

ELECTROCHEMICAL TESTING CONFIRMS SUITABILITY FOR HIGH-PERFORMANCE BATTERIES

- Electrochemical testing (half-cell) on Malingunde Coated Purified Spherical Graphite (CSPG) achieves exceptional outcomes confirming suitability for high-performance anodes for lithium-ion battery applications
- Testing achieved an <u>initial capacity of 367mAh/g</u> very close to graphite's theoretical storage capacity of 372mAh/g and met key criteria required for high-performance natural graphite anode
- Outcomes achieved with pitch levels well-below industry standards allowing for further opportunity to optimise and improve characteristics
 - Series A samples generated for further customers' engagement, qualification and offtake discussions

NGX Limited (**NGX** or **the Company**) is pleased to announce a significant achievement in the production of high-quality Active Anode Material (**AAM**) as part of its ongoing qualification program. The AAM, derived from upgraded concentrate from the Company's Malingunde Graphite Project in Malawi, has successfully met the key criteria required for qualification in lithium-ion battery applications, including electrochemical parameters, particle size distribution, surface area, impurities and tap density.

Electrochemical testing on the CSPG achieved an **initial capacity of 367mAh/g** – very close to graphite's theoretical capacity of 372mAh/g and well above the premium market benchmark of 360mAh/g.

The CSPG exhibited physical characteristics and specifications comparable to top Chinese reference materials, with **high-purity of 99.99%** and low impurity levels, further highlighting the outstanding quality of Malingunde's graphite for high-performance battery applications.

Table 1: Electrochemical and Characteristics Test Results								
Sample	Initial Capacity (mAh/g)				First Cycle Efficiency (%)			
		367			93.8%			
Malingunde CSPG	D50 Size	D90/D10	Tap Density	BET	Loss on Ignition	Fe	Ca	Si
	(microns)	(microns)	(g/cm³)	(m²/g)	%	ppm	ppm	ppm
	17.0	2.51	1.01	3.23	99.99%	8.9	12.4	1.9

NGX's Executive Director, Peter Fox, commented: "The achievement of these electrochemical performance outcomes are the culmination of months of exceptional work by our highly experienced technical team and partners. With these results, we demonstrate to the market that Malingunde is suitable for high-performance anode applications with specifications comparable to or better than the material currently in the market. NGX is excited to distribute the Series A samples for customers' evaluation to drive further offtake discussions."

For further information, please contact:

Peter Fox Executive Director Tel: +61 8 9322 6322 Sam Cordin Executive Tel: +61 422 799 087



ELECTROCHEMICAL TESTING RESULTS

NGX has previously successfully completed flowsheet optimisation testwork producing graphite concentrate at over 98% TGC with this concentrate (Refer ASX announcement 24 October 2024) then spheronised, purified, pitch coated and carbonised to produce CSPG in preparation for electrochemical testing.

The electrochemical testing on the CSPG's performance was subsequently performed by a leading Asian laboratory via industry-standard half-cell testing.

1 /	Table 2: Malingunde PSG characteristics compared to China Standard reference						
	Parameter		Malingundo	China Standard GB/T-24533-2019 ¹			
			Malingunde	Grade I	Grade II	Grade III	
/	Initial Capacity	mAh/g	367	≥360	≥360	≥345	
	First Cycle Efficiency	%	93.8	≥95	≥93	≥91	

Source: 1. National Standard of China – Flake Graphite (GB/T 24533-2019)

NGX currently meets the Grade I initial capacity and the Grade II first cycle efficiency China Standards. The Company has identified a number of processing options that could improve both the first cycle efficiency. The pitch levels used in this testwork were well below industry standards, providing a significant opportunity to optimise the pitch content to achieve first-cycle efficiency above 95% and achieve China Standard Grade I specifications.

This CSPG demonstrates physical characteristics — including particle size, tap density, BET specific surface area as well as Loss-on-Ignition (**LOI**) purities and remnant impurities — that are comparable to leading Chinese reference materials. Notably, the CPSG exhibits lower impurity levels, reinforcing the excellent quality of Malingunde's graphite for high-performance battery applications.

1 /	Table 3: Malingunde SPG and CPSG characteristics								
	Sample	D50 Size (microns)	D90/D10	Tap Density (g/cm³)	BET (m²/g)	Loss on Ignition (%)	Fe (ppm)	Ca (ppm)	Si(ppm)
	Malingunde Optimised CSPG	17.0	2.51	1.01	3.23	99.99%	8.9	12.4	1.9
	Malingude SPG	15.6	2.64	0.92	11.8	99.98%	4.4	14.4	2.7

These results build on NGX's unique advantage that weathered saprolite hosted ore at Malingunde is amenable to upgrading to high concentrate grades, where the higher purity graphite concentrate offers a significant advantage in downstream processing with the potential for lower reagents consumption and environmental advantages to purify the material. Achieving these electrochemical outcomes with this impurity profile is a significant milestone. These results commercially demonstrate Malingunde's downstream process and assist with defining engineering parameters for a vertically integrated AAM operation.

The CSPG samples produced from this latest program will now be provided to cell manufacturers and potential customers as Series A samples for customer evaluation, feedback and qualification.



These results are part of a series of testwork programs that included bulk-scale optimisation. The Company looks forward to further optimisation results and valuable industry feedback as part of its pre-qualification program.

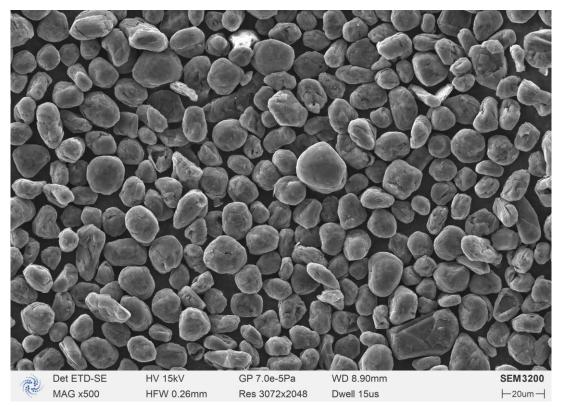


Figure 1: Scanning Electron Microscope image of CSPG produced from Upgraded Malingunde Concentrate showing conventional potato-shaped particles

Competent Persons' Statements

The information in this report that relates to Metallurgical Downstream Studies is based on information compiled by Dr Surinder Ghag, PhD., B. Eng, MBA, M.Sc., who is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM). Dr Ghag is engaged as a consultant by NGX Limited. Dr Ghag has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking, to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Dr Ghag consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Forward Looking Statement

This release may include forward-looking statements, which may be identified by words such as "expects", "anticipates", "believes", "projects", "plans", and similar expressions. These forward-looking statements are based on NGX's expectations and beliefs concerning future events. Forward looking statements are necessarily subject to risks, uncertainties and other factors, many of which are outside the control of NGX, which could cause actual results to differ materially from such statements. There can be no assurance that forward-looking statements will prove to be correct. NGX makes no undertaking to subsequently update or revise the forward-looking statements made in this release, to reflect the circumstances or events after the date of that release.

Disclaimer

In relation to the disclosure of visual information and descriptions, the Company cautions that images displayed are for general illustrative purposes only, and that the visuals displayed, visual methods and estimation of mineral abundance should not be a proxy for laboratory analysis, and that laboratory analysis would be required to determine grades. Visual information also potentially provides no information regarding impurities or deterious physical properties relevant to valuations.

Approved for release by the Executive Director, Peter Fox.



Appendix 1: JORC Code, 2012 Edition - Table 1

SECTION 1 - SAMPLING TECHNIQUES AND DATA

Criteria	JORC Code explanation	Commentary
Sampling Techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	Samples from the 65cm diameter spiral auger drilling were taken on 1 metre intervals. Each sample was manually quartered with each component of the sample separately bagged.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Sample representivity was achieved through manual quartering.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	Weathering and lithological information logged from the 1-metre auger sample was used to define the compositing intervals.
Drilling Techniques	Drill type (e.g. core, reverse circulation, openhole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, facesampling bit or other type, whether core is oriented and if so, by what method, etc).	A custom-made 65cm diameter spiral auger bit was connected to a standard air-core drilling rig, though no air or compressors were used or required for this style of drilling. The auger bit were cleaned between each metre of sampling to avoid contamination.
Drill Sample Recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Samples are assessed visually for recoveries. Overall, the recovery was very good.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Sovereign Metals Limited's (previous owner) trained geologists supervised the spiral auger drilling. No issues with recovery were identified.
	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.	No bias related to preferential loss or gain of different materials has occurred.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation mining studies and metallurgical studies.	All individual 1-metre auger intervals are geologically logged, recording relevant data to a set template using company codes. A small representative sample was collected for each 1m interval and placed in appropriately labelled chip tray for future reference.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	All logging includes lithological features and estimates of basic mineralogy. Logging is generally qualitative.
	The total length and percentage of the relevant intersection logged	100% of samples were geologically logged.
Sub- sampling	If core, whether cut or sawn and whether quarter, half or all core taken.	Not applicable – not core drilling
techniques and sample preparation	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	Samples were manually coned and quartered to obtain representative subsamples.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	This method is considered appropriate for this style of bulk sample drilling.
	Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples.	Samples were manually coned and quartered to obtain representative subsamples.



Criteria	JORC Code explanation	Commentary				
	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.	Duplicate samples were obtained and stored on site. The auger bit was cleaned between each metre of sampling to avoid contamination.				
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The sample size is considered appropriate for the material sampled and for the pilot plant				
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Refer to ASX Announcment dated 29 April 2024 titled Major Advances in Production of Active Anode Material for the plant was setup using the flowsheet The metallurgical performance of the circuit was controlled with hourly grab assays and full circuit surveys approximately every 12 hours of operation. The plant was fed at a rate of approximately 200 kg/hr and treated a total of approximately 40 tonnes of raw ore. The pilot plant was operated as a fully integrated circuit treating as received ore to final graphite concentrate filter cake and combined tailings Since the ore yielded a high moisture content, compositing and feeding was done manually at a rate of 10 kg every 3 minutes The plant treated three different composites namely a life of mine (LOM), Year 1 +2, and a North composite Although feed grades and visual appearance of the ore was highly variable, the metallurgical response was consistent The pilot plant campaign confirmed the suitability of the flowsheet that was developed in two laboratory scale programs The pilot plant campaign produced a total concentrate mass of approximately 4.1 tonnes				
	For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	No non-laboratory devices were used for analysis.				
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicate, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Internal standards were used by SGS Lakefield. No interrogation has been undertaken on these standards in this case.				
Verification of sampling & assaying	The verification of significant intersections by either independent or alternative company personnel.	Significant mineralisation intersections were verified by qualified, alternative company personnel.				
	The use of twinned holes.	The 8 spiral auger holes were all twins of existing air-core holes.				
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All data was collected initially on paper logging sheets and codified to the Company's templates. This data was hand entered to spreadsheets and validated by Company geologists. This data was then imported to a Microsoft Access Database then validated automatically and manually.				
	Discuss any adjustment to assay data.	No assay adjustment has occurred.				
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	A Trimble R2 Differential GPS was used to pick up the bulk of the hand auger collars containing significant mineralisation. A smaller number of samples were surveyed using a standard hand held GPS. No downhole surveying of the spiral auger holes is completed. Given the vertical nature and shallow depths of the auger holes drill hole deviation is not considered to significantly affect the downhole location of samples.				
	Specification of the grid system used.	WGS84 UTM Zone 36 South.				
	Quality and adequacy of topographic control.	DGPS pickups are considered adequate topographic control (metres above mean sea level).				
Data spacing &	Data spacing for reporting of Exploration Results.	The 8 bulk sample spiral auger holes were drilled in areas designed to represent the life of mine ore feed as identified in the PFS (pre-feasibility study).				
distribution	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	Not applicable - no Mineral Resource or Ore Reserve estimations are covered by the drilling in this report.				



Criteria	JORC Code explanation	Commentary
	Whether sample compositing has been applied	Individual 1-metre spiral auger samples were composited into 3 bulk samples representative of life of mine ore feed.
Orientation of data in relation to geological structure Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known considering the deposit type		No bias attributable to orientation of sampling has been identified.
)	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.	No bias attributable to orientation of drilling has been identified.
Sample security	The measures taken to ensure sample security	Samples were stored in secure storage from the time of drilling. The samples were sealed as soon as compositing was completed, and again securely stored awaiting shipment.
Audits or reviews	The results of any audits or reviews of sampling techniques and data	g It is considered by the Company that industry best practice methods have beer employed at all stages of the exploration.

Criteria	Explanation	Commentary				
Mineral tenement & land tenure status	tenement & location and ownership including agreements or material issues with			a Retention Licence (Ri any's wholly-owned, Ma		
	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.	The tenements exist.	s are in good standin	g and no known imped	diments to expl	loration or mining
Exploration done by other parties	Acknowledgement and appraisal of exploration by other parties.	No other partie	es were involved in e	xploration.		
Geology	Deposit type, geological setting and style of mineralisation	Graphite at Ma capital known a preserved. A ty pedolith ("FER	alingunde occurs in a as the Lilongwe Plair pical profile from top P", 1-4m), mottled zo	termed a weathered p mostly topographicall where a deep tropical to base is generally sone ("MOTT", 4-7m), p ("SAPR", 25-35m) and	y flat area wes al weathering p soil ("SOIL" 0-1 allid saprolite (rofile is m) ferruginous ("PSAP", 7-9m),
Drill hole	A summary of all information material	Hole ID	Easting	Northing	RL	Depth
information	to the understanding of the	MGSA001	571575	8436200	1125	18.3
	exploration results including a	MGSA002 MGSA003	571330 572775	8436399 8434999	1129 1088	24 18
	tabulation of the following information	MGSA003	570751	8437000	1132	21
	for all Material drill holes: easting and	MGSA005	570610	8437000	1133	19
	northings of the drill hole collar;	MGSA006	570621	8436900	1135	23
	elevation or RL (Reduced Level-	MGSA007	572575	8435110	1096	7
	elevation above sea level in metres	MGSA008	570531	8437097	1132	21
	of the drill hole collar); dip and azimuth of the hole; down hole length and interception depth; and hole length	All holes were	vertical. Grid system	is WGS 84, Zone 36	South.	
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case	No information	has been excluded.			
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of highgrades) and cut-off grades are	No grade weig	hting or lower or upp	er cuts were used.		



Criteria	Explanation	Commentary
	usually Material and should be stated.	
	Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	Not applicable to these bulk metallurgical results.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values are used in this report.
Relationship between mineralisation widths &	These relationships are particularly important in the reporting of Exploration Results.	It is considered that the mineralisation lies in laterally extensive, near surface, moderate to shallowly dipping flat bodies in areas where the entire weathering profile is preserved and not significantly eroded.
intercept lengths	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Not applicable to this near-surface style of mineralisation and drilling style.
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'.	Downhole widths approximate true widths, though all mineralisation currently remains open at depth.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of the drill collar locations and appropriate sectional views.	A location map of the samples used in relation to the metallurgical test work conducted in this announcement are included in NGX's ASX announcement dated 5 February 2025. Refer to the Company's Prospectus lodged with ASIC on 12 April 2023 and on the ASX announcement platform on 16 June 2023.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high-grades and/or widths should be practiced to avoid misleading reporting of exploration results.	Refer to the Company's Prospectus lodged with ASIC on 12 April 2023 and on the ASX announcement platform on 16 June 2023
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to: geological observations; geophysical survey results; geochemical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	No other substantive exploration data is available.
Further work	The nature and scale of planned further work (e.g. test for lateral extensions or depth extensions or large-scale step-out drilling).	Further work involves working with numerous potential off-take partners to understand their product specifications required.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	A location map of the samples used in relation to the metallurgical test work conducted in this announcement are included in NGX's ASX announcement dated 5 February 2025. Refer to the Company's Prospectus lodged with ASIC on 12 April 2023 and on the ASX announcement platform on 16 June 2023.