22 October 2018 **ASX/MEDIA RELEASE**

OUTSTANDING METALLURGICAL RESULTS PAVE WAY FOR SIGNIFICANT EXPANSION OF BARDOC GOLD PROJECT, WA

Positive results from metallurgical test work and mining studies justify increased project scope to 2Mtpa as Feasibility Studies advance on the combined project

Key Points:

- **Outstanding metallurgical results demonstrate total gold recoveries of up to 93.5% for the Alpha deposit (Aphrodite Gold Project) using the Albion Process™ (http://www.albionprocess.com), an atmospheric leaching process that uses industry-standard IsaMills™ for fine grinding.**
- **This represents a key breakthrough for the project compared with the pressure oxidation treatment route contemplated in the 2017 Aphrodite Feasibility Study.**
- **Metallurgical results to date demonstrate that significant improvements to both process recovery and operating costs can be achieved with further work.**
- **Ongoing mining studies on the combined Spitfire/Excelsior projects (the Bardoc Gold Project) have highlighted the potential to improve open pit optimisation results with work underway on a revised mine schedule which is expected to be completed in November.**
- **Work is also nearing completion on a new JORC Mineral Resource statement for the combined Bardoc Gold Project, which is expected to be finalised this month and will underpin ongoing development studies.**
- **Further significant drilling results received from the Zoroastrian Underground and Blueys South, clearly demonstrating the potential for extensions to the high grade underground resource.**

  KNC180101 7m @ 4.83g/t Au from 410m *including* 4m @ 7.27g/t Au.

  KNC180098 16m @ 2.67g/t Au from 135m.

Spitfire Materials Limited (ASX: SPI) is pleased to report a number of significant and very positive interim results from ongoing Feasibility Studies on its flagship 100%-owned **Bardoc Gold Project**, located 55km north of Kalgoorlie in Western Australia.

These include outstanding results from metallurgical testwork on the key underground (sulphide) deposits at the Aphrodite Gold Project (Spitfire Materials), together with highly encouraging results from open pit optimisation studies and drilling at the North Kalgoorlie Project (Excelsior Gold). Following the recently completed merger between Spitfire and Excelsior, these adjoining projects are now combined and form what will be known as the Bardoc Gold Project moving forward.

Results from on-going 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.

Initial estimates for atmospheric leaching using the Albion Process™ under tested conditions indicate the potential for a 28% reduction in total unit processing costs compared to the total pressure oxidation conditions outlined in the 2017 Aphrodite Pre-Feasibility Study (completed prior to Spitfire acquiring the project). The demonstrated improvements in both process recoveries and operating costs will have a significant and positive impact on mine planning and modelling. This work, along with further metallurgical processing, will continue to evolve during the Bardoc Gold Project Feasibility Study.

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 the positive interim results reported in this release, the scope of this work has been expanded to explore the option of increasing the annual throughput to 2Mtpa.

Mining option studies on the combined Bardoc Gold Project are now underway and are due to be completed in November. Work is also well advanced on a new combined JORC Mineral Resource statement for the Project which is expected to be completed this month.

Spitfire Materials' Managing Director, Mr John Young, said

"*The early results from Feasibility Studies on the combined project amounted to a significant breakthrough for the newly-expanded company following the completion of the merger with Excelsior Gold. Given all the work streams underway during the merger process, we have been able to do exactly what we said we would do – which was to hit the ground running post-merger," Mr Young said.*

"The combination of the highly encouraging metallurgical results from Aphrodite, combined with the other positive developments described in this release, means that we can now press ahead with combined development studies on a project which we are confident will underpin a significant new long-life gold operation in the North Kalgoorlie region.

"We expect to be able to release a new combined JORC Mineral Resource statement for the Bardoc Project this month.

"The positive metallurgical results represent a key breakthrough for the project and, when combined with the potential benefits of Ore Sorting technology and the open pit optimisations achieved recently, means we are well on the way to unlocking the value of this significant new Australian gold project."

Metallurgical Testwork

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. Flotation of Aphrodite core samples in synthetic site water demonstrated faster kinetics and higher recoveries. This provides greater confidence in the process and allows smaller process plant equipment.

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%.

About Albion Process™

Albion Process™ is an oxidative leaching technology that has been shown to process broad feed variations, cost less and ramp-up faster. In other applications, it has delivered consistently high recoveries of up to 97% in sulphide gold and over 99% in chalcopyrite copper concentrates. In a comparative analysis by Jacobs engineering in 2018, it was shown to have significantly lower capital cost than traditional leaching plants such as pressure oxidation.

Albion Process™ is a combination of ultrafine grinding and oxidative leaching at atmospheric pressure. The ultrafine grinding by an IsaMill™ creates more boundary fractures in the minerals, improving the leaching and preventing passivation.

The leaching sees oxidation by HyperSparge™ supersonic oxygen injection in Albion Process™ Leach Reactors. Because these operate at atmospheric pressure, they avoid the risks of traditional pressure oxidation plants.

The Albion Process™ feed can be base or precious metal concentrates. The sulphides in the feed are oxidised and valuable metals liberated, with the economic metals recovered by conventional downstream processing.

The technology has been shown to be less expensive to operate, approximately a third lower in ongoing opex costs while tolerating a more variable sulphur grade without compromising performance.

Albion Process™ plants around the world are treating a range of materials including a zinc, gold/silver and chalcopyrite copper concentrates. There are currently six Albion Process™ plant in commercial operation.

A case study on the GPM Gold operation in Armenia showed Albion Process™ to lift recoveries from 20% to over 97%. It has been exceeding nameplate production of 100,000 tpa to deliver 120,000 tpa.

Figure 1: Ultrafine Grinding (IsaMill™)

Figure 2: Albion Leach Reactors

Zoroastrian Extension Drilling

A short program of four Reverse Circulation (RC) drill holes for 1,271m (see figure 5) successfully targeted mineralisation extensions for one of the multiple high-grade lodes at the Zoroastrian deposit. 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 in KNC180101 returning an intersection of **7m @ 4.83g/t Au from 410m** down-hole, including **4m @ 7.27g/t Au from 412m (see figures 3-4)**. 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** *(ASX announcement 6 December 2017 by EXG)*.

The success in 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.**

Intersections reported for other lodes have increased the confidence in the current Mineral Resource estimate with the best result returned from the Blueys South Lode of **16m @ 2.67g/t Au from 135m** in KNC180098.

The broad intersection is at a vertical depth of 130m which is comparable to the final depth of Zoroastrian Central Pit at 125m depth. Drill hole KNC180098 terminated at 168m and will be completed to test the Zoroastrian South Lode using diamond core later this year.

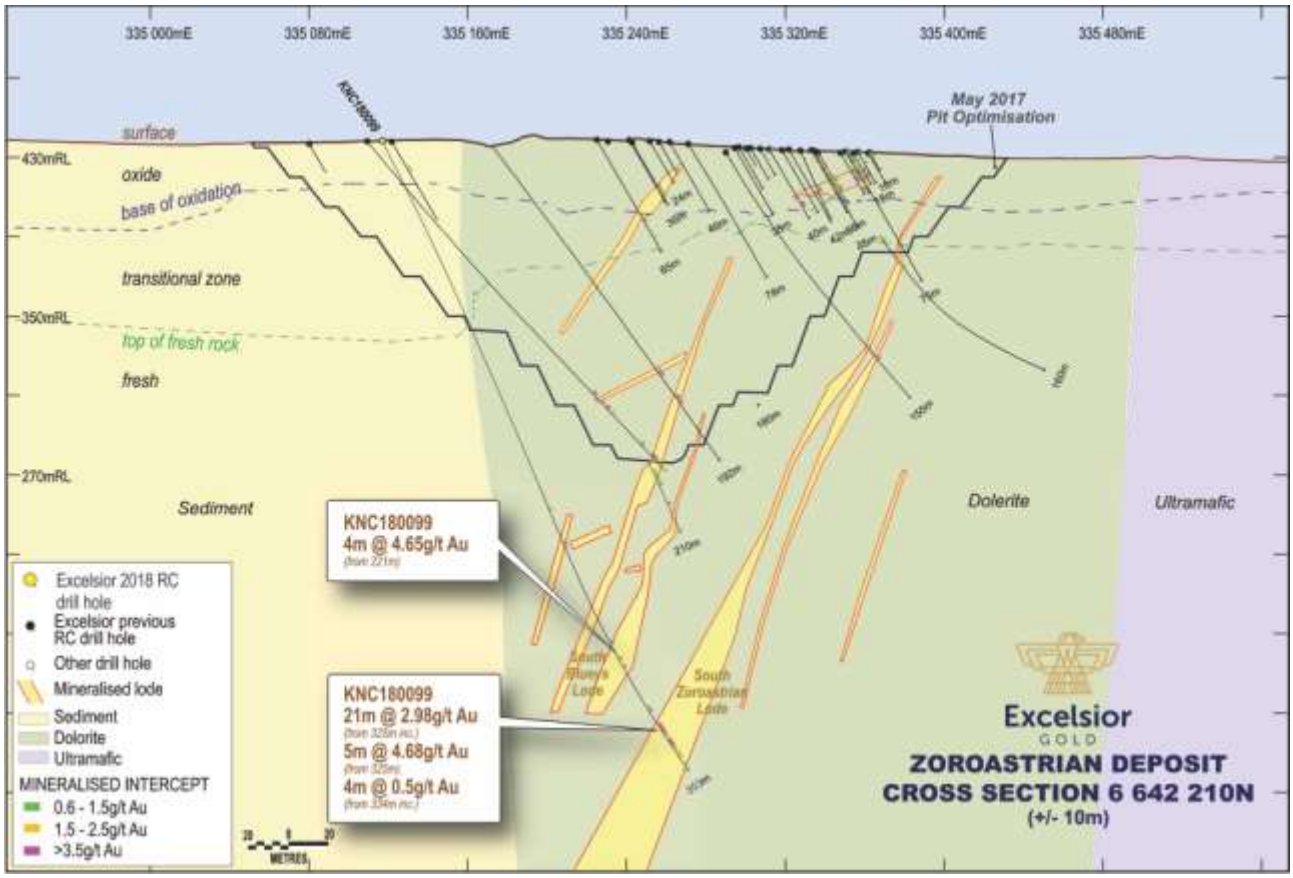

Figure 3: Zoroastrian Cross Section 6,642,210mN

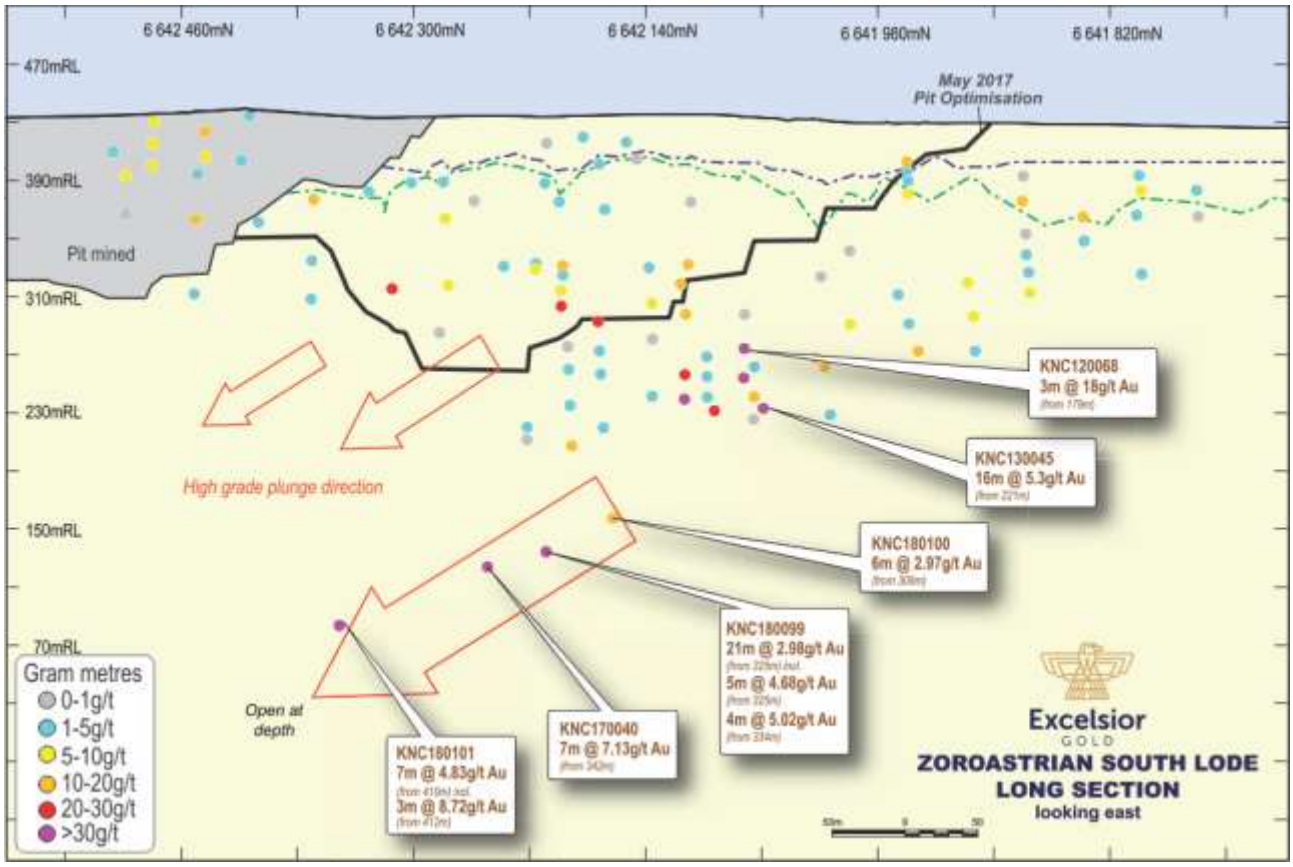

Figure 4: Zoroastrian Long Section - South Lode

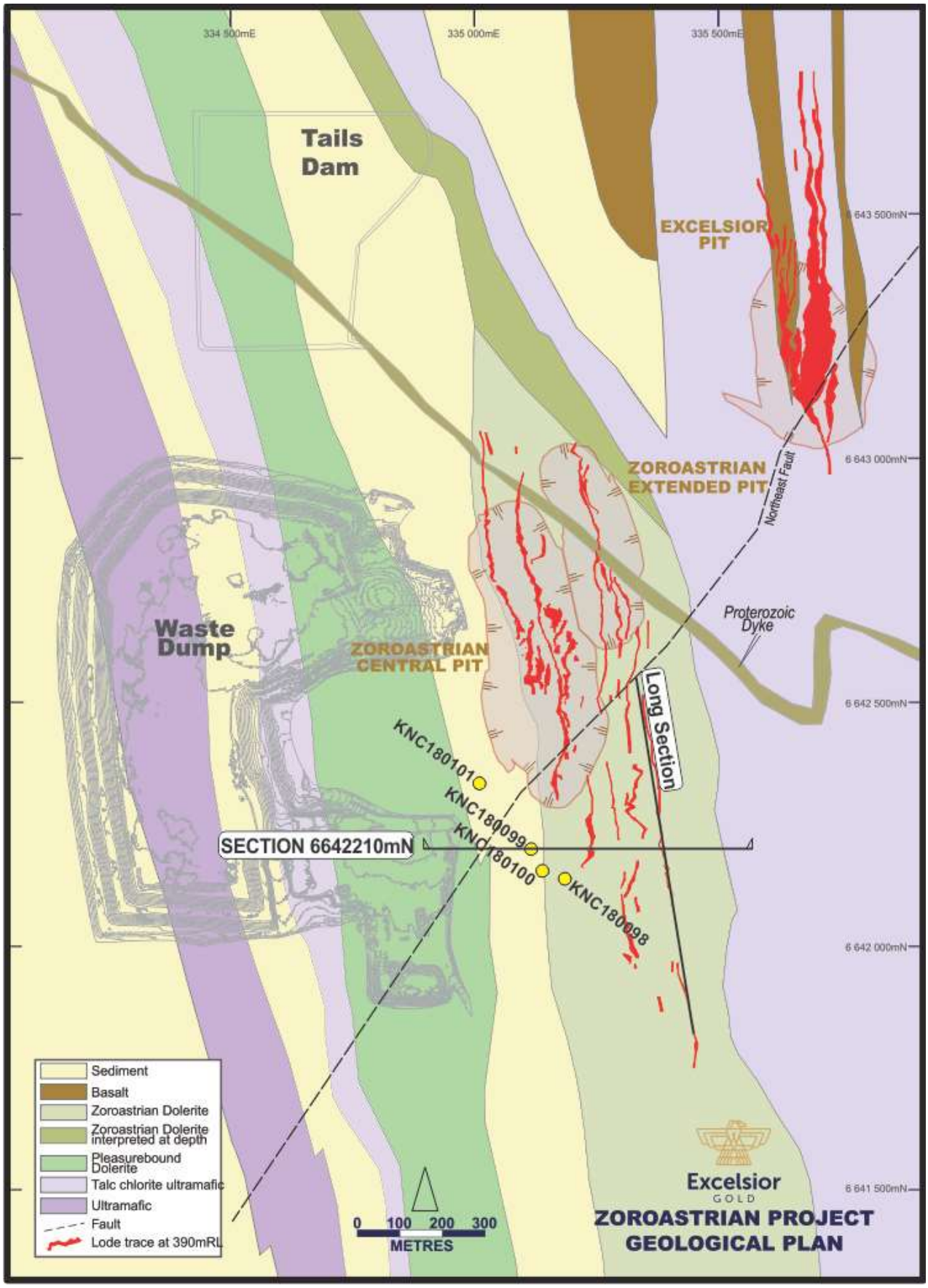

Figure 5: Zoroastrian Geology

BARDOC GOLD PROJECT – BACKGROUND

The New Bardoc Gold Project was formed in October 2018 following completion of the merger of Excelsior Gold and Spitfire Materials, bringing together significant resources and excellent potential for growth (Refer Scheme Booklet dated 13 August 2018).

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 multimillion-ounce deposits, including the world-renowned Golden Mile in Kalgoorlie.

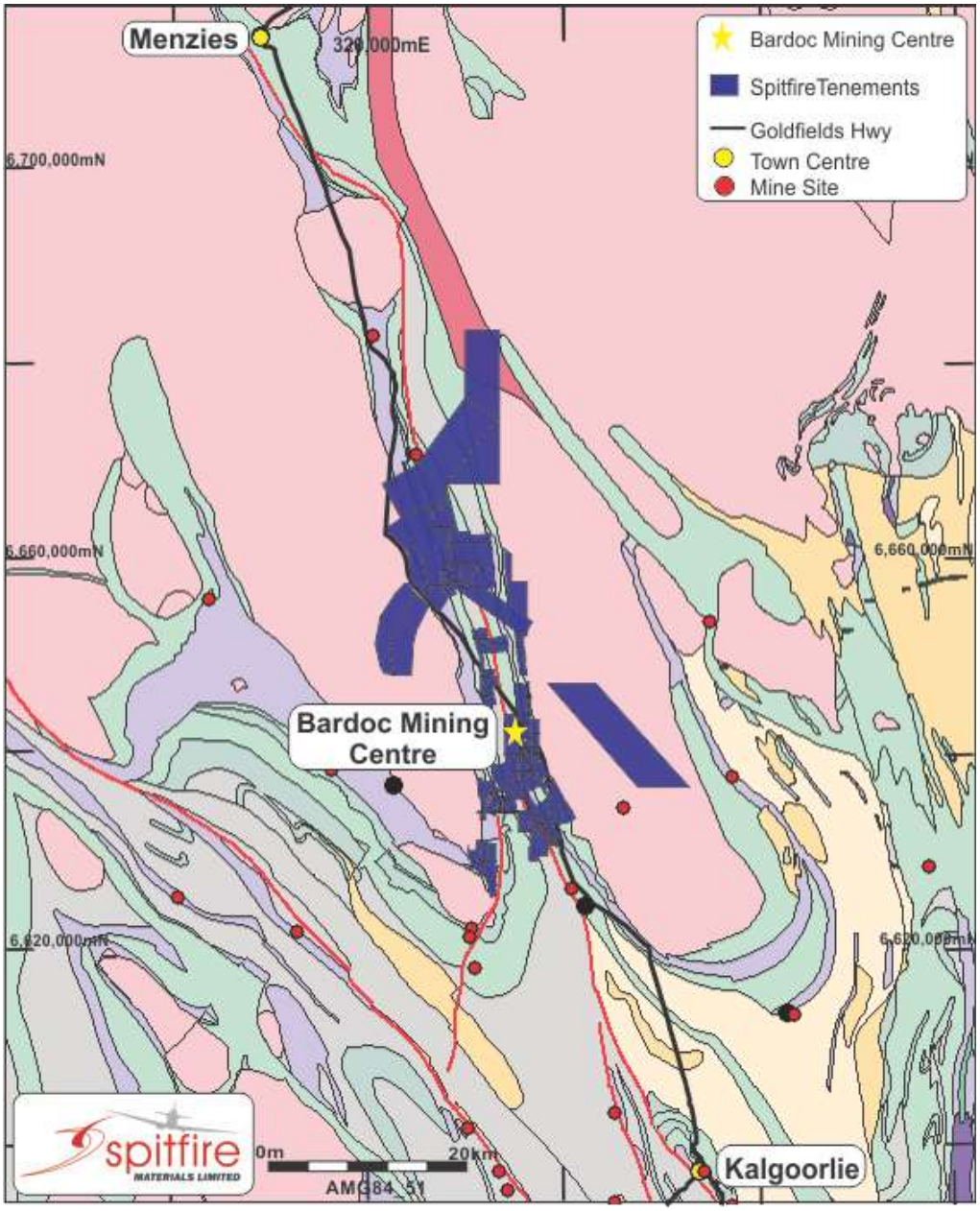

Figure 6: Bardoc Gold Project, Geology and Location Plan.

Qualifying Statement

This report may include forward-looking statements. These forward-looking statements are based on a number of assumptions made by the Company and its consultants in light of experience, current conditions and expectations concerning future events which the Company believes are appropriate in the present circumstances. Forward-looking statements are necessarily subject to risks, uncertainties and other factors, many of which are outside the control of Spitfire Materials Limited, which could cause actual results to differ materially from such statements. The Company makes no undertaking to subsequently update or revise the forward-looking statements made in this release to reflect the circumstances or events after the date of this release.

For further information contact:

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 Statement – Exploration Results

Information in this announcement that relates to exploration results is based on information compiled by Mr. Bradley Toms who is the Exploration Manager of Spitfire Materials Limited. Mr. Toms is a Member of The Australian Institute of Geoscientists and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking, to qualify as Competent Person as defined in the 2012 Edition of the ''Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves''. Mr. Toms consents to the inclusion in the document of the information in the form and context in which it appears.

Appendix 1

Table 1 – Drill Hole Location Table

Hole ID	Collar North (MGA94-z51)	Collar East (MGA94-z51)	Collar RL	Collar Dip	Collar Azi Magnetic	Maximum Depth
KNC180098	6642140.95	335190.68	430.13	-63.0	87.0	168m
KNC180099	6642201.03	335117.50	437.87	-63.0	87.0	353m
KNC180100	6642156.28	335137.18	431.59	-63.0	87.0	330m
KNC180101	6642341.12	335015.67	436.43	-62.0	87.0	420m

Table 2 - Significant Intersections (> 0.6g/t Au) Drilling

Hole id	From	To	Width	Grade	Lode
KNC180098	122	124	2	4.27	Pearl Flat
KNC180098	127	128	1	1.17	Un-named
KNC180098	**135**	**151**	**16**	**2.67**	South Blueys hw
including	*135*	*137*	*2*	*9.42*	
KNC180098	161	162	1	1.23	South Blueys flat
KNC180099	203	204	1	0.61	Un-named
KNC180099	**221**	**225**	**4**	**4.65**	South Blueys hw
KNC180099	277	279	2	2.36	South Blueys hw
KNC180099	286	288	2	0.67	Un-named
KNC180099	291	292	1	3.32	Un-named
KNC180099	315	318	3	1.4	Un-named
KNC180099	**325**	**346**	**21**	**2.98**	Zoroastrian South
including	*325*	*330*	*5*	*4.68*	
including	*334*	*338*	*4*	*5.02*	
KNC180099	349	350	1	0.61	Un-named
KNC180100	197	198	1	0.61	Un-named
KNC180100	223	224	1	0.6	Un-named
KNC180100	**229**	**234**	**5**	**4.09**	South Blueys hw
including	*229*	*231*	*2*	*8.44*	
KNC180100	241	242	1	1.53	Un-named
KNC180100	247	251	4	2.00	South Blueys fw
KNC180100	285	287	2	1.4	Un-named
KNC180100	**290**	**300**	**10**	**1.17**	Un-named
including	*298*	*300*	*2*	*3.68*	
KNC180100	305	306	1	2.12	Un-named
KNC180100	**309**	**316**	**7**	**2.64**	Zoroastrian South
including	*309*	*312*	*3*	*4.36*	
KNC180101	318	319	1	0.84	South Blueys hw
KNC180101	334	339	5	1.98	South Blueys fw
KNC180101	**410**	**417**	**7**	**4.83**	Zoroastrian South
including	*412*	*415*	*4*	*7.27*	

1. JORC CODE, 2012 EDITION – TABLE 1 - ZOROASTRIAN

1.1 Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary *Note that Excelsior Gold Ltd (EXG) has merged with Spitfire Materials Ltd (SPI) after the drilling reported in this announcement was completed, hence references to EXG have been retained.
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample 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 (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	• The mineralization was primarily sampled by Reverse Circulation (RC) and Diamond Core (DC) drilling on nominal 40m x 20m (N x E) grid spacing. The holes were generally drilled towards grid east at varying angles to optimally intersect the mineralized zones. • The drilling database consists of historic (pre 2009) and EXG drilling data. The historic data consists of 19 DD and 420 RC holes; EXG drilling consists of 12 DD, 22 Reverse Circulation with diamond tail (RCD), 579 RC and 1,800 Reverse Circulation grade control (RCGC) holes. • Complete details are un-available for historic drilling. • Generally, EXG RC recovered chip samples were collected and passed through a cone splitter. Results in this announcement were passed through a cone splitter. • Limited numbers of field duplicates and screen fire assays have been undertaken to support sample representivity. • EXG DD core has been sampled by submission of cut half core. • All EXG RC drilling was sampled on one metre down hole intervals. The recovered samples were passed through a cone splitter and a nominal 2.5kg – 3.5kg sample was taken to a Kalgoorlie contract laboratory. Samples were oven dried, reduced by riffle splitting to 3kg as required and pulverized in a single stage process to 85% passing 75 µm. The sample is then prepared by standard fire assay techniques with a 40g charge. Approximately 200g of pulp material is returned to EXG for storage and potential assay at a later date. The EXG DC samples are collected at nominated intervals by EXG staff from core that has been cut in half and transported to a Kalgoorlie based laboratory. Samples were oven dried, crushed to a nominal 10mm by a jaw crusher, reduced by riffle splitting to 3kg as required and pulverized in a single stage process to 85% passing 75 µm. The sample is then prepared by standard fire assay techniques with a 40g charge. Approximately 200g of pulp material is returned to EXG for storage and potential assay at a later date. • Due to the presence of coarse gold and arsenopyrite some 150 samples were subjected to a 400g LeachWell® technique with a standard fire assay on the tail. This demonstrated that some of the gold is nuggetty in nature and that normal fire assay techniques may underestimate the grade. It also demonstrated that the mineralisation is non-refractory in nature.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Prior to 2009 19 DC and 420 RC holes were drilled by previous owners over the area. These holes are without documentation of the rig type and capability, core size, sample selection and handling. • For (post 2009) EXG drilling, the RC drilling system employed the use of a face sampling hammer and a nominal 146mm diameter drill bit. The DC drilling is NQ2 size core (nominal 50.6mm core diameter) or HQ (nominal 63.5mm core diameter). • All EXG drill core is orientated by the drilling contractor with a down the hole Ace system. Core diameter is noted in the assay results table for DC assay results.
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*	• All EXG RC 1m samples are logged for drilling recovery by a visual estimate and this information is recorded and stored in the drilling database. At least every 10th metre is collected in a plastic bag and these are weighed when they are utilized for the collection of field duplicate samples. All samples received by the laboratory are weighed with the data collected and stored in the database. • The EXG DC samples are orientated, length measured and compared to core blocks placed in the tray by the drillers, any core loss or other variance from

	• *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.*	that expected from the core blocks is logged and recorded in the database. Sample loss or gain is reviewed on an ongoing basis and feedback given to the drillers to enable the best representative sample to always be obtained. • EXG RC samples are visually logged for moisture content, sample recovery and contamination. This is information is stored in the database. The RC drill system utilizes a face sampling hammer which is industry best practice and the contractor aims to maximize recovery at all times. RC holes are drilled dry whenever practicable to maximize recovery of sample. • The DC drillers use a core barrel and wire line unit to recover the core, they aim to recover all core at all times and adjust their drilling methods and rates to minimise core loss, i.e. different techniques for broken ground to ensure as little core as possible is washed away with drill cuttings. • Study of sample recovery vs gold grade does not show any bias towards differing sample recoveries or gold grade. The drilling contractor uses standard industry drilling techniques to ensure minimal loss of any size fraction.
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.*	• All EXG RC samples are geologically logged directly into hand-held Geobank devices. • All EXG DC is logged for core loss, marked into metre intervals, orientated, structurally logged, geotechnically logged and logged with a hand lens with the following parameters recorded where observed: weathering, regolith, rock type, alteration, mineralization, shearing/foliation and any other features that are present • All EXG DC is photographed both wet and dry after logging but before cutting. • The entire lengths of EXG RC holes are logged on a 1m interval basis, i.e. 100% of the drilling is logged, and where no sample is returned due to voids (or potentially lost sample) it is logged and recorded as such. Drill core is logged over its entire length and any core loss or voids intersected are recorded.
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.*	• EXG Exploration results reported for drill core are half core taken from the right hand side of the core looking down hole. Core is cut with an on-site diamond core saw. • All EXG RC samples are put through a cone splitter and the sample is collected in a unique pre-numbered calico sample bag. The moisture content of each sample is recorded in the database. • The EXG RC samples are sorted, oven dried, the entire sample is pulverized in a one stage process to 85% passing 75 µm. The bulk pulverized sample is then bagged and approximately 200g extracted by spatula to a numbered paper bag that is used for the 50g fire assay charge. • The EXG DC samples are oven dried, jaw crushed to nominal <10mm, 3.5kg is obtained by riffle splitting and the remainder of the coarse reject is bagged while the 3.5kg is pulverized in a one stage process to 85% passing 75 µm. The bulk pulverized sample is then bagged and approximately 200g extracted by spatula to a numbered paper bag that is used for the 40g fire assay charge. • EXG RC and DC samples submitted to the laboratory are sorted and reconciled against the submission documents. EXG inserts blanks and standards with blanks submitted in sample number sequence at 1 in 50 and standards submitted in sample number sequence at 1 in 20. The laboratory uses their own internal standards of 2 duplicates, 2 replicates, 2 standards, and 1 blank per 50 fire assays. The laboratory also uses barren flushes on the pulveriser. • In the field every 10th metre from the bulk sample port on the cone splitter is bagged and placed in order on the ground with other samples. This sample is then used for collection of field duplicates via riffle splitting. RC field duplicate samples are collected after results are received from the original sample assay. Generally, field duplicates are only collected where the original assay result is equal to or greater than 0.1g/t Au. The field duplicates are submitted to the laboratory for the standard assay process. The laboratory is blind to the original sample number. • For DC, no core duplicates (i.e. half core) have been collected or submitted. • The sample sizes are considered to be appropriate for the type, style, thickness and consistency of mineralization located at this project. The sample size is also appropriate for the sampling methodology employed and the gold grade ranges returned.
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*	• EXG has routinely used local Kalgoorlie Certified Laboratories for all sample preparation and analysis. The most commonly used laboratories have been SGS Australia and Bureau Veritas Australia which has two facilities in Kalgoorlie. No complete details of the sample preparation, analysis or security are available for either the historic AC, DD or RC drilling results in the database.

	parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• The assay method is designed to measure total gold in the sample. The laboratory procedures are appropriate for the testing of gold at this project given its mineralization style. The technique involves using a 40g sample charge with a lead flux which is decomposed in a furnace with the prill being totally digested by 2 acids (HCl and HNO3) before measurement of the gold content by an AA machine. • The QC procedures are industry best practice. The laboratory is accredited and uses its own certified reference material. The laboratory has 2 duplicates, 2 replicates, 1 standard and 1 blank per 50 fire assays. • EXG submits blanks at the rate of 1 in 50 samples and certified reference material standards at the rate of 1 in 20 samples in the normal run of sample submission numbers. As part of normal procedures EXG examines all standards and blanks to ensure that they are within tolerances. Additionally, sample size, grind size and field duplicates are examined to ensure no bias to gold grade exists.
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.*	• Consultant geologist, Rick Adams from Cube Consulting, John Harris of Geological Services and independent geologist Matt Ridgway, have inspected drill core and RC chips in the field to verify the correlation of mineralized zones between assay results and lithology/alteration/mineralization. Recent drilling has been inspected by EXG site geologists. • A number of diamond core holes were drilled throughout the deposit to twin RC holes. These twinned holes returned results comparable to the original holes and were also used to collect geological information and material for metallurgical assessment. A number of RC holes have also been drilled that confirmed results obtained from historical drillholes. • Primary data is sent digitally every 2-3 days from the field to EXG's Database Administrator (DBA). The DBA imports the data into the commercially available and industry accepted DataShed database software. Assay results are merged when received electronically from the laboratory. The responsible geologist reviews the data in the database to ensure that it is correct and has merged properly and that all data has been received and entered. Any variations that are required are recorded permanently in the database. • No adjustments or calibrations were made to any assay data used in this report.
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.*	• All drill holes have their collar location recorded from a hand held GPS unit. Subsequent to drilling holes were picked up using RTKGPS by the mine surveyor or by contracted surveyors. Downhole surveys are completed every 30m downhole. No detailed down hole surveying information is available for the historic RC or DD drilling. • EXG routinely contracted down hole surveys during the programmes of exploration drilling for each RC and DC drill hole completed using either digital electronic multi-shot tool or north seeking gyro, both of which are maintained by Contractors to manufacturer specifications. • All drill holes and resource estimation use the MGA94, Zone 51 grid system. • The topographic data used was obtained from consultant surveyors and is based on a LiDAR survey flown in 2012. It is adequate for the reporting of Exploration Results and subsequent Mineral Resource estimates.
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.*	• The nominal exploration drill spacing is 40m x 40m with many E-W cross-sections in-filled to 20m across strike. This has been infilled with variable spacing for Resource estimate purposes to 20 x 20m and with Grade control to 7.5 x 5m (N x E) spacing. • This report is for the reporting of recent explorations drilling. The drill spacing, spatial distribution and quality of assay results is sufficient to support the JORC classification of material reported previously and is appropriate for the nature and style of mineralisation being reported. • The majority of holes were sampled at 1m, but when this isn't the case, sample compositing to 4m has been applied.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• The majority of drilling is to grid east. The bulk of the mineralized zones are perpendicular to the drilling direction. Structural logging of orientated drill core supports the drilling direction and sampling method. • No drilling orientation and sampling bias has been recognized at this time.
Sample security	• *The measures taken to ensure sample security.*	• RC samples are delivered directly from the field to the Kalgoorlie laboratory by EXG personnel on a daily basis with no detours, the laboratory then

		checks the physically received samples against an EXG generated sample submission list and reports back any discrepancies • Drill core is transported daily directly from the drill site to EXG's secure core processing facility by EXG personnel with no detours. The core is then placed on racks within a secure shed and processed until it requires cutting. Core is then transported directly by EXG's staff to the Kalgoorlie laboratory where it is cut in half by laboratory staff and then sampled by EXG staff. The core is then prepared for assay in Kalgoorlie to the pulverizing stage whereupon the laboratory transports it using a contractor directly to their Perth based assay facility.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• An internal review of sampling techniques and procedures was completed in March 2013. No external or third party audits or reviews have been completed.

1.2 Section 2 Reporting of Exploration Results (Zoroastrian)

(Criteria listed in the preceding section also apply to this section.)

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary
*Note that Excelsior Gold Ltd (EXG) has merged with Spitfire Materials Ltd (SPI) after the drilling reported in this announcement was completed, hence references to EXG have been retained.</th></tr>
<tr><td>Mineral tenement and land tenure status</td><td>• 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.</td><td>• The results reported in this Announcement are on granted Mining tenements held by GPM Resources Pty Ltd, a wholly owned subsidiary of Excelsior Gold Limited.
<table>
<tr><th>Tenement</th><th>Holder</th><th>Area (Ha)</th><th>Expiry Date</th></tr>
<tr><td>M24/11</td><td>GPM Resources</td><td>1.80</td><td>23/03/2025</td></tr>
<tr><td>M24/43</td><td>GPM Resources</td><td>9.28</td><td>15/10/2026</td></tr>
<tr><td>M24/99</td><td>GPM Resources</td><td>190.75</td><td>02/12/2028</td></tr>
<tr><td>M24/121</td><td>GPM Resources</td><td>36.95</td><td>02/11/2029</td></tr>
<tr><td>M24/135</td><td>GPM Resources</td><td>17.75</td><td>10/06/2029</td></tr>
<tr><td>M24/869</td><td>GPM Resources</td><td>7.16</td><td>21/10/2024</td></tr>
<tr><td>M24/870</td><td>GPM Resources</td><td>7.04</td><td>21/10/2024</td></tr>
<tr><td>M24/871</td><td>GPM Resources</td><td>9.72</td><td>21/10/2024</td></tr>
<tr><td>M24/951</td><td>GPM Resources</td><td>190.03</td><td>16/04/2036</td></tr>
</table>
• At this time the tenements are in good standing. There are no existing royalties, duties or other fees impacting on the EXG Kalgoorlie North Project.</td></tr>
<tr><td>Exploration done by other parties</td><td>• Acknowledgment and appraisal of exploration by other parties.</td><td>• Exploration by other parties has been reviewed and is used as a guide to EXG's exploration activities. This includes work by AMAX, Hill Minerals, Aberfoyle and Halycon Group. Previous parties have completed both open pit and underground mining, geophysical data collection and interpretation, soil sampling and drilling.</td></tr>
<tr><td>Geology</td><td>• Deposit type, geological setting and style of mineralisation.</td><td>• The deposit occurs on the eastern limb of a narrow NNW trending structure, the Bardoc-Broad Arrow syncline within the Bardoc Tectonic Zone. In this zone the sequence comprises highly deformed fault slice lenses of intercalated Archaean mafic and ultramafic volcanics and metasediments.
• The mineralisation in the Zoroastrian area is predominately associated with a complex array of multiple dimensional and variable orientated quartz veins and stock works within the differentiated Zoroastrian Dolerite. In places a surficial 1-2m thick calcrete/lateritic gold bearing horizon and small near surface supergene pods exist.
• The Zoroastrian dolerite is thought to be the stratigraphic equivalent of the Paddington dolerite which hosted the 1m+oz mine at Paddington itself with both deposits bounded to the west by the Black Flag sediments and to the east by the Highway Ultramafics. Shear zones up to 10m wide containing gold bearing laminated quartz veining (5cm to 1m wide) occur on both contacts.
• At Zoroastrian slivers of the intruded sequence occur apparently internal to the dolerite throughout the area suggesting a more complex thrust/folding structural system than is readily apparent. Geological and structural interpretation at Zoroastrian is further complicated by contradicting and conflicting mapping and logging of the different units particularly between basalt and dolerite</td></tr>
<tr><td>Drill hole Information</td><td>• 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:</td><td>• See Tables included in this announcement
• No results from previous un-reported exploration are the subject of this announcement.
• Dip is the inclination of the hole from the horizontal (i.e. a vertically down drilled hole from the surface is -90°). Azimuth is reported in magnetic</td></tr>
</table>

	○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	degrees as the direction toward which the hole is drilled. MGA94 and magnetic degrees vary by approximately 1° in this project area • Down hole length of the hole is the distance from the surface to the end of the hole, as measured along the drill trace. Interception depth is the distance down the hole as measured along the drill trace. Intersection width is the downhole distance of an intersection as measured along the drill trace. • Hole length is the distance from the surface to the end of the hole, as measured along the drill trace.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No high grade cuts have been applied to assay results. RC assay results are distance weighted using 1m for each assay. • Intersections are reported if the interval is at least 1m wide at 0.6g/t Au grade. Intersections greater than 1m in downhole distance can contain up to 2m of low grade or barren material. • No metal equivalent reporting is used or applied.
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 (e.g. 'down hole length, true width not known').*	• The intersection width is measured down the hole trace, it is not usually the true width. Cross sections in this announcement allows the relationship between true and down hole width to be viewed. • Data collected historical workings and shafts exist within the area and structural measurements from orientated diamond core drilling show the primary ore zones to be sub-vertical in nature with a general northerly strike. • All drill results within this announcement are downhole intervals only and due to variable mineralisation and style true widths are not able to be calculated until modelling of the mineralisation.
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.*	• Plan and cross sectional views are contained within this 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.*	• All results >= 0.6g/t Au are reported. The results are length weighted composites based on the Au grade and down hole length, a maximum of 2m of internal dilution is included.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• No other exploration data is considered meaningful and material to this announcement.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Exploration work is ongoing at this time and may involve the drilling of more drill holes, both DC and RC, to further extend the mineralised zones and to collect additional detailed data on known mineralized zones. • No additional information can be made available at this time as it is conceptual in nature and commercially sensitive.