploration Pty Ltd and Hampton Metals Ltd both wholly owned subsidiaries of LEX.</li> <li>An overriding royalty of 4% is payable to Franco Nevada on all minerals produced from Location 45.</li> <li>No State royalties are payable and there are no external reporting requirements for freehold titles.</li> <li>No known impediments exist, and the title is in good standing.</li> </ul>		
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>The Mt Martin orebody was discovered in 1923 and has been mined both underground and open pit by various owners. The deposit has produced approximately 200,000 ounces of gold.</li> <li>The commencement of the underground mining is unknown, gold was mined from 4 shafts with the deepest being 165 metres below the surface.</li> <li>Open pit mining was initially conducted by New Hampton Goldfields and ceased in 1997.</li> <li>Further open pit mining was conducted by Harmony Gold Aust Pty Ltd (Harmony) during the period 2001 to 2004 over a length of 800m and depth of 80m.</li> <li>In May 2007 Australian Mines acquired Location 45 from Harmony. Under a separate arrangement, Dioro Exploration NL retained an interest in the Mt Martin Gold Mine for 30 months under a sublease arrangement from Australian Mines.</li> <li>In 2009 Dioro mined down to a maximum depth 115 metres in the central portion of the pit. A total of 743Kt at 1.5g/t Au for 31k ounces of gold was recovered (Australian Mines 2010).</li> <li>In January 2010 Australian Mines gained full control of the lease when the Dioro sublease arrangement expired and completed 3 separate exploration drill programs. An updated resource estimate was completed by consultants CSA Global Pty Ltd (CSA) in October 2010 comprising approximately 4.67Mt at 2.19g/t Au for a total of 328,000 ounces.</li> <li>In August 2011 Alacer Gold Corporation (Alacer) acquired the Mt Martin leases and locations from Australian Mines. Alacer drilled a total of 8 DD holes for 2,171m and 15 RC holes for 2,702m at Mt Martin during 2011. The current gold resource of 501.175oz Au was first estimated and reported by Alacer on 1 April 2013.</li> <li>Metals X Limited acquired the SKO tenement holdings in October 2013 via the acquisition of Alacer's Australian Business Unit.</li> <li>In Aperil 2018 Northern Star Resources acquired the SKO tenement holdings with the purchase of HBJ Minerals Pty Ltd from Westgold.</li> <li>No drilling has been completed at Mt Martin since Alacer's 2011 drill progr</li></ul>		
Geology	• Deposit type, geological setting and style of mineralisation.	<ul> <li>The Mount Martin deposit is located within a regional scale north- northwest trending Archean Greenstone Belt. Within the Mount Martin Carnilya area, the greenstone belt comprises a mixed sequence of ultramafic (predominantly komatiitic) and fine-grained, variably sulphidic sedimentary lithologies with subsidiary mafic basalt units.</li> <li>The deposit occurs in several ductile shear zones in altered ultramafic lithologies in a lower amphibolite facies metamorphic regime.</li> </ul>		

		<ul> <li>The dominant rocks in the Mt Martin mine consist of highly strained, carbonate altered pyroxenite to peridotite komatiitic ultramafic rocks.</li> <li>There are two phases of alteration overprinting the carbonate altered ultramafic rocks.</li> <li>Phase 1 is the formation of quartz-fuchsite-aluminosilicate schists comprising: (i) cummingtonite-quartz-biotite-carbonate-(albite) schists, which form the dominant alteration lithology, (ii) quartz-cordierite-amphibole-chlorite(biotite) schists and (iii) quartz-fuchsite-(andalusite-kyanite silliminite) schists.</li> <li>Phase 2 is characterised by the development of biotite either along microfractures or replacing amphibole, commonly with accompanying fine granular quartz and sulphide together with vein quartz and carbonate. Assemblages (i), (ii) and (iii) of the phase 1 alteration can all be mineralised and overprinted although the cummingtonite schists are the most abundant.</li> <li>Gold mineralisation is generally associated with arsenopyrite, less commonly with siderite, and more rarely in pyrrhotite. Mineralisation occurs as disseminated blebs and fracture filling within wall rocks.</li> <li>Mineralisation generally occurs as a series of sulphide lodes (mineralised fault structures) parallel to the dominant foliation along the Main, East, North Shaft and West shear zones. It is best developed where individual foliation-parallel faults, or complete shear zone segments, have been rotated and steepened into dilational jogs.</li> <li>The dilational jogs, together with enhanced alteration and sulphide mineralisation plunge at 30 degrees towards 300 azimuth, forming a distinct plunging shoot geometry that was mined in the underground development.</li> </ul>
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</li> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case</li> </ul>	<ul> <li>The data has been independently verified by external consultants CSA and four separate owners of the project since 2011.</li> <li>Since acquiring the complete database in June 2023, the Mt Martin database has been reviewed by LEX personnel.</li> <li>A summary of all significant intersections along with a table of coordinates and key drill hole information (dip azimuth etc) are contained in tables with the body of the announcement.</li> <li>Drill holes vary in survey dip from +41 to -90, with hole depths ranging from 2 m to 655 m, with an average depth of 30 m. The assay data acquired from these holes are described in the Alacer NI 43-101 resource report dated 3 April 2012.</li> <li>All validated drill hole data were used directly or indirectly for the preparation of the resource estimates described in the resource report.</li> <li>No material information has been excluded.</li> </ul>
Data aggregation methods	<ul> <li>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.</li> <li>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated</li> </ul>	<ul> <li>All gold results are reported as length weighted down-hole averages.</li> <li>Significant results were reported using a 0.25g/t Au lower cut-off, a minimum intersection length of 2m and including a maximum of 2m internal dilution below cut-off.</li> <li>Where an intersection incorporates short lengths of high grade results these intersections are reported in addition to the aggregate value.</li> <li>No metal equivalent values were used.</li> </ul>

Relationship between mineralisation widths and intercept length	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul> <li>Mineralised structures at Mt Martin are generally shallow dipping and drillholes have been oriented to intersect ore zones at an angle to provide an approximate true width intercept.</li> <li>True widths are not reported. All reported assay results have been reported as length weighted downhole intercepts.</li> </ul>
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.	<ul> <li>A plan view, long section and cross section showing significant drill holes has been included in this announcement.</li> <li>Additional holes within the long-section that did not intersect mineralisation within the projected mineralisation corridor have also been included to give a full picture of the extents of mineralisation.</li> </ul>
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.	<ul> <li>Comprehensive reporting of all results for the Mt Martin database is not practicable due to the sheer number of drillholes.</li> <li>Both high-grade and lower grade intersections for all drill holes are represented diagrammatically in the long-section and cross section figures and/or the accompanying table of intersections.</li> <li>Selected intercepts are reported in Table 1 to provide a representative selection of drillhole grades that intercept the corresponding resource block model presented in cross section B-B'.</li> </ul>
Other substantive exploration data	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul> <li>No additional substantive exploration data relevant to the Mt Martin resource has been excluded.</li> <li>The Company is reviewing all additional historical data acquired as part of ongoing exploration targeting and will report any new material information when it becomes available.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Exploration drilling is planned to determine extent of mineralisation outside the existing resource estimate at depth and along strike.</li> <li>Initial drill testing and validation of significant gold and nickel anomalies identified by previous explorers is also planned.</li> <li>Appropriate diagrams accompany this release.</li> </ul>