ASX Release
28 September 2023

High Grade Graphite at Rullbo Project, Sweden

HIGHLIGHTS

- **Historic drilling identifies graphite mineralisation up to 120m wide and 1.6km long with mineralisation open along strike and at depth.**
- **Several additional outcropping graphitic schists mapped and sampled have increased the exploration potential of the project.**
- **Rock chip samples were taken from outcropping graphitic shales (Figure 2). Samples were submitted to ALS laboratory in Sweden for multi-element analysis (AuME-TL44) and Total Graphitic Carbon (C-IR18).**
- **Geophysical reprocessing of previous VLF surveys underway to assist in target generation together with a further mapping program in October.**
- **Metallurgical consultants are being engaged to determine metallurgical test work and front-end engineering program.**

Western Gold Resources (**ASX: WGR**) ("**WGR**" or "**the Company**") is pleased to advise that it has completed a field assessment exploring the graphite potential of the Rullbo prospect. As part of the field assessment WGR completed a rock chip sampling program, located historical collars, and logged the historic diamond core held at the National Drill Core housed at SGU's Mineral Resources Information Office in Malå.

For more details of the Rullbo project acquisition refer to ASX release 21st August 2023 "WGR to acquire Swedish High-Grade REE (>3.45% TREO) and Graphite (up to 20% TGC) Projects".

WGR Managing Director Warren Thorne commented:

"The ability of the exploration team to locate historic cores drilled by previous explorers and identify graphite mineralisation provides WGR with an opportunity to quickly understand the scale and tenure of mineralisation at the Rullbo project. The access to the drill core also allows WGR to undertake a preliminary metallurgical test work to determine flake size, impurities, microscopy, and physical and simple kinetic flotation tests to evaluate the recoverability of graphite. Coupled with the discovery of the historic Ni-Cu mine, Jättegruvan, discovered with exceptional rock chips containing up to 20% sulfides, the Rullbo project is displaying the exceptional exploration potential that the Company believed in.

A further mapping program in October as well as reprocessing of a previous VLF survey aims to further refine exploration targets. Given the strong start to the exploration program, WGR is confident in unlocking value for our shareholders".

Rullbo Graphite

The Rullbo project is situated within the southwestern part of the 1.97–1.87 Ga Bothnian Basin, north of the Bergslagen district. The Bothnian basin is dominated by metasedimentary rocks with minor intercalated metavolcanic rocks. The volcanosedimentary sequence was intruded by the 1843 Ma Ljusdal granite. The rocks were strongly affected by NW- to NNW-trending shear zones of the so-called Storsjö–Edsbyn deformation zone).

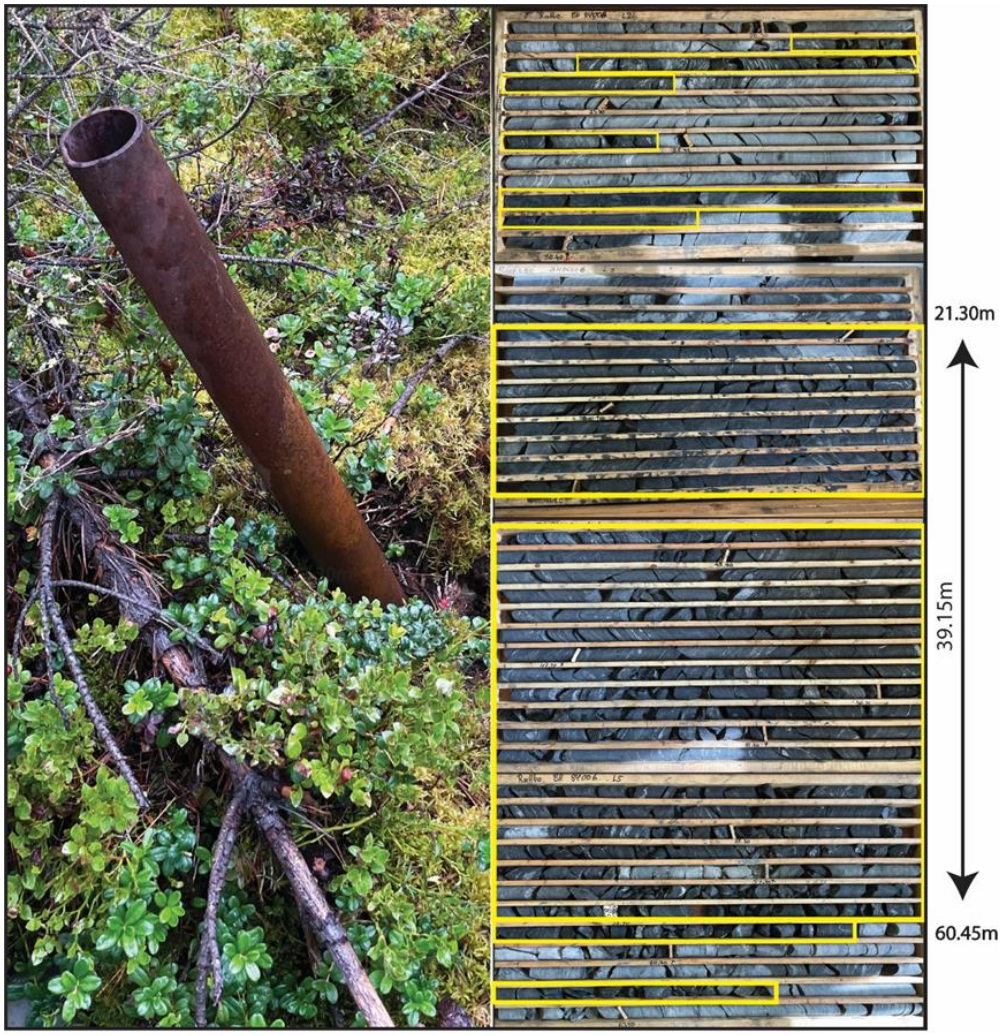

Figure 1. Historic drill collar (left) for diamond core 84006 displaying mineralised graphitic shale intercepts (right; in yellow)

The project area has seen previous exploration primarily for base metals with no active graphite exploration. Mapping by SGAB[1] and follow-up drilling of 9 diamond drill holes[2] identified graphitic shales. Graphitic shales, with a locally significant sulphide content of mainly pyrite and pyrrhotite occur in a band between the quartzite in the east and the greenstones in the west (Figure 2). The graphite content in the shales

varies greatly and in some cases the rock appears to consist solely of graphite and chlorite. The graphitic schist changes with increased admixture of terrigenous material and reduced graphite and sulphide content to a "normal" greywacke shale. The thickness appears to vary from one or a few meters to more than 50 m. Whether the observed large thicknesses are primary or caused by a folding of one or more layers is not clear.

WGR was able to verify the location of 5 of the 9 drill hole collars (Figure, 3; Table 1) providing confidence in the historic drill data. All nine holes were logged at the diamond core held at the National Drill Core housed at SGU's Mineral Resources Information Office in Malå. Graphite Intervals of the visible graphite mineralisation were logged (Table 1) in 7 of the 9 holes.

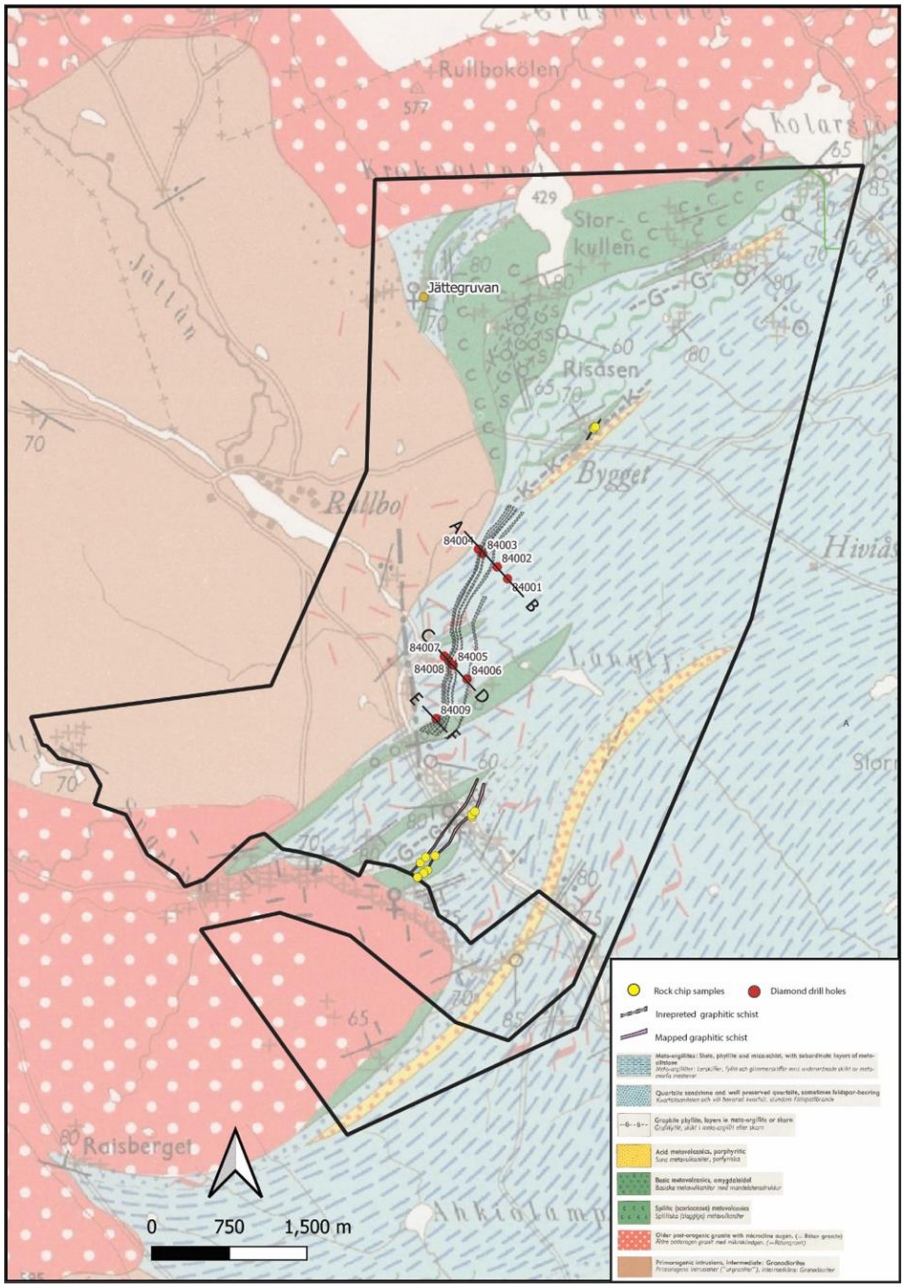

Figure 2. Rullbo 250k mapping with location of drillholes rock chip samples shown. Section lines of cross-sections displayed in Figure 3.

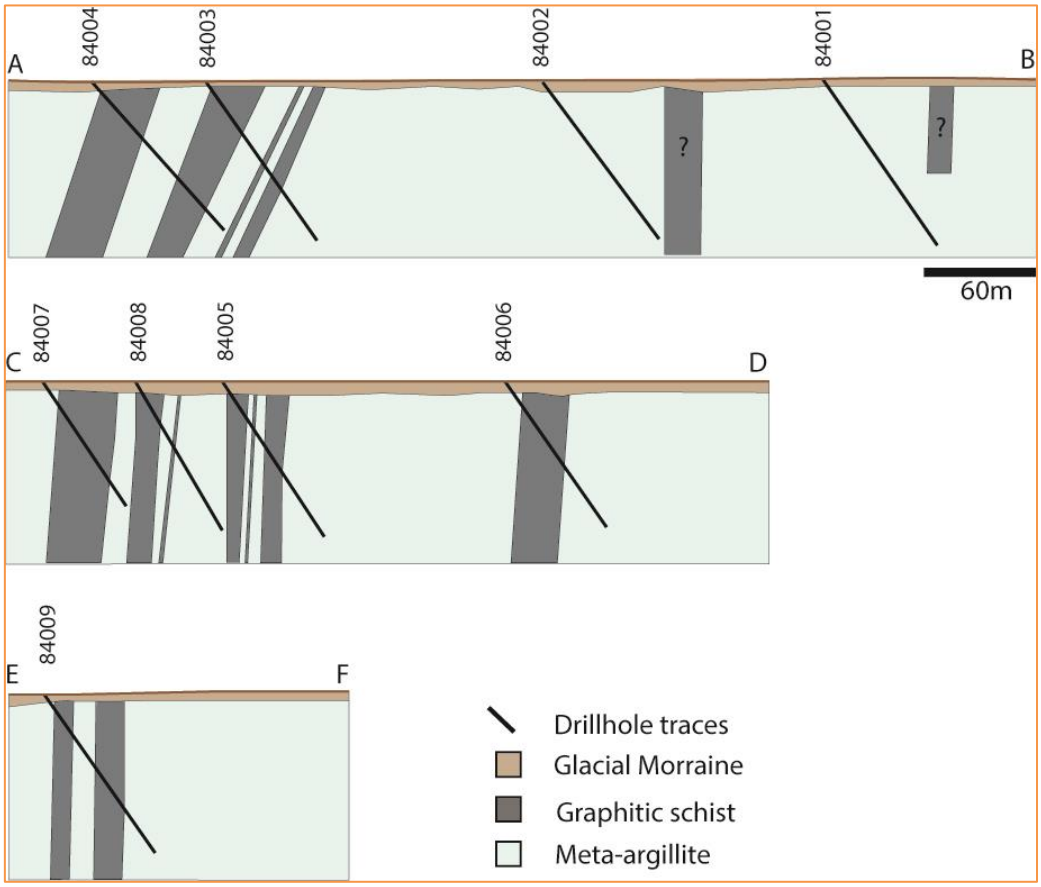

Figure 3. Rullbo graphite sections

Table 1. SGAB Drillholes 84001 to 84009 with logged graphite mineralisation intervals

									Graphite Mineralisation Logged		
DDH_ID	Northing	Easting	Drill Year	From	To	Core Length	Dip	Azimuth	From	To	Width
84001	6851102	1453145	1984	3.65	106.7	103.05	55	388.22	No significant intercepts		
84002	6851216	1453046	1984	4.7	101.55	96.85	55	386.37	No significant intercepts		
84003	6851346	1452908	1984	6.35	101.3	94.95	55	383	6.35	41.30	34.95
									50.40	51.30	0.90
									63.80	68.70	4.90
84004	6851389	1452867	1984	6	101.3	95.3	50	384	6.00	51.30	45.30
									71.40	89.90	18.50
84005	6850276	1452607	1984	3.7	105.5	101.8	50	374	3.70	28.60	24.90
									32.50	35.10	2.60
									40.20	58.20	18.00
									66.90	69.60	2.70
									75.00	78.20	3.20
84006	6850140	1452739	1984	8.6	100.05	91.45	50	380	20.35	22.50	2.15
									24.00	24.40	0.40
									28.00	29.50	1.50
									34.10	60.45	26.35
									62.20	62.70	0.50
84007	6850363	1452523	1984	3.7	81.8	78.1	50	356	12.00	70.20	58.20
84008	6850320	1452565	1984	4.3	74.5	70.2	55	364	9.50	21.78	12.28
									44.20	45.30	1.10
84009	6849763	1452435	1984	4.6	100.8	96.2	55	343	10.00	22.50	12.50
									38.00	63.00	25.00

A total of 827m core was logged of which 295.9m was interpreted to intersect graphite mineralisation. Graphite mineralisation was intersected on all three drill lines (Figure

3) over a strike length of 1600m and a width of up to 120m consisting of several sub-parallel bands.

In conjunction with the core logging of historic core, WGR completed a field mapping and rock-chip sampling program. Twelve rock chip samples were taken from outcropping graphitic shales (Figure 2). Samples were submitted to ALS laboratory in Sweden for multi-element analysis (AuME-TL44) and Total Graphitic Carbon (C-IR18).

Historical Exploration Results not in accordance with JORC Code 2012

Exploration results included in this announcement include geochemical analysis and geophysical surveys taken from reports compiled by previous explorers and which were not reported in accordance with the JORC Code 2012. The Company has not yet undertaken sufficient evaluation or exploration that would enable a Competent Person to confirm and report these exploration results in accordance with the JORC Code 2012. It is possible that following further evaluation and exploration work that the confidence in these results may be reduced. Nothing has come to the attention of the Company that causes it to question the accuracy or reliability of the historical exploration results. The Company has not independently validated the exploration results and is not to be regarded as adopting or endorsing them. There are no more recent available relevant exploration data.

Next Steps

The Company plans to undertake:

- Follow-up mapping and geochemical sampling program planned for late October 2023
- Sampling of core
- Reprocessing of existing geophysical surveys underway to aid in further target generation within Rullbo project.
- Engaging with metallurgical consultants to determine metallurgical test work and front-end engineering program.

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References

[1] PRAP 83530 Rullbo, Geologi, SGAB, 1983

[2] PRAP 84543 Rullbo, Borning Rullbo, SGAB, 1984

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Competent Person's Statement

The information in this report which relates to Exploration Results is based on information compiled by Dr Warren Thorne, he is a member of the Australasian Institute of Mining and Metallurgy (AusIMM) and a full-time employee of the company. Dr Thorne who is an option-holder, 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, Exploration Targets, Mineral Resources and Ore Reserves" (JORC

Code). Dr Thorne consents to inclusion in the report of the matters based on this information in the form and context in which it appears.

Forward-Looking Statements

This document includes forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning WGR's planned exploration programs, corporate activities, and any, and all, statements that are not historical facts. When used in this document, words such as "could," "plan," "estimate," "expect," "intend," "may", "potential," "should" and similar expressions are forward-looking statements. WGR believes that it has a reasonable basis for its forward-looking statements; however, forward-looking statements involve risks and uncertainties, and no assurance can be given that actual future results will be consistent with these forward-looking statements. All figures presented in this document are unaudited and this document does not contain any forecasts of profitability or loss.

JORC 2012 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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.*	Rock Chips • Rocks were selectively sampled to ensure high-level representivity of various rock and alteration types observed at each site. Samples collected were first-pass reconnaissance samples to develop familiarity with each of the prospects studied. Ni samples were collected from outcrop. Sample type, style, condition, and size were recorded for all samples collected by WGR. • Company rock chip samples attempted to be representative for the general outcrop in the area. Rock samples typically represented multiple chips from the broader outcrop using a hammer to collect the chips. • Company rock chip samples typically ranged from 0.5kg to 1.5kg in size. Drill holes Historical diamond drill holes have been sampled as half core samples taken over two metre length intervals.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).*	• Drilling has been undertaken using diamond coring methods. No reverse circulation, auger, or other drilling methods have been used. • Reported historical drilling are WL56 diamond drillholes (39mm core diameter)
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	• Core recovery was not recorded in historical holes at the time.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Company records of the rock chip results were qualitative. • Historical drill holes and trenches were logged by LKAB at the time. Records available from the time are limited, although historical reports were provided as scanned documents. Simple geological/graphic logs recording lithology/rock type for each interval in drill holes and costeans are available. The reports also include cross sections of drill holes and

		costeans showing graphite intersections and laboratory analytical results
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Samples were taken over regular two metre intervals and analysed as half-core samples. Sampling information for costeans is limited although from historical reports it is understood samples were taken as rock chips. Sample preparation procedures used historically are unknown. No QA/QC sampling exists for historical drill holes.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• The Company collected 9 rock chip samples. • All WGR samples were submitted to ALS laboratories, Piteå • Samples very, dried, fine crush entire sample to better than 70% -2mm, rotary split off up to 250g and pulverize split to better than 85% passing 75 micron. • Au(0.01-1ppm) and Multi Element package(50g nominal sample weight) from an Aqua Regia Digestion and a combination of ICP-AES & ICP-MS finish. Samples were also submitted for Total Graphitic Carbon content by IR spectroscopy (C-IR18)

AuME-TL43™ (25g sample) & AuME-TL44™ (50g sample) Analytes & Ranges (ppm)							
Au	0.001-1	Cs	0.05-500	Mo	0.05-10000	Sr	0.2-10000
Ag	0.01-100	Cu	0.2-10000	Na	0.01-10%	Ta	0.01-500
Al	0.01-25%	Fe	0.01-50%	Nb	0.05-500	Te	0.01-500
As	0.1-10000	Ga	0.05-10000	Ni	0.2-10000	Th	0.2-10000
B	10-10000	Ge	0.05-500	P	10-10000	Ti	0.005-10%
Ba	10-10000	Hf	0.02-500	Pb	0.2-10000	Tl	0.02-10000
Be	0.05-1000	Hg	0.01-10000	Rb	0.1-10000	U	0.05-10000
Bi	0.01-10000	In	0.005-500	Re	0.001-50	V	1-10000
Ca	0.01-25%	K	0.01-10%	S	0.01-10%	W	0.05-10000
Cd	0.01-2000	La	0.2-10000	Sb	0.05-10000	Y	0.05-10000
Ce	0.02-10000	Li	0.1-10000	Sc	0.1-10000	Zn	2-10000
Co	0.1-10000	Mg	0.01-25%	Se	0.2-1000	Zr	0.5-500
Cr	1-10000	Mn	5-50000	Sn	0.2-500		

		ALS routinely inserts analytical blanks, standards and duplicates into the client sample batches for laboratory QAQC performance monitoring.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Data was extracted from the SGU website ww.sgu.se/en
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Grid system is SWEREF 99 TM [EPSG: 3006] • All samples were located using a handheld GPS system • Topographic control is not reported but GPS elevation data is sufficient for the reconnaissance nature of the sampling.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Drillholes were drilled at 60m spacing on line 900m and 600 apart, along strike of graphitic shale units
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• All drill holes have been drilled along fences/sections orientated approximately perpendicular to the strike of the graphite mineralised unit. This is deemed appropriate to avoid sampling bias considering the geometry of the deposit. • Drill holes have been completed at inclinations of between 50° and 55° from horizontal to intersect the near vertical or sub-horizontal graphite mineralisation. As such, drill hole intersections are oblique to the mineralisation
Sample security	• *The measures taken to ensure sample security.*	• All samples were collected and accounted for by WGR employee during collection. All samples were bagged into calico bags and tied. Samples were transported to Pitea from logging site by WGR employees and submitted directly to ALS. • The appropriate manifest of sample numbers and a sample submission form containing laboratory instructions were submitted to the laboratory. Any discrepancies between sample submissions and samples received were routinely followed up and accounted for.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• None undertaken at this stage.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding*	• The Rullbo nr 100 permit is under application and are not yet granted

land tenure status	*royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.*	
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Exploration was initially undertaken during the early 1900's by several private entities and the Swedish Geological Survey (SGU).
Geology	• *Deposit type, geological setting and style of mineralisation.*	. The Rullbo area is divided into two main tectonic and petrographic areas; a mudstone area with subordinate sediments in the northwest and a metasediment area with subordinate acidic, intermediate, and basic volcanics in the southeast. The greenstone area forms a rather steeply dipping profile towards the northeast, and in the central and southeastern part of the Rullbo area, the metasediments form a steep anticlinal structure. Graphitic schist, with a locally significant sulfide content of mainly magnetite and pyrite occurs in a line between the quartzite in the south and the greenstones in north. One or more graphite-bearing horizons probably also occur in the area north of Gruvbackarna, i.e., in the western branch of the greenstone formation. The graphite content in the shales varies greatly, and in some cases the rock appears to consist solely of graphite and chlorite. The graphite shale transforms into a gravelly shale with increased admixture of terrigenous material and reduced graphite and sulphide content. The thickness seems to vary from a few meters to more than 40 m. Whether the observed large thicknesses are primary or caused by a folding of one or more layers is not clear. Graphite mineralisation is interpreted to be the result of local metasomatic reactions related to granitic intrusions.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* • *If the exclusion of this information is justified on the basis that the information is*	• Drilling information shown in Table 1

	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.	
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No weighting or averaging techniques have been applied to the sample assay results.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• All drill holes have been drilled along fences/sections orientated approximately perpendicular to the strike of the graphite mineralised unit. This is deemed appropriate to avoid sampling bias considering the geometry of the deposit. • Drill holes have been drilled at 50°-55° inclination, with the graphite mineralisation being approximately sub-vertical or near vertical (65°-85°). •
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Appropriate maps, have been included within this report
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.*	• Historic results have been reported as reported by SGU
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.*	• The Company is not in possession of other relevant exploration results
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Systematic geochemical sampling of known mineral occurrences within the tenement in conjunction with reconnaissance geological mapping. • Existing geophysical surveys will be purchased and reprocessed to help define prospective regions.