

## December 2019 Quarterly Activities Report

### Forrestania Gold-Lithium Project, Western Australia (Firefly 100%)

- Short follow-up program comprising 720m of Reverse Circulation (RC) drilling completed at the recently defined Gemcutter gold prospect.
- Initial results from the discovery program included 21m @ 3.20 g/t gold from 34m, including 3m @ 4.58g/t and 1m @ 33.10g/t.
- Follow-up drilling along-strike and down-dip indicates that the mineralised system is open in all directions, however gold grades encountered in the follow-up program are highly variable.
- Best assay result in follow-up drilling of 12m @ 0.43g/t gold, including 1m @ 2.33g/t.

### Corporate

- Company name changed to 'Firefly Resources Limited' following the receipt of shareholder approval, with the ASX Code changing from "MZN" to "FFR".
- Cost reduction initiatives implemented including rationalisation of non-core WA and NT base metal and gold exploration tenements, saving ~\$2m in annual expenditure commitments.
- Additional reductions in corporate overheads achieved.
- New project opportunities under review, consistent with the Company's focus on high-grade gold in WA.

### Forrestania Gold-Lithium Project, W.A. (Firefly 100%)

Firefly Resources Ltd (**ASX: FFR; Firefly or the Company**) owns a highly prospective tenement package covering a total area of >1,000km<sup>2</sup> in the Southern Forrestania Greenstone belt – one of Australia's last under-explored major greenstone belts. The Southern Forrestania region has been overlooked as a gold exploration play, with many operators in the region focusing historically on nickel and base metal exploration despite ~1.2Moz of production from the Bounty Gold Mine.

Firefly's portfolio includes historical high-grade gold mines with mineralised rock dumps and geophysical extensions to proven high-grade gold structures.

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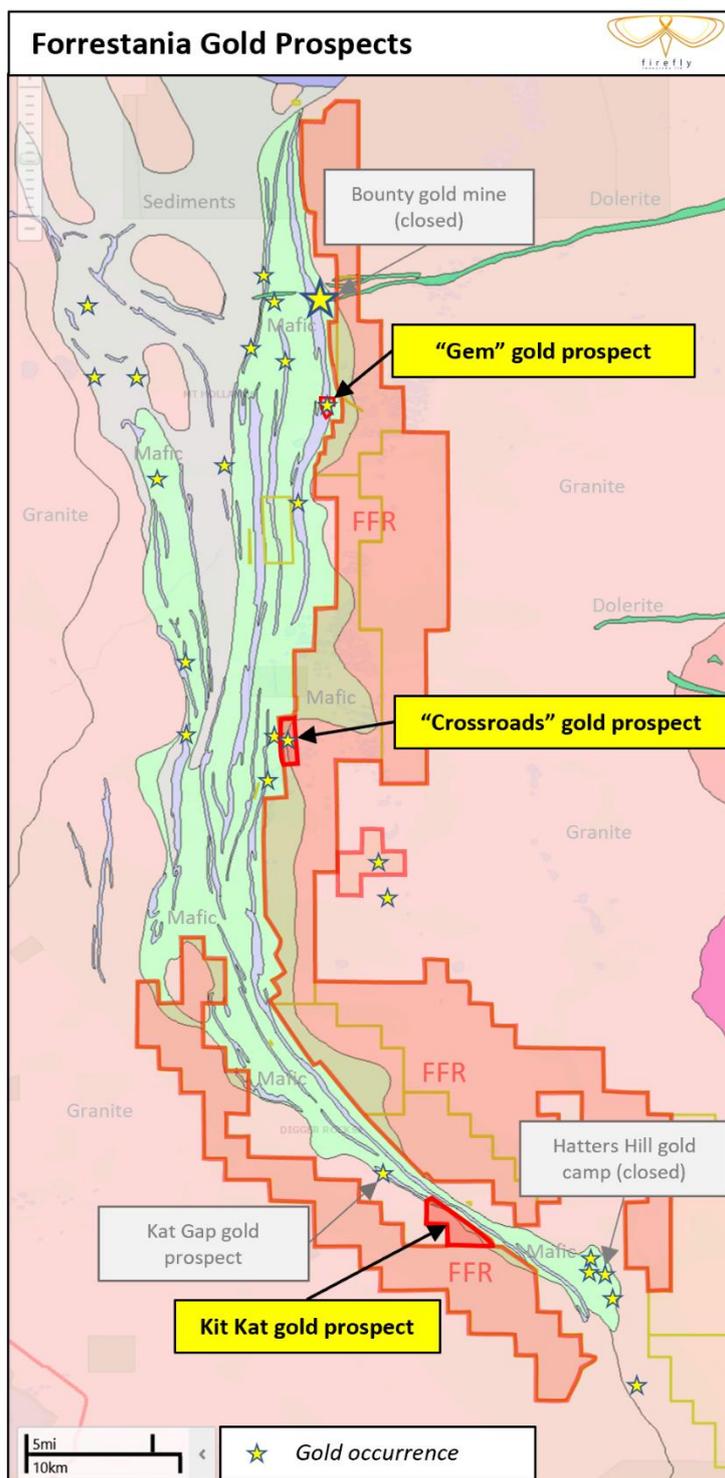


Figure 1. Firefly's Southern Forresteria Gold-Lithium Project – high priority gold prospects.

### Gemcutter Gold Prospect

During the Quarter, the Company completed a short follow-up drilling program across the Gemcutter gold prospect, located on its 100%-owned Gem Mining Lease, comprising seven drill-holes for a total of 720m of Reverse Circulation drilling.

While visually impressive zones were observed during the follow-up drilling, the assay results indicate that the grade of the mineralised system at Gemcutter is highly variable and the wide-spaced "step-out" holes returned mixed results including a best intercept of 12m grading 0.43g/t with a narrow zone of 1m at 2.33g/t Au.

A full list of assay results and collar locations is provided in the Company's ASX Announcement dated 4 December 2019.

The presence of consistently wide but low-grade gold values along-strike of the initial discovery line, coupled with the limited footprint of the M77/549 Mining Lease held by the Company, means the Gemcutter gold prospect will not be the focus of further significant exploration work.

### **Crossroads Gold Prospect**

The extensive Crossroads gold discovery represents a high-priority exploration target for Firefly, and planning is underway for a new round of exploration drilling in CY2020.

### **Kit Kat Gold Prospect**

The Kit Kat is located south of the Forrestania Project. The geological potential of the area is demonstrated by the emerging Kat Gap high-grade gold prospect to the north (owned by Classic Minerals) and the historical high-grade quartz-vein-hosted Hatters Hill gold field (owned by Western Areas) to the south.

Planning has commenced for a program of air-core drilling at Kit Kat, aimed at refining targets for follow-up RC drilling.

### **Paterson Copper-Gold Project, W.A. (Firefly 100%)**

The Paterson Copper-Gold Project comprises several tenement applications covering ~1,000 square kilometres of the highly prospective Paterson Province in north-western Western Australia. The main focus for Firefly in establishing these applications was to secure a favourable geological position over existing historical copper-gold prospects around the Kintyre uranium mine, particularly the Wanderer copper-gold-molybdenum prospect. Historical drilling at Wanderer during the 1980's returned primary copper grades up to 6.5%, gold grades up to 1g/t and molybdenum up to 700ppm less than 100 metres from surface, which have never been followed up.

An integration of available historical geophysical datasets conducted by consultants to Firefly has created a large high-resolution geophysical data package over the primary tenement application containing the Wanderer prospect. This modern dataset illustrates significant structural information, strongly supports Firefly's geological model for potential intrusive copper-gold sources for Wanderer and multiple nearby prospects, and has led to the development of several other high-priority drill targets across the application area.

Discussions with the Western Desert Lands Aboriginal Corporation (WDLAC), as representatives for the interests of the Martu people as the traditional owners of the region covering the Wanderer prospect area and surrounds are ongoing. Establishment of a mutually agreed Native Title Agreement is progressing.

## CORPORATE

### Change of Company Name and ASX Code

Following receipt of shareholder approval at the Company's Annual General Meeting held on Friday, 29 November 2019, the Company changed its name from Marindi Metals Limited to Firefly Resources Limited. The change of Company name on the ASX took effect from the commencement of trading on Friday, 6 December 2019, with the ASX Code changing from "MZN" to "FFR".

The Company's new website is [www.fireflyresources.com.au](http://www.fireflyresources.com.au).

### Cost reduction Program

As part of an ongoing review of costs across the Company, several areas have been identified for optimisation and rationalisation.

### Tenements

Over the past 12 months all non-core base metal project areas within the Company's tenement portfolio have been the subject of external marketing, including joint venture and sale discussions with a number of private and listed entities.

While all projects reached various stages of commercial discussion, no firm commitments were received. All of these project areas were acquired at earlier times in the Company's history when it was focused on base metal and conglomerate gold exploration. With the current system of escalating annual expenditure commitments, these projects now represent a considerable administration and expenditure burden.

Yalco and Caranbirini Projects, NT – \$600,000 total annual expenditure commitment (including rents and rates)

After completing rehabilitation work over previous exploration drill areas, the early-stage Yalco and Caranbirini zinc project exploration tenements in the Northern Territory have been relinquished.

Newman – \$700,000 total annual expenditure commitment (including rents and rates)

Economic evaluation of the Newman project, particularly the reported zinc resource and high-grade vanadium mineralisation, as well as a management review of the gold potential has concluded that:

The Prairie zinc-lead resource at 3Mt @ 5% Zn Eq is currently too small to support a stand-alone processing option.

- Along-strike extensions to the Prairie zinc-lead resource were tested by previous management, with results suggesting that any potential resource extension or additional resource volume would likely be at depth and therefore expensive to evaluate.
- The base metal prospectivity of the wider Prairie Downs fault system that hosts the current zinc-lead resource, as well as many other small base metal prospects, has been extensively tested to shallow depth. Further exploration work will require a strong base metal focus and potentially significant expenditure on deep drilling.
- The gold potential of the Prairie Downs fault itself has been proven to be minimal with samples from the many drill campaigns at Newman assayed for gold in conjunction with base metals.

- Areas adjacent to the main fault structure, including the Deadman's Flat gold prospect, have an increased prospectivity for gold, however historical sampling of these areas has only returned very low-grade values.
- The overall total annual expenditure commitments required to hold the Newman package of tenements (circa \$700k) far outweighs any perceived and/or actual value to the Company.

The Board therefore decided to relinquish the Newman Project.

***Bellary Dome – \$400,000 total annual expenditure commitment (including \$350,000pa option term)***

The Bellary Dome conglomerate gold asset was acquired by previous management during the 2017 Pilbara conglomerate gold "rush". The original option agreement terms to the vendor included a 5% gross royalty, a \$350,000 annual expenditure commitment and delivery of a 100koz "JORC 2012- compliant" gold resource within four years. Failure to meet any of these terms means the project is to be returned to the vendor.

The option terms have proven to be a serious impediment to the economics of achieving any favourable outcome at this project. The Company has approached the vendor on a number of occasions in an attempt to renegotiate the terms of the agreement but without success.

With the anniversary of the original agreement in late November 2019, the Board decided that was in the long-term best interests of shareholders to return the Bellary Dome conglomerate gold project to the vendor.

***Corporate overheads***

Office Lease

Firefly is in the process of sub-letting its current offices and moving to another shared workspace environment in a further effort to reduce unnecessary cost. This will potentially save 50% on the first year of office leasing costs and 75% annually in comparison to the current arrangement.

Staff

With Firefly's principal focus on high-grade gold in Western Australia and in line with overall corporate cost reduction, one full-time staff geologist position recently vacated will not be replaced.

**Authorised by:**

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**Table 1 – Tenements as at 31/12/2019**

Lease	Lease Holder	Locality	Status	Current Area (blocks)	Interest
E47/3555	Firefly Resources Limited	WA	Granted	28	100%
E52/3451	Marindi Metals Operations Pty Ltd	WA	Granted	70	100%
E74/0586	Forrestania Pty Ltd	WA	Granted	20	100%
E74/0592	Forrestania Pty Ltd	WA	Granted	70	100%
E74/0591	Forrestania Pty Ltd	WA	Granted	69	100%
E74/0627	Forrestania Pty Ltd	WA	Granted	4	100%
E77/2313	Forrestania Pty Ltd	WA	Granted	5	100%
E77/2364	Forrestania Pty Ltd	WA	Granted	20	100%
E77/2348	Forrestania Pty Ltd	WA	Granted	70	100%
E77/2561	Forrestania Pty Ltd	WA	Granted	47	100%
E77/2345	Forrestania Pty Ltd	WA	Granted	20	100%
E77/2346	Forrestania Pty Ltd	WA	Granted	20	100%
M77/0549	Forrestania Pty Ltd	WA	Granted	73.53 HA	100%
P77/4069	Forrestania Pty Ltd	WA	Granted	180 HA	100%
E52/3577	Forrestania Pty Ltd	WA	Granted	54	100%
E45/5358	Marindi Metals Operations Pty Ltd	WA	Application	68	100%
E45/5396	Marindi Metals Operations Pty Ltd	WA	Application	76	100%
E45/5397	Marindi Metals Operations Pty Ltd	WA	Application	51	100%
E45/5407	Marindi Metals Operations Pty Ltd	WA	Application	87	100%
E45/5391	Marindi Metals Operations Pty Ltd	WA	Application	174	100%
E77/2600	Firefly Resources Limited	WA	Application	21	100%
E16/0522	Firefly Resources Limited	WA	Application	2	100%
E16/0523	Firefly Resources Limited	WA	Application	6	100%
E16/0524	Firefly Resources Limited	WA	Application	9	100%