Lefroy Exploration

ASX ANNOUNCEMENT: 18 JANUARY 2024

Drilling Extends Gold Mineralisation at Mt Martin Gold Mine

ASX:LEX

HIGHLIGHTS

- Gold assay results have been received from the 29-hole RC drilling program at Mt Martin Gold Mine, 25km north of Kambalda
- Drilling northwest of the pit highlights the down-dip continuity and growth potential of mineralised structures at Mt Martin, supported by gold intersections including:
    - 10m @ 4.32g/t Au from 222m in LEFR379
- Additional mineralised zones identified east of the pit in an underexplored area (East Shear), highlight Mt Martin's strong upside potential, and include:
    - 8m @ 3.98g/t Au from 38m in LEFR395
- LEX considers the East Shear has potential to be a new shallow gold resource that will be prioritised in further exploration and resource expansion drilling, scheduled to begin in February 2024
- Commercialisation of LEX's gold assets, including Mt Martin, is Lefroy's main priority, with current work including updating the optimisation study for a cutback in the NW part of the pit and discussions with local gold mill operators

LEFROY MANAGING DIRECTOR WADE JOHNSON COMMENTED:

"We are delighted with the results from the recent drilling program at Mt Martin and now have a high degree of confidence in the geological model, with drilling confirming the main shears as consistent structures controlling mineralisation.

The program has also identified new shallow gold mineralisation in the underexplored area immediately east of the open pit, which will now be a priority focus for follow-up drilling to provide an additional source of shallow open pit mineralisation.

We look forward to initiating the follow-up drilling on the eastern side of the pit where, at a time of a near-record gold price, outlining further shallow mineralisation could significantly add to the MRE and additional ounces defined could enhance a larger optimised pit design."

RESULTS FROM MT MARTIN GOLD MINE

Lefroy Exploration Limited ("Lefroy" or "the Company") (ASX:LEX) is pleased to announce the results from its RC drilling campaign, which was completed in December 2023 at the Mt Martin Gold Mine (Mt Martin) located 25km north of Kambalda.

The Company's maiden resource expansion drilling program at Mt Martin consisted of 29 reverse circulation (RC) drillholes (Table 1) located proximal to the existing open pit and evaluated multiple extensions at depth and shallow gold-bearing shear structures over a strike length of 1,000m (Figure 1).

Each hole averaged approximately 200m depth for a total of 5,712m. The drillholes were targeted as nominal 40m step-outs from existing mineralisation.

The program returned significant gold intersections (Table 2) which have extended mineralisation beyond the existing Indicated/Inferred Mineral Resource Estimate (MRE) of 501,175oz gold (refer to LEX ASX release 5 September 2023).

Drill holes on the west side of the open pit (Figure 1) targeted the north-west plunging ore shoots which are a feature of high-grade mineralisation at Mt Martin (Figure 2). Significant results include:

- **35m @ 1.78g/t Au from 209m including 10m @ 4.32g/t Au from 222m (LEFR379)**
- **3m @ 3.74g/t Au from 128m (LEFR376)**
- **4m @ 2.6g/t Au from 178m (LEFR380)**
- **5m @ 2.45g/t Au from 115m (LEFR386)**

These results are highly encouraging as they confirm the mineralised structures have significant down-dip continuity that remains open at depth to the west (Figure 3) of the existing resource. There is significant potential for the discovery of additional shoot structures proximal to the existing resource where the controlling structures remain untested along strike to the north and south (Figures 2, 3 and 4).

The proximity of these zones close to the base of the existing open pit presents a compelling target for future shallow underground mine development.

Drill holes on the east side of the pit (Figure 1) were planned to confirm the near-surface continuity of mineralised structures including the Main Shear and the East Shear (Table 2), outside the eastern extent of the open pit. This area has been subject to limited historic drilling and forms a gap in resource data immediately outside the open pit (Figures 1 and 2).

Significant results include:

- **8m @ 3.98g/t Au from 38m, including 4m @ 7.16g/t Au from 41m (LEFR395)**
- **3m @ 2.62g/t Au from 53m (LEFR395)**
- **6m @ 2.55g/t Au from 141m (LEFR393)**
- **13m @ 1.04g/t Au from 167m (LEFR393)**

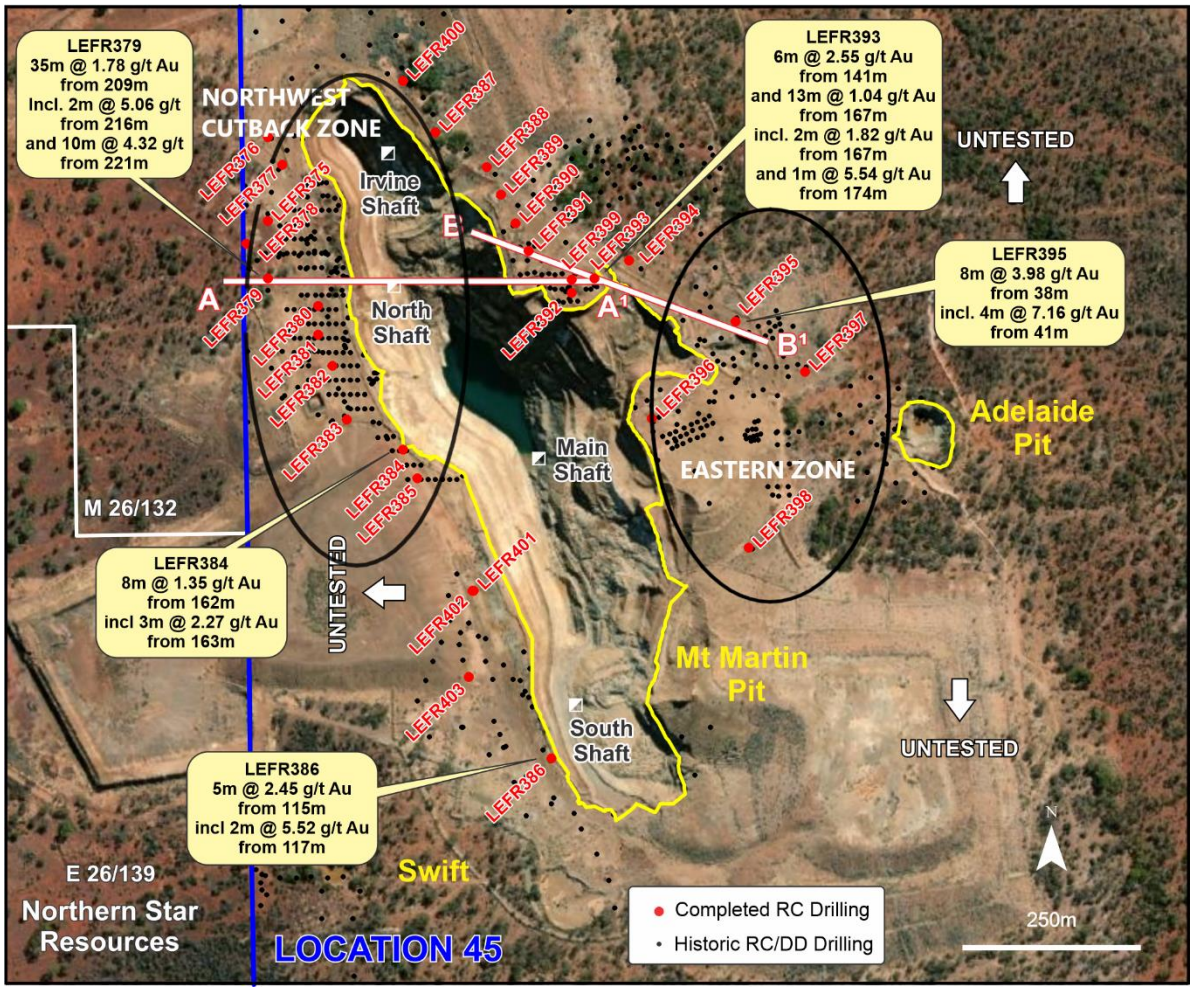

Figure 1 Mt Martin Gold Mine drill hole location plan (refer to Figures 3 and 4 for drill sections)

These holes confirm the discovery of an entirely new shoot structure in hole LEFR393 that remains open at depth, and to the north along strike (Figure 4). These initial results are considered by the Company to be very exciting and highlight the potential for the discovery of additional new zones of mineralisation adjacent to the pit and outside the current MRE that are almost entirely untested by effective drilling (Figure 1).

Shallow additions to the MRE in the area east of the pit have the potential to significantly improve pit optimisations and deliver additional ounces into any future mining studies. Lefroy considers the East Shear has potential to be a new shallow gold resource that will be a priority for the next phase of exploration and resource expansion drilling.

The maiden RC program also improved Lefroy's confidence in the geological model by confirming the major shear structures (Main, North and East) as consistent controls on mineralisation. Full suite geochemical analysis and hyperspectral data remains outstanding and will form the first consistent and modern geochemical dataset for the Mt Martin deposit.

This data will be integrated with the geological observations from the RC program and historical datasets to build an integrated targeting model to guide further exploration at Mt Martin and the broader Location 45 property.

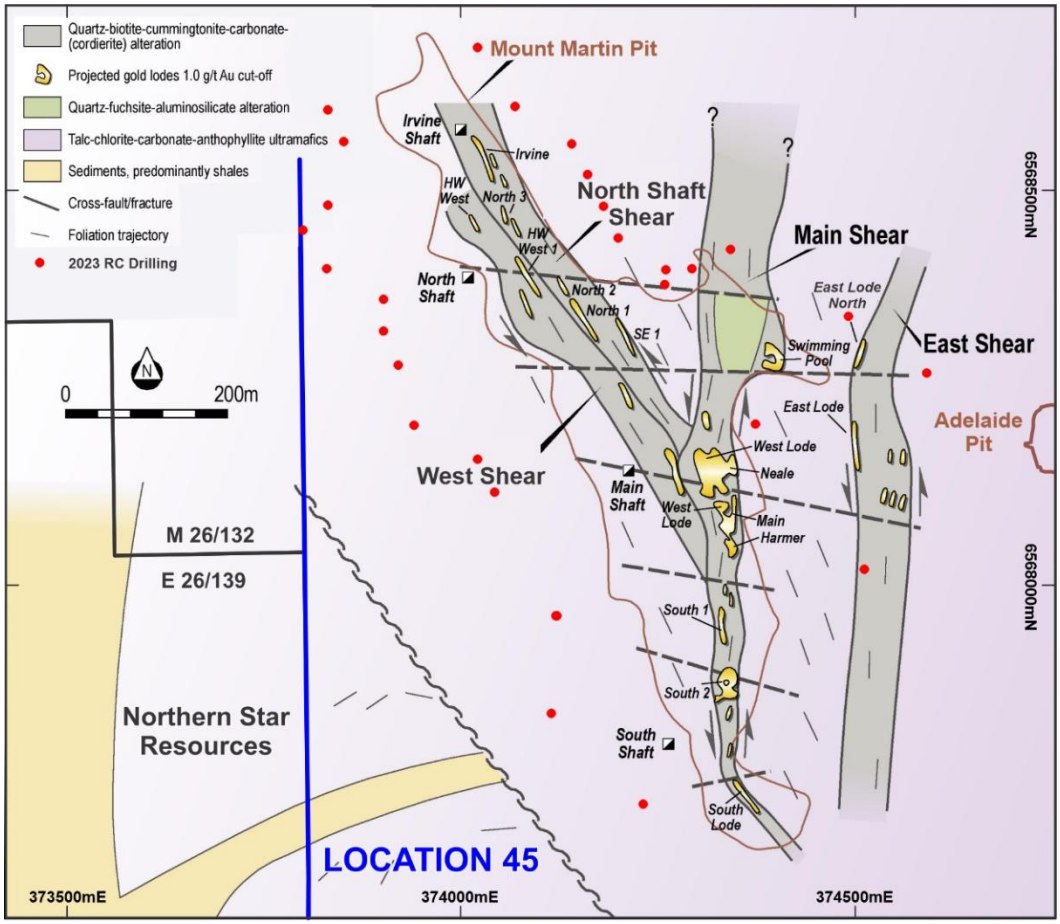

Figure 2 Mt Martin Gold Mine geological interpretation and recent drill hole location plan

NEXT STEPS

Based on these initial results, the Company intends to focus its next phase of drilling at Mt Martin on the eastern side of the pit, where there is strong potential for new shallow gold mineralisation that could add significant tonnes to the MRE and additional ounces to optimised pit designs for use in future mining studies.

Planning is currently underway, with drilling scheduled to commence in early February. This campaign will aim to further expand the potential open-pit resource at Mt Martin, focussed on the eastern side of the pit, and guide initial mining studies to assess options for the project's development.

Multi-element geochemical assays and hyperspectral results of samples remain outstanding and will be integral to developing the targeting model and vectoring tools for follow-up exploration programs at Mt Martin and the broader Location 45.

Limited modern exploration has occurred outside of the immediate Mt Martin mine area and there is significant potential for the discovery of additional gold resources with similar structural setting and geochemical signatures to Mt Martin, through the generation of new drill targets based on foundational geological and geochemical datasets. This work will be ongoing in conjunction with further resource expansion drilling programs.

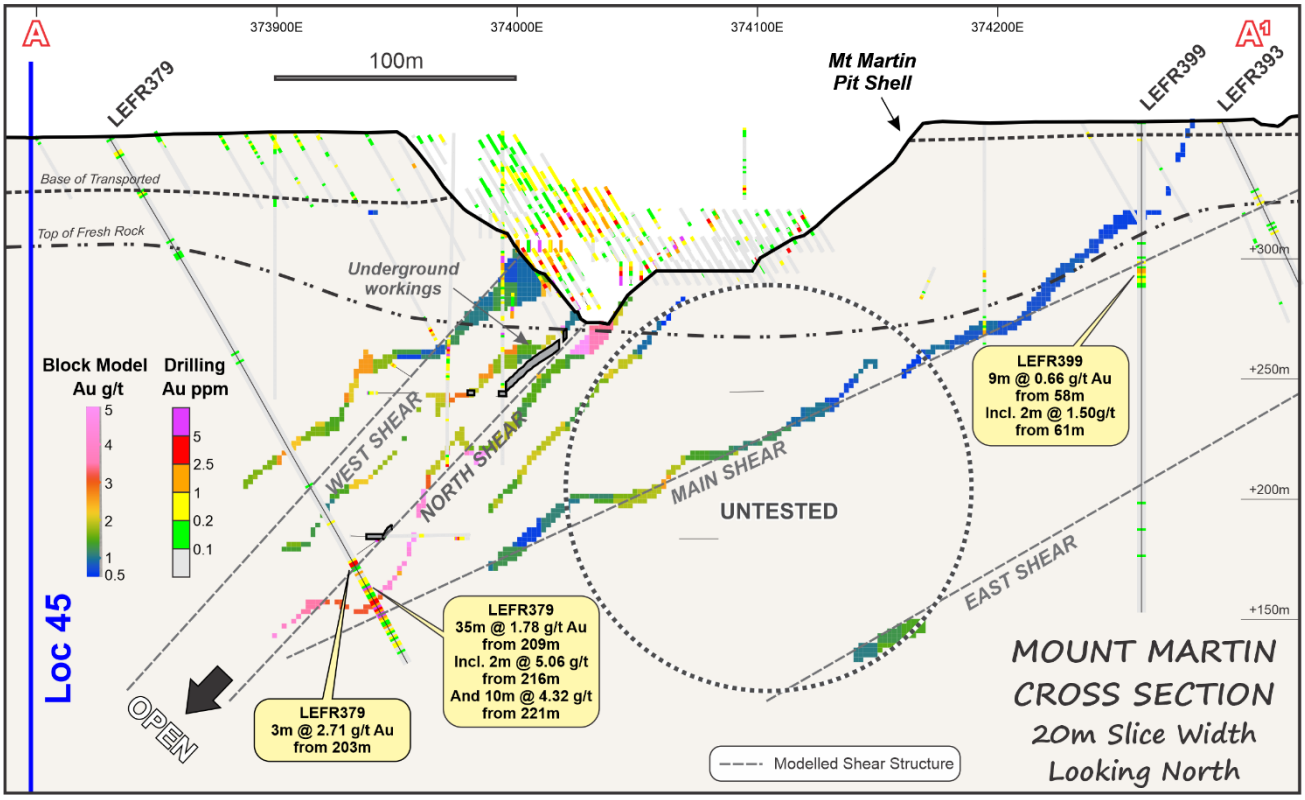

Figure 3 Schematic drill section depicting RC drill holes LEFR379 and LEFR399

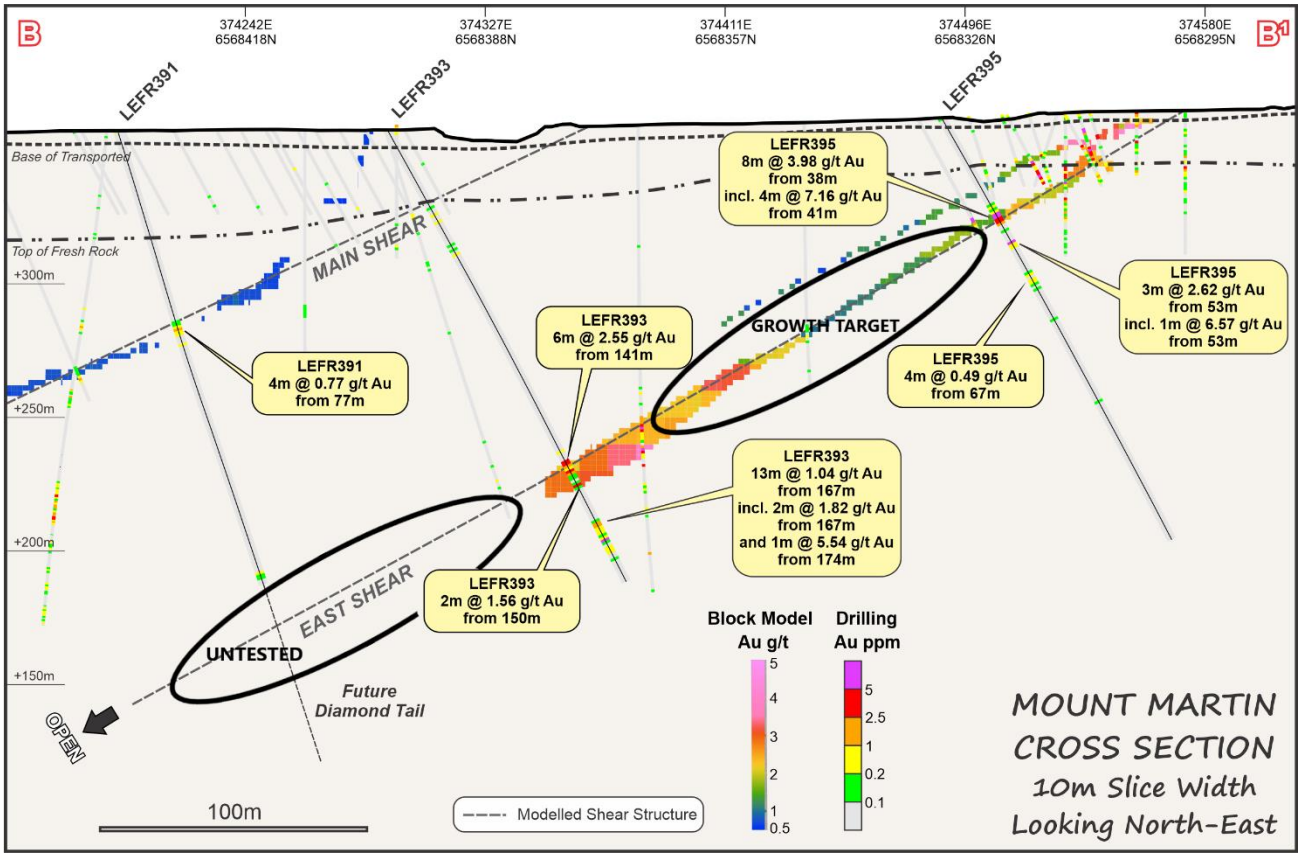

Figure 4 Schematic drill section depicting RC drill holes LEFR391, LEFR393 and LEFR395

-Ends-

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

Wade Johnson
Managing Director

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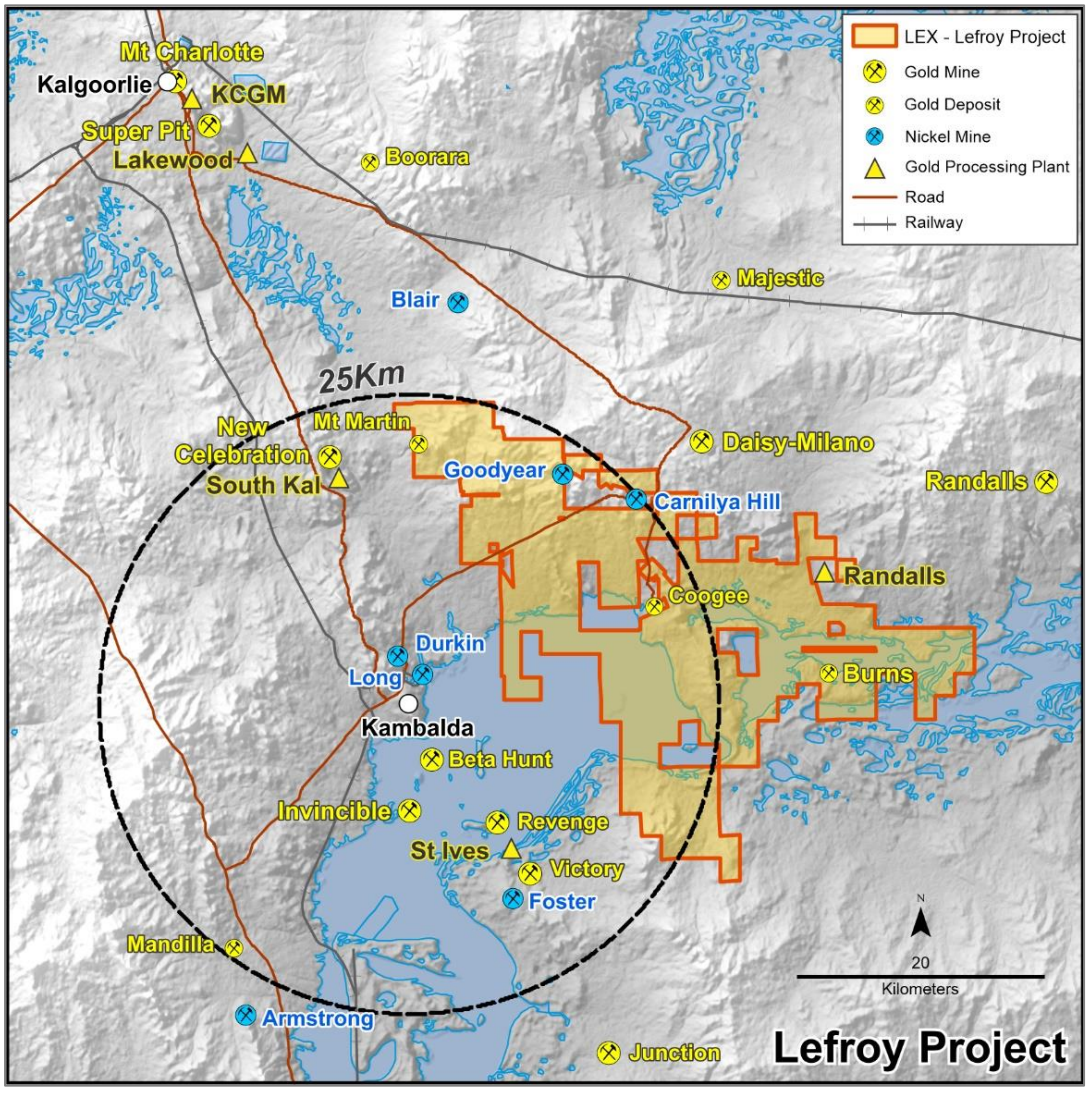
ABOUT LEFROY EXPLORATION LIMITED

Lefroy Exploration Limited (ASX:LEX) is an active West Australian exploration company focused on developing its growing gold and critical minerals projects. The Company's portfolio of high-quality projects, include the Lefroy Project, located in the heart of the world-class Kalgoorlie-Kambalda gold and nickel mining district, the Lake Johnston Project 120km west of Norseman, and the large 2872km² Glenayle Project 210km north of Wiluna. The Lefroy Project is a contiguous land package of 635km² with a growing mineral resource inventory of 1.1 million ounces of gold, 58,000 tonnes of contained copper and 14,780 tonnes of contained nickel, as at August 2023 (refer to LEX 2023 Annual Report).

In May 2023, Lefroy signed a Mineral Rights Agreement with title holder Franco-Nevada Pty Ltd, to acquire the mineral rights to Hampton East Location 45 (Location 45) (Refer ASX release 23 May 2023). Location 45 is a freehold property located 30km South-East of Kalgoorlie, surrounded by operating gold mines within the world-class Kalgoorlie-Kambalda mining district (Figure below). The property hosts the historic Mt Martin gold mine, which has historically produced approximately 200,000 ounces of gold at 2.8g/t and which includes an existing resource of 501,175oz gold (8.7Mt @ 1.79g/t Au) (Refer to ASX release 5 September 2023).



Regional Locality Map of the Company's Lefroy Project near Kambalda

SUPPORTING ASX ANNOUNCEMENTS

The following announcements were lodged with the ASX and further details (including supporting JORC Tables) for each of the sections noted in this Announcement can be found in the following releases. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements. In the case of the Mt Martin Mineral Resource Estimate (MRE), the Company confirms that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.

- Acquisition of Mineral Rights Transforms Lefroy – 23 May 2023
- Growth Potential for Mt Martin Gold Mine Confirmed – 5 September 2023
- Lefroy Exploration Investor Update Presentation – 6 September 2023
- $6.2M Raised to Advance Nickel and Gold Projects at Location 45 – 22 September 2023
- LEX 2023 Annual Report – 2 October 2023
- Resource Extension Drilling Underway at Mt Martin – 24 November 2023

COMPETENT PERSON STATEMENT

The information in this announcement that relates to exploration targets and exploration results is based on information compiled by Wade Johnson, a competent person who is a member of the Australian Institute of Geoscientists (AIG). Mr Johnson is employed by Lefroy Exploration Limited. Mr Johnson 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 Johnson consents to the inclusion in this announcement of the matters based on his work in the form and context in which it appears.

TABLE 1 Mt Martin December 2023 RC Drill Program- Drill Hole Collar Details

Hole ID	Collar E (MGA94_51)	Collar N (MGA94_51)	Collar RL (m)	Depth (m)	Azimuth (deg)	Dip (deg)
LEFR375	373831	6568482	351	186	90	-60
LEFR376	373831	6568602	352	162	90	-60
LEFR377	373851	6568562	353	252	90	-60
LEFR378	373800	6568450	351	222	90	-60
LEFR379	373830	6568401	351	252	90	-60
LEFR380	373901	6568362	353	252	90	-60
LEFR381	373901	6568322	352	258	90	-60
LEFR382	373921	6568278	353	336	90	-60
LEFR383	373941	6568202	353	264	90	-60
LEFR384	374021	6568159	354	192	90	-60
LEFR385	374042	6568118	354	186	90	-60
LEFR386	374231	6567722	354	150	90	-60
LEFR387	374068	6568607	355	204	90	-70
LEFR388	374140	6568559	357	198	90	-80
LEFR389	374160	6568520	357	180	0	-90
LEFR390	374181	6568480	357	162	90	-60
LEFR391	374199	6568440	357	180	90	-70
LEFR392	374259	6568381	356	180	120	-60
LEFR393	374293	6568401	358	192	120	-60
LEFR394	374342	6568426	359	180	120	-60
LEFR395	374492	6568341	362	180	120	-60
LEFR396	374374	6568204	360	156	120	-75
LEFR397	374591	6568269	365	150	120	-60
LEFR398	374511	6568020	362	150	90	-60
LEFR399	374260	6568400	357	204	0	-90
LEFR400	374021	6568682	355	168	90	-60
LEFR401	374122	6567960	354	156	90	-60
LEFR402	374120	6567960	354	162	270	-80
LEFR403	374115	6567837	353	204	0	-90

TABLE 2 Mt Martin December 2023 RC Drill Program -Significant Assay Results

Hole ID	From (m)	To (m)	Interval (m)*	Au (g/t)	Structure(s)	Au (g*m)
LEFR376	128	131	**3.00**	3.74	North Shear	11.2
LEFR377	229	230	**1.00**	4.08	Main Shear	4.1
LEFR379	203	206	**3.00**	2.71	North Shear	8.1
LEFR379	209	244	**35.00**	1.78	North Shear+ Main Shear	62.3
incl	216	218	**2.00**	5.06		10.1
and	221	231	**10.00**	4.32		43.2
LEFR380	81	84	**3.00**	0.62	West Shear	1.9
LEFR380	93	95	**2.00**	2.35	West Shear	4.7
LEFR380	131	139	**8.00**	0.78	North-West Shear	6.2
incl	133	135	**2.00**	2.41		4.8
LEFR380	178	182	**4.00**	2.60	North Shear	10.4
incl	179	180	**1.00**	9.42		9.4
LEFR380	214	218	**4.00**	0.50	Main Shear	2.0
LEFR381	103	104	**1.00**	5.27	West Shear	5.3
LEFR381	131	133	**2.00**	1.22	West Shear	2.4
LEFR381	183	185	**2.00**	0.54	Main Shear	1.1
LEFR381	202	212	**10.00**	0.97	Main Shear	9.7
incl	205	208	**3.00**	1.33		4.0
and	211	212	**1.00**	3.28		3.3
LEFR381	215	222	**7.00**	1.50	Main Shear	10.5
LEFR381	240	248	**8.00**	0.69	Main Shear	5.5
incl	246	247	**1.00**	2.94		2.9
LEFR382	201	206	**5.00**	0.81	North Shear	4.0
incl	202	205	**3.00**	1.08		3.2
LEFR382	214	218	**4.00**	0.57	North Shear	2.3
incl	215	216	**1.00**	1.41		1.4
LEFR382	243	245	**2.00**	0.65	Main Shear	1.3
LEFR382	294	299	**5.00**	0.83	East Shear	4.2
incl	295	296	**1.00**	2.13		2.1
LEFR382	305	307	**2.00**	0.52	East Shear	1.0
LEFR383	165	168	**3.00**	0.61	North Shear	1.8
LEFR383	179	181	**2.00**	0.62	North Shear	1.2
LEFR383	191	194	**3.00**	0.72	North Shear	2.2
incl	192	193	**1.00**	1.14		1.1
LEFR384	135	139	**4.00**	0.75	North Shear	3.0
LEFR384	162	170	**8.00**	1.35	Main Shear	10.8
incl	163	166	**3.00**	2.27		6.8
and	167	169	**2.00**	1.14		2.3

TABLE 2 Mt Martin December 2023 RC Drill Program -Significant Assay Results Continued

Hole ID	From (m)	To (m)	Interval (m)*	Au (g/t)	Structure(s)	Au (g*m)
LEFR385	135	137	**2.00**	0.54	Main Shear	1.1
LEFR386	115	120	**5.00**	2.45	West Shear	12.3
incl	117	119	**2.00**	5.52		11.0
LEFR388	114	119	**5.00**	1.56	Main Shear	7.8
LEFR388	133	136	**3.00**	0.50	Main Shear	1.5
LEFR389	138	140	**2.00**	0.51	Main Shear	1.0
LEFR389	149	155	**6.00**	0.83	Main Shear	5.0
incl	153	155	**2.00**	1.15		2.3
LEFR389	168	170	**2.00**	1.58	East Shear	3.2
LEFR390	*135*	*136*	***1.00***	*7.70*	East Shear	7.7
LEFR391	77	81	**4.00**	0.77	Main Shear	3.1
LEFR392	13	17	**4.00**	1.40	Main Shear.	5.6
incl	13	14	**1.00**	4.01		4.0
LEFR392	173	176	**3.00**	1.02	East Shear	3.1
LEFR393	141	147	**6.00**	2.55	East Shear	15.3
LEFR393	150	152	**2.00**	1.56	East Shear	3.1
LEFR393	167	180	**13.00**	1.04	East Shear	13.5
incl	167	169	**2.00**	1.82		3.6
and	174	175	**1.00**	5.54		5.5
LEFR394	117	123	**6.00**	0.77	East Shear	4.6
incl	119	122	**3.00**	1.03		3.1
LEFR395	38	46	**8.00**	3.98	East Shear	31.8
incl	41	45	**4.00**	7.16		28.6
LEFR395	53	56	**3.00**	2.62	East Shear	7.9
incl	53	54	**1.00**	6.57		6.6
LEFR395	67	71	**4.00**	0.49	East Shear	2.0
LEFR397	0	2	**2.00**	1.11	Transported Material	2.2
incl	0	1	**1.00**	1.30		1.3
LEFR398	0	2	**2.00**	1.80	Transported Material	3.6
incl	0	1	**1.00**	3.01		3.0
LEFR399	58	67	**9.00**	0.66	Main Shear	5.9
incl	61	63	**2.00**	1.50		3.0
LEFR401	107	114	**7.00**	1.50	Main Shear	10.5
incl	110	113	**3.00**	2.92		8.8
LEFR401	117	126	**9.00**	0.63	Main Shear	5.7
incl	119	120	**1.00**	1.09		1.1
and	124	125	**1.00**	1.14		1.1
LEFR402	103	105	**2.00**	1.91	West Shear	3.8
incl	103	104	**1.00**	3.33		3.3

Significant intercepts greater than 2m @ 0.5g/t Au using 0.25g/t cut-off and no more than 2m of consecutive waste

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	• *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 representativity 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 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.*	• The sampling noted in this release has been carried out using Reverse Circulation (RC) drilling at the Mt Martin Gold (Au) prospect. The drill program comprises 29 RC holes for a total of 5718m of drilling. Holes vary in depth from 150m to 336m with an average depth of 200m. • Sampling and QAQC protocols as per industry best practice with further details below. • 1m interval samples were split to a 12% fraction via a rig-mounted cone splitter to deliver a sample of approximately 3 kg into pre-numbered calico bags. • All samples were delivered to the Bureau Veritas laboratory in Kalgoorlie where they were dried, crushed to 95% passing 3 mm if required. At this point large samples may be split using a rotary splitter. • For fire assay, samples are pulverised to 95% passing 75 µm and a 40g charge was fired with Au determination by Atomic Absorption Spectrometry (AAS).
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 Reverse Circulation (RC) drilling was completed by an RC rig from Raglan Drilling (Kalgoorlie). Low air face sampling hammer drilling proved satisfactory to penetrate the regolith and reduce contamination risk. • RC Drilling was completed using a 143mm diameter drill bit.
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.*	• RC drilling contractors adjust their drilling approach to specific conditions to maximize sample recovery. • Sample recovery was visually inspected and recorded by the rig geologist and sampler with regular checks of sample weights using scales. • Sample recoveries were observed to be excellent with minimal groundwater encountered during the program. • Underground voids were intersected in 2 drill holes corresponding with historic underground mine workings. No sample was recovered for these intervals and this was recorded on the drill logs and sample sheets.
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.*	• RC sample chips are logged in 1m intervals for the entire length of each hole. Regolith, lithology, alteration, veining, and mineralisation are all recorded. • All logging codes for regolith, lithology, veining, alteration, mineralisation, and structure is entered into the database using suitable pre-set dropdown codes to remove the likelihood of human error. All data is validated before upload to the primary database.

	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	• All core logging is qualitative with mineralised zones assayed for quantitative measurements. Magnetic susceptibility measurements were recorded for each metre and are quantitative in nature. • In all instances, the entire drill hole 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.*	• RC samples are collected at 1m intervals directly off a rig-mounted cone splitter into separate pre-numbered calico bags. The bags are then reconciled and collected by company staff for submission to the laboratory. • 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. • Sample preparation techniques are considered appropriate for the style of mineralisation being tested for - this technique is industry standard across the Eastern Goldfields. • Procedures are available to guide the selection of sample material in the field. Standard procedures are used for all process within the laboratory. • For RC chips field duplicates are collected within mineralised zones at a frequency of approximately 1:100 samples and analysed for significant variance to primary results. • The sample sizes are considered appropriate for the material 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.*	• Only nationally accredited laboratories are used for the analysis of the samples collected. • The laboratory oven dries, jaw crushes, and if necessary (if the sample is >3kg), riffle split the sample and then pulverise the entire 3kg sample in a ring mill to a nominal 90% passing 75 microns. • All RC samples are analysed for total Au via Fire Assay, which involves 40g charge (sub-sampled after the pulverisation) of the analytical pulp being fused at 1050^0c 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. • No geophysical tools were used. • Quality Assurance and Quality Control (QA/QC) samples are routinely submitted and comprise standards, blanks, field duplicates, lab duplicates and repeat analyses. The results for these QA/QC samples are routinely checked by the Exploration Manager with any discrepancies dealt with in conjunction with the laboratory prior to the analytical data being imported into the database. • Certified standards and blanks were inserted on a regular basis of 1 in 20 for standards and 1 in 100 for blanks. Standards were certified reference material prepared by Geostats Pty Ltd. • Field duplicates are collected within mineralised zones at a frequency of approximately 1:100 samples and analysed for significant variance to primary results. • The analytical techniques used are considered appropriate for the style of mineralisation being tested for and analysis of QC data indicates acceptable levels of accuracy and precision in the analytical results.
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*	• All data used in the calculation of resources are compiled in databases which are overseen and validated by senior geologists. • Grade control drilling and reconciled mine production data from within the Mt Martin pit has overlapped existing historical exploration holes providing comparable mineralised intercepts. • Capture of field logging is electronic using Logchief software. Logged data is then exported as an xml document to the Company's external database managers and loaded to the Company's DATASHED database. Validation checks are completed to ensure data accuracy. Assay files are received electronically from the laboratory and filed to the Company's server and provided to the external database manager. • No adjustment has been made to any assay data.

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 hole positions were surveyed using a handheld GPS operated by the rig geologist/field assistant. The final RC collar was later surveyed by a DGPS by a third-party survey contractor. • Down holes surveys were completed by Raglan drill crew using a multi-shot gyro which records a survey every <5m down the hole. • Grid System – MGA94 Zone 51. Topographic elevation captured by using the differential GPS.
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.*	• Drill spacing ranges from 10m x 5m grade control drilling to 100m x 100m at deeper levels of the existing resource for Mount Martin. • The current program of 29 RC holes was designed on approximate 80m x 40m step-outs from the existing resource dataset. • Interpretation of the area is well understood and is supported by the knowledge from open pit and underground mining operations. • Data spacing is considered appropriate for the estimation of a Mineral Resource. • No compositing was carried out
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.*	• Drilling intersections are nominally designed to be as perpendicular to the known mineralised structures as possible with some allowance for existing mine infrastructure constraints. • The geometry of the main controlling shear structures and resulting ore shoots is relatively well understood based on historic drilling and mining datasets. • It is not considered that drilling orientation has introduced an appreciable sampling bias.
Sample security	• *The measures taken to ensure sample security.*	• Samples are delivered by field staff directly to the independent laboratory contractor. Samples are stored securely until they leave site. • Samples are reconciled by the laboratory on receival and any discrepancies with the submission paperwork are validated by company staff before sample processing commences.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• All sampling and analytical results are reviewed by the Exploration Manager and Managing Director. Anomalous gold intersections are checked against chip trays and logging to correlate with geology. • QAQC reports are routinely generated and reviewed by staff. • 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.

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	• *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 licence to operate in the area.*	• The Mt Martin deposit is situated on freehold land (Hampton East Location 45) approximately 30km South-East of Kalgoorlie. The freehold title to Location 45 is held by Franco-Nevada Australia Pty Ltd (Franco-Nevada). • 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. • An overriding royalty of 4% is payable to Franco Nevada on all minerals produced from Location 45. • No State royalties are payable and there are no external reporting requirements for freehold titles. • No known impediments exist, and the title is in good standing.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• 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 at a grade of 2.8 g/t. • The commencement of the underground mining is unknown, gold was mined from 4 shafts with the deepest being 165 metres below the surface. • Open pit mining was initially conducted by New Hampton Goldfields and ceased in 1997. • 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. • 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 mining sublease arrangement from Australian Mines. • 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. • 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. • 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. • Metals X Limited acquired the SKO tenement holdings in October 2013 via the acquisition of Alacer's Australian Business Unit. • In December 2016 Metals X Limited demerged its gold mining and exploration business as a separate ASX listed entity, Westgold Resources Limited. • In April 2018 Northern Star Resources acquired the SKO tenement holdings with the purchase of HBJ Minerals Pty Ltd from Westgold. • No drilling has been completed at Mt Martin since Alacer's 2011 programs. The resource has continued to be reported unchanged by subsequent owners Metals X Limited, Westgold Resources Limited, and Northern Star Resources Limited.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• 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. • The deposit occurs in several ductile shear zones in altered ultramafic lithologies in a lower amphibolite facies metamorphic regime.

		• The dominant rocks in the Mt Martin mine consist of highly strained, carbonate altered pyroxenite to peridotite komatiitic ultramafic rocks.
		• There are two phases of alteration overprinting the carbonate altered ultramafic rocks.
		  o 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.
		  o 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.
		• Gold mineralisation is generally associated with arsenopyrite, less commonly with siderite, and more rarely in pyrrhotite. Mineralisation occurs as disseminations in massive to semi-massive sulphide concentrations, attenuated sulphide veins associated with quartz veining and as weakly disseminated blebs and fracture filling within wall rocks.
		• 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.
		• These 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.
		• Narrow late-stage subvertical cross-faults are common throughout the deposit and dislocate both the mineralisation and the late-stage barren quartz veins associated with the gold mineralisation.

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 metres) 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 data has been verified by the Exploration Manager and Managing Director. • A summary of all significant intersections along with a table of coordinates and key drill hole information (dip azimuth etc) are contained in tables 1 and 2 with the body of this announcement. • No material information has been excluded.
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*	• All gold results are reported as length weighted down-hole averages. • Significant results were reported using a minimum intersection length of 2m at greater than 0.5g/t Au, a 0.25g/t Au lower cut-off, and including a maximum of 2m internal dilution below cut-off. • Where an intersection incorporates short lengths of high grade results these intersections are reported in addition to the aggregate value. • No metal equivalent values are used for reporting.

Relationship between mineralisation widths and intercept length	• *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').*	• 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. • Mineralisation is localised within a series of North-West trending shear zones (North Shaft Shear and West Shear) that dip at 40-50 degrees towards 240 azimuth (TN) and later North trending ductile shear zones (Main shear and East Shear) that dip at approximately 25-40 degrees towards 270 azimuth. The intersection of these two sets of shears forms a plunging shoot geometry within high grade mineralised zones of 30 degrees towards 300 azimuth. • True widths are not reported. All reported assay results have been reported as length weighted downhole intercepts.
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 plan view, and representative cross sections showing significant drill holes has been included in this announcement. • Additional holes that did not intersect significant mineralisation have also been included to give a full picture of the extents of mineralisation.
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.*	• Both high-grade and lower grade intersections for all drill holes are represented diagrammatically in the figures and the accompanying table of results. • Significant intercepts greater than 0.5g/t Au are reported in Tables 1 and 2. Holes with no significant intersections are highlighted but individual assays are not 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 additional substantive exploration data relevant to the Mt Martin resource has been excluded. • 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.
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.*	• Exploration drilling is planned to determine extent of mineralisation outside the existing resource estimate at depth and along strike. • Initial drill testing and validation of significant gold and nickel anomalies identified by previous explorers is also planned. • Appropriate diagrams accompany this release.