SEPTEMBER 2018 QUARTERLY ACTIVITIES REPORT

Completion of merger with Excelsior Gold paves way for expanded development studies on Bardoc Gold Project, supported by positive metallurgical and drilling results and imminent Resource update

MERGER WITH EXCELSIOR GOLD

- **Scheme of Arrangement implemented, completing the merger of Spitfire and Excelsior and resulting in the creation of a leading ASX-listed gold company with a diversified asset portfolio and clear pathway to production in the highly prospective Eastern Goldfields region of WA.**
- **Trading of new Spitfire shares commenced 4 October.**

BARDOC GOLD PROJECT

- **Combined Spitfire/Excelsior gold projects in the Eastern Goldfields region renamed the "Bardoc Gold Project".**
- **6,552m/16-hole diamond drill program completed at Aphrodite with results confirming the continuity of mineralisation in the lower zones of the Alpha lode and providing key data for inclusion in an updated Mineral Resource estimate.**
- **Work well advanced on a new consolidated Group JORC Mineral Resource Statement for the Bardoc Gold Project, including the Aphrodite, Zoroastrian and Mulwarrie deposits. Updated Resource on track for the first half of November.**
- **Metallurgical test work delivers a major breakthrough, demonstrating outstanding gold recoveries of up to 93.5% for the Aphrodite deposit using the Albion Process™, an atmospheric leaching process that uses industry-standard IsaMills™ for fine grinding.**
- **Ongoing mining studies have highlighted the potential to improve open pit and underground optimisation results at Aphrodite with work underway on a revised mine schedule which is expected to be completed this calendar year.**
- **Feasibility Studies for the Bardoc Gold Project underway, with positive results from metallurgical test work and mining studies underpinning an increased project scope to 2Mtpa.**
- **Further significant drilling results from the Zoroastrian Underground and Blueys South deposits, clearly demonstrating the potential for extensions to the high-grade underground resource.**

CORPORATE

- **Proposed change of company name to "Bardoc Gold Ltd" to reflect the Company's emerging status as a new mid-tier Australian gold company focused on the development of the Bardoc Gold Project in the Eastern Goldfields of Western Australia.**

Spitfire Materials Limited | ABN 40 125 578 743
130 Stirling Highway, North Fremantle WA 6159 | Locked Bag 4, North Fremantle WA 6159 | Australia
Tel +61 (0)8 6215 0090 | Fax +61 (0)8 6215 0091
www.spitfirematerials.com

Overview

Spitfire Materials Managing Director John Young said the September Quarter saw the Company put in place the foundations for its rapid transformation into an ASX-listed gold company focused on developing a substantial new mid-tier scale gold project in WA's Eastern Goldfields.

"This has been a busy and productive time for Spitfire, with the recently-completed merger providing us with the critical mass to become a serious mid-tier player in the Australian gold space.

"While our corporate focus during the quarter was on completing the merger, our expanded technical teams took advantage of the opportunity to press ahead with a wide range of technical work, drilling and pre-development studies focused on the bigger picture of how best to progress the development of the now-combined Bardoc Gold Project.

"On the Spitfire side, we completed a 6,500m diamond drilling program at Aphrodite which confirmed the continuity of the underground Resource that will form the basis of upcoming economic studies. We also achieved a major breakthrough with metallurgical test work completed on sulphide ore confirming total gold recoveries from the Alpha deposit of up to 93.5% using the Albion Process™.

"This is a really important step forward, indicating that significant improvements in both process recovery and operating costs may be achieved compared with the 2017 Aphrodite Feasibility Study.

"We are now also working to deliver a consolidated Mineral Resource Statement for the combined Bardoc Gold Project, comprising the Aphrodite, Zoroastrian and Mulwarrie deposits. This updated Resource, which should be completed in early November, will form the basis of ongoing studies for the Bardoc development.

"Based on the strength of the recent metallurgical testwork, together with positive results from ongoing mining studies, we are now looking at the opportunity to increase the scope for the proposed mine development to a 2Mtpa scenario – an exciting development which highlights the scale and potential of this project.

"With the Excelsior merger complete, we now have the combined asset base, the team and the corporate backing and shareholder support to fast-track the development of the Bardoc Gold Project to production and cash-flow at a time when the Australian Dollar gold price remains close to 10-year highs."

Merger with Excelsior Gold

As outlined in the Company's June 2018 Quarterly Report, Spitfire Materials (ASX: SPI) and Excelsior Gold Limited ("Excelsior") (ASX: EXG) entered into an agreement on 25 June to merge the two companies to create a significant diversified Australian gold company.

This Scheme of Arrangement was approved by Excelsior shareholders on 19 September 2018 and the Federal Court of Australia on 21 September 2018, and was implemented on 3 October 2018.

As a result, Excelsior is now a wholly-owned subsidiary of Spitfire with the transaction resulting in the creation of a leading ASX-listed gold company with a diversified asset portfolio and clear pathway to production in the highly prospective Eastern Goldfields of Western Australia. The merger provides the critical mass required to accelerate development plans with the aim of becoming a recognised mid-tier Australian gold producer.

In accordance with the Scheme, Spitfire has issued 378,626,920 fully-paid new ordinary shares ("Shares") as consideration for the transfer of Excelsior shares to Spitfire under the Scheme.

Out of the new Shares issued, 2,357,827 Shares were issued to the sale agent to sell on behalf of ineligible foreign and sale elected shareholders (refer to the Scheme Booklet that was dispatched by Excelsior on Friday, 17 August 2018, for further details).

Trading of these new Spitfire Shares commenced on 4 October 2018 on a normal settlement basis.

Spitfire has also granted 6,340,580 unlisted options, each exercisable at $0.1104 on or before 24 November 2018, in consideration for the cancellation of all existing Excelsior options on issue.

Removal of Excelsior securities from quotation on the official list of the ASX occurred at the close of trading on the ASX on 5 October 2018.

Bardoc Gold Project (SPI: 100%)

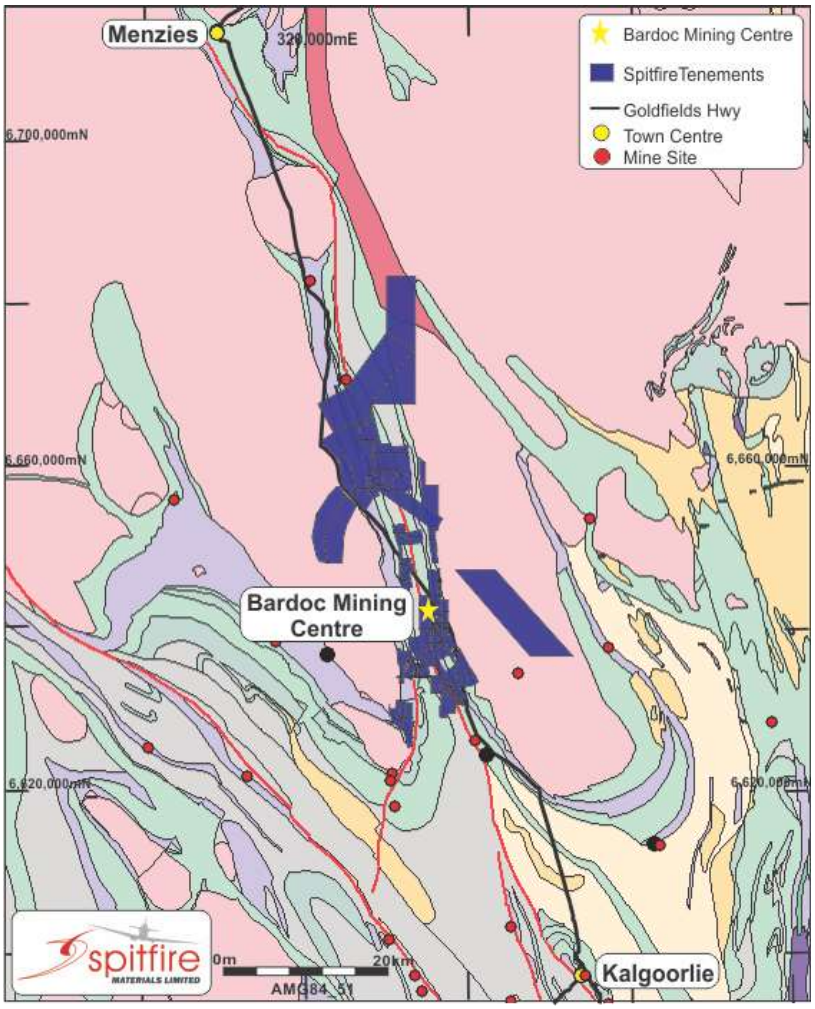

Figure 1: Bardoc Gold Project, Geology and Location Plan.

Following the completion of the merger with Excelsior outlined above, Spitfire now holds a highly prospective tenement position in the Eastern Goldfields of Kalgoorlie comprising the Aphrodite Gold Project, the Kalgoorlie North Gold Project and the Mulwarrie Gold Project.

These projects have collectively been renamed the **"Bardoc Gold Project"**, reflecting their location along the highly prospective Bardoc Tectonic Zone.

Located 30km north of Kalgoorlie on the Goldfields Highway, the New Bardoc Gold Project runs contiguously north for 50km in the Eastern Goldfields. There are four main deposits and a multitude of smaller projects within the 200km^2 land-holding, providing a large resource base and excellent exploration potential within the prolific Norseman-Wiluna greenstone belt and junction of the Bardoc Tectonic Zone (BTZ) and the Blag Flag Fault (BFF).

These two deep-seated crustal structures host many multi-million-ounce deposits, including the world-renowned Golden Mile in Kalgoorlie.

Previously announced Technical Studies for the Aphrodite Gold Project focused on assessing the commercial and technical viability of a potential underground mining operation that could extend the economic life of the initial Aphrodite open pit mine as proposed during the 2017 Pre-Feasibility Study. The subsequent merger with Excelsior Gold Limited has significantly expanded the scope of these studies to include the additional Resources contained within the combined group.

This collection of assets offers an excellent opportunity to leverage technical and commercial opportunities across the group. Future technical studies will focus efforts to unlocking these opportunities.

CONSOLIDATED JORC RESOURCE ESTIMATE

An updated JORC Mineral Resource estimate for the combined Bardoc Gold Project is currently being completed, and is on track for delivery in the first half of November.

METALLURGICAL TESTWORK (see ASX Release 22 October 2018)

Metallurgical testwork on the key underground (sulphide) deposits at the Bardoc Gold Project has delivered outstanding results, demonstrating total gold recoveries of up to 93.5% for the Aphrodite deposit using the Albion Process™, an atmospheric leaching process that uses industry-standard IsaMills™ for fine grinding.

Results from ongoing metallurgy on the key Alpha and Phi underground deposits at Aphrodite using oxidative leach conditions typically used in the Albion Process™ have demonstrated significant improvements in overall gold recoveries.

The Albion Process™ is a combination of ultra-fine grinding and oxidative leaching at atmospheric pressure using industry-standard equipment utilised at major mining operations around the world.

Flotation testwork has been conducted on Aphrodite core to test both spatial and geological variability. The testwork has confirmed high recoveries of gold to concentrate.

Flotation gold recoveries of up to 96.3% from the Alpha lode and 97.4% from Phi lode have been repeatedly demonstrated. Direct cyanidation of concentrates achieved low gold recoveries. In order to liberate the gold for high cyanidation recoveries, oxidative processes have been evaluated for technical and economic merit.

A number of oxidative process options have been evaluated including the Glencore Technology owned and developed Albion Process™. Glencore Technology and Core Resources were commissioned to provide support for the technical and economic evaluation of the Albion Process™. The resulting amenability showed significant recovery improvements in downstream cyanidation from 30% without Albion Process™ treatment increasing to 97.2% after Albion Process™ treatment.

Results from testwork of the Aphrodite Alpha Primary lode have been very positive. At a grade of 7.27 g/t Au, a flotation recovery of 96.3% combined with the improved cyanide leach recovery of 97.2% following Albion Process™ oxidation has resulted in a combined overall gold recovery of 93.5%.

The demonstrated improvements in both process recoveries and operating costs will have a significant and positive impact on mine planning and modelling.

MINING STUDIES (see ASX Release 22 October 2018)

Ongoing mining studies on the Bardoc Gold Project have highlighted the potential to improve open pit and underground optimisation results. Work is now underway on a revised mine schedule which is expected to be completed this calendar year.

The Company had initially engaged Como Engineering to provide engineering and design for the process plant and infrastructure for a 1Mtpa operation at Bardoc. In light of recent positive interim results, the scope of this work has been expanded to explore the option of increasing the annual throughput to 2Mtpa.

This work, along with further metallurgical processing, will continue to evolve during the Bardoc Gold Project Feasibility Study.

ORE SORTING

Ore sorting assessment continues following the initial testwork completed by the Company in March 2018 (see ASX March 2018 Quarterly Activities Report release dated 24 April 2018). Diamond core has been sampled on ~5cm intervals, assayed using the Chronos non-destructive photon assay system and submitted to Tomra Sorting Pty Ltd. Testing using Tomra's sensing systems included Near-infrared spectrometry (NIR), X-ray transmission (XRT), Electromagnetic (EM) response, colour difference and the presence of quartz using Tomra's multi-channel laser system.

NIR has demonstrated consistency in classifying material as low (<0.5g/t), mid (0.5 to 5.0g/t) and high-grade (>5.0g/t). Low-grade response is classified as purple while high-grade response is classified as green as demonstrated in Figures 2 and 3 below.

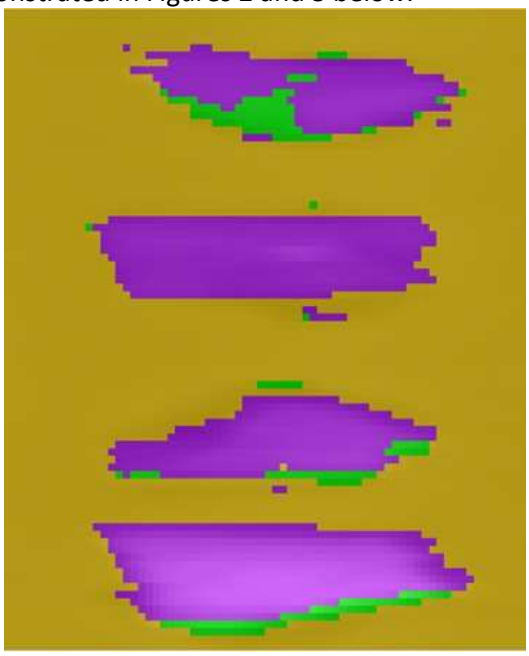

Figure 2: Classified image of low-grade samples.

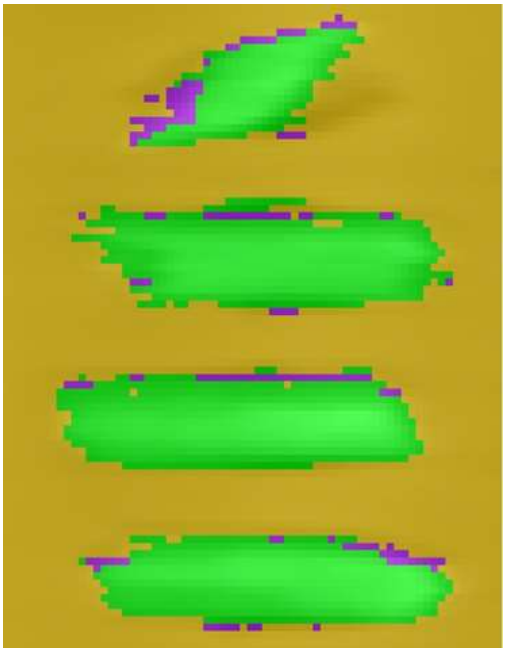

Figure 3: Classified image of high-grade samples.

The areas of low and high-grade classification for each individual sample is plotted against the gold grade of the samples. This plot is shown in Figure 4 below.

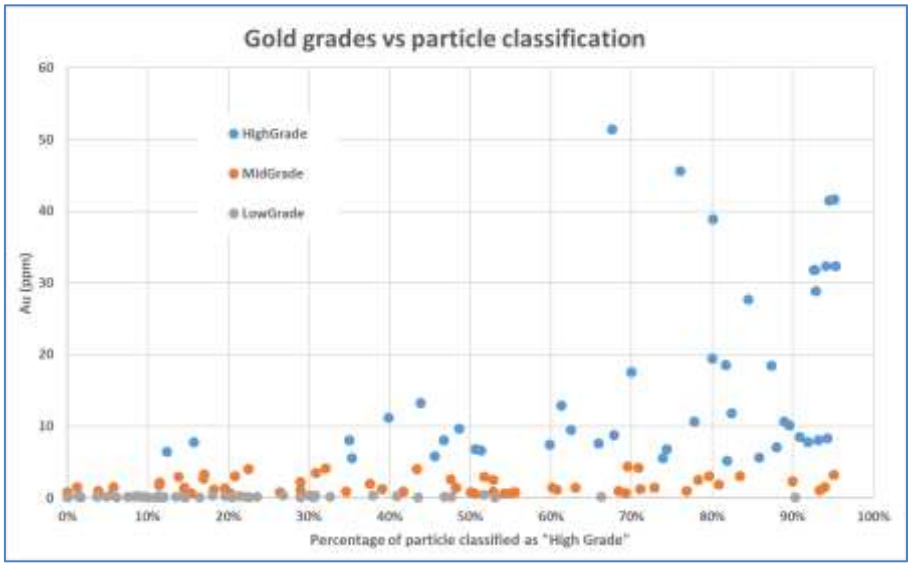

Figure 4: Gold grades vs percentage of each sample classified as high grade by NIR.

The results demonstrate a positive correlation between sample grade and NIR classification. To validate this relationship, a set point of ~30% high-grade classification has been applied. Results from this set point are simulated in Table 1 below.

Table 1: Simulated sort of cut point 30% "high-grade" by NIR classification.

Simulated 30% cut point								
	HG		MG		LG		Total	
	# Particles	%	# Particles	%	# Particles	%	# Particles	%
Product	42	95.5%	36	64.3%	13	27.7%	91	61.9%
Waste	2	4.5%	20	35.7%	34	72.3%	56	38.1%
Total	44	100%	56	100%	47	100%	147	100%

In this simulation, 95.5% of high-grade samples have been classified as product by NIR with two samples classified as waste. An overall 38% mass reduction is achieved. The results demonstrate the potential for ore sorting technologies to be used at the Bardoc Gold Project. Ore sorting, which is increasingly used across the gold sector, can substantially reduce operating costs and improve gold recoveries. Testing of ore sorting technologies is ongoing.

Potential applications for the technology offer significant upside to the treatment of low-grade material within an existing mine plan. Low-grade material that would normally be mined and stockpiled could be treated by ore sorting and classification to create a ROM grade feed material. Phase 4 of the ore sorting testwork program will seek to extend the application to low-grade in-pit material.

ENVIRONMENTAL

Environmental studies for the Bardoc Gold Project continued during the Quarter. Field surveys and desktop reviews have been completed of all available data to assess the Project's environmental and social impacts. Key areas of environmental study include:

- Landform and Soils
- Flora and Vegetation
- Fauna
- Subterranean Fauna
- Short Range Endemics
- Mine Closure
- Waste Characterisation
- Hydrology
- Hydrogeology
- Aboriginal Heritage
- Project Approvals

Based on the current level of knowledge, the Project is unlikely to trigger referrals to the EPA or under the Commonwealth EPBC Act.

EXPLORATION ACTIVITIES

Aphrodite Diamond Drilling Program

A second phase of diamond drilling was completed at the Aphrodite deposit, part of the Bardoc Gold Project, during the Quarter (see SPI: ASX announcement 3 September 2018), with assay results confirming the continuity and quality of the underground Resource.

The second program was mainly designed to in-fill and upgrade the current underground Mineral Resource, which comprises an Indicated and Inferred Resource of **2.9Mt at 7.0g/t Au for 663,000oz**.

Drill holes 18APD014, 18APD017, 18APD018 and 18APD019 were completed on sections approximately 100m apart and were designed to intersect the lower section of the Alpha lode at depths in excess of 300m (below surface), within the Inferred section of the current Resource model. Drill hole 18APD017 was abandoned due to drilling issues. 18APD027 was drilled to replace this hole.

Drilling was successful in intersecting the Alpha lode, with 18APD014 intersecting 25.61m @ 4.11g/t Au from 485.68m down-hole, with both footwall and stronger hanging wall mineralisation occurring some 110m south and up-plunge of 18APD018. The true width of this zone is approximately 50% of the down-hole intersection width. 18APD018 intersected the higher-grade footwall lode within Alpha, returning an intercept of 6m @ 15.98g/t Au from 546m. The mineralised zone intersected in 18APD019 is 80m south of 18APD014, and the tenor of the mineralisation in both the footwall and hanging wall appears to weaken in comparison over a similar width of 17m.

Drilling was successful in intersecting the footwall Alpha lode, with 18APD027 intersecting **17m @ 6.38g/t Au from 475m**, including **8m @ 11.27g/t Au from 477m** and **1m @ 34.56g/t Au from 479m down-hole**. Hanging wall mineralisation outside of the current Resource was also intersected in this hole with **2m @ 5.71g/t Au** including **1m @ 10.33g/t Au from 357m** (see Figure 5).

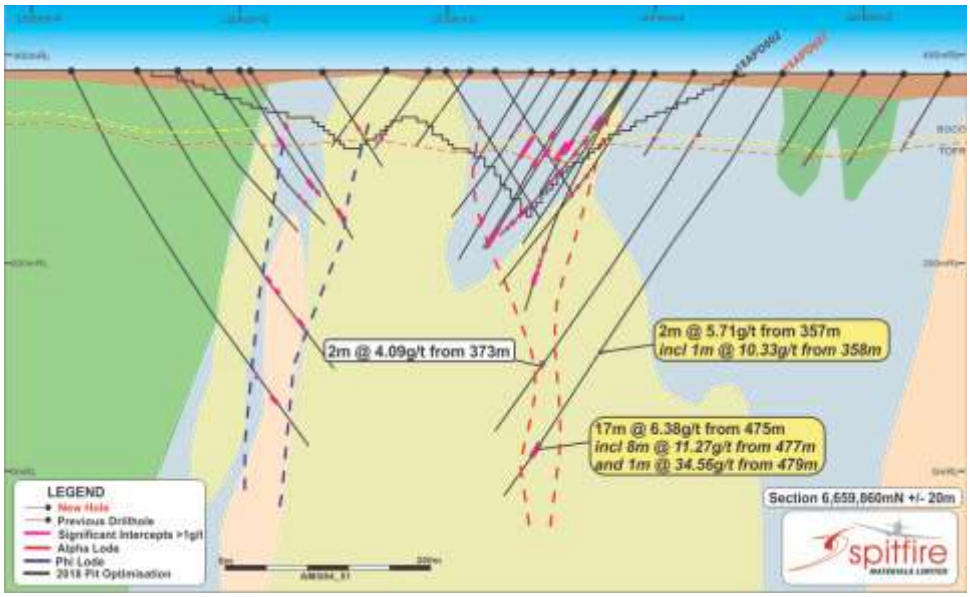

Figure 5: Cross-Section 6,659,860mN

Drill-hole 18APD028 intersected strong Alpha lode mineralisation of **10m @ 5.27g/t Au from 468m** in the hanging wall position of the lode and **8m @ 7.23g/t Au from 486m** in the footwall position of the Alpha lode (see Figure 6).

These intersections confirm and in-fill the results previously reported for drill holes 18APD006 and 18APD007 (see SPI: ASX release 16 April 2018 *Strong Initial Assays at Aphrodite Project* and 29 May 2018 *Aphrodite latest assays and drilling resumes).*

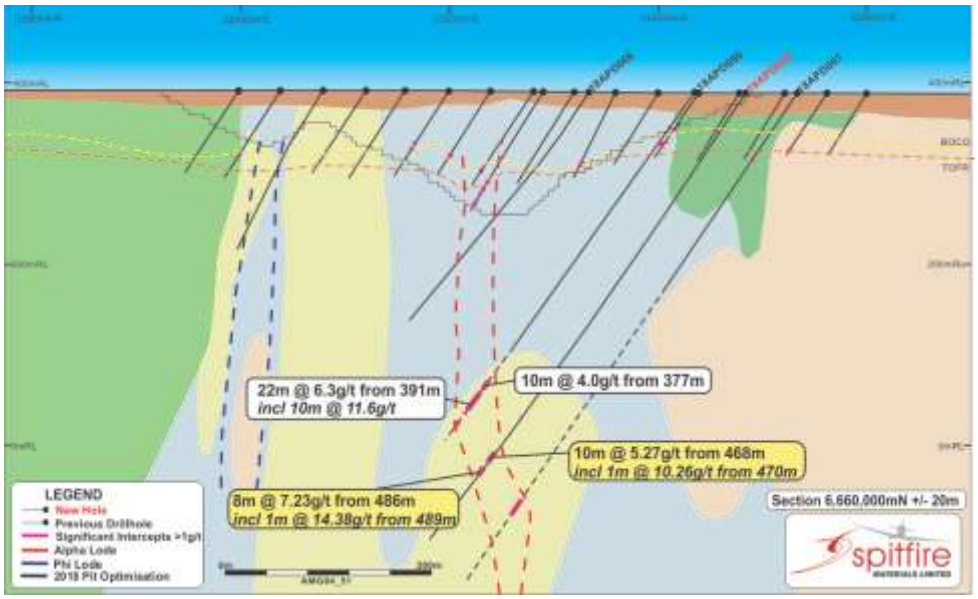

Figure 6: Cross-Section 6,660,000mN

Hole 18APD029 on section 6,659,640mN intersected 34m @ 1.41g/t Au from 297m. This intersection is within the unclassified portion of the Alpha Mineral Resource and confirms that the mineralisation, while lower grade, does extend to the south and follows up on results from holes 18APD010, 18APD019 and 18APD022.

This in-fill drilling has again confirmed the model now being applied to the remodelling of the deposit, with the higher grade zones associated with a narrow vein network (associated with an increase in arsenopyrite with grades in excess of 10g/t Au) that appear to have a shallow (20-25°) plunge towards a 340°.

This strong geological control has never been applied in targeting the higher-grade shoots or to the interpretation used for previous resource estimation methods.

Results from the Phase 2 drilling program at Aphrodite were outlined in the Company's ASX Announcements dated 30 July 2018 and 3 September 2018, and will be incorporated in the updated JORC Mineral Resource estimate for the Bardoc Gold Project scheduled for release in early November.

Zoroastrian Extensional Drilling

A short program of four Reverse Circulation (RC) drill holes for 1,271m successfully targeted mineralisation extensions for one of the multiple high-grade lodes at the Zoroastrian deposit (which forms part of the land-holding acquired through the merger with Excelsior Gold outlined above).

The targeted lode was the South Zoroastrian Lode, which daylights some 500m south of the recently completed Zoroastrian Central Pit and plunges to the north at about 40-50 degrees.

The drilling intersected high-grade mineralisation outside the current Zoroastrian Mineral Resource with KNC180101 returning an intersection of 7m @ 4.83g/t Au from 410m down-hole, including 4m @ 7.27g/t Au from 412m (see SPI: ASX announcement 23 October 2018) (see Figures 7-8). This drill-hole intersected strong mineralisation some 100m down-plunge of the deepest previous mineralisation in KNC170040 of 7m @ 7.13g/t Au from 342m (see EXG: ASX announcement 6 December 2017).

The success of this hole and the other drill holes, confirms that mineralisation for the Zoroastrian South Lode is open at depth and can be targeted with extensional drilling to increase the known high-grade gold Resource.

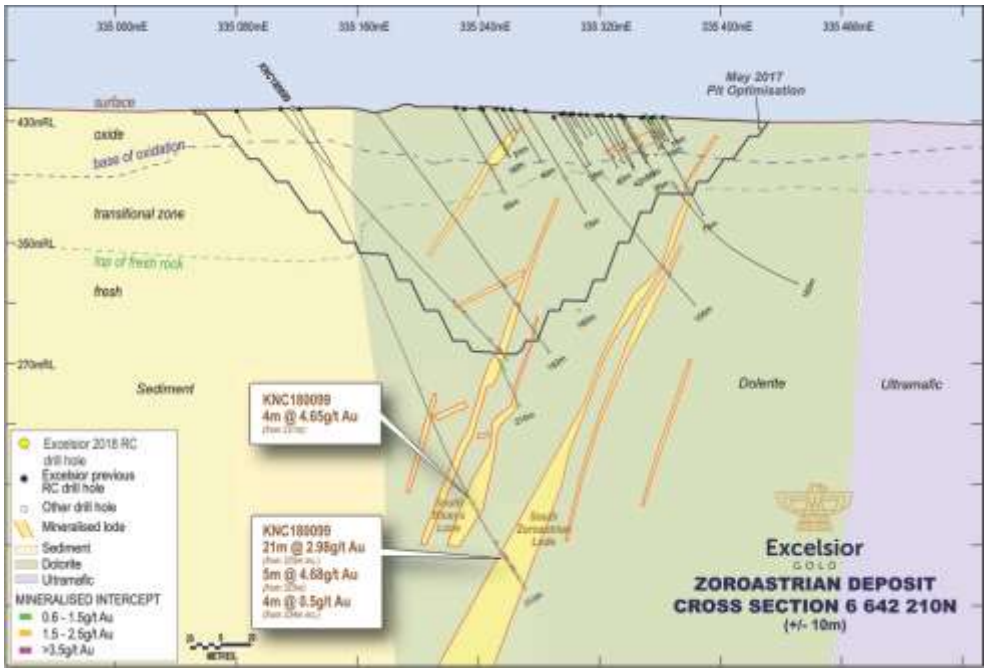

Figure 7: Zoroastrian Cross Section 6,642,210mN

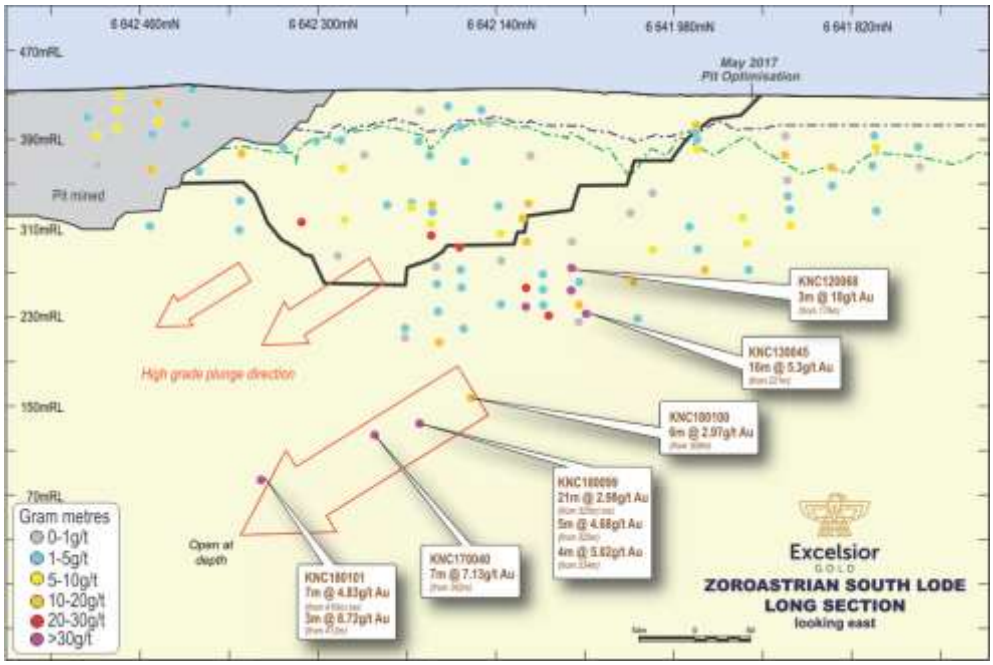

Figure 8: Zoroastrian Long Section – South Lode

Woodie Woodie South

During the Quarter, the Company engaged manganese specialists AEMCO Pty Ltd to undertake a comprehensive technical review of the South Woodie Woodie manganese assets. South Woodie Woodie is located 180km north-east of Newman in Western Australia, a region well known and highly prospective for manganese mineralisation.

A field trip to the project area in September further reinforced the potential of the project, with 11 surface samples taken from manganese outcrops over two newly-identified targets. The Company awaits the final independent geologist's report to determine the next steps for the South Woodie Woodie Project.

Alice River Gold Project, NE Queensland

A binding MOU was signed during the agreed mediation process with the Olkola Corporation setting out the pathway and terms for the completion of an exploration agreement. Negotiations are continuing on developing a suitable agreement to conduct exploration activities.

Corporate

Proposed change of Company name

Following the completion of the merger with Excelsior Gold outlined above, Spitfire Materials proposes to change the Company name to "Bardoc Gold Limited" to reflect its status as an emerging mid-tier Australian gold producer based on the development of the Bardoc Gold Project in the Eastern Goldfields of Kalgoorlie.

This change is subject to shareholder approval, which will be sought at the Company's Annual General Meeting on 28 November 2018.

Director Loan Facility Agreements

During the quarter, Spitfire entered into loan facility agreements with entities associated with its Chairman, Peter Buttigieg, and Executive Director, Neil Biddle (together, the "Lenders") for unsecured loan facilities up to an aggregate of A$1 million. The key terms of the loan facility agreements are set out below:

- Provision of unsecured loan facilities of up to an aggregate of A$1,000,000 by the Lenders, comprising of a loan facility of up to A$500,000 from an entity associated with Chairman Peter Buttigieg and a loan facility of up to A$500,000 from an entity associated with Executive Director Neil Biddle;
- Spitfire can draw down on the loan facilities at any time until the earlier of:
    - the date of the implementation of the merger between Spitfire and Excelsior by way of a scheme of arrangement under Part 5.1 of the Corporations Act 2001 (Cth); or
    - 30 November 2018;
- Interest rate of 12.5%.

The loan facilities were undrawn at the end of the quarter and up to the date of implementation of the merger of Spitfire and Excelsior on 3 October 2018.

Cash Position

The Company held cash reserves of A$0.62 million at the end of the quarter. Upon implementation of the merger with Excelsior Gold Limited on 3 October 2018, Excelsior held cash reserves of A$2.97 million.

More Information

INVESTORS:		**MEDIA:**	
John Young	Spitfire Materials Limited	Nicholas Read	Read Corporate
Telephone:	0419 954 020	Telephone:	0419 929 046
Email:	admin@spitfirematerials.com.au	Email:	info@readcorporate.com.au

Competent Person's Statement

The Company confirms it is not aware of any new information or data that materially affects the information included in the 25 January 2018 Aphrodite Mineral Resource Estimate and that all material assumptions and technical parameters underpinning the estimate continue to apply and have not materially changed when referring to its resource announcement made on January 25, 2018.

The information in this presentation relating to Exploration Results and Mineral Resources is based on information compiled by the Company's proposed Managing Director, Mr John Young, a competent person, who is a Member of the Australian Institute of Mining and Metallurgy. Mr Young has sufficient experience relevant to the style of mineralisation and to the type of activity described to qualify as a competent person as defined in the 2012 Edition of the "Australasian

Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves." Mr Young has disclosed to the Company that he is a substantial shareholder in the Company. Mr Young consents to the inclusion in this announcement of the matters based on his information in the form and content in which it appears. The Company is not aware of any new information or data that materially affects the information included in the previous ASX announcements.

Schedule of Tenements

Country/state	Tenement Code	Beneficial Interest (%)
England Gold Project		
Western Australia	E38/2869	100%
Yoda Prospect Project		
Northern Territory	EL 30834	100%
Mulwarrie Gold Project		
Western Australia	M30/0119	100%
Western Australia	M30/0145	100%
South Woodie Woodie Manganese Project		
Western Australia	E46/616	80%
Western Australia	E46/787	100%
Western Australia	E46/835	100%
Western Australia	R46/0002	80%
Western Australia	E46/1159	100%
Western Australia	E46/1160	100%
Alice River Gold Project		
Queensland	ML2901	0%*
Queensland	ML2902	0%*
Queensland	ML2907	0%*
Queensland	ML2908	0%*
Queensland	ML2957	0%*
Queensland	ML2958	0%*
Queensland	ML3010	0%*
Queensland	ML3011	0%*
Queensland	EPM14313	0%*
Queensland	EPM15359	0%*
Queensland	EPM15360	0%*
Queensland	EPM15409	0%*
Queensland	EPM16301	0%*
Queensland	EPM26266	0%*

** Subject to Farm-In/Joint Venture Agreement*

Aphrodite Gold Project		
Western Australia	M24/720	100%
Western Australia	M24/779	100%
Western Australia	M24/649	100%
Western Australia	M24/681	100%
Western Australia	M24/662	100%
Western Australia	E24/186	100%
Western Australia	P24/5014	100%
Western Australia	P24/5015	100%
Western Australia	L24/204	100%
Western Australia	L29/114	100%
Western Australia	L29/115	100%
Western Australia	L24/225 – Pending Application	100%
Western Australia	L24/226 – Pending Application	100%
Western Australia	L24/227 – Pending Application	100%