



**ASX ANNOUNCEMENT**

**29 January, 2018**

## **DECEMBER 2017 QUARTERLY ACTIVITIES & CASH FLOW REPORT**

Hexagon Resources (ASX:HXG, “Hexagon” or the “Company”) has made significant advances on its McIntosh flake graphite project throughout the December quarter.

The Company is dedicated to bringing the McIntosh project into production to service growing demand for the lithium-ion battery revolution and is increasingly looking at the viability of producing “expandable graphite” which is a premium priced product used in a range of advanced technologies, including batteries.

### **Highlights include:**

- Transformational test work results for McIntosh flake graphite;
  - ✓ Test work confirms the viability of producing graphite products to Five-Nines purity (99.999 wt%C) with a potential selling price of approximately US\$30,000/t; and
  - ✓ Test results continue to support amenability for battery anode material but importantly confirm the higher priced product opportunities to exploit larger flake size, expandability and easy Five-Nines purification attributes.
- Test results from the secondary processing and of drill core to gain geo-metallurgical (Geo-Met) data, largely received, enabling an acceleration of the primary process test work. Primary process test work to confirm important enhancements to the PFS assumptions such as ore sorting, flake size preservation and lower operating costs;
- Applications submitted for two large scale Mining Leases to replace the original four small leases;
- Additional data compilation and target generation has outlined new drill ready targets at Halls Creek (Au, Cu-Pb-Zn & Ni). Funding options for large work program are being considered and include farm-out or “spin-out” options; and
- 2 million shares in unlisted Battery Minerals Limited sold realising approximately A\$1.3 million.

### **1. COMMENTARY**

The December quarter was a transformational period for the Company’s 100% owned McIntosh graphite project, with a series of new test work results confirming the high-quality nature of the concentrate and premium pricing potential.

Test work validates the Company’s new graphite product marketing strategy, from what was a single product focus, aimed solely at the battery anode material as outlined in the Pre-Feasibility Study (PFS) to a diversified product range. This new product range may include large-flake products suitable for the premium priced, ultra-high purity expandable graphite market.



This round of test work has culminated in the recent release of the graphite purification results which followed reports in November highlighting the large flake endowment and the expandability of the +60 Mesh flake material.

In short, the company has confirmed the validity of its strategy that it can diversify its product range and demonstrate easy purification metrics to achieve ultra-high purity products suitable for advanced technical applications for premium prices.

The Company considers that it has found the path to get the best value for its unique deposit and the results delivered during the quarter confirm that a clean benign ore-type is a key differentiating factor and outweighs simple mining metrics, such as grade. The Five Nines purity allows Hexagon to operate in the “nuclear purity world” across a range of intermediate flake products.

The Company was advised by NAmLabs that “any extra *Nine* elevates the selling price by an order of magnitude and that *Five-Nines* flake could have a selling price of around US\$30k per tonne”. Aside from the broader product appeal, the higher and “easy” purification translates into lower costs, higher margins and a lower environmental impact.

The focus remains on completing a Feasibility Study (**FS**), financing and off-take. Off-take is the “keystone” that links the FS with the financing and the Company has been advancing these discussions, especially with the release of the new test results starting in November, 2017.

In order to secure off-take agreements the Company’s initial aim is to enter into a series of non-binding Memoranda of Understanding (**MoU**); which is typical for industrial minerals with a significant pre-qualification process given the high-tech end uses and for a project not in production. These agreements map out each party’s objectives in a loose commercial framework and are subject to satisfactory test work outcomes. Nevertheless, each party generally invests significant time and money from the inception of an MoU to achieve the mutually beneficial long-term and binding off-take agreements.

## **2. MCINTOSH FLAKE GRAPHITE PROJECT – FEASIBILITY STUDY WORK**

The PFS, completed in May 2017 (Refer ASX Report 31 May, 2017), demonstrated the viability of the McIntosh Flake Graphite project. However, now key aspects of the primary processing circuit are superseded by opportunities to create a more diverse range of premium priced graphite products and implement major improvements to the circuit.

These aspects still require ongoing test work however, the outcomes will also affect the mining optimisations and likely the tailings management plan – in a positive manner. During the December quarter, the main FS work focused on the secondary processing test work, referred to as “product development” to ensure that the primary circuit is set-up to enhance product revenue and margins.

Work was also undertaken to improve the understanding of mineralogical and flake size variations around the various deposits to ensure that in production, the plant is configured for the expected variability and ore types.

The secondary process test results released during the December quarter and in early January 2018, has highlighted many new opportunities to significantly enhance the project economics. In particular, the potential to secure off-take for a more diverse product mix i.e. catering for expandable graphite as well as the original battery anode sector, to generate higher revenue streams and margins.

### **2.1 Geo-Met Model Inputs**

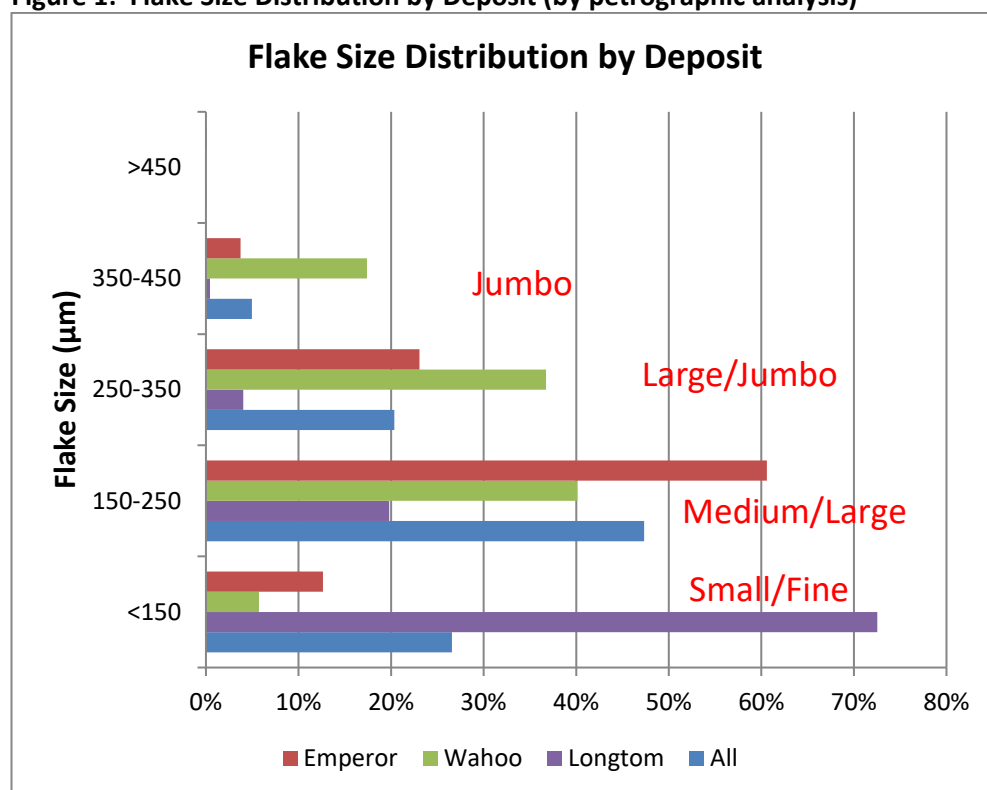
*A robust Geo-Met model is necessary to provide the geological and spatial framework for ongoing metallurgical test work. To date much of the test work has been undertaken on bulk composite*



*samples blended to represent the “average” of all the deposits. The focus on higher specification products requires the Company to further refine its understanding of the orebody and the variability of key attributes for the different deposits to ensure consistent processing performance and product specifications. The work now needs to progress to understand the variability within each deposit in terms of mineralogy, grade and flake size (amongst other criteria) and how these variations, characterised as “geological domains” might impact on the processing performance. Predicting processing performance is essential to consistently meeting offtake specifications.*

During the quarter the Company received the outstanding petrographic flake size analyses for the Wahoo and Longtom deposits in addition to those for Emperor received in the previous quarter. The results are summarised in Figure 1.

**Figure 1: Flake Size Distribution by Deposit (by petrographic analysis)**



The data demonstrates that the Emperor and Wahoo deposits which comprise 71% of the Mineral Resource are dominated by Large and Jumbo sized flake<sup>1</sup>. The Longtom deposit is dominated by Fine and Medium sized flake with 28% in the Medium and Large categories.

The multi-element analysis work on samples utilised for the petrographic work is in progress.

There is now sufficient data to commence the Geo-Met modelling for each deposit. This is essential to underpin the next round of process flow sheet test work as being representative and applicable to the variety of ore types and possible ore blends the concentrator plant may encounter.

<sup>1</sup> **Flake Size Conversion key**

	USA Sieve Series - ASTM Specification E-11:70 (ISO Standard)					
	Fine	Small	Medium	Large	Jumbo	Super Jumbo
Mesh (ASTM)	200	200-100	100- 80	80 - 50	50 - 35	+ 35
Microns	< 75	+75 - 150	+150 - 180	+180 - 300	+300 - 500	+500



## 2.2 Primary Processing Flowsheet

The major test work programs to examine several opportunities to make significant improvements to the processing flow sheet assumed in the May 2017 PFS were suspended while vital data from the secondary processing tests and from the Geo-met modelling became available. The secondary processing test results have for example highlighted the large flake endowment and the importance of designing a comminution circuit that preserves flake size as much as possible, unlike the circuit in the PFS – which focused on achieving a certain target size ideal for the spherical graphite market. The geo-met data is currently being modelled, but already it provides the background data in regard to representivity and variability of the samples being selected for the test work.

The opportunities to improve the PFS process flow sheet include ore-sorting and beneficiation, alternative comminution circuits and reagent regimes. But with the preliminary secondary process and Geo-met test work now largely complete major test work programs are being planned for ore sorting, comminution, and classification and trialling new reagent regimes. This work is planned to commence in the March quarter.

## 2.3 Secondary Processing Test Work

Hexagon recently partnered with a US company, referred to as “NAmLab” which specialises in graphite-battery technologies; from research, to test work and commercial manufacturing. NAmLab has been certified by the US Department of Defence to be ISO 9001:2008 compliant in Quality Systems and importantly, has a commercial production arm.

The objective of this partnership is to undertake test work to characterise end use opportunities for McIntosh graphite concentrate with particular focus on higher purity products, aimed primarily at the advanced battery materials trade and other applications such as high-purity larger flake graphite products. There are many niche markets that this test work is assessing, with a view to diversify Hexagon’s product range further and increase its exposure to premium graphite pricing opportunities. The partnership with NAmLab provides a credible technical partner to execute the test work that understands the relevant end-use specifications and ultimately, through its commercial links can assist in the marketing process.

During the December quarter the Company released a series of pivotal test work outcomes which have transformed and significantly upgraded the planned portfolio of products planned to be produced at McIntosh.

The test work was undertaken on 25kg of two McIntosh graphite concentrate samples generated from Emperor drill core samples despatched to NAmLab. The graphite flake concentrate samples included;

- HXGCon1 – generated from batch test work completed in 2016 on a 200kg composite sample of drill core; and
- HXGCon2 and 3 which is the product of the pilot program completed in July 2017.

Both samples were generated using the PFS style process flow sheet and therefore do not include any of the planned process modifications (which will aim to optimise desirable flake characteristics).

### 2.3.1 Large Flake Endowment

Sizing work indicated the presence of a significant proportion of Large (>180µm) and Jumbo (>300µm) sized flake in HXGCon 1 as shown in Figure 2. This supports the flake sizing analysis undertaken on drill core samples by petrographic methods.

Note, 16% of flake is classified as Super Jumbo and Jumbo and 69% of flake classified as Large with only 14% classified as Small or Fine. Importantly the pilot program (HXGCon2 & 3) actually targeted a

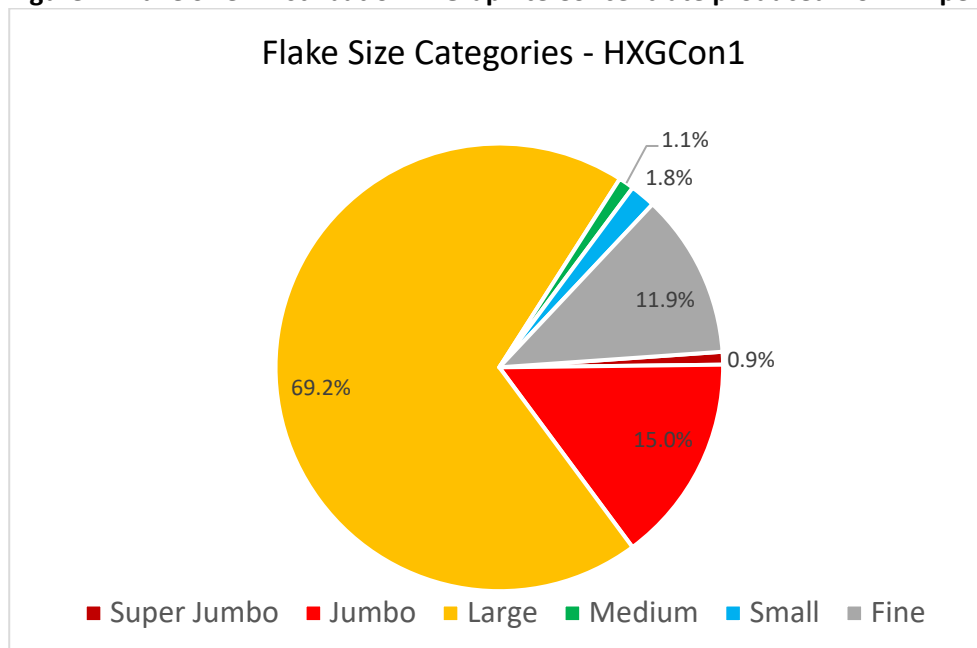


c. 100 micron flake size product. Therefore, sample HXGCon1 is more relevant in terms of concentrate flake size distributions.

This result is very positive. Previous sizing work had indicated that only 30% of flake in concentrate was greater than 150 microns (Medium & Large). Flake size had not been a priority until current management's focus on marketing and product development due to the previous strong focus on a single flake product destined for the battery anode market and the preconception that approximately 106 microns was the target feed size for a spheroidisation plant.

Refer to ASX Report 6 November, 2017 for full details.

**Figure 2: Flake Size\* Distribution in Graphite Concentrate produced from Emperor Samples**



\*Screen Analysis by RX-29 Ro-Tap Test Sieve Shaker/cross referenced by laser diffraction method (Microtrac S3500).

### 2.3.2 Expandability Test Work

Test work was undertaken on the HXGCon1 sample.

A strong Expansion Factor of 220% was achieved for the +60 Mesh sized flake.

The Results are summarised in Table 1 below. The Expansion Volume for a plus 60 Mesh (+250 µm) sized flake had an approximate value of 160mL, while for a +80 mesh it amounted to a low 24mL. Expansion factors typically correlate to flake size and for the Emperor deposit there is a clear demarcation between +60 and +80 mesh sizes i.e. between 180 and 250 µm in terms of both expansion volumes and flake size abundance. This is important for optimising the primary flow sheet and based on the flake size test work reported previously, highlights the opportunity to recover a large proportion of the overall graphite flake to this product.

**Table 1: Expansion Test Work Results from NAMLabs**

Sample ID (HXGCon1)	Initial Mass (g)	Final Mass (g)	Expansion Volume (mL)	BET Surface Area (m <sup>2</sup> /g)	Volatiles Content <sup>1</sup> (g)	Weight% Volatiles <sup>2</sup>	Expansion Coefficient <sup>3</sup> (mL/g)
+60 Mesh	1.0008	0.7275	160	21.63	0.2733	27.31%	219.93
+80 Mesh	1.0040	0.7740	24	9.41	0.2300	22.91%	31.01

1. Volatiles Content = Initial Mass – Final Mass.

2. %Volatiles =  $\frac{\text{Volatiles Content}}{\text{Initial Mass}} \times 100$ ;

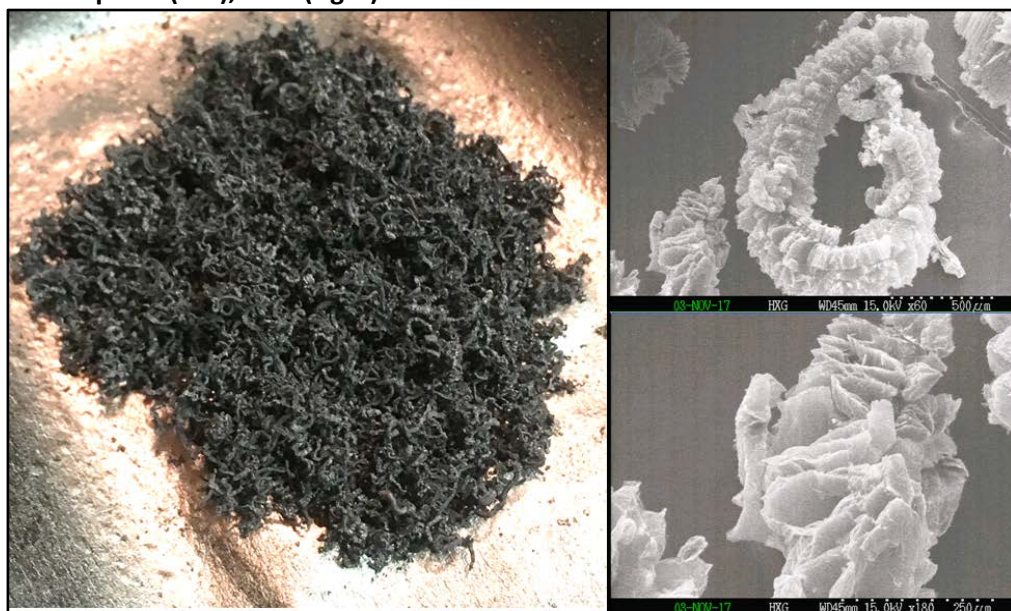
3. Expansion Coefficient =  $\frac{\text{Expansion Volume}}{\text{Final Mass}}$ .





The resultant product from the expansion test has an appearance of vermiform, accordion-looking structures, commonly referred to as “graphite worms” as illustrated in Figure 3.

**Figure 3: Expanded graphite “worms” produced from +60 mesh fraction of HXGCON 1 precursor flake: optical (left), SEM (right).**



The BET surface area of +60 mesh expanded graphite was registered at 21.63 m<sup>2</sup>/g, which puts McIntosh flake in line with a number of competitor materials on the expandable graphite market. NAmLab commented that it is very confident that the Expansion Coefficient and BET surface area could be easily increased in the future as a result of optimisation of flake concentrate sizing and graphitic carbon content as well as fine-tuning the composition of the intercalant acids.

### 2.3.3 Purification Test Outcomes

Purification result of up to 99.9998 were achieved on the McIntosh graphite concentrate samples using a proprietary thermal process. The method is regarded as a medium temperature and involves very mild addition of chlorine to the nitrogen gas carrier. NAmLab described it as an “easy” purification process and hence lower operating and capital costs should provide a competitive advantage for the McIntosh material.

The purity results are summarised in Table 2; the tare weight of the platinum crucible was subtracted from the final combined crucible and ash weight to give the amount of non-carbon ash left in the crucible. HXGCon1 had a barely measurable amount of ash left revealing a flake with purity of 99.9998 wt%C, while HXGCon2A had slightly more ash, highlighting a purity of 99.9991 wt%C. Since virtually no ash could be detected, the LOI tests prove the purified McIntosh concentrates are extremely high-purity.

**Table 2: Loss of Ignition (LOI) 950 Analysis of purified graphite concentrates from NAmLab**

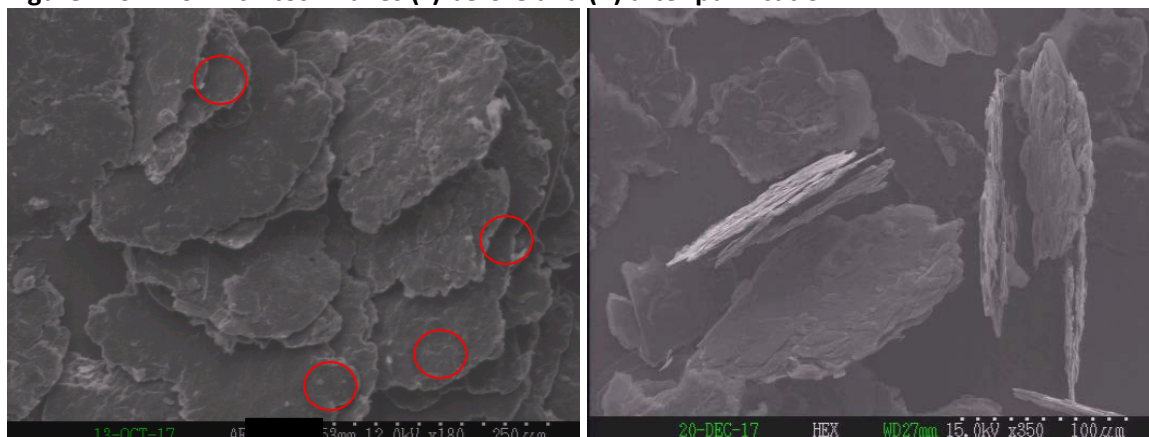
HXGCon1		HXGCon2A (+270#)	
Crucible mass (g)	10.54785	Crucible mass (g)	10.54755
Ore mass (g)	4.29712	Ore mass (g)	5.69234
Crucible + Ash (g)	10.5486	Crucible + Ash (g)	10.54789
Ash (g)	0.00001	Ash (g)	0.00004
<b>% Carbon</b>	<b>~99.9998</b>	<b>% Carbon</b>	<b>~99.9991</b>
Time to oxidise	9:27	Time to oxidise	6:58



Interestingly, in setting up the test runs, NAmLab was actually targeting a 99.95 wt%C or 99.99 wt%C result but ultimately produced a Five Nines graphite (99.999 wt%C), which confirms that the mineral impurities in the McIntosh concentrates “are extremely easy to remove due to their concentration on the surface of the flake as opposed to trapped in-situ of the flake in gangue and fissures,” as reported by NAmLab.

The SEM scans highlight the presence of small bright specks on the surface of the graphite flakes which are the mineral impurities as shown in Figure 4. If these were embedded as gangue into the flake structure it is unlikely such a high purity could have been achieved in this easy manner.

**Figure 4: SEM of McIntosh flakes (L) before and (R) after purification.**



The final elemental scans have not detected any residual elements that raise any concerns in regard to any likely product specifications. The levels are either below detection limits or well below established passing specifications. In general, the battery industry has 10 critical and 8 more non-critical elements that it assesses, as excessive concentrations of certain elemental impurities pose a risk of side reactions, over-pressurising and leakage in the batteries.

As expected, the tap density, Scott volume, and Microtrac particle sizes of the purified materials did not change significantly compared to the materials before purification. The tap density and Scott volume would not have increased because the material, though purified, is still in flake form. However, BET surface area values generally went down by a factor of 1.5-2; e.g. HXGCon2 changed from a BET of 4.24 g/cm<sup>3</sup> to 2.27. Ideal BET values are between 2 and 4 g/cm<sup>3</sup>). This change is considered to be due to high surface area fines comprising the mineral impurities, which have been eliminated from the structure of the graphite carbon.

## 2.4 Project Permitting and Approvals

Two new applications for mining licences (**MLA**) and one miscellaneous licence application covering the four deposits and areas for proposed infrastructure were lodged with the Department of Mines and Petroleum as illustrated in Figure 5. These application areas were selected to best reflect the area required for the development of the McIntosh Project. Subsequent to these applications, the original four MLA's (which only covered the individual deposits) were withdrawn.

Mining Lease Agreement negotiations required for the grant of the MLAs have commenced with the Native Title Claimant Group and a series of meetings scheduled to advance these negotiations.

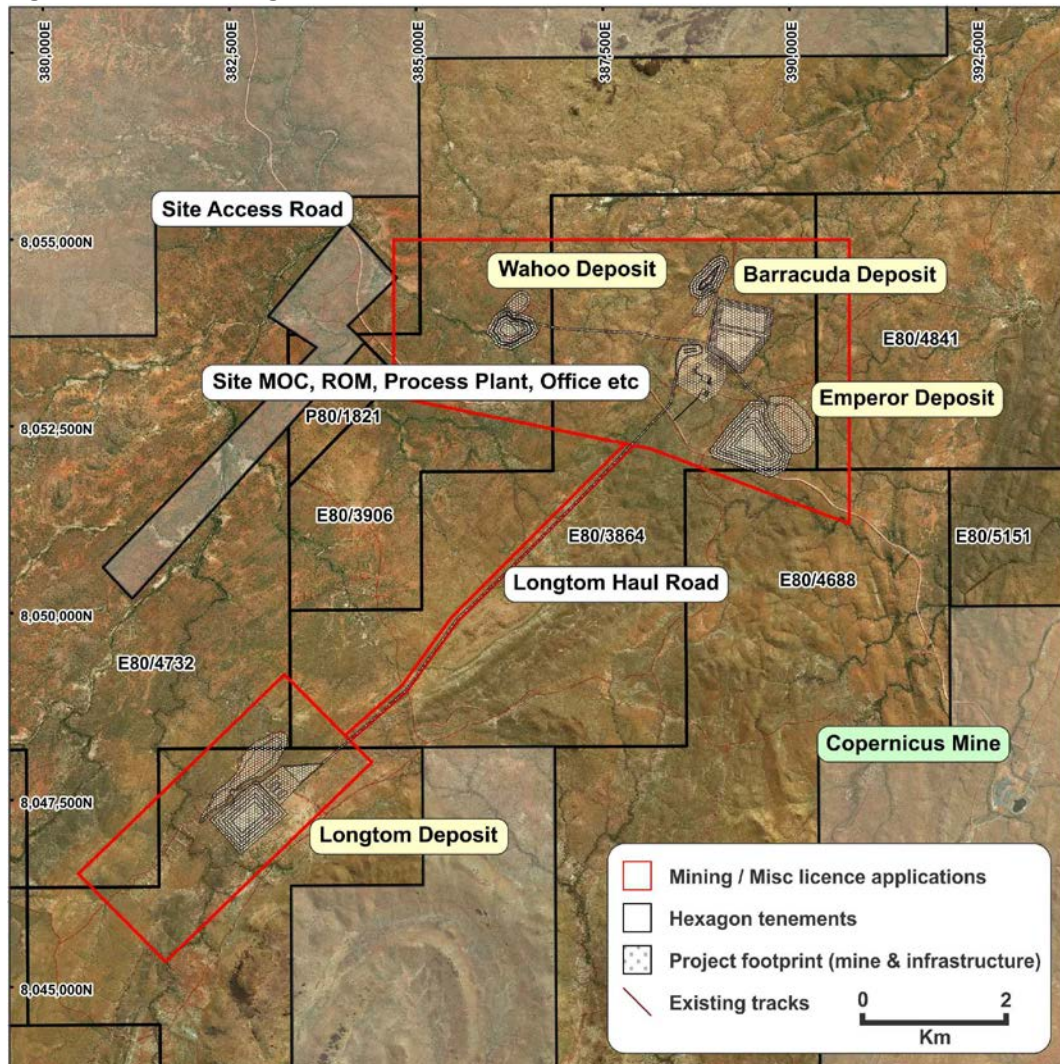
The Subterranean Fauna Survey continued during the quarter with environmental consultants Biologic Environmental Surveys completing preliminary work on the identification of subterranean fauna collected during previous field surveys. The survey work to date will be the largest subterranean fauna survey completed in the Kimberley and is one of the first of its kind in the region to meet the





new Western Australian Mining Proposal requirements. A completed report was expected in November 2017, however work is continuing on the identification of some species collected to allow information for a comprehensive impact assessment. The majority of species identified to date appear to occur widely in the local area.

**Figure 5: Plan showing new MLAs and Miscellaneous Licence areas.**



## 2.5 Feasibility Study and Development Strategy

The Company is currently recruiting a Chief Development Officer to drive the Feasibility study process.

With the conclusion of the preliminary Secondary Processing and Geo-met test work programs there is now solid foundation of knowledge to accelerate the processing and ore sorting test work assessing the PFS enhancements, subject to availability of laboratory capacity and funding.

The secondary process test outcomes have been critical to redesign the primary process circuit but also to commence planning and work on the FS to build and operate secondary processing facilities to capture a greater part of the graphite value chain. Ideally any secondary processing facilities would be established as quickly as possible; initially on a trial scale capable of being increased in scale incrementally.

The Company is in discussions with a variety of parties in regard to off-take and financing to complete the FS and develop the project. The recent test work results have assisted this process greatly.





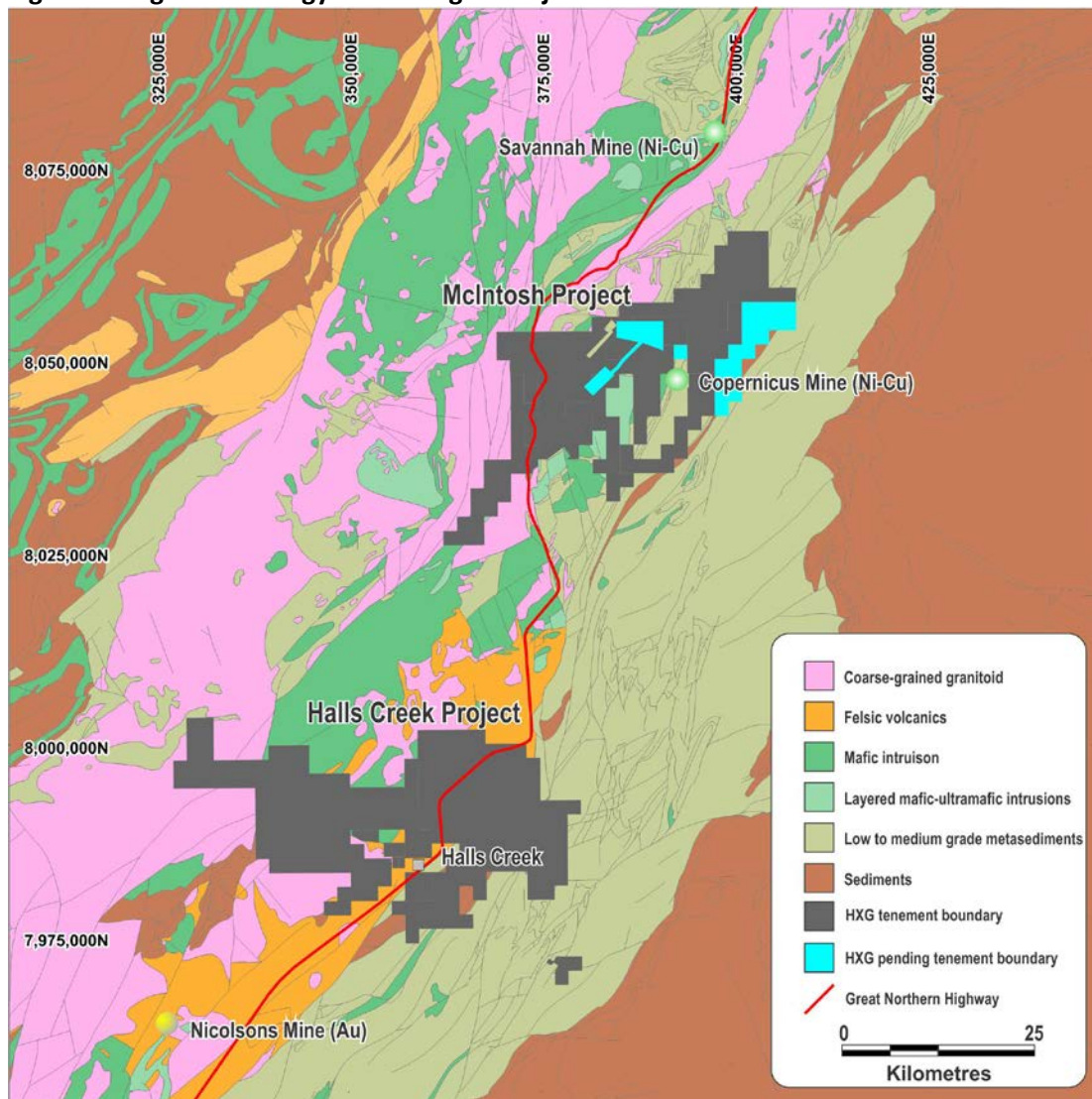
### 3. DISCOVERY

The Company has two main tenement areas located in the East Kimberley as shown in Figure 6, comprising:

- The McIntosh project – prospective for graphite and base metal massive sulphide deposits; and
- The Halls Creek project – prospective for gold and base metal massive sulphide deposits.

The McIntosh tenements are the core focus and host the McIntosh flake graphite project which is in feasibility study. Data compilation and target generation work was undertaken on the Halls Creek Project and the Company is assessing its options for this non-core project which includes a standard farm-out or possibly some kind of spin-out.

**Figure 6: Regional Geology and Hexagon Project Location Plan.**



#### 3.1 McIntosh Project

Details of the drilling program completed in the September quarter were reported previously. Since then, assay results for all the reverse-circulation (RC) samples submitted have been received, with the assay results for core drilling still pending. Diamond core was drilled primarily for metallurgical samples and as such assay turnaround is expected to be longer.



Drilling was primarily focused at the Longtom deposit targeting extensions to the existing resource, based on VTEM anomalism (as shown in figures 7 and 8), and also to provide diamond core within the current resource for metallurgical test work. Highlights of this drilling include:

- Graphite mineralisation intercepted at true widths of up to 10 metres along an additional strike length of 1.4km from current SW edge of the Longtom resource:
- T1GRC260: 16 metres at 4.62 %TGC
- T1GRC261: 14 metres at 6.00 %TGC
- Confirmation of high grade TGC results within current Longtom resource for example - - T1GRC270: 27 metres at 5.39 %TGC)

Assay results at Longtom presented in Attachment 2, indicate moderate widths of mineralisation were intercepted along an additional strike length of approximately 1.4km from the SW edge of the existing resource.

A modest drill program was also completed at Barracuda to provide assays supporting a resource category upgrade and material for metallurgical test work.

**Figure 7: Longtom collar plan showing current resource and optimised pit outline underlain by late time channel VTEM survey image.**

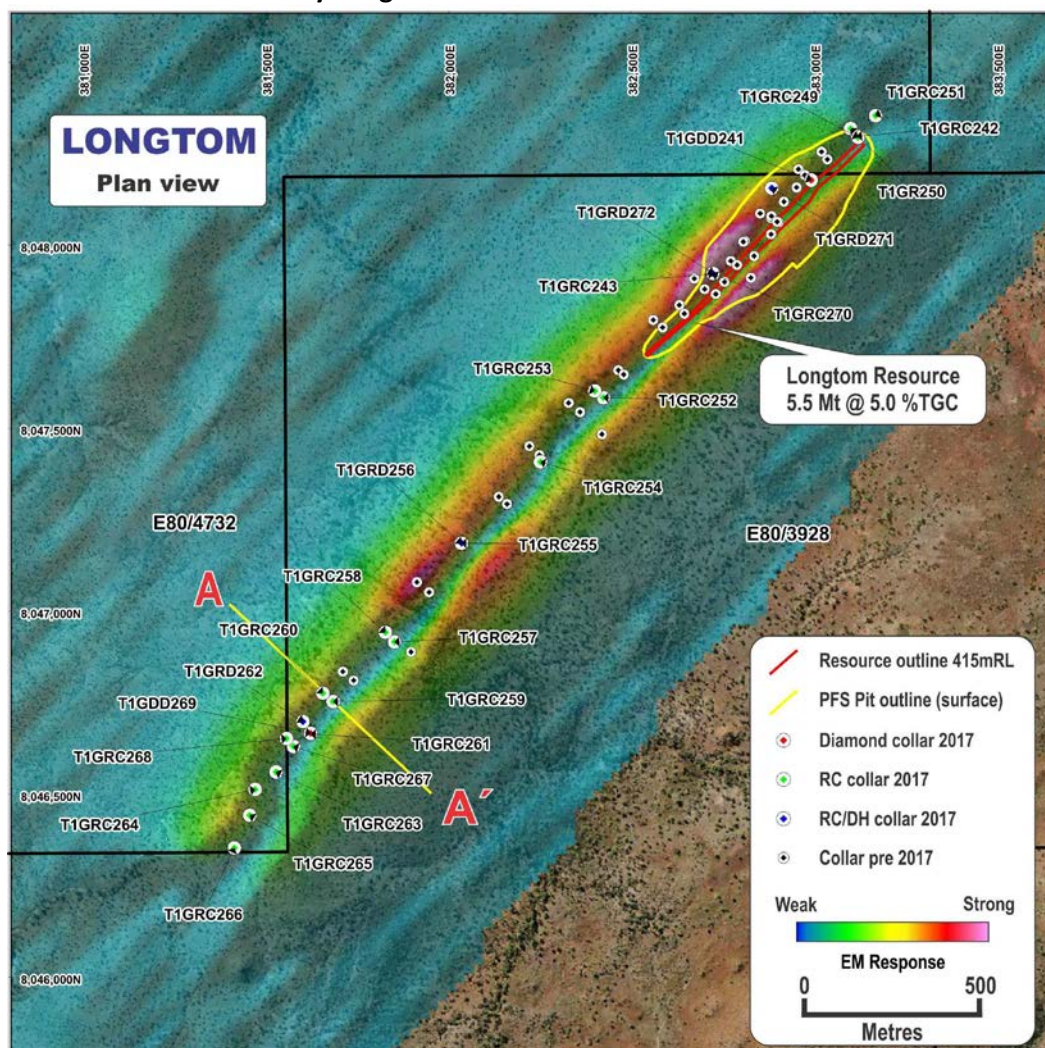
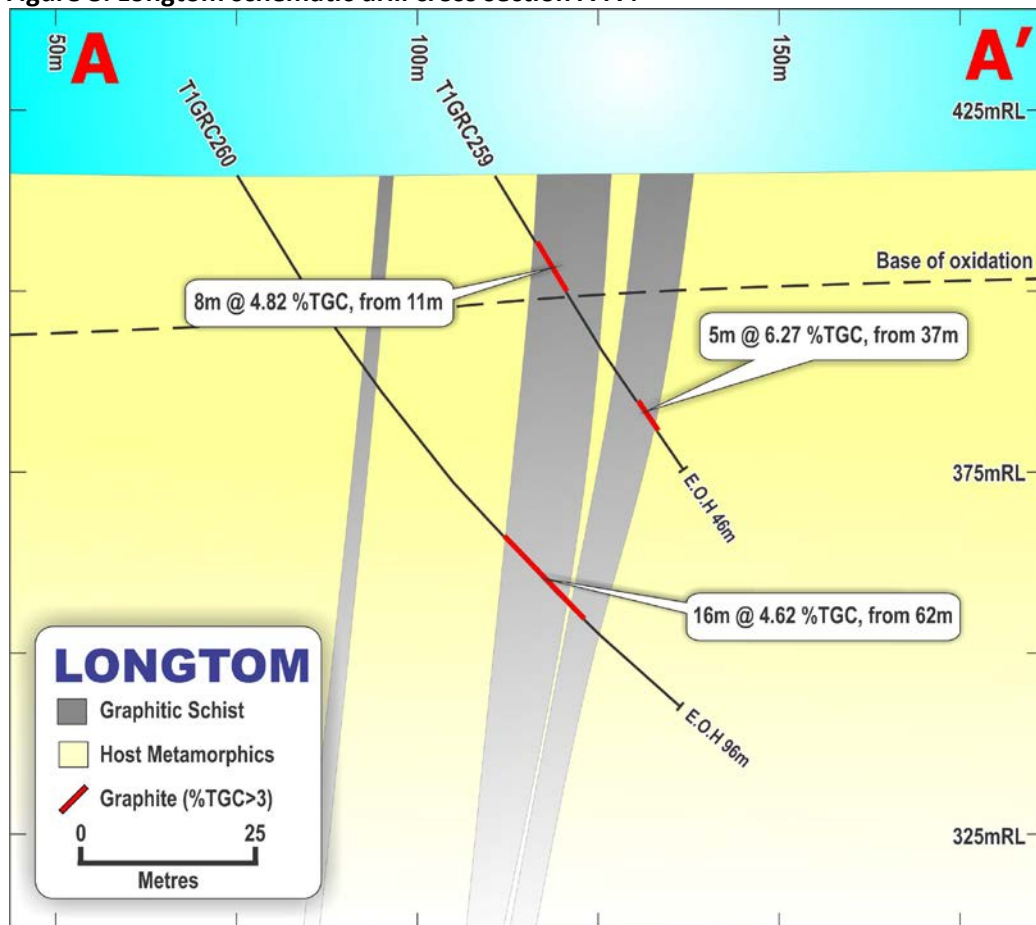




Figure 8: Longtom schematic drill cross section A-A'.



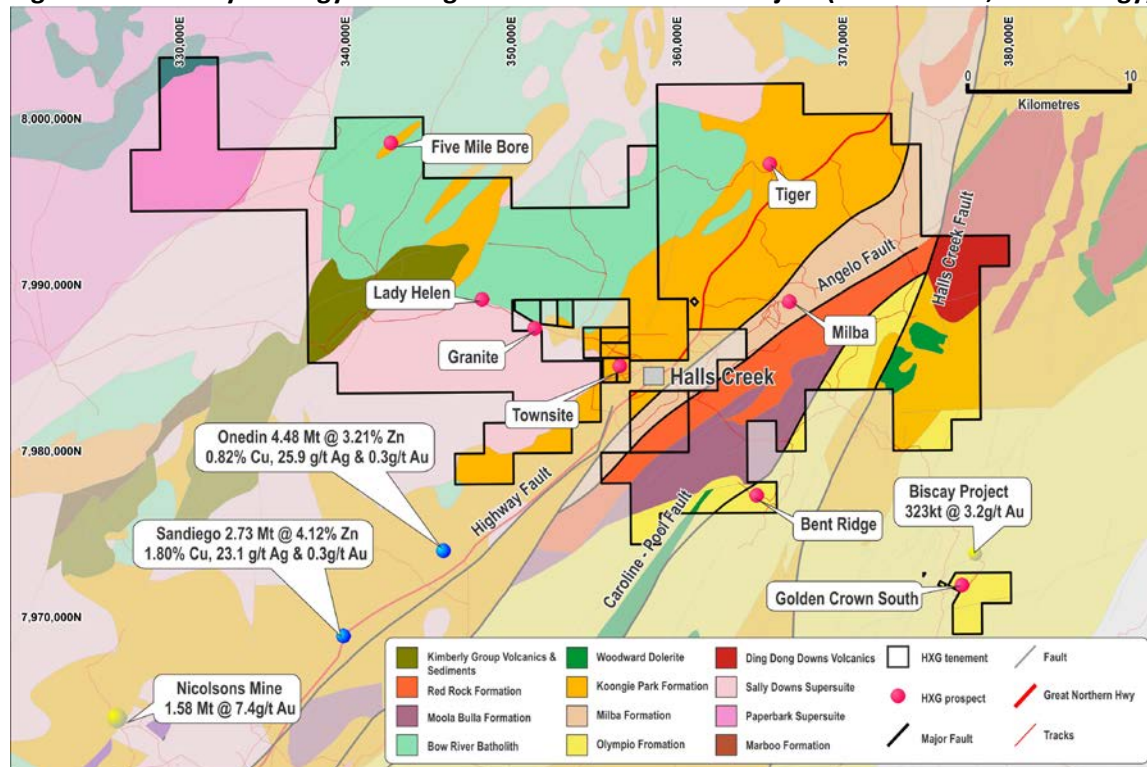




### 3.2 Halls Creek Project

The Halls Creek Project is an early stage exploration project which has had very little systematic work, in particular drilling. The Company is very pleased to have defined a further drill ready target in addition to the previously announced four targets as shown in Figure 9.

**Figure 9: Summary Geology and Target Plan for Halls Creek Project (GSWA 1:500,000 Geology)**



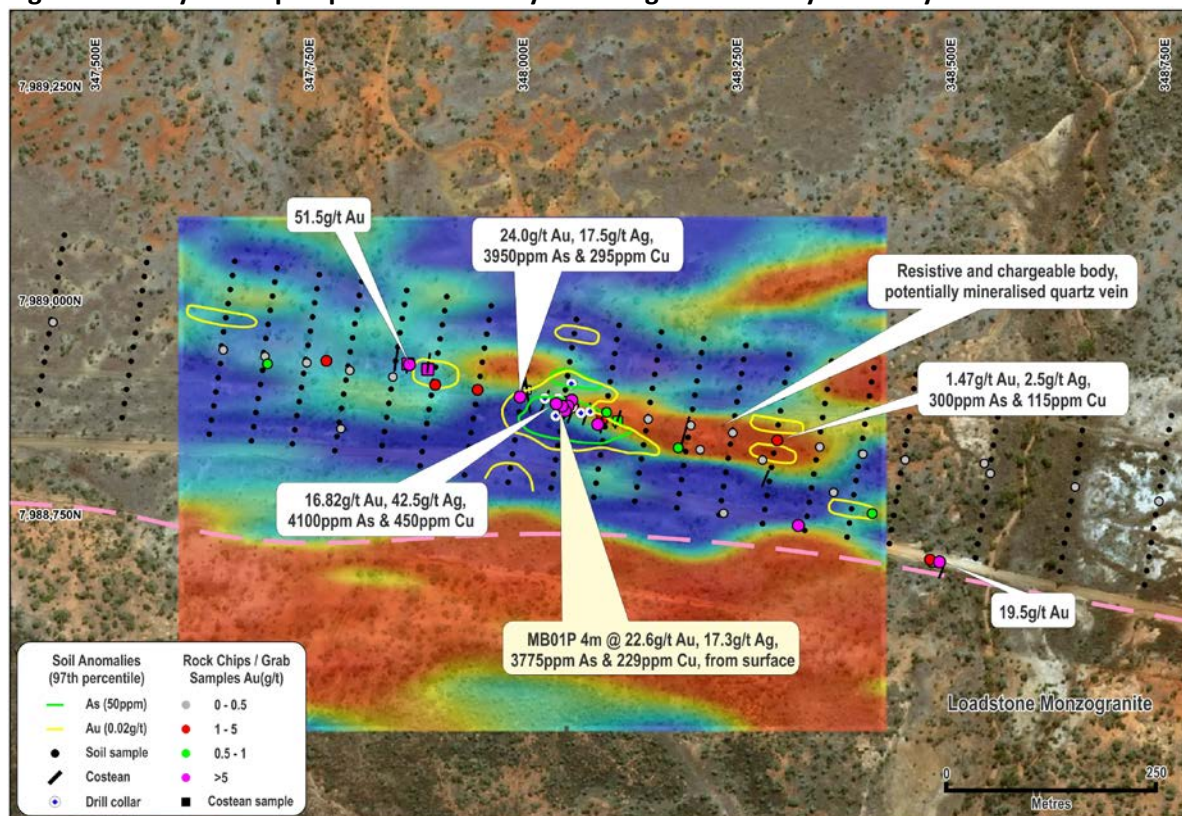
During the quarter, exploration at the Halls Creek Project consisted of the continued review and compilation of historical data to generate targets for follow up exploration along with ongoing engagement with the native title claimant group's representative for access to carry out field based exploration programs in the upcoming field season. From the historical data review the Lady Helen prospect (Au-Ag prospect) was identified as a high priority target requiring follow up exploration illustrated in Figure 10.

Historic high grade gold values up to 70 g/t Au and silver 50 g/t Ag have been returned from rock chipping a gossan within an intermittent Au-As geochemical anomaly over a strike length of 500m. A historical drilling program returned a best result of 4 metres at 22.6 g/t Au & 17.3 g/t Ag from a vertical hole drilled straight into the gossan. The program consisted of 9 holes, 7 of which were vertical, over a 60 metre strike targeting mineralisation which is sub vertical. Subsequent historical exploration included an IP gradient array survey which identified IP anomalism that may represent a potential quartz bearing mineralised structure.





**Figure 10: Lady Helen prospect underlain by historic gradient array IP survey**



## 4. SUSTAINABILITY

### 4.1 Health and Safety-

No injuries or major incidents were recorded for the quarter.

## 5. CORPORATE

### 5.1 Transactions

Management's core focus continues to be to secure project financing support and offtake interest for the McIntosh Project. The recent positive test work results have added new momentum to that process soliciting interest from parties interested in the larger and expandable flake varieties.

During the quarter the Company agreed to sell its 2 million shares in unlisted Battery Mineral Resources Limited shares to generate approximately A\$1.3 million, the majority of which was received before 31 December, 2017.

### 5.2 Financial Position

The Company finished the December 2017 quarter with \$1.1 million cash at bank. Approximately \$0.55 million was spent on exploration and development and \$0.26 million on administration and staff costs – which includes the financing and offtake related expenditures. The quarterly cash flow and forecast is summarised in the attached Appendix 5B.

The Company has no debt and is considering its capital management strategy as part of finalising the planning of the Feasibility Study, secondary processing test work and increasing its project development team.



### 5.3 Company Administration

The Company has completed the transition of its financial and corporate administration to Perth, Western Australia. Specifically, during the quarter:

- Mr Rowan Caren commenced as sole Company Secretary on 1 November, 2017; and
- Mr Peter Marcakis assumed the role of Chief Financial officer to manage all of the Company's financial and administrative activities.

### 5.4 Capital Structure

During the quarter the following changes to the capital structure of the Company occurred:

Incentive shares and options were issued to directors of the Company, following shareholder approval obtained on 26 September;

- Incentive Shares - 1,000,000
- Incentive Options exercisable at 15 cents expiring 16 October 2020 - 7,862,500
- Incentive Options exercisable at 17 cents expiring 16 October 2020 - 7,862,500
- Incentive Options exercisable at 20 cents expiring 16 October 2020 - 7,862,500

There are specific vesting conditions for the shares and options comprising both achieving milestones toward production and the Hexagon share price attaining certain "Knock-In" prices of between 20 and 23 cents.

Commensurate with the Director's incentive structure the following shares and options were also issued to employees and key contractors:

- Incentive Shares - 590,000
- Incentive Options exercisable at 15 cents expiring 16 October 2020 – 420,000
- Incentive Options exercisable at 17 cents expiring 16 October 2020 – 420,000
- Incentive Options exercisable at 20 cents expiring 16 October 2020 – 420,000

On the 30 September, 2017, 4,131,250 unlisted options exercisable at 12 cents each expired. In addition, 50,000 unlisted options exercisable at 8 cents expiring on 11 November 2017 also lapsed following the resignation of an employee. A further 6,000,000 unlisted options exercisable at between 28 and 50 cents were cancelled by mutual consent during the quarter.

The Company has 248.2 million fully paid ordinary shares on issue and 32.5 unlisted options on issue at the date of this report.

## 6. COMPETENT PERSONS' ATTRIBUTIONS

### *Exploration Results and Mineral Resource Estimates*

The information within this report that relates to exploration results, Exploration Target estimates, geological data and Mineral Resources at the McIntosh and Halls Creek Projects is based on information compiled by Mr Shane Tomlinson and Mr Mike Rosenstreich who are both employees of the Company. Mr Rosenstreich is a Fellow of The Australasian Institute of Mining and Metallurgy and Mr Tomlinson is a Member of the Australian Institute of Geoscientists. They both, individually have sufficient experience relevant to the styles of mineralisation and types of deposits under consideration and to the activities currently being undertaken to qualify as a Competent Person(s) as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves and they consent to the inclusion of this information in the form and context in which it appears in this report.



### ***Metallurgical Test Work Outcomes***

The information within this report that relates to metallurgical test work outcomes and processing of the McIntosh material is based on information provided by a series of independent laboratories. Mr Rosenstreich (referred to above) managed and compiled the test work outcomes reported in this announcement. A highly qualified and experienced researcher at NAmLab planned, supervised and interpreted the results of the test work. Mr Noel O'Brien provided overview and technical guidance on the planning of the programs and the interpretation of the results generated. Mr O'Brien is a Fellow of The Australasian Institute of Mining and Metallurgy. Mr O'Brien and the NAmLab principals have sufficient experience relevant to the styles of mineralisation and types of test work under consideration and to the activities currently being undertaken to qualify as a Competent Person(s) as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves and have consented to the inclusion of this information in the form and context in which it appears in this report.

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**Attachment 1: Hexagon Tenement Holdings as at 31 December, 2017**

Project	Type	Number	Ownership Status at end of Quarter	Tenement Status
McIntosh, WA	E	E80/3864	100% Hexagon	Granted
	E	E80/3928	100% Hexagon	Granted
	E	E80/3906	100% Hexagon	Granted
	E	E80/3907	100% Hexagon	Granted
	E	E80/4688	100% Hexagon	Granted
	E	E80/4734	100% Hexagon	Granted
	E	E80/4739	100% Hexagon	Granted
	E	E80/4732	100% Hexagon	Granted
	E	E80/4825	100% Hexagon	Granted
	E	E80/4842	100% Hexagon	Granted
	E	E80/4841	100% Hexagon	Granted
	P	P80/1821	100% Hexagon	Granted
	E	E80/4733	100% Hexagon	Granted
	E	E80/4879	100% Hexagon	Granted
	E	E80/4931	100% Hexagon	Granted
	E	E80/5151	100% Hexagon	Application
	E	E80/5157	100% Hexagon	Application
	L	L80/0092	100% Hexagon	Application
	M	M80/638	100% Hexagon	Application
	M	M80/639	100% Hexagon	Application
Halls Creek, WA	E	E80/4794	100% Hexagon	Granted
	E	E80/4793	100% Hexagon	Granted
	E	E80/4795	100% Hexagon	Granted
	E	E80/4858	100% Hexagon	Granted
	P	P80/1816	100% Hexagon	Granted
	P	P80/1817	100% Hexagon	Granted
	P	P80/1815	100% Hexagon	Granted
	P	P80/1818	100% Hexagon	Granted
	P	P80/1814	100% Hexagon	Granted
	P	P80/1799	100% Hexagon	Granted
	P	P80/1801	100% Hexagon	Granted
	P	P80/1800	100% Hexagon	Granted





**Attachment 2. Drill Hole Results, reported downhole intercepts using >3%TGC**

HoleID	Deposit	Hole Type	mFrom	mTo	Interval	%TGC
T1GDD241	Longtom	DD	Results pending			
T1GRC242	Longtom	RC	Hole abandoned			
T1GRC243	Longtom	RC	Hole abandoned			
T1GRC249	Longtom	RC	35	43	8	3.03
			49	59	11	3.26
T1GRC250	Longtom	RC	No significant results			
T1GRC251	Longtom	RC	No significant results			
T1GRC252	Longtom	RC	0	3	3	3.18
T1GRC253	Longtom	RC	59	64	5	4.58
T1GRC254	Longtom	RC	13	18	5	4.48
			26	31	5	3.32
T1GRC255	Longtom	RC	Hole abandoned			
T1GRD256	Longtom	RCD	Results pending			
T1GRC257	Longtom	RC	19	23	4	4.04
T1GRC258	Longtom	RC	67	72	5	4.82
T1GRC259	Longtom	RC	11	19	8	4.82
			37	42	5	6.27
T1GRC260	Longtom	RC	62	78	16	4.62
T1GRC261	Longtom	RC	5	8	3	4.30
			13	18	5	4.39
			22	36	14	6.00
T1GRD262	Longtom	RCD	Results pending			
T1GRC263	Longtom	RC	60	66	6	5.05
T1GRC264	Longtom	RC	No significant results			
T1GRC265	Longtom	RC	47	51	4	4.27
			57	60	3	4.98
T1GRC266	Longtom	RC	40	45	5	3.61
T1GRC267	Longtom	RC	5	8	3	3.43
			57	62	5	4.84
T1GRC268	Longtom	RC	79	84	5	4.48
T1GRD269	Longtom	RCD	Results pending			
T1GRC270	Longtom	RC	66	93	27	5.39
T1GRD271	Longtom	RCD	Results pending			
T1GRD272	Longtom	RCD	Results pending			
T5GDD244	Barracuda	DD	Results pending			
T5GDD245	Barracuda	DD	Results pending			
T5GRC246	Barracuda	RC	7	22	15	4.24
			30	33	3	3.85
T5GRC247	Barracuda	RC	3	12	9	3.99
			24	35	11	4.48
			44	50	6	3.49
T5GRC248	Barracuda	RC	No significant results			



### Attachment 3. Drill Hole Summary

Hole ID	Hole Type	Easting (m)	Northing (m)	R.L. (m)	Dip (°)	Azimuth (°)	Depth EOH (m)
T1GDD241	DD	382991	8048178	420	-60	140	57.2
T1GDD269	DD	381623	8046667	416	-60	140	44
T1GRC242	RC	383117	8048298	420	-60	140	22
T1GRC243	RC	382724	8047922	422	-60	140	12
T1GRC249	RC	383119	8048295	420	-60	140	75
T1GRC250	RC	383099	8048319	419	-60	140	73
T1GRC251	RC	383168	8048354	421	-60	140	83
T1GRC252	RC	382424	8047584	415	-60	140	45
T1GRC253	RC	382400	8047602	413	-60	140	80
T1GRC254	RC	382251	8047408	415	-60	140	57
T1GRC255	RC	382035	8047186	418	-60	140	65
T1GRC257	RC	381852	8046916	417	-60	140	36
T1GRC258	RC	381827	8046943	414	-60	140	87
T1GRC259	RC	381684	8046753	416	-60	140	48
T1GRC260	RC	381656	8046776	416	-60	140	96
T1GRC261	RC	381623	8046665	416	-60	140	42
T1GRC263	RC	381528	8046561	416	-60	140	78
T1GRC264	RC	381471	8046513	417	-50	140	90
T1GRC265	RC	381456	8046442	418	-60	140	78
T1GRC266	RC	381414	8046353	416	-60	140	66
T1GRC267	RC	381576	8046631	417	-60	140	69
T1GRC268	RC	381557	8046652	417	-60	140	108
T1GRC270	RC	382722	8047922	422	-60	140	108
T1GRD256	RCD	382035	8047186	418	-60	140	90
T1GRD262	RCD	381602	8046698	416	-60	140	79.5
T1GRD271	RCD	382884	8048156	422	-60	140	185.2
T1GRD272	RCD	382723	8047923	422	-60	140	102
T5GDD244	DD	388790	8054033	396	-60	310	72.5
T5GDD245	DD	388815	8054102	393	-60	310	29.9
T5GRC246	RC	388839	8054141	392	-60	310	66
T5GRC247	RC	388870	8054191	391	-60	310	66
T5GRC248	RC	388944	8054258	394	-60	300	96

*Note: Reverse Circulation (RC), Diamond (DD) and Reverse Circulation precollar with diamond tail (RCD). Coordinates grid GDA94-52N.*



+Rule 5.5

## Attachment 4: JORC Tables

### Section 1 Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Nature and quality 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> </ul>	<p><b>McIntosh Project</b></p> <p><b>1. Reverse Circulation</b></p> <ul style="list-style-type: none"> <li>RC drilling used high pressure air and a cyclone with a rotary splitter.</li> <li>Samples were collected at one-metre intervals.</li> <li>Approximately 50% of samples were not submitted for assay due to the visual non-mineralised nature of the material collected. All graphitic intervals were submitted for analyses.</li> <li>Duplicate and standards analysis were completed and no issues identified with sampling reliability.</li> <li>Samples were sent to the ALS laboratory in Perth for assay preparation and then sent to ALS in Brisbane for Total Graphitic Carbon (TGC) analyses.</li> <li>All samples were pulverised to better than 85% passing 75µm with a 10 g aliquot taken for assay.</li> <li>Sampling was guided by Hexagon's protocols and QA/QC procedures.</li> <li>RC drilling samples of 3 to 5 kg weight were shipped to the laboratory in plastic bags; samples were pulverised and milled for assay.</li> </ul> <p><b>2. Diamond Drilling</b></p> <ul style="list-style-type: none"> <li>Drill samples in this program were collected based on geology, varying in thickness from 0.1 m to 2 m intervals. Sampling was completed so samples could be composited to one metre intervals within the geological units.</li> <li>Core samples were quarter split HQ3 core using a diamond bladed saw and sent to the ALS laboratory in Perth for assay preparation and then sent to ALS in Brisbane for Total Graphitic Carbon (TGC) analyses.</li> <li>All samples were pulverised to better than 85% passing 75µm with a 10 g aliquot taken for assay.</li> <li>Duplicate samples, CRM standards and blank material were used during the drill programs. Duplicates collected after each 50 samples. Standards were inserted for samples ending in *00,*20,*40,*60 and *80 and blanks for samples ending in *01,*21,*41,*61 and *81. Sampling was guided by Hexagon's protocols and QA/QC procedures.</li> </ul>
<b>Drilling Techniques</b>	<ul style="list-style-type: none"> <li>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).</li> </ul>	<p><b>McIntosh – Longtom Deposit</b></p> <p><b>1. Reverse Circulation</b></p> <ul style="list-style-type: none"> <li>RC drill holes (total of 1,418 m from 21 holes) – completed with face sampling hammers and collected through a cyclone. Sample recovery was estimated at a percentage of the expected sample, sample state recorded (dry, moist or wet), samples tested with 10:1 HCl acid for carbonates and graphite surface float.</li> <li>RC drilling was completed by Seismic Drilling using an LMP2000 multipurpose rig.</li> </ul> <p><b>2. Diamond Drilling</b></p> <ul style="list-style-type: none"> <li>Diamond drill holes (total of 102.2 m for 2 holes) – collected HQ<sub>3</sub> core using a 3m core barrel and drilled by Seismic Drilling using an LMP2000 multipurpose rig Core orientation was recorded using a Camtec instrument.</li> <li>RC pre-collars were drilled with HQ<sub>3</sub> diamond tails for a total of 456.7 m from 4 holes.</li> </ul> <p><b>McIntosh – Barracuda Deposit</b></p> <p><b>1. Reverse Circulation</b></p> <ul style="list-style-type: none"> <li>RC drill holes (total of 228 m from 3 holes) – completed with face sampling hammers and collected through a cyclone. Sample recovery was estimated at a percentage of the expected sample, sample state recorded (dry, moist or wet), samples tested with 10:1 HCl acid for carbonates and graphite surface float.</li> <li>RC drilling was completed by Seismic Drilling using an LMP2000 multipurpose rig.</li> </ul> <p><b>2. Diamond Drilling</b></p> <ul style="list-style-type: none"> <li>Diamond drill holes (total of 102.4 m for 2 holes) – collected HQ<sub>3</sub> core using a 3m core barrel and drilled by Seismic Drilling</li> </ul>



		using an LMP2000 multipurpose rig Core orientation was recorded using a Camtec instrument.
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>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.</i></li> </ul>	<p><b>McIntosh Project</b></p> <ol style="list-style-type: none"> <li><b>1. RC Drilling</b> <ul style="list-style-type: none"> <li>• A face sampling hammer was used to reduce contamination at the face.</li> <li>• 1 m drill chip samples, weighing approximately 2 kg were collected throughout the drill programme in sequentially numbered bags.</li> <li>• Split samples were recovered from a cyclone and rig-mounted cone splitter. The sample recovery and physical state were recorded.</li> <li>• Every interval drilled is represented in an industry standard chip tray that provides a check for sample continuity down hole.</li> </ul> </li> <li><b>2. Diamond drilling</b> <ul style="list-style-type: none"> <li>• Core recovery was excellent. Recoveries were measured for each run between core blocks and measurements recorded. Core was photographed and logged for RQD and geology.</li> <li>• Analysis from one pair of twin holes drilled at Hexagon's Longtom resource (an adjacent and similar style graphite deposit) noted a lower graphite content in the RC samples when compared with diamond core. Insufficient work has been completed on comparing RC and diamond methods to rule out drilling by RC.</li> </ul> </li> </ol>
<b>Logging</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<p><b>McIntosh Project</b></p> <ul style="list-style-type: none"> <li>• All RC and diamond drilling (100%) was logged for geology in the field by qualified geologists. Lithological and mineralogical data was recorded for all drill holes using a coding system developed specifically for the Project. Primary and secondary lithologies are recorded in addition to texture, structure, colour, grain size, alteration type and intensity, estimates of mineral quantities, graphite intensity and sample recovery. The oxidation zone is also recorded.</li> <li>• No adjustments have been made to any assay data</li> <li>• Geological logging is qualitative in nature.</li> <li>• Diamond drilling logging also recorded recovery, structure and geotechnical data.</li> <li>• Diamond core was orientated using the Reflex orientation tool.</li> <li>• Core was photographed both dry and wet.</li> </ul>
<b>Sub-sample techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<p><b>McIntosh Project</b></p> <ol style="list-style-type: none"> <li><b>1. RC Drilling</b> <ul style="list-style-type: none"> <li>• All samples marked with unique sequential sample number</li> <li>• RC drilling samples were bagged at the drill site in calico bags with a second outer plastic bag to prevent loss of fines. The sample sizes are considered to be appropriate to the grain size of the material being sampled.</li> <li>• 1m RC drilling samples were submitted to either Actlabs Canada or ALS laboratories in Perth. The samples were riffle split on a 50:50 basis, with one split pulverised and analysed for Total Graphitic Carbon (TGC), Total Carbon (TC) and Total Sulphur (TS) using a LECO Furnace, and the other split held in storage.</li> <li>• For RC samples, standards and field duplicates were inserted at an approximate rate of 1 in every 20 samples collected. Duplicate assay results exhibit good correlation with the original assays and no consistent bias is evident.</li> <li>• Sample preparation:               <ol style="list-style-type: none"> <li>1. Coarse crush using a jaw crushed to better than 70% passing 6mm.</li> <li>2. For samples exceeding 3kg received mass, riffle split using a Jones Riffle Splitter 50:50</li> <li>3. Pulverise up to 3kg of coarse crushed material to better than 85% passing 75µm particle size</li> <li>4. Small aliquot (~10g) taken for assay.</li> </ol> </li> </ul> </li> <li><b>2. Diamond Drilling</b> <ul style="list-style-type: none"> <li>• Diamond drill core was cut into half core (used for metallurgical testing) and the remaining half sawn into quarter core using diamond blade core-saw. Quarter core was used</li> </ul> </li> </ol>





		<p>for samples and duplicates. Core cutting was carried out under consignment at Westernex in Perth.</p> <ul style="list-style-type: none"> <li>• Duplicate assay results exhibit good correlation with the original assays and no consistent bias is evident.</li> <li>• Sample preparation: <ol style="list-style-type: none"> <li>1. Coarse crush using a jaw crushed to better than 70% passing 6mm.</li> <li>2. For samples exceeding 3 kg received mass, riffle split using a Jones Riffle Splitter 50:50</li> <li>3. Pulverise up to 3 kg of coarse crushed material to better than 85% passing 75µm particle size</li> <li>4. Small aliquot (~10 g) taken for assay.</li> </ol> </li> <li>• Sampling procedures and sample preparation represent industry good practice:</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>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.</i></li> </ul>	<p><b>McIntosh Project</b></p> <ul style="list-style-type: none"> <li>• The assaying and laboratory procedures used are industry standard and are appropriate for the material tested.</li> <li>• Sampling was guided by Hexagon's protocols and QA/QC procedures.</li> <li>• For RC samples, standards and field duplicates were inserted at an approximate rate of 1 in every 20 samples collected.</li> <li>• Field duplicates were inserted into diamond core samples at a rate of 4 every 100 samples, standards at a rate of 4 every 100 samples and blanks at 2 every 100 samples.</li> <li>• Statistical analysis of standards, blanks and duplicates during the QAQC process showed that the data was satisfactory.</li> <li>• No issues were identified with sampling reliability</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<p><b>McIntosh Project</b></p> <ul style="list-style-type: none"> <li>• Hexagon QA/QC checks show that all samples are within acceptable limits. No adjustments to assay data have been made based on the analysis of duplicates, standards and blanks.</li> <li>• Standards from ALS laboratory were found to be acceptable.</li> <li>• Duplicate analysis was completed and no sampling issues were identified.</li> <li>• CSA verified several graphite intersections in core and RC chip samples during a visit to Hexagon's warehouse during January 2015.</li> <li>• During a site visit in October 2015, a geological consultant from CSA verified that the diamond drilling, geological logging and sampling practices were of industry standard. The consultant also verified graphite intersections in core samples.</li> <li>• Analysis from one pair of twin holes drilled at Hexagon's Longtom resource noted a lower graphite content in the RC samples when compared with diamond core. It is suggested that RC samples are biased due to the loss of fine material. The majority of samples used in the estimation for Emperor are diamond core.</li> <li>• The Hexagon database is hosted in a SQL backend database, ensuring that data is validated as it is captured and exports are produced regularly. Assay results are merged into the database from the lab certificates limiting transcription or mapping errors from occurring.</li> <li>• No adjustments have been made to the results.</li> </ul>
<b>Location of Data points</b>	<ul style="list-style-type: none"> <li>• <i>Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<p><b>McIntosh – Longtom and Barracuda Deposits</b></p> <ul style="list-style-type: none"> <li>• 32 drill hole collars were surveyed using Differential GPS by a contract surveyor (MNG survey) from Broome. The degree of accuracy of drill hole collar location and RL is estimated to be within 0.1 m for DGPS. 3 collars were surveyed using a handheld Garmin 62S and Garmin 76c Global Positioning System (GPS) with a typical ±5 m accuracy. Topography from contours generated from a LiDAR survey was used to validate collar points and assign RL values to the 3 holes surveyed by GPS that had an RL &gt;2 m different to the topography.</li> <li>• Downhole surveys completed for all holes where possible (holes) by a gyro instrument by ABIM Solutions.</li> <li>• Topographic control was adequate for the purposes of Mineral Resource estimation.</li> <li>• The map projection used is the Australia Geodetic MGA 94 Zone 52.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>Whether the data spacing and</i></li> </ul>	<p><b>McIntosh – Longtom Deposit</b></p> <ul style="list-style-type: none"> <li>• Drill spacing on an approximate 40 m by 80 m grid throughout the majority of the deposit extension to the SW.</li> </ul>



	<p>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.</p> <ul style="list-style-type: none"> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Geological interpretation and mineralisation continuity analysis indicates that data spacing is sufficient for definition of a Mineral Resource.</li> </ul> <p><b>McIntosh – Barracuda Deposit</b></p> <ul style="list-style-type: none"> <li>Drill spacing on an approximate 20 m by 40 m grid within the existing defined resource.</li> <li>Geological interpretation and mineralisation continuity analysis indicates that data spacing is sufficient for definition</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <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>	<p><b>McIntosh – Longtom and Barracuda Deposits</b></p> <ul style="list-style-type: none"> <li>Holes generally drilled dipping at -60° perpendicular to mineralised structure.</li> <li>Diamond drill core has been orientated using a Camtech tool, with <math>\alpha</math> and <math>\beta</math> angles measured and positioned using a Kenometer. MapInfo software was used to calculate dip and dip direction for each structure.</li> <li>The relationship between the drilling orientation and the orientation of key mineralised structures is not considered to have introduced a sampling bias.</li> </ul>
<b>Sample Security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<p><b>McIntosh Project</b></p> <ul style="list-style-type: none"> <li>Unique sample number was retained during the whole process</li> <li>RC and diamond samples were placed into calico bags and then into self-sealing plastic bags prior to being put into bulka bags. The bulka bags were then transported by road. RC samples were sent to the ALS laboratory in Brisbane for preparation and analysis and diamond core samples were sent to ALS in Perth for preparation and then to ALS in Brisbane for analysis. A small amount of core samples were sent to Actilabs.</li> <li>Drill core transported to Westernex was secured on pallets with metal strapping and transported to Perth by road train.</li> <li>The sample security is considered to be adequate.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<p><b>McIntosh Project</b></p> <ul style="list-style-type: none"> <li>Sampling techniques and data collected methods have been audited by CSA during a site visit in October 2015</li> <li>Field data is managed by an independent data management consultancy Rocksolid Solutions.</li> <li>All data collected was subject to internal review</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <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> </ul> <p>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.</p>	<p><b>McIntosh – Emperor Deposit</b></p> <ul style="list-style-type: none"> <li>Concentrate material generated from the Emperor deposit occurred on exploration leases E80/3864 and E80/4841. These tenements are held by McIntosh Resources Pty Ltd who is a wholly owned subsidiary of Hexagon Resources. Hexagon Resources are the managers of exploration on the project.</li> <li>A mining licence (M80/638) application has been applied for which covers the Emperor resource.</li> </ul> <p><b>McIntosh – Longtom Deposit</b></p> <ul style="list-style-type: none"> <li>Drilling on the Longtom deposit occurred on exploration leases E80/3928 and E80/4732.</li> <li>A mining licence (M80/639) application has been applied for which covers the Longtom resource.</li> </ul> <p><b>McIntosh – Barracuda Deposit</b></p> <ul style="list-style-type: none"> <li>Drilling on the Barracuda deposit occurred on exploration lease E80/3864.</li> <li>A mining licence (M80/638) application has been applied for which covers the Barracuda resource.</li> </ul> <p><b>Halls Creek</b></p> <ul style="list-style-type: none"> <li>The Lady Helen prospect occurs within tenement E80/4793.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<p><b>McIntosh Project</b></p> <ul style="list-style-type: none"> <li>The East Kimberley has been largely explored for base metals and diamonds with no active previous exploration for graphite. Graphite had been noted by Gemutz during regional mapping in the Mabel Downs area for the BMR in 1967, by Rugless mapping and RAB drilling in the vicinity of Melon Patch bore, to the east of the Great Northern Highway in 1993 and has been located during nickel exploration by Australian Anglo American Ltd, Panoramic Resources Ltd and Thundelarra Resources Ltd over the last 20 years.</li> </ul>



		<p><b>Halls Creek Project</b></p> <ul style="list-style-type: none"> <li>The East Kimberley has been largely explored for gold, base metals and diamonds. Within the Halls Creek Project exploration over the past twenty years has been carried out primarily by two companies; Burdekin Resources and 3D resources. Prior to these two companies exploration has been carried out mostly by smaller private companies or prospectors sometimes in joint ventures with larger companies like Freeport of Australia. Exploration consisted of surface geochemical, reconnaissance drilling and geophysical surveys.</li> <li>Exploration by both companies has been largely limited to surface geochemical sampling programs where numerous prospective gold and base metals targets were identified. A small shallow drill program was carried out at the Granites prospect while focused ground IP surveys were completed at some of the prospects including Lady Helen by 3D Resources in the mid 2000's.</li> <li>Within the broader Halls Creek area significant resources for gold have been identified at Nicolsons and base metal deposits at Onedin and Sandiego.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<p><b>McIntosh Project</b></p> <ul style="list-style-type: none"> <li>The McIntosh Project graphite schist horizons occur in the high grade terrain of the Halls Creek Mobile Zone of Western Australia. The host stratigraphy is the Tickalara Metamorphic which extend for approximately 130 km along the western side of the major Halls Creek Fault. The metamorphic rocks reach granulite metamorphic facies under conditions of high-temperature and high pressure although the metamorphic grade in the McIntosh Project area appears to be largely upper amphibolite facies with the presence of key minerals such as sillimanite and evidence of original cordierite.</li> <li>Hexagon has identified potential graphite schist horizons based on GSWA mapping and EM anomalism over a strike length in excess of 15 km within the project area, with potential for an additional 35 km strike length of graphite bearing material from lower order EM anomalism.</li> </ul> <p><b>Hall Creek Project</b></p> <ul style="list-style-type: none"> <li>The Halls Creek project occurs in the Halls Creek Mobile Zone "HCMZ" of Western Australia. The HCMZ is divided into three sections; west, central and east. The Halls Creek project predominantly covers the central and eastern zones. The central zone includes felsic volcanic and volcanics units of the Koongie Park Formation while the eastern zone consists of greywacke, siltstone, sandstone, marble, impure calcareous rocks, chert and minor mafic lavas and sills.</li> <li>The metamorphic grade with the project area is low to medium.</li> <li>Hexagon is targeting structurally controlled epigenetic gold, VMS style base metal and nickel sulfide mineralisation.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li><i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:</i> <ul style="list-style-type: none"> <li><i>easting and northing of the drillhole collar</i></li> <li><i>elevation or RL (elevation above sea level in metres) of the drillhole collar</i></li> <li><i>dip and azimuth of the hole</i></li> <li><i>down hole length and interception depth</i></li> <li><i>hole length.</i></li> </ul> </li> </ul>	<p><b>McIntosh – Longtom Deposit</b></p> <ul style="list-style-type: none"> <li>2 diamond drill holes for 101.2 m and 21 RC drill holes for 1,418 m and 4 RC precollar diamond tail (RD) holes for 456.7 m completed at the Longtom deposit. Hole locations tabulated in an Appendix to this announcement report.</li> </ul> <p><b>McIntosh – Barracuda Deposit</b></p> <ul style="list-style-type: none"> <li>2 diamond drill holes for 102.4 m and 3 RC drill holes for 228 m were completed at the Barracuda deposit. Hole locations tabulated in an Appendix to this announcement report.</li> </ul> <p><b>Hall Creek Project</b></p> <ul style="list-style-type: none"> <li>N/A</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<p><b>McIntosh Projects</b></p> <ul style="list-style-type: none"> <li>Data compiled in Excel and validated in Datashed by an external data management consultancy.</li> <li>RC samples were all 1 m in length, diamond core samples vary between 1m and 2 m samples.</li> </ul>



		<ul style="list-style-type: none"> <li>• Metal equivalents are not reported as this is an industrial mineral project where the mineral properties define grade (e.g. flake size and purity).</li> <li>• A nominal 3% Total Graphitic Carbon cut-off has been applied in the determination of significant intercepts</li> </ul> <p><b>Halls Creek</b></p> <ul style="list-style-type: none"> <li>• N/A</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>• <i>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</i></li> <li>• <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect.</i></li> </ul>	<ul style="list-style-type: none"> <li>• <b>McIntosh – Longtom Deposit</b></li> <li>• Mineralised widths at Longtom are estimated to be typically between 5 m and 15 m, compared with RC samples of 1m width. There is a very close relationship between the graphitic schist unit and Total Graphitic Carbon (TGC%) assays. The presence of graphitic schist is clearly evident in both the RC chips and diamond drill core so that the assay widths can be clearly related to the geological logs.</li> <li>• The graphitic schist horizon has been interpreted as a steeply dipping unity with thin bands of internal waste. Angled drill holes (generally 60°) have targeted the mineralised unit with the priority to intersect the graphitic schist unit. The interpreted EM data has also allowed for a good indication of unit thickness to be made and applied in areas where the information is not available.</li> <li>• <b>McIntosh – Barracuda Deposit</b></li> <li>• Mineralised widths at Barracuda are estimated to be typically between 5m and 20m, compared with RC samples of 1m width. There is a very close relationship between the graphitic schist unit and Total Graphitic Carbon (TGC%) assays. The presence of graphitic schist is clearly evident in both the RC chips and diamond drill core so that the assay widths can be clearly related to the geological logs.</li> <li>• The graphitic schist horizon has been interpreted a sub vertical unit striking north, north-east. Angled drill holes (generally 60°) have targeted the mineralised unit with the priority to intersect perpendicular to the strike of the graphitic schist horizon.</li> <li>• Interpreted EM data and the width of intersections where holes were drilled perpendicular to the unit have allowed for a good indication of unit thickness to be made and applied in areas where the information is not available.</li> </ul> <p><b>Halls Creek</b></p> <ul style="list-style-type: none"> <li>• N/A</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>• <i>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 drillhole collar locations and appropriate sectional views.</i></li> </ul>	<p><b>McIntosh Project</b></p> <ul style="list-style-type: none"> <li>• Attached within announcement.</li> </ul> <p><b>Halls Creek</b></p> <ul style="list-style-type: none"> <li>• Attached within announcement.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<p><b>McIntosh Project</b></p> <ul style="list-style-type: none"> <li>• All RC sample results and significant widths have been provided within announcement.</li> </ul> <p><b>Halls Creek</b></p> <ul style="list-style-type: none"> <li>• The exploration data used in the Halls Creek was sourced from historic reports from the Department of Mines and Petroleum of WA "DMP". No new exploration has been carried out by Hexagon.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<p><b>McIntosh Project</b></p> <ul style="list-style-type: none"> <li>• The September 2014 VTEM Supermax survey over the McIntosh Flake Graphite Project covered a total of 642 line kilometres and identified a total of 12 high-priority anomalies. Five of these were previously identified by induced polarisation (IP) and historical electromagnetic (EM) techniques and confirmed to be flake graphite schist by geological field mapping, petrographic analysis, rock chip sampling and exploration drilling.</li> <li>• VTEM geophysical work was carried out by Geotech Limited with the data validated and processed by Southern Geoscience Consultants (SGC).</li> <li>• Test work and petrographic examinations to gather data on the mineralogy, flake size distributions and elemental associations are being undertaken and reported</li> </ul>





		<p>progressively. The methods comprise petrographic examination-including systematic flake length estimates, screen sizing analyses, assaying (as above). Samples were selected from within the current resource across low to high TGC and S grade ranges. Samples were collected from locations representing the limbs and fold hinge.</p> <ul style="list-style-type: none"> <li>Metallurgical test work is underway and being reported progressively on McIntosh concentrate material produced from previous test work. This work examines downstream processing opportunities based on understanding the technical attributes of the flake comprising the concentrate material. This includes simulating downstream processing for battery anode material (Spheroidisation) to generate battery related parameters. As well, tests were completed assessing flake size in the concentrate, flake morphology, purity and particle size distribution and other aspects. Test work has also been completed indicating that flake coarser than 60 Mesh is amenable to expansion (220% expansion factor) opening up new downstream opportunities.</li> <li>This work is being undertaken by several different laboratories and test work facilities in Australia and overseas that have been reviewed and assessed for their experience by Hexagon.</li> </ul> <p><b>Halls Creek</b></p> <ul style="list-style-type: none"> <li>N/A</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> </ul>	<p><b>McIntosh Project</b></p> <ul style="list-style-type: none"> <li>Further diamond core drilling has been recommended to twin and verify existing RC holes at Emperor. This core is planned to be assayed for TGC and examined petrographically to assess graphite flake characteristics.</li> <li>Additional dry density work on core to be carried out on mineralised and background domains.</li> <li>Estimate S% content into resource model</li> <li>Program to assess moisture content of Emperor material.</li> <li>Multi-element analysis of mineralisation and waste material.</li> <li>Continuation of the test work programs gathering mineralogical data to formulate a geometallurgical model, primary processing test work to improve the Stage 1 process flow sheet and continue the downstream processing test work on material derived from the stage 1 process flow sheet.</li> </ul> <p><b>Halls Creek</b></p> <ul style="list-style-type: none"> <li>Reconnaissance drilling program testing strike and depth extents of identified potential mineralisation.</li> </ul>

### Section 3 Estimation and Reporting of Mineral Resources – Emperor Deposit

Criteria	JORC Code explanation	Commentary
<b>Database integrity</b>	<ul style="list-style-type: none"> <li><i>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</i></li> </ul> <p><i>Data validation procedures used.</i></p>	<ul style="list-style-type: none"> <li>Primary data was captured into spreadsheet format by the supervising geologist, validated and subsequently loaded into Hexagon's database.</li> <li>Database extracted as an .mdb access file from Datashed and validated before importing into Surpac.</li> <li>Additional data validation by Optiro; included checking for out of range assay data and overlapping or missing intervals.</li> </ul>
<b>Site Visits</b>	<ul style="list-style-type: none"> <li><i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li> </ul>	<ul style="list-style-type: none"> <li>Numerous site visits were completed by S. Tomlinson during the 2015 and 2016 drilling period. The diamond and RC drill rigs were inspected, sampling procedures checked, RC chips and diamond core logged.</li> </ul>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li><i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i></li> <li><i>Nature of the data used and of any assumptions made.</i></li> <li><i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></li> <li><i>The use of geology in guiding and controlling Mineral Resource estimation.</i></li> </ul> <p><i>The factors affecting continuity both of grade and geology.</i></p>	<ul style="list-style-type: none"> <li>Geological interpretation based on lithology logging, structural logging, geochemical sampling, prospect scale surface mapping and modelled VTEM data collected during the 2014 VTEM Supermax survey.</li> <li>Drill coverage to ~40 m by 40 m.</li> <li>Mineralisation wireframe produced based on soft 3% TGC cut-off grade delineating ore/waste boundary. Internal dilution in the main mineralised envelope has been modelled as two domains. Further modelling of mafic intrusive bodies have also been modelled.</li> <li>The base of oxidation and mafic intrusives were also modelled as part of the Emperor resource.</li> <li>Confidence in the grade and geological continuity is reflected in the Mineral Resource classification.</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li><i>The extent and variability of the Mineral Resource expressed as</i></li> </ul>	<ul style="list-style-type: none"> <li>The Emperor resource extends 480 m north-northwest to south-southeast. The mineralisation occurs within an</li> </ul>



	length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	anticline of the hosting graphite schist units ranging in thickness between 5 m and 70 m. <ul style="list-style-type: none"> <li>Mineralisation is open along strike and at depth along the fold limbs.</li> </ul>
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.</li> </ul>	<ul style="list-style-type: none"> <li>The resource was modelled using Geovia's Surpac v6.7 modelling software.</li> <li>Drill hole sample data was flagged from interpretations of the top and base of the mineralisation horizon.</li> <li>Samples were composited to 1 m down hole length.</li> <li>Top grade cuts were not required (low coefficient of variation and no outlier grades)</li> <li>Statistical analysis was completed to investigate low correlation variances, boundary conditions between domains, and fresh/oxide.</li> <li>TGC mineralisation continuity was interpreted from variogram analyses to have a horizontal range of 170 m (north-west to south-east).</li> <li>The maximum extrapolation distance is 80 m along strike and 20 m across strike.</li> <li>Grade estimation was into parent blocks of 40 mE by 20 mN by 5 mRL. Block size was selected based on kriging neighbourhood analysis.</li> <li>Total Graphitic Carbon (TGC) estimated by Ordinary Kriging (OK) for mineralised domains (1 to 4) at the parent block scale.</li> <li>The search ellipses were oriented within the plane of the mineralisation.</li> <li>Three estimation passes were used; the first search was based upon the variogram ranges in the three principal directions; the second search was two times the initial search and the third search was four times the initial search, with reduced sample numbers required for estimation.</li> <li>Aproximately 70% of the block grades were estimated in the first pass for domain 1 (main envelope) and 49% for domain 4.</li> <li>The estimated TGC block model grades were visually validated against the input drillhole data, comparisons were carried out against the drillhole data and by northing, easting and elevation slices.</li> <li>There is no production data and so no reconciliation has taken place.</li> <li>Sulphur will be estimated into the model, as sulphide minerals have the potential to affect metallurgical processes for recovering graphite. The available metallurgical testwork results indicate that the sulphide minerals do not present any issues in recovering graphite. Sulphur is not correlated with TGC.</li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<ul style="list-style-type: none"> <li>The Emperor deposit is above the water table. Down hole dipping during the 2015 field season did not intercept water.</li> <li>Moisture content has not been tested</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>The Mineral Resource is reported above a 3% TGC cut-off grade to reflect current commodity prices and open pit mining methods.</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous.</li> </ul>	<ul style="list-style-type: none"> <li>It is assumed that extraction will be by open pit mining and that the mineralisation is economic to exploit to currently modelled depths.</li> <li>Mining factors such as dilution and ore loss have not been applied.</li> <li>No assumptions about minimum mining widths or dilution have been made.</li> </ul>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but</li> </ul>	<ul style="list-style-type: none"> <li>A range of test work results have now confirmed graphite concentrate grades of between 97 and 99% TGC produced from a process of crushing and grinding material from the McIntosh project. See results in metallurgical test work conducted by ALS Global in Adelaide. Refer to announcement released 18 January 2016, 31 May 2017 and 6 November, 2017 as examples.</li> </ul>



	<p><i>the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous.</i></p>	<ul style="list-style-type: none"> <li>Metallurgical testwork on Emperor material shows that the sulphides present are easily liberated from the graphite by flotation.</li> <li>The results from metallurgical testwork have been considered for Mineral Resource classification.</li> </ul>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation.</i></li> </ul>	<ul style="list-style-type: none"> <li>No assumptions have been made regarding waste and process residue</li> <li>Baseline and follow up environmental studies have been completed as part of the Mining Proposal requirements. Subterranean Fauna species identification is still continuing. No adverse impacts to the project have been identified to date.</li> </ul>
<b>Bulk density</b>	<ul style="list-style-type: none"> <li><i>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</i></li> <li><i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</i></li> </ul> <p><i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></p>	<ul style="list-style-type: none"> <li>Dry density was assigned a value of 2.85 t/m<sup>3</sup> (fresh) and 2.65 t/m<sup>3</sup> (oxide) based on 25 dried core samples and water emersion technique carried out by SGS.</li> <li>Geophysical gamma density data was also obtained but has not been included in the resource.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li><i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></li> <li><i>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i></li> </ul> <p><i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></p>	<ul style="list-style-type: none"> <li>Mineral Resources have been classified on the basis of confidence in geological and grade continuity using the drilling density, geological model, modelled grade continuity and conditional bias measures (slope of the regression and kriging efficiency) as criteria.</li> <li>The results from metallurgical testwork have been considered for Mineral Resource classification. The likelihood of eventual economic extraction was considered in terms of possible open pit mining, likely product specifications and possible product marketability.</li> <li>Measured Mineral Resources - none defined.</li> <li>Indicated resources have been defined in the centre of the deposit where material was estimated in the first pass estimation. Drill spacing for indicated material is generally 40 m by 40 m.</li> <li>Inferred material occurs in the northern and southern limits of the deposit where drilling data is sparser (to 40 m by 80 m), but still sufficient to assume continuity of mineralisation. Confidence for the resource in these areas is also from the VTEM survey completed over the area.</li> <li>The classification considers all available data and quality of the estimate and reflects the Competent Person's view of the deposit.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>CSA carried out a site visit in 2015.</li> <li>The resource estimate has been peer reviewed by independent consultants Optiro in 2017.</li> </ul>
<b>Discussion of relative accuracy/ confidence</b>	<ul style="list-style-type: none"> <li><i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person.</i></li> <li><i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation.</i></li> </ul>	<ul style="list-style-type: none"> <li>The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the JORC Code (2012 Edition).</li> <li>The Mineral Resource is a global estimate of tonnes and grade.</li> <li>Relative tonnages and grade above the nominated cut-off grades for TGC are provided in this announcement. Volumes of the collated blocks sub-set by mineralisation domains were multiplied by the dry density value to derive the tonnages. The contained graphite values were calculated by multiplying the TGC grades (%) by the estimated tonnage.</li> <li>No production data is available to reconcile results with.</li> </ul>



## Section 4 – Estimation and Reporting of Ore Reserves, McIntosh Project

Criteria	Explanation	Commentary
<b>Mineral Resource estimate for conversion to Ore Reserves</b>	<ul style="list-style-type: none"> <li><i>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</i></li> <li><i>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Mineral Resource models for the McIntosh Flake Graphite project have been developed by Hexagon Resources Ltd as outlined in May 2017 report and the Ore Reserve has been determined using these models.</li> <li>The stated Mineral Resource is inclusive of the Ore Reserve.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li><i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li> <li><i>If no site visits have been undertaken indicate why this is the case.</i></li> </ul>	<ul style="list-style-type: none"> <li>A site visit was not undertaken by the Competent Person as a site visit would not materially affect the determination of the Ore Reserve. The Competent Person has instead relied on reports from other independent consultants and site surveys in determining the viability of the Ore Reserve.</li> </ul>
<b>Study status</b>	<ul style="list-style-type: none"> <li><i>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</i></li> <li><i>The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</i></li> </ul>	<ul style="list-style-type: none"> <li>Studies undertaken and the modifying factors applied to enable the Mineral Resource to be converted to an Ore Reserve are based on a Pre-Feasibility level estimation of costs, modifying factors and parameters so that the resulting mine plan is technically achievable and economic.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li><i>The basis of the cut-off grade(s) or quality parameters applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>The cut-off grade applied is based on a cashflow positive method where the profitability of the resource block after modifying factors and the metallurgical and mass recovery are applied to the in-situ TGC grade. The nominal cut-off grade for processing is around 1.96% TGC. At Emperor and Wahoo there is a small percentage of resource blocks with this lower grade whereas at the other deposits the TGC grade is above 3%.</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).</i></li> <li><i>The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</i></li> <li><i>The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.</i></li> <li><i>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</i></li> <li><i>The mining dilution factors used.</i></li> <li><i>The mining recovery factors used.</i></li> <li><i>Any minimum mining widths used.</i></li> <li><i>The manner in which Inferred Mineral Resources are utilised in</i></li> </ul>	<ul style="list-style-type: none"> <li>Mining dilution is 5% extra tonnes and ore loss applied is 5%.</li> <li>Geotechnical parameters applied to the designs are based on preliminary investigations by Terra Firma at Emperor and were applied to the other pit areas. Further detailed work will be required in progression to a Feasibility study level.</li> <li>Whittle optimisations were inclusive of the Indicated and Inferred Resource. The Inferred Resource is around 16% of the resulting mineral inventory.</li> <li>Pit designs were completed to determine the Ore Reserve.</li> <li>Conventional mining methods are planned using 100 to 180 t excavators and 90 t trucks. Mining methods used are widely used in the mining industry and production rates and costings have been determined by a reputable mining contractor. Allowances have been made other earthworks, infrastructure, clearing, closure works and site layout.</li> <li>The resource classification consists of Indicated and Inferred. The Inferred Resource has not been evaluated or included in the Ore Reserve.</li> </ul>





	<p><i>mining studies and the sensitivity of the outcome to their inclusion.</i></p> <ul style="list-style-type: none"> <li><i>The infrastructure requirements of the selected mining methods.</i></li> </ul>	
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</i></li> <li><i>Whether the metallurgical process is well-tested technology or novel in nature.</i></li> <li><i>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</i></li> <li><i>Any assumptions or allowances made for deleterious elements.</i></li> <li><i>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.</i></li> <li><i>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</i></li> </ul>	<ul style="list-style-type: none"> <li>The ore will be processed via standard flotation concentration to produce a graphitic concentrate.</li> <li>The technology is well tested and employed in key graphite production centres such as China</li> <li>Extensive bench scale test work has been undertaken on samples from the Emperor deposit. Metallurgical samples have been generated from 200 kg and 2.5 tonne of composited diamond core from the Emperor deposit to produce flake graphite concentrate. This work was completed by ALS Global in laboratories in Australia.</li> <li>High and lower grade domains of mineralisation have been modelled, however the deposit grades are generally very similar: between 4% and 5% TGC. Otherwise no metallurgical effects related to regional variability have been identified.</li> <li>The key assumptions are a graphite recovery of 93.2% to produce a concentrate grading 98% TGC based on a mass pull of approximately 4% of the feed mass.</li> <li>No deleterious elements of any note have been detected.</li> <li></li> </ul>
<b>Environmental</b>	<ul style="list-style-type: none"> <li><i>The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.</i></li> </ul>	<ul style="list-style-type: none"> <li>Comprehensive flora and fauna environmental field surveys have been completed at the McIntosh Project area.</li> <li>Baseline and follow up environmental studies have been completed as part of the Mining Proposal requirements. Subterranean Fauna species identification is still continuing. No adverse impacts to the project have been identified to date.</li> <li>This is the final stage of the flora and fauna study requirements to support Hexagon's Mining Proposal application.</li> <li>The key environmental issues are: <ol style="list-style-type: none"> <li>Water run-off, flooding and erosion from cyclonic rainfall events which is addressed through significant site and drainage works; and</li> <li>Encapsulated storage on impermeable membranes of PAF waste rock material from each of the deposits estimated to comprise 70% of the waste mine. This has been addressed by allocation of capital to the waste pad preparation and an ongoing allowance for rehandling etc. As part of the DFS Hexagon plans to utilise in-pit dumping as a lower cost and more effective waste rock storage solution.</li> </ol> </li> </ul>
<b>Infrastructure</b>	<ul style="list-style-type: none"> <li><i>The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.</i></li> </ul>	<ul style="list-style-type: none"> <li>Infrastructure for the project will be required to be installed prior to extraction of the Ore Reserve. Plant, services, accommodation, access and internal roads have been costed by Scope Australia.</li> </ul>
<b>Costs</b>	<ul style="list-style-type: none"> <li><i>The derivation of, or assumptions made, regarding projected capital costs in the study.</i></li> <li><i>The methodology used to estimate operating costs.</i></li> <li><i>Allowances made for the content of</i></li> </ul>	<ul style="list-style-type: none"> <li>Mine operating costs are based on haulage distances and monthly total movement targets that were used in unit cost estimation by contractor MACA.</li> <li>Mine administration and ancillary costs have been based on current market levels.</li> <li>Processing costs include allowances for crushing, beneficiation,</li> </ul>



	<p><i>deleterious elements.</i></p> <ul style="list-style-type: none"> <li><i>The source of exchange rates used in the study.</i></li> <li><i>Derivation of transportation charges.</i></li> <li><i>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</i></li> <li><i>The allowances made for royalties payable, both Government and private.</i></li> </ul>	<p>processing, administration and transport. These costs have been provided by Scope Engineering.</p> <ul style="list-style-type: none"> <li>Deleterious elements are not a factor.</li> <li>Quotes for transport and port handling have been used.</li> <li>Royalties for WA State and Native title have been applied to the concentrate.</li> </ul>																		
<b>Revenue factors</b>	<ul style="list-style-type: none"> <li><i>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</i></li> <li><i>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</i></li> </ul>	<ul style="list-style-type: none"> <li>Flake graphite concentrate production for revenue calculations is based on the mine schedule and modifying factors applied.</li> <li>The Company has assumed an FOB price of US\$1,565/tonne of concentrate with an AUD rate of US\$0.75. This is based on a consensus price range from its detailed analysis of peer company assumptions and industry commentator forecasts. This price is not regarded as conservative or as optimistic.</li> <li>Pricing reflects any deleterious elements so penalties have not been applied. McIntosh concentrate does not contain any notable deleterious elements.</li> </ul>																		
<b>Market assessment</b>	<ul style="list-style-type: none"> <li><i>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</i></li> <li><i>A customer and competitor analysis along with the identification of likely market windows for the product.</i></li> <li><i>Price and volume forecasts and the basis for these forecasts.</i></li> <li><i>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</i></li> </ul>	<ul style="list-style-type: none"> <li>The sectors of the graphite market that Hexagon is targeting (batteries and expandables) are expected to show strong demand growth over the next 5 years as reported by a host of industry commentators, driven by increasing demand for batteries and high-end technological uses for expandable graphite.</li> <li>Hexagon's expected annualised output is 12 to 16% of the current estimates of the size of the flake graphite concentrate market – however, the growth prospects are strong and the market trend is that increasing natural flake graphite will replace synthetic which is estimated to be 3-4 times the size of the natural market. Hexagon is planning to attract large scale offtake on the basis of quality, locality and environmental credentials.</li> <li>The natural flake graphite market focussed on batteries is fragmented and immature. China is the dominant supplier and likely the dominant battery end user at present.</li> <li>Standard product specifications comprise the total graphitic carbon grade which must generally exceed 90 to 95% TGC to be saleable and the distribution of flake size – with the minimum saleable specification generally being "Fine".</li> <li>Product sales and pricing is the key risk to the development and viability of the McIntosh Project.</li> </ul>																		
<b>Economic</b>	<ul style="list-style-type: none"> <li><i>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</i></li> <li><i>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</i></li> </ul>	<p>The Ore Reserve estimate is supported by a financial model that has been prepared to a Pre-Feasibility level. The model covers the current 9 year life of the Project. The key economic inputs comprise:</p> <table border="1"> <thead> <tr> <th>Model Input</th><th>Value</th><th>Comment</th></tr> </thead> <tbody> <tr> <td><b>Project Ownership</b></td><td>100%</td><td>Hexagon owns all tenements 100%</td></tr> <tr> <td><b>Escalation</b></td><td>Nil</td><td>Available but not applied</td></tr> <tr> <td><b>State Royalty</b></td><td>5%</td><td>Levied on FOB sales value</td></tr> <tr> <td><b>Corporate Tax rate</b></td><td>30%</td><td>Current legislation</td></tr> <tr> <td><b>Discount Rate</b></td><td>8%</td><td>Possible cost of capital in low risk jurisdiction</td></tr> </tbody> </table>	Model Input	Value	Comment	<b>Project Ownership</b>	100%	Hexagon owns all tenements 100%	<b>Escalation</b>	Nil	Available but not applied	<b>State Royalty</b>	5%	Levied on FOB sales value	<b>Corporate Tax rate</b>	30%	Current legislation	<b>Discount Rate</b>	8%	Possible cost of capital in low risk jurisdiction
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		<table><tr><td><b>Funding Equity</b></td><td>-</td><td>100%</td><td colspan="3">A simple opening assumption.</td></tr><tr><td><b>Funding Debt</b></td><td>-</td><td>Nil</td><td colspan="3">In process – nothing assumed</td></tr></table> <ul style="list-style-type: none"><li>• All major cost inputs have been supplied by contractors and suppliers.</li><li>• Sensitivity analysis have been completed for the 3 main Project value drivers; commodity price, operating costs and Capital costs.</li></ul> <p>The base case NPV is A\$258 million the following table presents resultant NPV when key inputs are varied +/- 20%:</p> <table><tr><td></td><td>-20%</td><td>-10%</td><td>0%</td><td>10%</td><td>20%</td></tr><tr><td><b>Price</b></td><td>102</td><td>180</td><td><b>258</b></td><td>335</td><td>413</td></tr><tr><td><b>Operating Costs</b></td><td>331</td><td>294</td><td><b>258</b></td><td>221</td><td>185</td></tr><tr><td><b>Capital Cost</b></td><td>285</td><td>272</td><td><b>258</b></td><td>244</td><td>230</td></tr></table>	<b>Funding Equity</b>	-	100%	A simple opening assumption.			<b>Funding Debt</b>	-	Nil	In process – nothing assumed				-20%	-10%	0%	10%	20%	<b>Price</b>	102	180	<b>258</b>	335	413	<b>Operating Costs</b>	331	294	<b>258</b>	221	185	<b>Capital Cost</b>	285	272	<b>258</b>	244	230
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<b>Social</b>	<ul style="list-style-type: none"><li>• <i>The status of agreements with key stakeholders and matters leading to social licence to operate.</i></li></ul>	<ul style="list-style-type: none"><li>• Mining Lease applications have been submitted and the Company is working through that approval process.</li><li>• Heritage surveys have been completed over the main working areas and further work on extended areas is planned imminently.</li><li>• Hexagon is working towards Land Use Agreements with Traditional Owners (TO) as part of the normal WA Mining Licence application and approval process. It enjoys positive working relationships with local stakeholder groups and routinely employs members of local TO groups.</li></ul>																																				
<b>Other</b>	<ul style="list-style-type: none"><li>• <i>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</i></li><li>• <i>Any identified material naturally occurring risks.</i></li><li>• <i>The status of material legal agreements and marketing arrangements.</i></li><li>• <i>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.</i></li></ul>	<ul style="list-style-type: none"><li>• The approvals required for the commencement of mining at the mine are complete. Based on information provided there should be no reason as to a change in this status.</li><li>• A mining permit application was granted in 2013 and an addendum is currently being assessed by the DMP. Operations can still commence under the already approved mining proposal.</li></ul>																																				
<b>Classification</b>	<ul style="list-style-type: none"><li>• <i>The basis for the classification of the Ore Reserves into varying confidence categories.</i></li><li>• <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li><li>• <i>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources</i></li></ul>	<ul style="list-style-type: none"><li>• Classification of the Ore Reserve is based on the Mineral Resource classification.</li><li>• Indicated and Inferred Mineral Resources are contained within the pit designs and only the Indicated Resources have been converted to Probable Ore Reserves.</li><li>• The result appropriately reflects the Competent Person's view of the deposit.</li></ul>																																				



	(if any).	
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of Ore Reserve estimates.</li> </ul>	<ul style="list-style-type: none"> <li>The Ore Reserve estimates have been reviewed internally by Hexagon Resources and are considered to appropriately reflect the results of the application of the modifying factors to the Mineral Resources to a Pre-Feasibility Study level.</li> </ul>
<b>Discussion of relative accuracy/confidence</b>	<ul style="list-style-type: none"> <li>Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</li> </ul>	<ul style="list-style-type: none"> <li>The design, schedule and financial model on which the Ore Reserves are based has been completed to a Pre-Feasibility standard with a corresponding level of confidence.</li> <li>A degree of uncertainty is associated with the geological and Mineral Resource estimates and the Ore Reserve classification reflects the level of confidence in the Mineral Resources.</li> <li>There is a degree of uncertainty regarding estimates of modifying mining factors, geotechnical and processing parameters that are of a confidence level reflected in the level of the study. The Competent Person is satisfied that a suitable margin exists that the Ore Reserve estimate would remain economically viable with any negative impacts applied to these factors or parameters.</li> <li>There is a degree of uncertainty in the commodity price used, however, the Competent Person is satisfied that the assumptions used to determine the economic viability of the Ore Reserves are based on reasonable current data.</li> </ul>



## Appendix 5B

# Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

### Name of entity

<b>HEXAGON RESOURCES LIMITED</b>
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### ABN

<b>29 099 098 192</b>
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### Quarter ended ("current quarter")

<b>31 December 2017</b>
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<b>Consolidated statement of cash flows</b>	<b>Current quarter \$A'000</b>	<b>Year to date (6 months) \$A'000</b>
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers	-	-
1.2 Payments for		
(a) exploration & evaluation	(669)	(1,391)
(b) development	-	-
(c) production	-	-
(d) staff costs	(19)	(104)
(e) administration and corporate costs	(293)	(664)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	1	3
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Research and development refunds	21	59
1.8 Other (provide details if material)	-	-
<b>1.9 Net cash from / (used in) operating activities</b>	<b>(959)</b>	<b>(2,097)</b>

<b>2. Cash flows from investing activities</b>		
2.1 Payments to acquire:		
(a) property, plant and equipment	-	-
(b) tenements (see item 10)	-	-
(c) investments	-	-
(d) other non-current assets	-	-

<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (6 months) \$A'000</b>
2.2	Proceeds from the disposal of:		
	(a) property, plant and equipment	-	23
	(b) tenements (see item 10)	-	-
	(c) investments	1,242	1,242
	(d) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (Refund Security Deposit)	-	10
2.6	Other (Hengda Deposit Proceeds)	-	37
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>	<b>1,242</b>	<b>1,312</b>

<b>3.</b>	<b>Cash flows from financing activities</b>		
3.1	Proceeds from issues of shares	-	-
3.2	Proceeds from issue of convertible notes	-	-
3.3	Proceeds from exercise of share options	20	20
3.4	Transaction costs related to issues of shares, convertible notes or options	-	-
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
<b>3.10</b>	<b>Net cash from / (used in) financing activities</b>	<b>20</b>	<b>20</b>

<b>4.</b>	<b>Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1	Cash and cash equivalents at beginning of period	789	1,857
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(959)	(2,097)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	1,242	1,312
4.4	Net cash from / (used in) financing activities (item 3.10 above)	20	20

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	10	10
4.6	<b>Cash and cash equivalents at end of period</b>	<b>1,102</b>	<b>1,102</b>

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	1,072	759
5.2	Call deposits	30	30
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	<b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>1,102</b>	<b>789</b>

**6. Payments to directors of the entity and their associates**

	Current quarter \$A'000
6.1 Aggregate amount of payments to these parties included in item 1.2	110
6.2 Aggregate amount of cash flow from loans to these parties included in item 2.3	-
6.3 Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2	

6.1: Includes payments to Managing Director

**7. Payments to related entities of the entity and their associates**

	Current quarter \$A'000
7.1 Aggregate amount of payments to these parties included in item 1.2	-
7.2 Aggregate amount of cash flow from loans to these parties included in item 2.3	-
7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2	

## Mining exploration entity and oil and gas exploration entity quarterly report

**8. Financing facilities available**

*Add notes as necessary for an understanding of the position*

Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
-	-
-	-
-	-

8.1 Loan facilities

8.2 Credit standby arrangements

8.3 Other (please specify)

8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.

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9. Estimated cash outflows for next quarter	\$A'000
9.1 Exploration and evaluation	503
9.2 Development	
9.3 Production	
9.4 Staff costs	80
9.5 Administration and corporate costs	164
9.6 Other (provide details if material)	
<b>9.7 Total estimated cash outflows</b>	<b>747</b>

10. Changes in tenements (items 2.1(b) and 2.2(b) above)	Tenement reference and location	Nature of interest	Interest at beginning of quarter	Interest at end of quarter
10.1 Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced	-	-	-	-
10.2 Interests in mining tenements and petroleum tenements acquired or increased	-	-	-	-



### **Compliance statement**

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.



Sign here:

(Company secretary)

Date: 29 January 2018

Print name: Rowan Caren

### **Notes**

1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.