

ASX Announcement

21 June, 2018

**NEW RESULTS DEMONSTRATE 99% YIELDS IN SPHEROIDISATION TESTS AND OPEN DOOR TO NEW
DOWNSTREAM FLOW SHEET.**

HIGHLIGHTS

- ✓ Latest test work results confirm Company's ambitions of market leadership in downstream processing to produce a range of high-quality, premium value graphite materials at low cost, confirming Hexagon's value differentiation in the graphite sector.
- ✓ Low concentrate impurities enable new process flow sheet with purification as the initial phase to underpin Hexagon's downstream processing strategy. The main feedstock is planned to be its allocation of graphite concentrate from the McIntosh Graphite project in Western Australia, which is effectively fully funded to commercial production.
- ✓ Hexagon has already demonstrated the ease of purifying McIntosh graphite concentrates to ultra-high fixed carbon purities of 99.999% due to the unique attributes of the graphite mineralogy and crystal structure.
- ✓ Utilising a purified graphite feedstock for spheroidisation resulted in 2 high-value products compared to traditional flow sheets which have purification following spheroidisation producing a spherical product and a lower value reject material. This modification maximises the revenue achievable for each tonne of feedstock concentrate processed.
- ✓ Spheroidisation test results indicate nearly 100% yield to anode and cathode carbon materials comprising; up to 69% yield to lithium ion battery anode material; and up to 32% yield to higher value, conductivity enhancement materials utilised in a variety of battery types.
- ✓ Another innovation is utilisation of single-stage spheroidisation milling technology instead of the established cascading mills to achieve major operating cost savings, improved productivity and high yields.
- ✓ Reconfiguring the purification stage is fundamental to Hexagon's product development strategy which is focussed around high purity. Along with battery materials Hexagon is also focussed on expanded graphite for high-end foils and shielding as well as replacement of synthetic graphite in certain industrial uses such as electrodes in electric arc furnaces.
- ✓ The recently completed \$7M institutional placement enables the Company to undertake feasibility study work on purification and specific downstream process routes which is planned to include a pilot scale thermal graphite refining plant.

1. SUMMARY

Hexagon Resources Limited (**Hexagon** or the **Company**, (ASX:HGX)) is pleased to provide an update on its industry leading, downstream graphite processing business strategy and related to this, highly encouraging battery materials test work on concentrates from its McIntosh Project located in Western Australia.



The Company is excited to announce that it is making major improvements to the conventional flow sheet for downstream processing of graphite concentrates. The change is very fundamental, predicated on an initial purification phase, followed by whichever downstream process that is selected, in this case, spheroidisation to produce spherical graphite for lithium ion battery anodes.

The key points are:

- a. Hexagon's downstream flow sheet will start with the purification of graphite concentrate, sourced from its McIntosh Project, to at least 99.95 wt.% carbon (C); and
- b. working with its technical partner, Hexagon has identified a spheroidisation milling technology which offers major cost savings and improved productivity and yield when used with McIntosh material, that can't be delivered by traditional cascade impact milling circuits widely employed in China, the world's major supplier of spherical graphite.

The physical properties of the McIntosh graphite have enabled the reconfiguration of the downstream circuit and its application to spherical graphite production. This facilitates "leap-frogging" by Hexagon, over current state-of-the-art technology utilised by the majority of graphite processors. This includes existing production in China and new planned spherical graphite operations in other countries. Hexagon expects to reap major comparative benefits through lower purification costs, increased revenue per tonne of graphite concentrate feedstock and lower spheroidisation costs.

A key differentiating feature of Hexagon's graphite concentrate is the ease of purifying to ultra-high, "five-nines" purity (99.999 wt. % C) and its flake morphology which is highly amenable to spheroidisation. This enables the Company to test an innovative downstream (Stage 2), flow sheet but with established fine particle milling and spheroidisation technology. This combination results in an overall yield of nearly 100% of graphite concentrate feedstocks into high value battery materials.

The suitability of Hexagon's graphite for the battery materials market was assessed through spheroidisation and classification test work on purified concentrate samples which highlighted that:

- Up to 69.17% converts to spherical graphite suitable for anodes in a range of lithium ion battery types (Battery Anode Material (**BAM**)); and
- Approximately 31% converts to material suitable for carbon Conductivity Enhancement Materials (**CEM**), which is potentially a higher priced product than BAM and utilised in lithium ion, lithium primary and alkaline battery systems, to name a few.

The commercial impact of this flow sheet configuration compared to traditional secondary processing flow sheets for graphite is that Hexagon will effectively realise significantly more value for each tonne of graphite concentrate than the majority of its competitors. By way of example, in the BAM industry, Chinese plants generally achieve a "production-scale" yield from graphite concentrate to spherical graphite of between 18 to 50% with the balance of the material utilised for lower value graphite uses such as, lubricants, recarburiser pellets or pencils, etc. Hexagon's results indicate higher yields to spherical graphite with the non-spherical material suitable for higher value end uses with only minor additional processing required.

In the context of Hexagon's overall product development and marketing strategy, these test work results are related to the rapidly expanding battery materials sector; but the battery sector is not Hexagon's only product development focus. It is currently also planning test work:

- to demonstrate the potential to replace synthetic graphite in traditional uses such as electrodes in electric-arc furnaces used in steel making, which is estimated to be a 750,000 tonne per year industry. Electrodes are currently made entirely from high-quality synthetic graphite but recent third-party tests indicate that a blend with up to 10% high purity, highly crystalline natural flake can result in a smaller, more conductive electrode requiring less



power to operate. Given the current shortage of electrodes due to constraints in the synthetic graphite market and the enhanced operating metrics this represents a deep and potentially high-margin opportunity; and

- to develop expanded graphite products based on the recent findings that approximately 50% of the current Mineral Resource at the McIntosh Project, is estimated to comprise Large to Super Jumbo sized flake and that the + 60 Mesh (250 micron) size fraction has been demonstrated to be easily expanded (refer to ASX Report, dated 23 November, 2017). Within the context of Hexagon's modified downstream flow sheet, an ultra-high purity expanded graphite could become feed stock to produce foils for shielding electromagnetic radiation in high-end applications such as the nuclear industry, and cell phone market, which also command lucrative price premiums.

These outcomes underpin Hexagon's overall marketing strategy to allocate approximately 30% of its primary graphite concentrate to spheroidisation to realise nearly 100% yield to value-added applications that cover nearly all types of battery chemistries from lithium-ion to lithium primary and alkaline to other types. Another 30-40%, the +60 Mesh portion, will be allocated to expandable graphite products and the remaining 30-40% will be allocated to high purity refractories and other applications where synthetic graphite currently dominates, such as arc furnace electrodes. This product development work, including refining, is the current focus of the Company to develop its downstream business.

Hexagon's Managing Director, Mike Rosenstreich commented: "the competitive advantage which Hexagon has is the very clean graphite deposit at McIntosh which is highly amenable to low cost, environmentally friendly downstream processing in particular, purification."

"By virtue of the joint venture transaction with Mineral Resources, this is effectively fully funded to commercial production. This enables us to plan a downstream business strategy based on producing ultra-high purity graphite products suitable for a diverse range of end uses spanning from the energy storage, to technologically sophisticated and traditional industrial sectors."

"Whilst we see battery anode material as potentially only 25% of our overall product offering and likely the lowest value, these results indicate that in terms of yield at near 70% to BAM we would be industry leaders. To then also factor in the 30% by-product yield of possibly a higher priced conductivity material - that would really set the business in a league of its own in terms of a premium quality product offering and high operating margins."

With the recently completed \$7M institutional placement, Hexagon's strategy is to undertake the feasibility studies for graphite refining and certain additional downstream processing routes, such as spheroidisation, with its US based technical partner, NAm Labs¹¹. Planning, budgeting and site investigations are underway to establish a pilot plant for purification and a laboratory for ore and concentrate characterisation. The Company will provide further updates on the timing, objectives and costs for this Feasibility as these budgets and programs are finalised.

2. DOWNSTREAM FLOWSHEET MODIFICATIONS

The key aspect of the modification to the Stage 2 flow sheet is to perform the graphite purification phase ahead of the spheroidisation process or any other downstream processing.

First stage purification is possible because of the amenability of the McIntosh flake graphite to low cost purification to achieve ultra-high purity levels of 99.999 wt. % C, as reported to ASX on 18

¹¹ Hexagon has formed a technical alliance with a US based, highly accredited advanced materials research, testing and speciality manufacturing company that specialises in graphite products and technology. Due to confidentiality requested by the US partner, this company is referred to as "NAmLab".



January, 2018. Utilising an environmentally friendly, highly efficient thermal purification process, Hexagon plans to purify all of its graphite concentrate as the precursor step ahead of any further downstream work such as spheroidisation, intercalation, expansion, specific sizing or surface coating.

The impact of this modification is best illustrated by referring to spheroidisation. Current state-of-the-art technology is based on spheroidising “-195” flake graphite (e.g. less than 100 mesh in size at purity of 95 wt. % C). The spheroidisation is done in a cascading impact mill circuit, which generally consist of 15 to 20 (up to 35) impact (pin) mills placed in cascade. Broadly, each mill in a cascade generates spheroidal particles with the yield of 0.5 to 1.5%. The overall yield of spherical graphite after going through the cascade ranges anywhere from 18 to 35% depending on the operation and the specific product being made. That means that for every 1,000 tons of the 95 wt. % C graphite processed through the cascade milling circuit, a manufacturer could recover from as little as 180 tonnes to as much as 350 tonnes of spherical graphite, with a purity level of just under 95 wt.% C. Conversely, 650 to 820 tonnes of graphite by-product which is not spherical, with a purity of 94-95 wt. % C is also produced.

A typical manufacturer would then use hydrofluoric, hydrochloric and sulfuric acids to leach impurities out of the spheroidal graphite to achieve a purity of 99.95 wt. % C. However, this process is generally too costly and environmentally hazardous to also purify the by-product portion and this material can only be sold into the low-tech, lower value markets.

Purifying as a first step rather than a final step in the downstream processing strategy ensures maximum utilisation of all flake types and sizes into a range of premium-priced end uses with little or no reject or marginal priced material produced.

3 SPHEROIDISATION TEST WORK

3.1 Background

The purpose of this work was to demonstrate the feasibility of converting purified McIntosh natural crystalline flake graphite into spheroidal shaped particles, intended for BAM (the negative electrode active materials) in lithium-ion batteries. This work comprised the conversion of flake into spheroids and their classification by size and density, as well as measurement of other important battery related specifications such as Surface Area, Scott Volume and Tap Density. None of the test outcomes reported below have been optimised to meet any particular specifications, but this would be done as part of the planned Feasibility Study and commensurate with off-take related test work.

The market of lithium-ion battery anode materials (BAM) has witnessed exponentially growing demand which currently comprises approximately 50 to 70% synthetic graphite and 50 to 30% natural graphite, respectively. Spheroidisation refers to the multistage process of milling, shaping and classifying the anode-grade graphite, to produce spherical graphite to very exacting specifications demanded by lithium-ion battery manufacturers.

It is important to understand that there is no one spherical product that could cater to all applications within the lithium-ion battery sector. Spherical graphite comes in a variety of sizes and packing densities, typically defined by the D_{50} particle size and Tap density values. The current preferred size ranges (D_{50} specification; median diameter size) required by several of the larger global lithium ion battery manufacturers are 16 and 23 microns with tight D_{10} and D_{90} (10th and 90th percentile diameters) parameters and with Tap Densities greater than 0.9 g/cm³ for the carbon coated end-product, amongst other specified attributes.

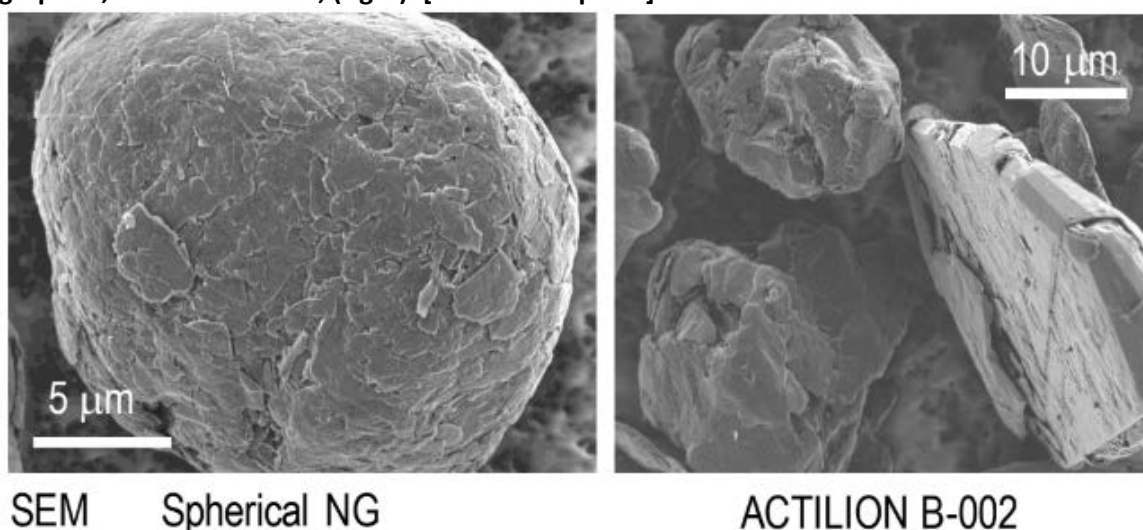
Spherical graphite is characterised as being comprised of spheroidally shaped fine powdered matter. Spheroidal particles are most often pursued because these shapes offer the maximum packing



density compared to all other shapes (refer to mathematical theorem by C.F. Gauss 1831) which is important for battery manufacturers seeking to achieve higher energy density on a full cell level. However, similar packing density can also be achieved with a bimodal size distribution of finer and coarser three dimensional particles (This can be likened to fitting small tennis balls in between the gaps in a box of soccer balls), even if they are not perfectly spherical. Indeed, much anode graphite, particularly of synthetic origin, is not a spherical or “potato” shaped. The latter term is actually a trademarked name of Imerys Graphite & Carbon which ironically is currently marketing a carbon-coated synthetic graphite, Actilion B, for use in battery anodes, which is entirely not a spherical shape (refer to Figure 1).

Note, synthetic graphite cannot be spheroidised. However, the same equipment which spheroidises natural flake is utilised to size and densify the synthetic material.

Figure 1: Battery anode material; natural flake spherical graphite (left) and synthetic “spherical” graphite, branded Actilion, (right). [From M.E. Spahr²]



3.2 Test Results

The test results for the two samples of McIntosh graphite concentrate (HXGCon1 & HXGCon2/3³) which had each been purified to 99.999% wt. % C indicated very high yields of between 67 to 69% to spherical graphite suitable as anode material in lithium ion batteries and 33 to 31% by-product suitable as conductivity enhancement material for a range of battery types including lithium ion, lithium primary and alkaline batteries. This compares to typical yields to spherical graphite which range from 18 to 50%. However, the key differentiating feature is that the by-product material is potentially of greater value than the spherical graphite due to its very high purity and highly ordered crystallinity.

The test work results are summarised in Table 1, with more detailed results presented in Appendix 1. These are the raw, technical outcomes from the first round of spheroidisation test work with no enhancements or optimisation. Further particle size classification into specific customers’ D₁₀, D₅₀ and D₉₀ size ranges can be adjusted accordingly during specific collaborative evaluation programs as part of the offtake test work developments.

² Presentation to 7th International Automotive Battery Conference Europe, January, 2017 by M.E. Spahr, from IMERYS Innovation.

³ For sample details refer ASX report dated 6 November, 2017; “McIntosh Large & Jumbo Graphite Flake Endowment”.



Typical Tap Density for the surface coated battery anode material is greater than 0.9 g/cm³ and NAMLab advise that almost certainly, after carbon coating, the tap density of the resultant product will go up to exceed 0.95 g/cm³, as long as the Tap Density of the uncoated graphite after spheroidisation falls within the range of 0.77 to 0.9 g/cm³.

Table 1: Summary Spheroidisation, Sizing and Density Outcomes

Likely End Product	Yield % of Total	Particle Size, microns				Tap Density	Scott Volume	BET
		D ₁₀	D ₅₀	D ₉₀	Mean			
		g/cm ³	g/cm ³	m ² /g				
Sample – HXGCon1								
BAM	67.01	15.27	29.72	50.31	32.12	0.90	0.58	-
CEM	32.84	7.68	15.30	27.26	17.19	0.64	0.33	3.77
Waste	0.15	-	-	-	-	-	-	-
Sample – HXGCon2/3								
BAM	69.17	14.48	27.98	48.53	30.55	0.87	0.53	-
CEM	29.51	7.65	16.20	43.22	22.19	0.73	0.28	-
Waste	1.32	-	-	-	-	-	-	-

3.3 Implications of Spheroidisation Test Results

The stated yield values are some of the highest in the industry and represent a remarkable building block for Hexagon's future cost model for the value-added downstream processing business.

The above yield data should be viewed against the backdrop of a 35% average yield achieved utilising traditional Chinese cascading impact mill technology, still being adopted by new downstream anode processors, even outside of China. The opportunity for Hexagon, based on these results is to replace approximately 15 to 20 (up to 35) cascading mills with a singular spheroidising mill and achieve twice the recovery yield for much lower overall operating costs and capital input. Another key element of cost reduction is an opportunity for a major overhaul of the repair and maintenance cost component of the variable cost of spheroidisation.

When a typical graphite concentrate grading 95 wt. % C undergoes spheroidisation in a cascading milling circuit the wear parts of the mills have to be replaced on a very frequent basis. This is because the remaining 5% of mineral impurities in the concentrate comprise mainly highly abrasive silicates (in the form of silica sand) and aluminates (in the form of corundum).

Therefore, in a traditional cascading mill circuit there is a dedicated repair maintenance team and work shop continually replacing the worn out parts. In an operation, which is producing spherical graphite, the repair and maintenance cost component could represent as much as 25% of the overall variable cost input.

Another very important aspect of the test results is the analysis of the properties of those fractions which were considered unsuitable for lithium-ion anode applications. All of these fractions have purity of 99.999 wt. % C in a "Hexagon Resources" new and improved production flow sheet. At these purities there is an obvious opportunity to further segregate, mill, size and or blend those fractions to meet the specifications for conductivity enhancement applications in the advanced battery cathodes or sell them to other value-added markets.

The current market price for some of these applications is considerably higher than the price for spherical graphite. Therefore, with the proposed approach of initial purification, there is a potential to realise a near 100% yield on usage of both spherical and non-spherical particles originating from



Hexagon's McIntosh graphite concentrates. The opportunity is to market and sell both product streams into the premium anode market for lithium ion batteries as well as value-added, highly priced additives into the cathodes of a wider range of battery types including lithium ion, primary lithium and alkaline batteries, to name a few.

In summary, Hexagon is excited about its plans to implement an innovative downstream flow sheet which has adopted the two changes discussed earlier, namely:

- a. an overhaul of the processing flow sheet in which graphite is refined to at least 99.95+ wt. % C prior to spheroidisation milling or any other downstream processing; and
- b. a singular spheroidising mill is employed instead of a cascade of 15 to 20 impact mills.

The Company considers that this will;

- ✓ simplify the spheroidisation classification flowsheet;
- ✓ result in significantly reduced energy costs, which is a major cost input;
- ✓ dramatically lower repair and maintenance expenses for re-tooling the spheroidisation circuit;
- ✓ reduce the physical footprint of the plant compared to a cascading mill operation with a similar output;
- ✓ notably increase the yield of spherical product; and
- ✓ significantly improve revenue per tonne of graphite concentrate feed stock because the portion of concentrate that could not be spheroidised has a premium value as CEM.

3.4 Test Methods

The work undertaken by NAMLab comprised two key processes;

- Spheroidisation – comprising milling to reduce the flake size and shaping into spherical particles; and
- Classification – to sort the resultant particles by both size and shape characteristics and thus optimising the tap density and specific surface area of the products.

Subsequently for each product fraction, SEMs were taken and other important battery related determinations such as Surface Area, Tap Density and Scott Volume were also measured on representative product cuts to enable a first pass assessment for each product fractions' suitability in various battery components and some observations for further work required. A summary of these results is presented in Table 1, above and a more detailed summary is provided in Appendix 1.

Spheroidisation

Irregularly shaped flake taken from batches of Hexagon Con 1 and Con 2/3 were transformed into spherical and round-edged particles using the mechano-chemical principle. The resultant particle size curve measured by laser diffraction is presented in Figure 2. For this study, NAMLab utilised leading spheroidisation equipment and technology sourced from Japan.

Figure 3 presents Scanning Electron Micrographs (SEMs) of McIntosh particles after spheroidisation milling, but just prior to classification by size and shape. Note, the majority of the sample represents a blend of spheroidal and odd-shaped particles of varying sizes. Segregation by type will occur on a subsequent processing step, classification (see below).



Figure 2: Laser particle size distribution of Hexagon graphite HXGCon1 just after spheroidisation and prior to classification.

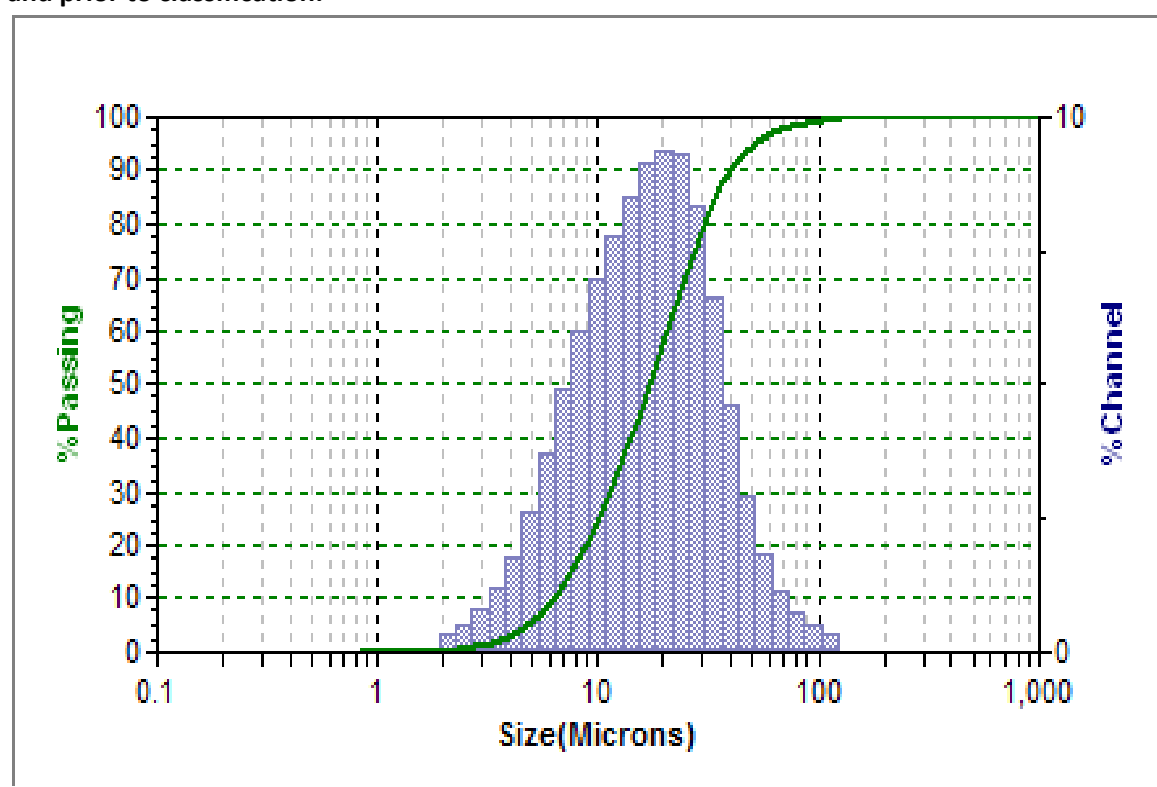
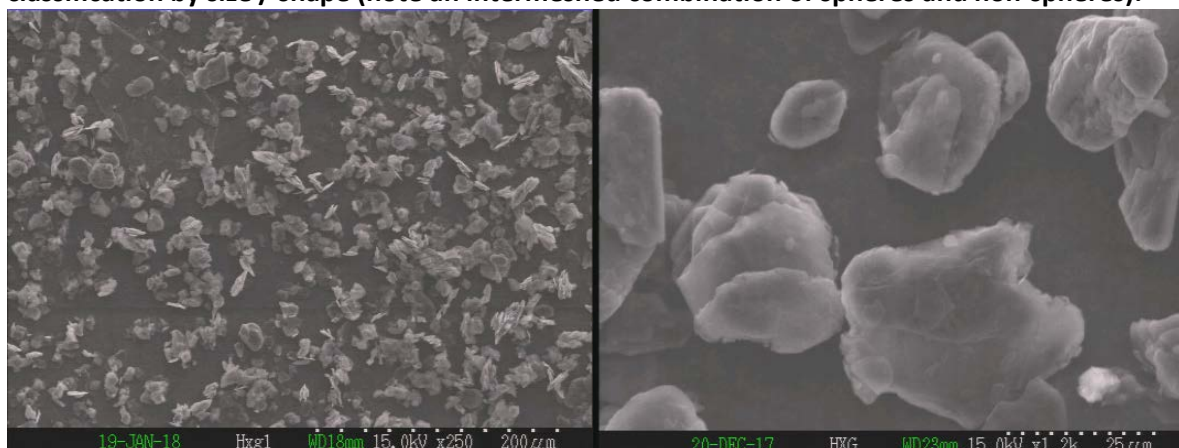


Figure 3. SEMs of bulk Hexagon graphite HXGCon1 just after spheroidisation but prior to classification by size / shape (note an intermeshed combination of spheres and non-spheres).



Classification

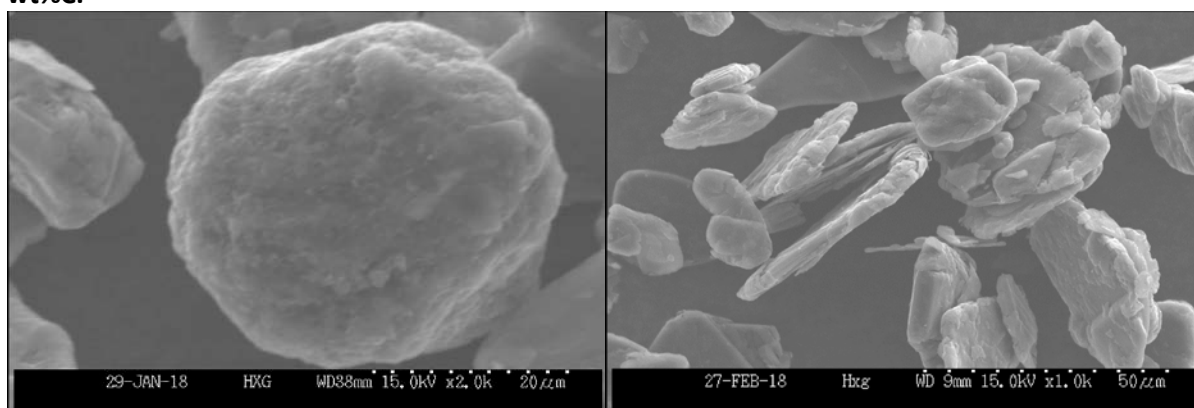
As illustrated in Figure 3 spheroidisation milling technology produces a broad distribution of spheres and non-spheres, typically covering the range from 3 to 130 microns (μm) in diameter (as per Figure 2). In order to segregate the bulk sample into individual size fractions that correspond to a precise D_{50} value, NAMLab employed an innovative particulate separation technology for segregation of particles by gravity and size.

The outcome of the classification extractions enabled our team to quantitatively discriminate different particle shapes, the levels of packing density and particle size generated in the



spheroidisation milling circuit. This resulted in the product classifications summarised in Table 1 and detailed in Appendix 1 which represent spherical graphite product (67 and 69% for Hexagon Con 1 and Con2/3, respectively) as well as by-products (33 and 31% for Hexagon Con 1 and Con2/3, respectively) which may be utilised in other, likely higher value, battery applications, categorised here as carbon Conductivity Enhancement Material.

Figure 4 introduces SEMs of two types of particles produced after classification: (left) is the BAM particle and (right) is the CEM particle, both having purity of 99.95 wt%C minimum to 99.999 wt%C.



4. CONCLUSION

By purifying graphite prior to spheroidising or any other downstream processing, Hexagon ensures that every particle produced in the spheroidising circuit becomes a value-added product regardless of its final shape.

By utilising a single stage spheroidising technology the Company anticipates major cost reductions for repair and maintenance compared to that faced by producers utilising cascading milling circuits. By utilising a more efficient next generation spheroidising milling technology Hexagon recovers up to 69.17% of spheres, which is twice the recovery rate of some of the best results obtained in a cascading circuit. The spheroidal end-product will have a purity of at least 99.95 wt. % C; the by-product, which did not spheroidise is segregated and milled into a conductivity enhancement carbon additive. The purity of the latter is also at least 99.95 wt. % C and its market price may exceed that of spherical graphite in certain applications targeted by Hexagon's marketing strategy.

As a result of these proposed fundamental changes to its downstream processing circuit Hexagon plans to utilise nearly 100% of its run-of-mine, minus 60 Mesh (-250 micron) primary processed graphite concentrate in value-added applications that cover nearly all types of battery chemistries from lithium-ion to lithium primary and alkaline to other types. Product development work on the remaining 50-60% larger flake graphite concentrate material planned to be produced at McIntosh is ongoing.

The next round of testing involves utilising the resultant purified, uncoated spherical graphite into the anodes of lithium ion test cells to undertake electrochemical test work.

5. 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 Project 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 Michael Chan also reviewed this report. Mr Chan is a Member of The Australasian Institute of Mining and Metallurgy. Mr Chan 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.

For further information, please contact:

Mike Rosenstreich

Managing Director

Hexagon Resources Limited
Mike@hexagonresources.com

+61 8 6244 0349

David Ikin

Senior Account Director

Professional Public Relations
David.ikin@ppr.com.au

+ 61 408 438 77

Appendix 1: Detailed Fraction Analysis Data

Sample: HXGCon1											
Sample Fraction	Yield % of Total	D ₁₀	D ₅₀	D ₉₀	D ₉₀ /D ₁₀	Mean	Tap Density	Scott Volume	BET	Purity	Comment
		Microns				Microns	g/cm ³	g/cm ³	m ² /g	Wt. % C	
1	36.94	17.62	33.99	56.42	3.20	36.46	0.92	0.62		99.999	Suitable Battery Anode Material (BAM) for high-energy lithium ion battery (LiB). It is a little coarse but size can be readily reduced to D ₅₀ =20um with further milling and further enhancing the tap density to nearer 1.0 g/cm ³ .
2	18.62	13.35	26.67	46.62	3.49	29.18	0.88	0.53		99.999	Very well suited for LiB anode (BAM).
3	11.45	10.79	20.90	36.58	3.39	22.92	0.87	0.52		99.999	Ideal BAM material for EV batteries and suitable for general and high-performance LiB.
4	6.27	14.84	28.09	47.43	3.20	30.40	0.79	0.47	7.29	99.999	Conductivity Enhancement Material (CEM) with a little more milling. Possible for LiB anodes.
5	3.99	8.69	18.34	28.74	3.31	18.22	0.64	0.29	9.43	99.999	Ideal for CEM blended with "3" above in LiB, Li Primary and Alkaline batteries.
6	2.92	8.11	15.74	28.63	3.53	17.81	0.80	0.43	7.26	99.999	Suitable as CEM for high-power cells and other specialty applications including finer BAM (16µm) and 3C anode material.
7	1.94	7.52	14.50	25.46	3.39	18.92	0.59	0.26	9.91	99.999	Suitable for CEM with a little more milling.
8	17.72	4.87	10.10	19.76	4.06	11.99	0.57	0.27		99.999	Suitable for CEM with a little more milling.
<i>with additional processing, suitable for:</i>											
BAM	67.01	15.27	29.72	50.31	3.30	32.12	0.90	0.58	-	99.999	Suitable for Battery Anode Material –some fractions possibly also suitable for alkaline battery material but conservatively included in this lower value category).
CEM	32.84	7.68	15.30	27.26	3.55	17.19	0.64	0.33	3.77	99.999	Suitable for Conductivity Enhancement Material
Waste	0.15										

Sample: HXGCon2/3											
Sample Fraction	Yield % of Total	D10	D50	D90	D90/D10	Mean	Tap Density	Scott Volume	BET	Purity	Comment
		Microns				Microns	g/cm³	g/cm³	m²/g	Wt. % C	
1	25.46	16.95	32.78	55.23	3.26	35.32	0.91	0.56		99.999	Suitable BAM for high energy, low discharge rate LiB with thick electrodes -e.g. medical and high capacity solar energy space batteries.
2	21.17	15.32	29.57	50.78	3.31	32.07	0.88	0.54		99.999	As above and also for laptop type LiBs.
3	14.84	11.10	21.60	39.13	3.53	24.04	0.83	0.51		99.999	Ideal BAM for EV batteries and suitable for LiB. Subject to further improvements in Tap Density through carbon coating
4	7.70	10.51	20.05	38.30	3.64	23.16	0.77	0.46		99.999	Potentially suitable as negative electrode active material in LiB. Dependent on carbon coating to improve TD
5	4.94	9.05	17.60	32.77	3.62	19.95	0.72	0.28		99.999	Suitable for CEM with further milling.
6	3.46	8.55	16.15	27.53	3.22	17.36	0.69	0.31		99.999	Suitable for CEM with further milling.
7	2.80	7.64	15.08	29.61	3.88	18.00	0.66	0.25		99.999	Suitable for CEM.
8	18.31	7.11	16.01	51.08	7.18	24.34	0.75	0.29		99.999	Ideal for CEM in LiB, Li Primary and Alkaline batteries.
<u>with additional processing, suitable for:</u>											
BAM	69.17	14.48	27.98	48.53	3.35	30.55	0.87	0.53	-	99.999	Suitable for Battery Anode Material –some fractions possibly also suitable for alkaline battery material but conservatively included in this lower value category).
CEM	29.51	7.65	16.20	43.22	5.65	22.19	0.73	0.28	-	99.999	Suitable for Conductivity Enhancement Material
Waste	1.32										