

# Drill Results from 40N section further enhance and expand Burns Cu-Au-Ag system

- Final results from three diamond drill holes completed on the 40-north section have enhanced the Burns copper gold silver mineral system and discovered a new gold zone hosted by the footwall basalt beneath Lake Randall to the east of the drilling to date.
- The drill results highlight multiple broad intersections that include high grade, gold copper and silver intercepts hosted by magnetite breccia veins within both porphyry and basalt. Better results from the three holes include:
  - 15.4m @ 1.02g/t Au & 0.19% Cu & 1.05g/t Ag from 154.6m in LEFRD261 Including 0.4m @ 33g/t Au & 1.83% Cu & 9g/t Ag
  - 6.8m @ 1.18g/t Au & 1.00% Cu & 7.57g/t Ag from 45m in LEFRD262 Including 0.63m @ 2.13g/t Au & 1.45% Cu & 52.5g/t Ag from 51.2m
  - 27.4m @ 1.93g/t Au & 0.22% Cu & 0.92g/t Ag from 219.8m in LEFRD262 Including 1m @ 33.7g/t Au & 0.93% Cu & 6.0g/t Ag from 226.8m
  - 25.4m @ 2.13g/t Au & 0.13% Cu & 0.53g/t Ag from 152.4m in LEFRD283 Including 1m @ 14.8g/t Au & 0.08% Cu & 2.50g/t Ag from 159m
- Hole LEFRD261 was extended 100m beyond the eastern porphyry and intersected a new interval of 24m @ 0.22g/t Au from 334m within a carbonate veined sheared basalt. This new zone demonstrates the potential of the footwall basalt position as a new target area that remains unexplored beneath Lake Randall.
- The results from the three diamond holes on the 40 north section have now established
  - at least 150m of vertical depth continuity of altered and mineralised porphyry and basalt 40m to the north of the 37m zone of Au Cu mineralisation in LEFR260 (38m @ 7.63g/t Au & 0.56% Cu from 134m) that is open along strike and at depth
  - multiple contrasting styles of mineralisation hosted by both porphyry and basalt, that now includes high grade Au-Cu-Ag intervals associated with magnetitesulphide breccia veins. These add another target style and uniqueness to the Burns system.
- The magnetic anomalies from Au-Cu-Ag mineralised magnetite breccia veins provide a first order targeting vector for additional Burns style systems. The multiple magnetic anomalies recognised along the 5km Burns corridor demonstrate the large scale of the system.
- Planning of the next phase of exploration is underway, with a broad step out RC drilling program to commence in late September. Results remain pending for 9 RC holes that are expected by the end of September.

Australian Registered Office Level 2, 11 Ventnor Avenue West Perth, 6005 E: info@lefroyex.com T: +61 8 9321 0984 ARBN: 052 123 930

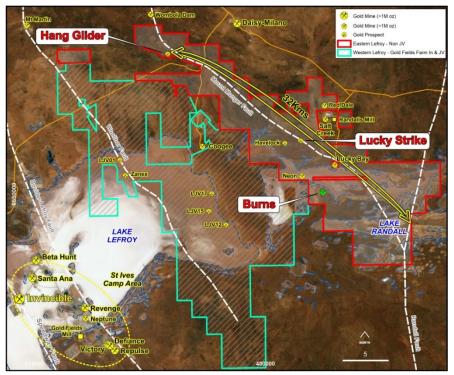
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Lefroy Exploration Limited (ASX: LEX) ("Lefroy" or "the Company") is pleased to report results from 3 diamond drill holes on the 40 north (40N) section evaluating the Burns copper (Cu) gold (Au) prospect. Burns is within the Eastern Lefroy tenement package, which is part of the wholly owned greater Lefroy Gold Project (LGP) located 50km southeast of Kalgoorlie (Figure 1).

The Burns copper gold prospect is situated on the eastern margin of a large interpreted felsic intrusion, termed the Burns Intrusion. The intrusion does not outcrop but features a distinctive annular aeromagnetic and gravity geophysical signature. The Company has not yet established the association between the larger Burns intrusion and the diorite porphyry intrusions intersected at Burns but consider there is a genetic relationship between them.

Broad high-grade gold mineralisation is hosted within a newly discovered hematite-pyritechalcopyrite-magnetite altered diorite porphyry (refer LEX ASX release 23 February 2021) that intrudes high Mg basalt at Burns. This porphyry, termed the Eastern Porphyry, is open to the north and south. The eastern extent of the Eastern Porphyry is now defined, on multiple drill sections, by foliated basalt (footwall basalt). The copper and gold mineralisation hosted by both the diorite porphyry, basalt and massive magnetite veins is considered by the Company to be a new style of Au-Cu-Ag mineralisation in the area, a land position dominated by Lefroy (Figure 1). The existence of additional mineralisation further east and north under Lake Randall is not discounted by the current drilling campaign and will be the subject of more exploration and drilling that is currently being planned for CY2021.



**Figure 1** Lefroy Gold Project, highlighting Eastern and Western Lefroy, the location of the Burns prospect and proximity to Lucky Strike. Refer to Figure 2 for Burns drill hole plan.



#### Eastern Porphyry Diamond Drill program-background

A nine-hole diamond drill program commenced on 20 April 2021 to evaluate the Eastern Porphyry over a 200m strike length on 40m spaced drill sections (Figure 2). The first hole of the program (LEFD004) was completed on 3 May 2020. That hole was designed to twin and extend past the high-grade interval found in LEFR260 to confirm structural orientations and determine the width of the Eastern Porphyry (Figure 3) on the zero north drill section (0N). Details of that drill hole were reported to the ASX on 3 May 2020 and results reported on 2 August 2021.

That hole was drilled primarily to understand the geological and structural controls of the system but also to provide guidance for the subsequent diamond holes on 0N, 40N and 40s drill sections (Figure 2). The host Eastern Porphyry was intersected in LEFD004 from 117m to 304.5m, a down hole interval of 187.5m. The porphyry is interpreted to have a near vertical dip and an estimated true width of approximately 110m. It is bounded by basalt to the west and east (Figure 3). The results form that hole confirmed (visual & geochemical evidence) three distinct variations of the host diorite porphyry which are interpreted as multi-phase intrusive events.

These characteristics confirm the Company's initial interpretation of the Burns copper gold model as being a multi-phase intrusion (diorite porphyries) related mineralising system, with the final magnetite sulphide event mineralising (Au-Cu-Ag-Mo) both the porphyry and the basalt host rocks over a broad area.

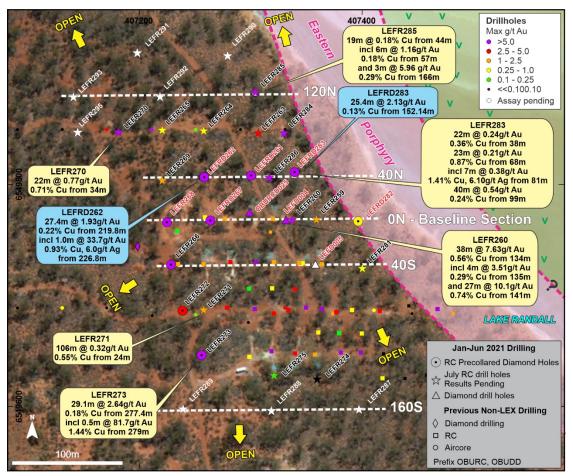
The five diamond holes on the zero north section established at least 180m of vertical depth continuity of visually altered and mineralised porphyry below the 37m zone of Au/Cu mineralisation in LEFR 260 (38m @ 7.63g/t Au & 0.56% Cu from 134m). Assessment of the gold, copper, and silver results from four of the five holes highlighted multiple zones of gold and/ or copper mineralisation in the intervals noted from inspection of the core. Interpretation of the data highlights two steeply dipping zones that are approximately 20m in width with a vertical continuity of 150m.

The drill data has also defined the boundaries to the Eastern Porphyry body which has approximately 120m true width. The eastern boundary is considered to be a major structural zone within basalt that has an interpreted northwest trend. The geology also revealed a unique mineral assemblage, in particular the gypsum-magnesite-sulphide veins and magnetite sulphide (chalcopyrite) veins. The results from the 0N section were reported on 2 August 2021 (refer LEX ASX release 2 August 2021)

The 40N section (Figure 2) was drilled with five RC holes by the company earlier in the year.

Three of the holes (LEFR 283,261 & 262) were used as precollars for diamond tails (Figure 3), with details reported on 18 June and 28 July 2021 (refer LEX ASX releases 18 June 2021, 28 July 2021) and Table 1. Two of the RC holes (LEFR 283 and 286) just penetrated the eastern porphyry, both intersecting copper gold mineralisation in the porphyry, including 13m @ 1.63gt Au and 0.55% Cu from 146m in hole LEFR286.





**Figure 2** Drill hole plan at the Burns prospect highlighting the Jan-August 2021 drill program (LEFR259 to LEFR295) relative to LEFR260 and the interpreted extent of the Eastern Porphyry (refer Figure 3 for the 40N drill section).

#### 40 north section-results

Assay results (Table 2) have been received, collated and reviewed for the three (LEFRD283, LEFRD261, LEFRD262) diamond holes completed on the 40N section. All samples for each of the holes were submitted for gold and whole rock (WR) geochemistry.

The WR geochemistry has been combined with data from the 0N or baseline section and is currently being interrogated. The WR data will provide important geochemical data to characterise the three types of porphyries visually identified, understand the mineral relationships, and provide vectors for exploration of further Au-Cu mineralisation external to the currently established Burns system.



Significant gold, copper, and silver results from the three diamond holes are as follows:

- 15.4m @ 1.02g/t Au & 0.19%Cu & 1.05g/t Ag from 154.6m in LEFRD261 Including 0.4m @ 33g/t Au & 1.83% Cu & 9g/t Ag
- 4.55m @ 2.12g/t Au & 0.10%Cu & 0.89g/t Ag from 209m in LEFRD261
- 6.8m @ 1.18g/t Au & 1.00% Cu & 7.57g/t Ag from 45m in LEFRD262 Including 0.63m @ 2.13g/t Au & 1.45% Cu & 52.5g/t Ag from 51.2m
- 27.4m @ 1.93g/t Au & 0.22% Cu & 0.92g/t Ag from 219.8m in LEFRD262 Including 1m @ 33.7g/t Au & 0.93% Cu & 6.0g/t Ag from 226.8m
- 4.4m @ 2.16g/t Au & 0.25g/t Ag from 154.6m in LEFRD261
- 25.4m @ 2.13 g/t Au & 0.13% Cu & 0.53g/t Ag from 152.4m in LEFRD283 Including 1m @14.8g/t Au & 0.08%Cu & 2.50g/t Ag from159m

The results (Table 2) have delivered multiple broad gold copper intersections, mainly hosted by porphyry, that has established continuity 40m along strike of the discovery or baseline (0N) section. The mineralisation dips steeply to the west and is open at depth and along strike. Narrow higher-grade Au-Cu-Ag intervals are hosted by magnetite breccia veins within porphyry. However, hole LEFRD262 intersected a magnetite breccia veined zone from 45m that included a 0.63m interval containing 52.5g/t Ag in basalt. The new results support a common developing theme that the Au-Cu-Ag mineralisation in either the basalt or porphyry host is related to the magnetite veining. The surface magnetic anomalies provide a first order vector to search for additional Burns-style mineralisation external to the current focused drill area.

Hole LEFRD261 was completed as the first step out diamond hole on the 40N section and was reported to the ASX on 18 June 2021. The hole intersected a broad 110m downhole interval of hematite-magnetite-pyrite altered Eastern Porphyry, followed by foliated altered basalt to EOH at 393.8m. The entire interval of porphyry was altered and/or mineralised, demonstrating the northern continuity of mineralisation within the altered Eastern Porphyry 40m to the north of the zero-north section.

LEFRD261 was the only hole that penetrated well into the lower or footwall basalt, where a 35.45m downhole interval of strongly foliated basalt containing massive pink calcite veins (Figure 7) was intersected (refer pages 5 & 7 LEX ASX release 18 June 2021). The results from this interval intersected 24m @ 0.22g/t Au from 334m (Table 3) within a carbonate veined sheared basalt that now demonstrates the potential of the footwall basalt to host mineralisation.

Hole LEFRD283 was drilled to evaluate the porphyry approximately 30m up dip from LEFRD261.The hole confirmed the eastern porphyry but was abandoned before reaching final depth due to ground conditions (Figure 3). The final hole on this section, LEFRD262, intersected the eastern porphyry down dip of LEFRD261, with a 27.4m Au-Cu-Ag intercept within altered and mineralised (sulphides) porphyry. These three holes confirmed the geometry and dimensions of the Eastern Porphyry, including the same alteration characteristics 40m to the north of the zero-north section.



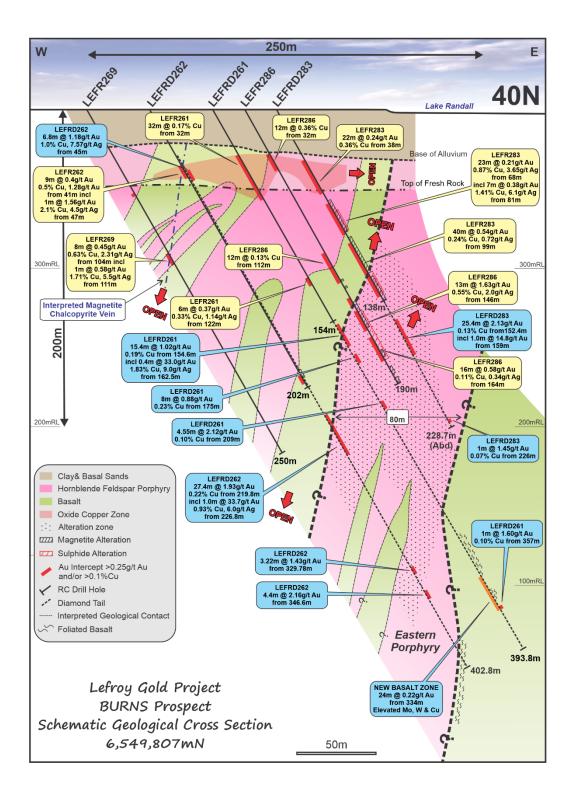


Figure 3 40 north drill section geology and key diamond and RC drill intersections.

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Photographs of selected examples of drill core from LEFRD261 within the broader intervals are shown below (Figures 4 to 7). These are not the only mineralised zones but examples to highlight the style of the mineralisation in the host altered porphyry and basalt. These photos were provided in the LEX ASX release dated 18 June 2021 and are now displayed to highlight the gold and copper grades revealed from assay results.



Figure 4 LEFRD261 interval 163.7m-164m and example showing the strong red hematite alteration of the diorite porphyry (162.9m-164m 0.17g/t Au & 0.2%Cu)



Figure 5 LEFRD261 interval 213.15m to 213.45m Brecciated hematite altered porphyry with magnetite-sulphide (pyrite)veins (213-213.55m 11.1g/t Au, 0.13% Cu, 1g/t Ag)



Figure 6 LEFRD261 interval 244.82m-245.07m showing altered diorite porphyry with pyrite, chalcopyrite, and blebby magnetite (244m-245m 0.86g/t Au, 0.02% Cu, 1.5g/t Ag)





Figure 7 LEFRD261 339-339.4m (Lower basalt) showing pink calcite vein with chalcopyrite and pyrite blebs from within a basalt host rock (339m-340m 0.28g/t Au, 0.01% Cu, 192ppm W)

#### Summary and Ongoing Burns Program

The recent assay results from the 40N diamond drill holes, combined with those from the zero north section and the visuals from July's nine hole RC program continue to highlight and support the growing scale and multi-stage style of mineralisation at Burns. The 40N section assay results highlight a Au-Cu-Ag mineralised porphyry and basalt system that is at least 250m in width with outer limits yet to be defined (Figure 3).

The new gold intersection in the lower basalt expands the footprint of the system out under lake Randall, which provides another area for drill targeting. The general association of the Au-Cu-Ag mineralisation with magnetite veins provides a strong first order exploration focus on magnetic anomalies. Interpretation of the results from the recently completed detailed magnetic survey will provide the backdrop to evaluation of the multiple magnetic anomalies to the north and south of Burns (refer LEX ASX release 18 August 2021).

Assay results for the final diamond hole of the program completed on the 40S section are expected over the coming 2 weeks. Results for the recent 9-hole RC drill program are not expected until late September.

The integration of the geological model with the new processed aeromagnetic data is underway and will provide additional early-stage targets to the north along the developing Burns corridor.

Planning of the next phase of RC drilling to evaluate Burns, Smithers and north of Smithers is in progress. RC drilling is scheduled to commence in late September and planning for drilling of geophysical targets on lake Randall in CY2021 has commenced. These programs aim to build scale to the system and demonstrate the Burns prospect is part of a much larger mineralised intrusive system.

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This announcement has been authorised for release by the Board

Wade Johnson.

Wade Johnson Managing Director

END

#### Table 1

Burns drill hole collar details April-July 2021 Diamond and RC Drill Program

Hole ID	Collar E (MGA)	Collar N (MGA)	Collar RL	Depth (m)	Azimuth	Metres of Diamond Core	Comments
LEFD004	407331	6549769	290	369.8 (EOH)	91	331	Mud rotary pre-collar to 39m
OBURCD025	407299.1	6549776.3	290	396.6 (EOH)	95	356	Wedge off of RC pre-collar at 40m
LEFRD267	407263.0	6549768.4	290.4	522.8m (EOH)	86.75	278.8	RC pre-collar to 244m.
LEFRD268	407223.9	6549766.8	290	582.8m (EOH)	88	251.95	RC Pre-collar to 150.2m, NQ Diamond from 330.85m
LEFRD282	407395.4	6549767.9	289	270.8m (EOH)	92.7	120.8	RC Pre-collar to 150m
LEFRD261	407299.4	6549808.7	291.4	393.8.8m (EOH)	88	239.2	RC Pre-collar to 154.6m
LEFRD283	407339	6549811.6	291.2	228.7m (EOH)	89	90.7	RC Pre collar to 138m (hole abandoned at 228.7m)
LEFRD262	407257.4	6549807.4	290.8	402.87m(EOH)	93	369.57	Wedge off RC precollar at 33.3m
LEFD005	407360	6549730	290	333.8m(EOH)	90	289.8	Mud rotary pre-collar to 44m

#### Burns drill hole collar details July 2021 RC Drill Program

Hole ID	Collar E (MGA)	Collar N (MGA)	Collar RL	Depth (m)	Azimuth	Dip	Target
LEFR287	407400	6549600	290	264	90	-60	Burns
LEFR288	407320	6549600	290	276	90	-60	Burns
LEFR289	407240	6549600	290	330	90	-60	Burns
LEFR290	407280	6549915	293	270	90	-60	Burns
LEFR291	407198	6549923	296	300	90	-60	Burns
LEFR292	407218	6549879	295	258	90	-60	Burns
LEFR293	407140	6549880	292	222	90	-60	Burns
LEFR294	406980	6550090	290	156	90	-60	Smithers
LEFR295	407144	6549852	290	252	90	-60	Burns

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#### Table 2

#### Assay Results LEFRD283, LEFRD261, LEFRD262

Hole Id	From (m)	To (m)	Interval (m)*	Au (g/t)	Cu (%)	Ag (g/t)	Geology
LEFRD261	154	154.6	0.60	-	-	-	Core Loss
LEFRD261	154.6	170	15.40	1.02	0.19	1.05	Porphyry & Basalt
Incl	162.50	162.90	0.40	33.00	1.83	9.00	Magnetite breccia vein
LEFRD261	175	183	8.00	0.88	0.23	1.16	Porphyry
Incl	177.00	179.00	2.00	1.84	0.51	1.90	Porphyry
Incl	182.00	183.00	1.00	1.34	0.24	2.00	Porphyry
LEFRD261	209	213.55	4.55	2.12	0.10	0.89	Basalt & Magnetite Veins
Incl	212	213.55	1.55	5.64	0.25	1.00	Basalt & Magnetite Veins
LEFRD261	249	256	7.00	0.39	0.03	0.29	Porphyry
Incl	255	256	1.00	1.19	0.00	0.25	Porphyry
LEFRD261	309	310	1.00	1.34	0.20	1.70	Basalt
LEFRD261	339	342	3.00	0.24	0.00	0.30	Basalt
LEFRD261	357	358	1.00	1.60	0.10	0.70	Basalt
LEFRD262	41	50	9.00	0.40	0.50	1.28	Porphyry & Basalt
Incl	47	48	1.00	1.56	2.10	4.50	Porphyry & Basalt
LEFRD262	193	199	6.00	0.15	0.18	0.50	Basalt
LEFRD262	45	51.8	6.80	1.18	1.00	7.57	Brecciated porphyry & basalt
Incl	51.17	51.8	0.63	2.13	1.45	52.50	Magnetite breccia vein
LEFRD262	61.2	64	2.80	0.12	0.24	0.59	Basalt
LEFRD262	73	81	8.00	0.01	0.24	1.91	Porphyry with magnetite veins
LEFRD262	219.8	247.2	27.40	1.93	0.22	0.92	Porphyry & Basalt
Incl	226.8	227.8	1.00	33.70	0.93	6.00	Basalt with calcite vein
Incl	230	231	1.00	5.69	0.48	2.00	Basalt
Incl	238	239	1.00	1.86	0.80	2.00	Porphyry
Incl	239.6	241	1.40	1.40	0.95	3.64	Porphyry
LEFRD262	326	327.4	1.40	3.04	0.00	0.25	Porphyry
LEFRD262	329.78	333	3.22	1.43	0.00	0.25	Porphyry
LEFRD262	346.6	351	4.40	2.16	0.00	0.25	Porphyry
LEFRD262	358	361	3.00	0.54	0.00	0.25	Porphyry
LEFRD283	141.4	144	2.60	0.40	0.16	0.38	Porphyry & Basalt
LEFRD283	152.14	177.5	25.40	2.13	0.13	0.53	Porphyry & Basalt
Incl	154	156	2.00	5.35	0.33	0.66	Magnetite breccia vein
Incl	159	160	1.00	14.80	0.08	2.50	Porphyry
Incl	164	166	2.00	5.40	0.64	2.00	Porphyry
Incl	167	168	1.00	6.94	0.05	0.25	Porphyry
Incl	170	172	2.00	1.87	0.10	0.38	Porphyry
Incl	175	176	1.00	1.07	0.00	0.25	Porphyry
LEFRD283	180	191	11.00	0.56	0.02	0.25	Porphyry
Incl	180	181	1.00	1.34	0.01	0.25	Porphyry
LEFRD283	226	227	1.00	1.45	0.07	0.25	Porphyry

Table 3



#### **LEFRD261** Lower Basalt intersection

### Intercept =334m-358m 24m @ 0.22 g/t Au, 0.02% Cu, 0.27 g/t Ag, 9ppm Mo, 98ppm W

Hole ID	From (m)	To (m)	Interval (m)*	Au (g/t)	Cu (%)	Ag (g/t)	Mo (ppm)	W (ppm)	Geology
LEFRD261	334	335	1	0.36	0.04	0	5	7	Sheared basalt with massive pink calcite veins
LEFRD261	335	336	1	0.16	0.04	2.5	2	3.5	Sheared basalt with massive pink calcite veins
LEFRD261	336	337	1	0.10	0.04	0	11	100	Sheared basalt with massive pink calcite veins
LEFRD261	337	338	1	0.09	0.07	0	7	6.5	Sheared basalt with massive pink calcite veins
LEFRD261	338	339	1	0.18	0.07	0	18	187	Sheared basalt with massive pink calcite veins
LEFRD261	339	340	1	0.28	0.02	0	6.5	192	Sheared basalt with massive pink calcite veins
LEFRD261	340	340.8	0.8	0.12	0.01	0	12	7	Sheared basalt with massive pink calcite veins
LEFRD261	340.8	341.5	0.7	0.30	0.01	0.5	30	29.5	Sheared basalt with massive pink calcite veins
LEFRD261	341.5	342	0.5	0.25	0.01	0	18.5	75	Sheared basalt with massive pink calcite veins
LEFRD261	342	343	1	0.21	0.02	0	9	7.5	Sheared basalt with massive pink calcite veins
LEFRD261	343	344	1	0.13	0.02	0	3	21.5	Sheared basalt with massive pink calcite veins
LEFRD261	344	345.15	1.15	0.17	0.03	0	6	151	Sheared basalt with massive pink calcite veins
LEFRD261	345.15	346	0.85	0.22	0.05	1	3.5	18.5	chlorite gypsum pyrite altered porphyry
LEFRD261	346	347	1	0.07	0.01	0	2	15.5	chlorite gypsum pyrite altered porphyry
LEFRD261	347	348	1	0.22	0.05	1	6.5	33	chlorite gypsum pyrite altered porphyry
LEFRD261	348	349	1	0.27	0.08	0.5	5	36	chlorite gypsum pyrite altered porphyry
LEFRD261	349	349.8	0.8	0.14	0.01	0	39	74	chlorite gypsum pyrite altered porphyry
LEFRD261	349.8	351	1.2	0.08	0.00	0	10.5	31.5	Sheared basalt with massive pink calcite veins
LEFRD261	351	352	1	0.11	0.01	0	7.5	159	Sheared basalt with massive pink calcite veins
LEFRD261	352	353	1	0.12	0.00	0	4	119	Sheared basalt with massive pink calcite veins
LEFRD261	353	354	1	0.16	0.01	0	2	14	Sheared basalt with massive pink calcite veins
LEFRD261	354	355	1	0.10	0.01	0.5	2.5	23.5	Sheared basalt with massive pink calcite veins
LEFRD261	355	356	1	0.11	0.00	0	24	842	Sheared basalt with massive pink calcite veins
LEFRD261	356	357	1	0.10	0.01	0	12	111	Sheared basalt with massive pink calcite veins
LEFRD261	357	357.3	0.3	0.30	0.03	0.5	15.5	354	Sheared basalt with massive pink calcite veins
LEFRD261	357.3	357.6	0.3	0.70	0.05	0.5	11.5	32.5	Sheared basalt with massive pink calcite veins
LEFRD261	357.6	358	0.4	3.24	0.20	1	6	46	Sheared basalt with massive pink calcite veins

Au-Gold

Cu-Copper

Ag-Silver

Mo-Molybdenum

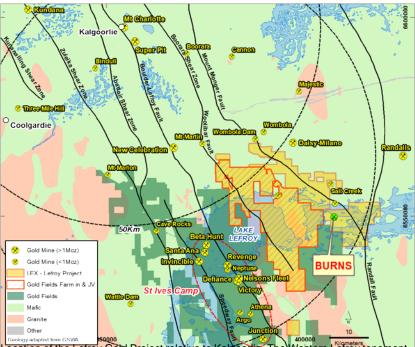
W-Tungsten



#### About Lefroy Exploration Limited and the Lefroy Gold Project

Lefroy Exploration Limited is a WA based and focused explorer taking a disciplined methodical and conceptual approach in the search for high value gold deposits in the Yilgarn Block of Western Australia. Key projects include the Lefroy Gold Project to the southeast of Kalgoorlie and the Lake Johnston Project 120km to the west of Norseman.

The 100% owned Lefroy Gold Project contains mainly granted tenure and covers 637.6km<sup>2</sup> in the heart of the world class gold production area between Kalgoorlie and Norseman. The Project is near Gold Fields' St Ives gold camp, which contains the Invincible gold mine located in Lake Lefroy and is also immediately south of Silver Lake Resources' (ASX:SLR) Daisy Milano gold mining operation. The Project is divided into the Western Lefroy package, subject to a Farm-In Agreement with Gold Fields and the Eastern Lefroy package (100% Lefroy owned). The Farm-In Agreement with Gold Fields over the Western Lefroy tenement package commenced on 7 June 2018. Gold Fields can earn up to a 70% interest in the package by spending up to a total of \$25million on exploration activities within 6 years of the commencement date.



Location of the Letroy Gold Project relative to Kalgoorlie. The Western Letroy tenement package subject to the Gold Fields Farm In and Joint Venture, and Gold Fields tenure are also highlighted

For Further Information please contact: Wade Johnson Managing Director Telephone: +61 8 93210984

Email: wjohnson@lefroyex.com

# ASX Announcement 21 September 2021



#### 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 by the Company of previous exploration at Burns at the Lefroy Gold Project. Exploration results by the previous explorer that refers to the Burns prospect are prepared and disclosed by the Company in accordance with the JORC 2004 code. The Company confirms that is it not aware of any new information or data that materially affects the information included in this market announcement.

- Lefroy Expands Tenement Holding & Secures Au-Cu Prospect: 10 December 2019
- June 2020 Quarterly Activities Report: 31 July 2020
- Multiple Gold Trends Confirmed from Eastern Lefroy: 1 September 2020
- Tenement Granted over Burns Au-Cu Prospect: 16 September 2020
- September 2020 Quarterly Activities Report: 29 October 2020
- Drilling Underway at Burns Au-Cu Prospect: 12 January 2021
- Drilling Update-Native copper Intersected at Burns Prospect: 2 February 2021
- Outstanding High-Grade Gold and Copper Mineralisation Intersected at Burns: 23 February 2020
- New Basalt Hosted Gold-Copper Zone Supports Large Burns Mineral System: 9 March 2021
- Exploration Update-Drilling Extends Porphyry at Burns: 26 March 2021
- Diamond Drilling Underway at the Burns Cu-Au Prospect: 21 April 2021
- Resampling of RC holes at Burns confirms and better defines recent Copper Gold intersections: 27 April 2021
- Drill Results Extend Copper Gold Zones at Burns: 29 April 2021
- Multiple Intervals of Altered Porphyry Intersected at Burns: 3 May 2021
- Burns Success Continues-55m vertical depth extension and more strong mineralisation established: 13 May 2021
- Burns Continues to Grow-deeper-wider and a new zone: 25 May 2021
- Burns Drilling Update-first hole on 40N section confirms significant mineralisation extends to the north: 18 June 2021
- Exploration Update-RC drilling commences at the Burns Cu Au prospect: 20 July 2021
- Burns Update-Cu-Au mineralisation confirmed on 0N section, step out drilling extends system: 2 August 2021
- June 2021 Quarterly Activities Report: 28 July 2021
- Exploration Update-Advancing the Burns and Coogee South Prospects: 18 August 2021

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 – Burns Cu-Au Prospect April July 2021 Diamond drilling program-40N section results SECTION 1: SAMPLING TECHNIQUES AND DATA

Criteria	JORC Code Explanation	Commentary
Criteria Sampling techniques	<ul> <li>JORC Code Explanation</li> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity 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 (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.</li> </ul>	• RC bluk samples were collected from the cyclone at 1m intervals in plastic buckets and arranged in rows of 30 samples. Four metre composite samples were collected from 0m to the base of transported regolith using a scoop to produce a 2-3kg sample. 1m split samples were collected from the base of transported regolith to end of hole (EOH). 1m split camples were collected directly off the drill is cample.
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).	<ul> <li>digest and sodium peroxide fusion with ICP finish.</li> <li>The diamond drilling (DD) and Reverse Circulation (RC) was completed by Raglan Drilling (Kalgoorlie).</li> <li>DD was commenced using HQ sized core. NQ sized core was primarily used when the drill core recovery became more competent. Accurate bottom of hole orientation marks were captured using an Ace tool.</li> <li>RC Holes LEFR287-295 were completed by 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.</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>	• Diamond core was measured by a field assistant and compared to drilled interval indicated by the drillers. From this, a percentage of recovery can be calculated. Where

Criteria	JORC Code Explanation	Commentary
		• Sample recovery visually inspected and recorded by the rig geologist and sampler.
		• Some poor sample return in the overlying transported material (0-10m) during RC drilling
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>Detailed logging of, regolith, lithology, structure, veining, alteration, mineralisation and recoveries recorded in each hole by qualified geologist.</li> <li>Diamond core underwent detailed logging through the entire hole with data to be transferred to the Lefroy drilling database after capture.</li> <li>Analysis of rock type, colour, structure, alteration, mineralisation, veining and geotechnical data were all routinely collected.</li> <li>Geological logging is qualitative in nature and relies on the geologist logging the hole to make assumptions of the core character based on their experience and knowledge.</li> <li>Recovery, RQD (rock quality designation) and magnetic susceptibility measurements were recorded and are considered to be quantitative in nature.</li> <li>Core within the core trays for each hole was photographed using a purpose made camera stand and a quality digital SLR camera and stored in the database.</li> </ul>
Sub-sampling	• If core, whether cut or sawn and whether	All drill holes are logged in their entirety (100%).  DD
techniques and sample preparation	<ul> <li>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>Drill core has been cut using an automated diamond saw and half sampled with the other half retained.</li> <li>RC</li> <li>A 4m composite sample was collected, from 0m to the base of transported regolith for each hole. Sample weight 2 - 3 kg. The composite samples were collected by using a scoop to collect a representative "split" from each bulk sample that made up a 4m composite interval, this was placed into a pre-numbered calico bag.</li> <li>The remainder of each hole was sampled at 1m intervals directly off a rig-mounted cone splitter into separate prenumbered calico bags. Pre-numbered calico bags containing the samples were despatched to the laboratory for assay.</li> <li>The sample preparation of the RC samples follows industry best practice, involving oven drying, pulverising, to produce a homogenous sub sample for analysis.</li> <li>Along with submitted samples, 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.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and 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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>Bureau Veritas's Kalgoorlie Laboratory. Additional elements, will be derived using a mixed acid digest with ICP finish for Cu, Ag, As, Mo, Fe, Pb, S, Te, W and Zn.</li> <li>Selected samples will be analysed for an additional 61 elements using a mixed acid digest and sodium peroxide fusion with ICP finish.</li> <li>Quality control process and internal laboratory checks demonstrate acceptable levels of accuracy. At the laboratory regular assay repeats, lab standards, checks and blanks were analysed.</li> <li>Selected 1m samples in hole LEFR260 were re-assayed by</li> </ul>

Criteria	JORC Code Explanation	Commentary
		<ul> <li>Weighted Average of Au for whole sample</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>Capture of field logging is electronic using Toughbook hardware and Logchief software. Logged data is then exported as an xml document to the Company's external database managers which is then loaded to the Company's DATASHED database and validation checks 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.</li> <li>There has been no adjustment to the assay data. The primary gold (Au) plus additional elements field reported by the laboratory is the priority value used for plotting, interrogating and reporting.</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> </ul>	<ul> <li>Drill hole positions were surveyed using a handheld GPS operated by the rig geologist/field assistant. The final RC and DD hole collar was later surveyed by a DGPS by a third-party contractor.</li> <li>Down holes surveys were completed by Raglan drill crew using a multi-shot gyro which records a survey every &lt;5m down the hole.</li> <li>Grid System – MGA94 Zone 51. Topographic elevation captured by using the differential GPS.</li> </ul>
Data spacing and distribution 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>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Hole spacing at approximately 40m spaced intervals</li> <li>Mineralisation at the Burns prospect is primarily hosted by a magnetite-biotite altered High Mg basalt which has been intruded by a later felsic to intermediate porphyry intrusion. The contacts of which are not uniform however the intrusion appears to be sub-vertical. Mineralisation is predominantly Cu plus Au. There is an association between Cu and Au mineralisation but they can occur independently of one another. There is a strong upgrade of Cu and Au in the supergene environment approximately 50-100m downhole and this is typically flat in its orientation. A primary system (hypogene) occurs in the fresh rock below 100m depth and at this stage the orientation and main controls on mineralisation may dip toward the west-south-west and plunge toward the south-east, hence the drill orientation toward the east.</li> <li>Drill data spacing is not yet sufficient for mineral resource estimation.</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> </ul>	<ul> <li>No compositing has been applied to assay results.</li> <li>The east-west orientated drill traverses are considered effective to evaluate the roughly North-West to South-East trending stratigraphy and sub-vertical mineralised structures.</li> <li>The drill orientation is an effective test of "true" width of the host rock due to the fact the host rock unit is striking roughly North-South and dipping 70° to the West.</li> <li>At this stage the primary controls on the hypogene coppergold (Cu-Au) system are not completely understood, however analysis of previous drilling in conjunction with this drilling have determined the drill hole orientation is optimum to determine the true width of mineralisation and improve geological knowledge of the system.</li> </ul>
Sample security	• The measures taken to ensure sample security.	<ul> <li>Samples were bagged in labelled and numbered calico bags, collected and personally delivered to the Bureau Veritas Laboratory (Kalgoorlie) by Company field personnel. Samples were then on sent to the BV lab in Perth. Samples were then sorted and checked for inconsistencies against lodged Submission sheet by Bureau Veritas staff.</li> <li>Bureau Veritas checked the samples received against the Lefroy Exploration Limited (LEX) submission sheet to notify of any missing or extra samples. Following analysis, the sample, pulps and residues are retained by the laboratory in a secure storage yard.</li> </ul>

Criteria	JORC Code Explanation	Commentary
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul> <li>All sampling and analytical results of the drill program were reviewed by the Senior Exploration Geologist and Managing Director. Anomalous gold and copper intersections were checked against library core photos and logging to correlate with geology. QAQC reports are auto generated by the database managers and reviewed by staff.</li> </ul>

# Section 2: REPORTING OF EXPLORATION RESULTS – LEFROY PROJECT- Burns Cu-Au Prospect April July 2021 Diamond drilling program-40N section results

	rilling program-40N section results	
Criteria	JORC Code 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 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 Monger Exploration Pty Ltd. The work described in this report was completed on Exploration lease E 15/1715.</li> <li>E 15/1715 is held 100% by Monger Exploration Pty Ltd a wholly owned subsidiary of Lefroy Exploration Limited</li> <li>The tenements are current and in good standing with the Department of Mines and Petroleum (DMP) of Western Australia.</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>1968-1973 BHP: The earliest recognition of the magnetic anomaly was by BHP. The area fell within TR 3697, which had been taken up for nickel. The anomaly stood out on the BMR aeromagnetic contoured plans and BHP was testing aeromagnetic contoures/Enterprise Gold Mines: The ground encompassing Burns was taken up as three Els, E15/19-21.</li> <li>1985 BHP: BHP farmed into E15/21 having re-interpreted the magnetic feature as a potential carbonatite. BHP's E15/5 covered the western one third of the anomaly. Following ground magnetic traverses, BHP drilled two diamond core holes, LR 1 and 2. LR 1 falls within Goldfields E15/1638 and LR 2 falls within P15/6397. The results, which are covered in the next section, did not indicate a carbonatite and so BHP withdrew their interest in the area.</li> <li>1985-1989 CRAE: Meanwhile CRAE was conducting exploration for gold on adjacent tenements and had engaged Jack Hallberg to carry out geological mapping. He mapped suites of intermediate dykes (plagioclase-quartz-hornblende porphyry) intruding basalt in outcrops to the north west of Burns.</li> <li>1992: M. Della Costa took up E15/304 over aeromagnetic anomalies including Burns. The EL was vended into Kanowna Consolidated Gold Mines as part of the St Alvano project. Which comprised a total of 12 ELS. They flew 50m line-spaced aeromagnetics and engaged EHW to interpret. Burns was not highlighted as such but the magnetic anomalies forming portions of the annular ring were tested with air core, leading to the discovery of</li></ul>

Criteria	JORC Code Explanation	Commentary
		<ul> <li>2005-2008 Gladiator Resources: The area was taken up by Sovereign following their assessment of previous work. They identified Homer's Inlet and the S11 area as priority targets. In 2007 a JV was established with Newmont/Sipa covering the gold rights. In 2008 the southern and eastern sectors of W15/774 was surrendered and taken up as E15/1030. The northern sector including Burns was surrendered.</li> <li>2008 Gold Attire: The ground surrendered by Sovereign over</li> </ul>
		<ul> <li>Burns was taken up as E15/1097.</li> <li>2008-2010 Newmont: Newmont joint ventured into the Sovereign and Gold Attire ELs. It conducted an 800 X 400m gravity survey to trace a north-south "Salt Creek-Lucky Bay" corridor through the tenements. This was tested by four lines of aircore on 640 X 160m spacing. Two aircore traverses on a 1200 X 320m spacing were also and conducted across the interpreted intrusion and the surrounding magnetic halo. Infill drilling was conducted following up on the 2.0m @ 5.0 g/t Au intercept in a Goldfields hole, SAL 1089. The hole was reentered and a diamond core tail drilled. This hole falls just inside E15/1638 close to the boundary with P15/6397.</li> </ul>
Contant		<ul> <li>2010-2019 Octagonal Resources: Three phases of AC to define a gold in regolith anomaly east of the main intrusive body. Two phases of RC identified Ag-Cu-Au mineralisation on four sections spaced approx. 40m apart. The drilling recognised Cu mineralisation which due to the host rock association, Octagonal believed there was potential for a much larger intrusion related system so the emphasis was switched from orogenic gold style exploration to predominately copper focussed intrusion related hosted mineralisation. In 2013 surface geophysical techniques were applied looking for conductors that might represent massive sulphides. Ground EM failed to identify any bedrock conductors, but the magnetic surveys did identify anomalies. In 2014, a diamond core hole, OBUDD001, was drilled at -60 degrees to 090 east to 401.5m in order to test the source of the magnetic anomalism, which occurred within the area tested by the RC drilling. It intersected a 3.6m wide zone of mafic-dominant breccia including 0.9m of massive magnetite-chalcopyrite which returned 4.5 g/t Au, 2.6% Cu from 256.4m, within a low-grade zone of 55.95m @ 0.5 g/t Au and 0.2% Cu from 229.85m It was interpreted to be a west-dipping structure and the feeder conduit for the mineralization. A second zone of low-grade mineralization of 38.5m @ 0.5 g/t Au and 0.2% Cu was intersected from 184.5m. An EIS grant in 2015 and a loan from a third-party company allowed for two more DD holes to be completed, however by 2016 the Company was acquired by the third-party loan company and subsequently delisted from the ASX.</li> </ul>
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	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. Burns is proximal to the Lake margin and is subsequently under >20-25m of lake sediment and surface sand dune cover. A stripped profile below this cover means that there is no significant dispersion or oxide component to the Burns prospect. Mineralisation is hosted with a High Mg Basalt and in an intermediate composition porphyry which intrudes the basalt. Mineralisation is primarily gold associated with magnetite alteration and copper occurring as native copper and chalcopyrite in veins and veinlets throughout the basalt and porphyry.
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	• Tables containing drill hole collar, survey and intersection data for material drill holes (gold intersections >0.25gpt Au with a max of 2m internal dilution) are included in the Table in the body of the announcement.

Criteria	JORC Code Explanation	Commentary
Criteria Data aggregation methods	<ul> <li>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> <li>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.</li> <li>Where aggregate intercepts incorporate short lengths of high-grade results, the procedure</li> </ul>	<ul> <li>Table 1 of drill hole collars completed by Lefroy is noted in this announcement.</li> <li>No Information has been excluded.</li> <li>All grades have been length weighted and reported as downhole metres. High grades have not been cut. A lower cut off of 0.25gpt Au has been used to identify significant results (intersections).</li> <li>Where present, higher grade values are included in the intercepts table and assay values equal to or &gt; 1.0 g/t Au have been stated on a separate line below the intercept assigned with the text 'includes'.</li> </ul>
Relationship	<ul> <li>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> <li>These relationships are particularly important</li> </ul>	<ul> <li>No metal equivalent values or formulas are used.</li> </ul>
between mineralisation widths and intercept lengths	<ul> <li>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 (eg 'down hole length, true width not known').</li> </ul>	<ul> <li>Previous drill coverage and structural measurements from oriented core has provided guidance for the presence of steeply dipping geology comprising a package of rocks containing basalt intruded by diorite porphyry. This data and modelling of prior ground magnetic data provides support for orientation of the drilling. Results from this drill program do not represent 'true widths' however holes are designed to intercept the host sequence perpendicular to its strike.</li> </ul>
Diagrams	<ul> <li>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.</li> </ul>	<ul> <li>Appropriate summary diagrams (plan) and cross sections are included in the accompanying announcement.</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>Significant assay results are provided in Table 1 for the recent LEX RC and DD drill program.</li> <li>Drill holes with no significant results (&lt;2m and &lt;0.50g/t Au) are not reported.</li> <li>Reference to significant assay results from historical drilling are noted in the body of the report.</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>	
Further work	<ul> <li>The nature and scale of planned further work (eg 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>The appropriate next stage of exploration planning is currently underway and noted in the body of the report.</li> </ul>