ASX Release: 9 March 2017



Exploration Update

Initial Drilling Campaign Completed on Lake Lefroy

Key Points:

- Early stage aircore drill program recently completed in Lake Lefroy, at the Company's flagship Lefroy Gold Project.
- Reconnaissance drilling evaluated seven prioritytargets, including the Zanex Prospect all located on Lake Lefroy, 14km to the east of the St lves Gold Mining Operation.
- Targets situated along a 10km emerging structural corridor defined from geophysical data and termed the Woolibar Trend.
- Ninety two vertical aircore holes drilled totaling 4881m completed over a 4 week period.
- Encouraging gold intersection of 17m from 40m at 2.14g/t Au returned from hole LEFA 47 at the Zanex Prospect.
- Results received for 18 holes with results for remaining 74 holes expected by end of March.
- Synthesis of the drilling campaign and follow up work program upon receipt of final results and compilation of data.

The Board of Lefroy Exploration Limited (ASX: LEX) ("Lefroy" or "the Company") is pleased to announce the recent completion of its extensive early stage aircore drilling program on Lake Lefroy at its flagship Lefroy Gold Project ("LGP or Project"), located approximately 50km to the south east of Kalgoorlie.

LGP is a commanding contiguous land package covering in excess of 540km² in the heart of the world class gold production area between Kalgoorlie and Norseman. The Project adjoins the Gold Fields owned St lves gold camp and mining centre, which contains the Invincible gold deposit, now in production and located in the western part of Lake Lefroy. The LGP is also immediately south of the Mount Monger Gold Operation and adjoins the site of the Randalls Processing Facility, both operated by Silver Lake Resources (ASX: SLR).

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The Company completed an early stage aircore drill program to evaluate seven priority target areas located within the eastern part of Lake Lefroy within tenements wholly owned by the Company on 5 March some 4 weeks after commencing the program on 8 February. The drilling within Lake Lefroy was completed despite heavy rainfall in the district in January and February making conditions in the lake challenging (refer Figure 1).



Figure 1 Examples of LEX air core drilling on Lake Lefroy February 2017

The seven targets evaluated comprised six conceptual targets defined from geophysical datasets and one geochemical target known as the Zanex Prospect, where previous drilling by Cyprus Gold Australia Limited in 1997 intersected 6m at 2.97gpt Au from wide spaced aircore drilling, in 1997, that has never been followed up (refer to LEX Prospectus dated 8 September 2016).



The six conceptual targets were generated from interpretation of airborne magnetic and ground gravity geophysical datasets that has provided an improved geological and structural framework for the area. These targets were selected on the basis of areas of geological and or structural complexity that have been derived from interpreting the geophysical data, and in particular the detailed ground gravity data, acquired by the Company in November 2016.

All the targets evaluated in the program lie along or adjacent to a corridor termed the Woolibar Trend. Within Lake Lefroy, the targets extend over a 10km northwest strike length. To the north of Zanex, this trend encompasses the historical Cutters Luck gold workings and a series of small but nevertheless important alluvial gold workings. These occurrences support the hypothesis that the trend could be gold bearing.

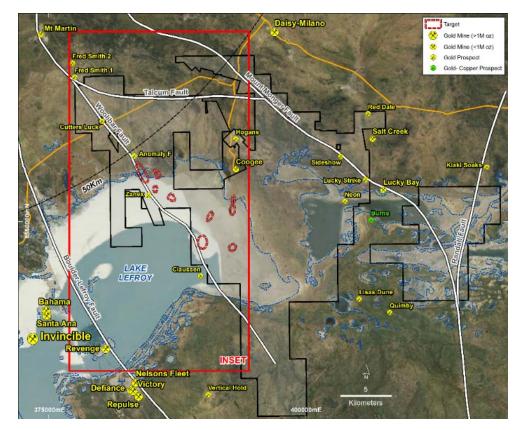


Figure 2 Lefroy Project tenement package, location of targets for drill evaluation and extent of geophysical interpretation shown in red outline (inset Figure 3)

Each of the target areas were evaluated with wide spaced vertical air core drilling as an initial test to understand the geology beneath the recent lake sediments and older transported cover sequences. Drill traverses were spaced at either 160m or 320m apart, and hole centres mainly 80m apart but up to 160m. The methodology of the wide spaced program was to determine the depth of the cover and regolith, determine geology to support ongoing development of the geological model and to search for indicators (alteration, geochemistry) or hints that could represent the footprint of a gold system.



A total of 4881m of drilling was completed in 92 holes over the seven targets. Drill hole depths predominantly ranged from 30-55m, the air core drill technique terminating near or top of fresh rock. However at target LTT06 (Figure 3) holes terminated at depths of 80-108m encountering deeper transported cover above basement lithological units.

Assay results from composite samples have been received for the first 18 holes (LEFA 42-59) of the program. These holes were drilled at the Zanex prospect to follow up on a gold intersection reported by Cyprus Gold Australia Corporation (Cyprus), who completed early stage wide spaced drilling in Lake Lefroy in 1996-1997. The recent program comprised an initial four 160m spaced lines with holes at 80m centres. An additional line was also completed along the original Cyprus drill traverse after evidence of this drilling after 20 years was located. An encouraging intersection of 17m at 2.14g/t Au from 40m to the end of hole was returned from hole LEFA 47 (Table 1) from the recent program (refer Figure 4&5). The hole intersected some 20m of transported cover above saprolite and terminated in an interpreted altered mafic lithology. On the last day of the program two infill holes at 40m centres were drilled next to LEFA 47 (refer Figure 5) and results are pending. Once all results have been received the significance of this intersection will be placed in the context of the Woolibar Trend.

The assay results for the remaining 74 holes are expected to be received by end of March.

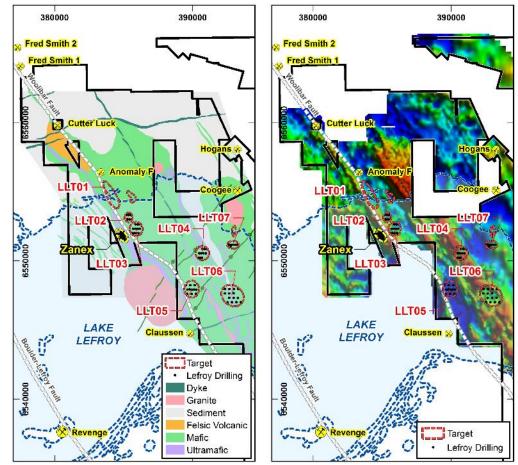
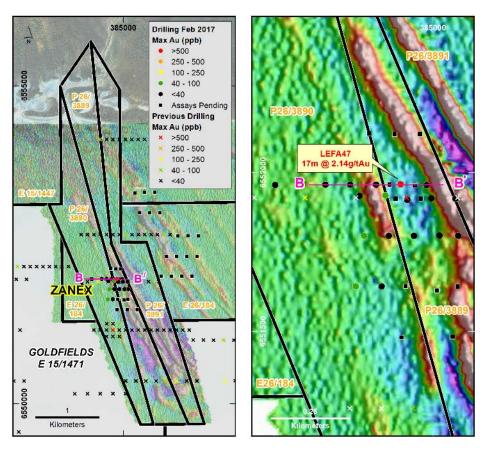
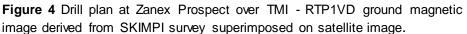


Figure 3 Inset Map-Highlighting geological interpretation on left and residual gravity image on right, both with targets, and extent of Lake Lefroy.







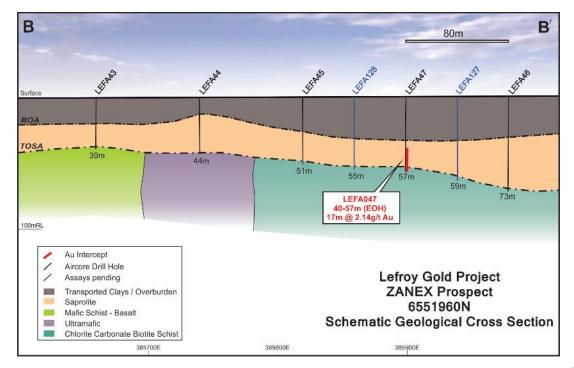


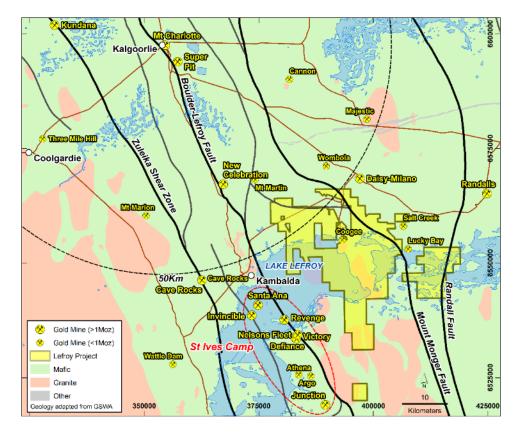
Figure 5 Zanex Prospect 6551960N drill section



About Lefroy Exploration and the Lefroy Project

Lefroy Exploration Limited is a new WA based and focused explorer taking a disciplined methodical approach in the search for high value gold and nickel deposits. Key Projects include the Lefroy Gold Project to the south east of Kalgoorlie and the Lake Johnston Project 120km to the west of Norseman.

The 100% owned Lefroy Gold Project contains mainly granted tenure covering 547km², located in the heart of the world class gold production area between Kalgoorlie and Norseman. The Project is in close proximity to Gold Fields' St lves gold camp, which contains the newly discovered Invincible gold mine located in Lake Lefroy, and is also immediately south of Silver Lake Resources (ASX: SLR) Daisy Milano gold mining operation.



Location of the Lefroy Gold Project relative to Kalgoorlie, Gold Fields St lves Gold Camp near Lake Lefroy, and major gold deposits.

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Table 1 2017 AirCore Drilling-Lefroy Gold Project-Woolibar Trend

Drill hole intersections are calculated with a 0.3gpt Au lower cut including 4m of internal dilution and minimum sample width of 4m. Samples are routinely collected as 4m composite intervals. The last sample of each hole is dedicated 1m interval, and the prior sample can vary from 1-4m depending on final depth. **Only significant (>0.30ppmAu) intersections are shown.**

Hole Id	Collar N (MGA)	Collar E (MGA)	Collar RL	Dip °	Azimuth	Hole Depth (m)	Depth From (m)	Depth To (m)	Gold Intersection (downhole width)
LEFA 47	6551962	384898	285	090	-	57	40	57	17m @ 2.14 ppm
				Incl	uding	-	44	48	4m @ 5.48 ppm
				Incl	uding		48	52	4m @ 2.47 ppm
				Incl	uding		56	57	1m @ 1.87 ppm

Notes Specific-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 that these announcements are not the only announcements released to the ASX but specific to exploration reporting on the Lefroy Gold Project.

- Lefroy Exploration Limited-Prospectus 8 September 2016
- Lefroy Commences Exploration 24 October 2016
- Gravity Survey Completed at Lefroy Project 22 November 2016
- Managing Directors AGM Presentation 5 December 2016
- Exploration Update 23 December 2016
- Drilling Campaign Commences on Lake Lefroy 8 February 2017

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). Wade Johnson is employed by Lefroy Exploration Limited. Wade 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. Wade Johnson consents to the inclusion in this announcement of the matters based on his work in the form and context in which it appears.

JORC CODE, 2012 Edition-Table 1 Report –Lefroy Project –Woolibar Trend-as at 9 March 2017	
Section 1: Sampling Techniques and Data	

Criteria	JORC Code Explanation	Commentary
Sampling techniques	 Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 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 (eg submarine nodules) may warrant disclosure of detailed information. 	 The sampling noted in this release has been carried out using AirCore (AC) drilling at several targets located in Lake Lefroy, along a corridor termed the Woolibar Trend. The AC program comprised 92 vertical holes for 4881m, holes varying in depth from 3-108m with an average depth of 53m. At each target hole spacing was primarily at 160m centres on traverses located 160m to 320m apart. At some targets (egZanex) the hole spacing was bought down to a regular 80m grid Sampling and QAQC protocols as per industry best practice with further details below. AC samples were collected from the cyclone at 1m intervals and laid out in rows of 10 or 20m (10-20 samples) on the ground (salt lake) or contained in green plastic bags. If laid out on the ground 1m library samples were collected in calico sample bags for future detailed sampling the 1m piles with a flour scoop to produce a bulk 2-3kg sample which was sent to the Laboratory in Kalgoorlie for analysis. Samples were dried, pulverised, split to produce a 40g sample for analysis by fire assay with Au determination by Atomic Absorption Spectrometry.
Drilling techniques	• Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	 The AirCore (AC) drilling was completed by Raglan Drilling (Kalgoorlie). The AC drill bit has a diameter of 78mm and collects samples through an inner tube to reduce contamination, but also allows better penetration through any palaeochannel puggy clays and fine sands. Aircore drilling is blade refusal and hence terminates in fresh rock or hard material such as quartz.
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. 	 The majority of the samples collected from the AC drill program were moist. Given all the drilling was in Lake Lefroy the initial 0-20m of drilling was wet with muddy samples, some with poor recovery. Minor AC samples were wet at the base of the holes. Sample recovery below the base of alluvium (BOA) was considered appropriate with some samples dry with good sample recovery. Sample recovery size and sample condition (dry, wet, moist) recorded. Recovery of samples estimated to be 10-100%, with limited recovery particularly drilling through the surficial lake clays and puggy moist transported clays. Drilling with care (eg. clearing hole at start of rod, regular cyclone cleaning) if water encountered to reduce incidence of wet – sticky sample and cross contamination. Insufficient sample population to determine whether relationship exists between sample recovery and grade. The quality of the sample (wet, dry, low recovery) was recorded during logging.

Criteria	JORC Code Explanation	Commentary
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. 	 Detailed logging of drill chips to record, regolith, lithology, structure, mineralisation and recoveries in each hole by an experienced geologist. Logging carried out by sieving 2m composite sample cuttings, washing in water and the entire hole collected in plastic chip trays for future reference. Every hole was logged for the entire length.
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. 	 No core drilling completed Composite samples of 4m were collected by scoop or grab (sticky clays) sampling 1m intervals into pre-numbered calico bags. Sample weight 2 - 3 kg. The last interval of each hole was a specific 1m. Collected 4m Samples placed in plastic and/or polyweave bags for despatch to assay laboratory. The sample preparation of the AC follows industry best practice, involving oven drying, pulverising, to produce a homogenous sub sample for analysis. Along with composite samples, standards and blanks were randomly inserted (approximately every 40 samples) and were included in the laboratory analysis. Standards were certified reference material prepared by Geostats Pty Ltd. Duplicate samples were collected at zones of interest and at irregular intervals of about 1 in every three holes.
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	• Samples routinely analysed for gold using the 40gram Fire Assay digest method with an AAS finish at Bureau Veritas's Kalgoorlie Laboratory. A Bottom of Hole

Criteria	JORC Code Explanation	Commentary
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. 	 The results have been reviewed and checked by alternative company personnel. LEFA 050 twinned historical drill hole LFA182 drilled by Cyprus Gold Australia Limited in 1996. Capture of field logging is electronic using Toughbook hardware and Logchief software. Logged data is then exported as an excel spreadsheet to the Companys external database managers which will be loaded to the Company's DATASHED data base and validation checks completed to ensure data accuracy. Assay files are received electronically from the laboratory by the Managing Director and filed to the companys server, and provided to the external database manager. There has been no adjustment to the assay data. The primary Au field reported by the laboratory is the value used for plotting, interrogating and
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. 	 reporting. Drill hole positions were surveyed using a hand-held Garmin GPS with a horizontal (Easting Northing) accuracy of +-5m. Drill location is set up by the supervising geologist. No downhole surveys completed. Grid System – MGA94 Zone 51. Topographic elevation captured by using reading from Garmin hand held GPS with an accuracy of+-10m and considered suitable for the flat terrain.
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. 	 centres at the Zanex Prospect on existing sections. AC samples composite range 2-4m but generally 4m. No assay compositing has
Orientation of dat 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. 	 be en applied. The East West orientated drill traverses considered effective to evaluate the northerly-north westerly trending geology and interpreted regional Woolibar Fault which has been interpreted from aeromagnetic and gravity data. Drill holes are reconnaissance and are orientated appropriately to ensure unbiased sampling of the geological trends The AC drilling is reconnaissance in nature, being wide spaced and the orientation of the deformed rocks intersected is yet to be confirmed.
Sample security	• The measures taken to ensure sample security.	 Individual composite samples were bagged in polyweave bags, collected and personally delivered to the Bureau Veritas Laboratory in Kalgoorlie by the Field Supervisor. Samples were sorted and checked for inconsistencies against submission sheet by Bureau Veritas staff at the Kalgoorlie laboratory. Bureau Veritas check the samples received against the LEX submission form to notify

Criteria	JORC Code Explanation	Commentary
		of any missing or extra samples. Following analysis, the sample pulps and residues are retained by the laboratory in a secure storage yard.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	 All results of this drill program were reviewed by the Senior Exploration Geologist and Managing Director. Anomalous gold intersections checked against library chip trays to correlate with geology. No specific site audits or reviews have been conducted.

Section 2: REPORTING OF EXPLORATION RESULTS - LEFROY PROJECT-Woolibar Trend as at 9 March 2017

		aga inst library chip trays to correlate with geology. No specific site audits or reviews have been conducted.
Section 2: RE	Porting of Exploration Results - Lefroy Pr	OJECT-Woolibar Trend as at 9 March 2017
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 licence to operate in the area. 	 The Lefroy Project is located approximately 50 km in south east from Kalgoorlie, Western Australia and consists of a contiguous package of wholly owned tenements held under title by LEX or its wholly owned subsidiary's Hogans Resources Pty Ltd. The work described in this report was undertaken on Prospecting leases P26/3889, P26/3890 and Exploration Licence 15/1447 held 100% by Lefroy Exploration Limited.
1		 The tenements are current and in good standing with the Department of Mines and Petroleum (DMP) of Western Australia.
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	 Within Lake Lefroy and along the interpreted Woolibar Trend the key exploration in the area now known as Zanex was completed Cyprus Gold Australia Corporation in 1997 and this drill program is well documented in a report to the Department of Mines and Petroleum WAMEX report A52840. This report clearly documents the air core drill program that resulted in the intersection in hole LFA182 drilled by Cyprus Gold Australia Limited.
Geology	 Deposit type, geological setting and style of mineralisation. 	 The Lefroy Project is located in the southern part of the Norseman Wiluna Greenstone Belt and straddles the triple junction of three crustal units, the Parker, Boorara and Bulong Domain. The Lefroy project tenements are mostly covered by alluvial, colluvial and lacustrine material with very little outcrop. The project is underlain by a folded and fault bounded sequence of Archaean rocks, and in the Woolibar trend within Lake Lefroy area being predominantly metasediments, High Mg basalt and basalt. The key structural element is the interpreted North West trending Woolibar Fault.
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 	 Table containing drill hole collar, survey, and intersection data for material (gold intersections >0.30gpt Au) drill holes are included in the Table in the body of the announcement. No Information has been excluded. There are historical drill holes within the Zanex Prospect and these are depicted on the drill hole plan and section in the announcement. These holes were drilled by

Criteria	JORC Code Explanation	Commentary
	 hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	Cyprus Gold Australia Corporation in the mid 1990's.
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	 All report grades have been length weighted. High grades have not been cut. A lower cut off of 0.3gpt Au has been used to identify significant results. These are considered significant given the first pass reconnaissance nature of the drilling. Where present, higher grade values are included in the intercepts table and assay values equal to or > 1.0 g/t Au have been stated on a separate line below the intercept assigned with the text 'includes'. Reported AC results have been calculated using a minimum intercept width of 4m. Anomalous composite samples have been resampled as individual 1m intervals but results not yet received. No metal equivalent values or formulas used.
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	 All results are based on down-hole metres. Given the wide spaced reconnaissance nature of the drilling the geometry of the mineralisation reported is not sufficiently known and the true width is not known
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. 	 Appropriate summary diagrams (section & plan) are included in the accompanying announcement.
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.	 Significant assay results are provided in Table 1 for the recent LEX drill program. Drill holes with no significant results are not reported. Significant assay results from historical drilling are noted in the body of the report.
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. 	 All relevant data has been induded within this report.
Further work	 The nature and scale of planned further work (eg 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. 	 The appropriate next stage of exploration to be undertaken will planned once all composite sample results of the Lake Lefroy drilling program have been received, validated and considered.