

Geophysical Interpretation identifies 8 graphite targets at Loberget and Hogaberg graphite projects, over combined 30.8km strike length - Sweden

HIGHLIGHTS

Loberget

- Three subparallel NW-striking conductors (A-C) identified with a combined strike length of 11.5km
- Previous rock chip sampling identified two zones of graphitic schist outcrop up with samples up to 15.9% TGC coincident with target conductor.
- Planning for Loupe mobile TEM survey in March underway

<u>Hogaberg</u>

- Five subparallel NW-striking conductors (D-H) identified with a <u>combined</u> <u>strike length of 19.3km</u>
- Historic drillholes 85005 from Hogaberg intersected 5.00m @ 8.5% TGC
- Resampling of graphitic schist from historic diamond holes underway
- Graphitic schist intercepts are coincident with areas of low resistivity that strike northwest over a strike length of 4km.

Western Gold Resources (**ASX: WGR**) ("**WGR**" or "**the Company**") is pleased to advise that Geovista has completed a compilation and interpretation of existing geophysical datasets over the Loberget and Hogaberg projects (Figure 1). Both projects are located north, and along, strike, of the Woxna graphite mine and adjacent to the Mattsmyra and Gropado graphite deposits with a combined NI 43-101 Indicated and Inferred resource of 10.23Mt @ 7.34 % TGC¹.

WGR Managing Director Warren Thorne commented:

"Using the expertise of Geovista to compile historic data and interpret multiple airborne and ground geophysics programs, has allowed WGR to identify the highly conductive zones, synonymous with graphite mineralisation, at the Loberget and Hogabert projects.

At Loberget, the conductors are coincident with outcrop containing up to 15.9% TGC. At Hogabert, historic drilling intersected the graphite targets horizons, highlighting the *exploration potential within the project. WGR will conduct further field work, Loupe EM surveys and trenching to develop targets for drilling".*

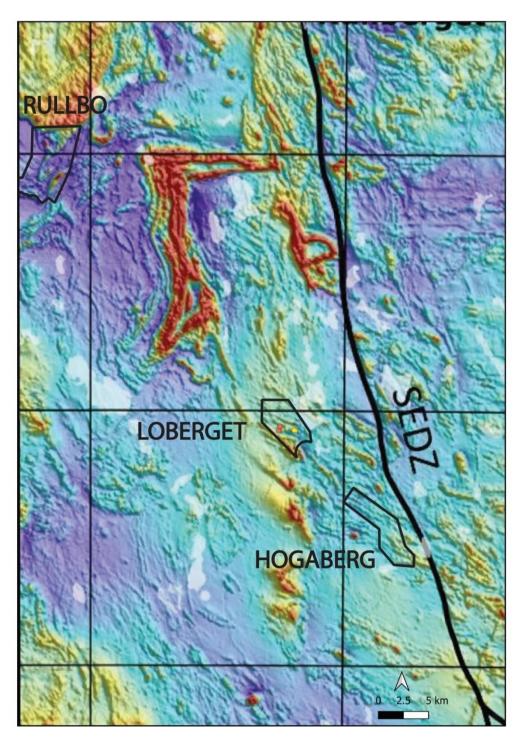


Figure 1. Approved Rullbo, Loberget and Hogaberg licenses on regional TMI and location of the Storsjon-Edsbyn Deformation Zone (SEDZ)

Geophysics Data Compilation

WGR engaged Geovista to complete a review of all historic geophysical data over the Loberget and Holmtjarn licenses. Airborne and ground geophysical data, including petrophysical data, were compiled and evaluated. The different datasets were interpreted qualitatively, method by method, and a combined interpretation was carried out with focus on physical properties and structural features, and their relation to known mineralization within, and close to, the two license areas.

The Loberget and Högaberg licenses are both in a similar geological environment, defined by roughly NW-SE trending good electrical conductors, that are several kilometres long and continuous that coincide with magnetic banding with increased magnetization. There is a well-defined spatial correlation between these conductors and known occurrences of graphite, Fe-sulphide and Fe-oxide mineralization.

Loberget Graphite Project

At Loberget, regional NNW-SSE oriented low magnetic zones (mylonite zones) and a dominant fabric of NW-SE oriented magnetic features (bodies and banding) is interpreted. Many of the electrical conductors coincide and follow the positive magnetic units. Several conductors that crosscut the magnetic fabric, having NE-SW to N-S orientation, are interpreted to be dextral fault structures.

Previous field programs by the company identified graphite mineralisation in two outcrop areas with rock chips samples containing up to 15.9 % TGC (See ASX announcement 6th December 2023). The two areas of graphitic schist outcrop, 1.6km apart, (Western and Eastern) strike at approximately 290° and dip steeply (70-80°) to the south-west. The graphitic schist outcrops are coincident with the Target C (Figure 2), a 5km-long conductive zone that is offset in the south by dextral N-S faulting, Targets A and B are sub-parallel to Target C, similar geophysical signature, and likely represent repetition of the graphitic shale layers.

Högaberg Graphite Project

A similar geological framework exists at Högaberg (Figure 2). Regional NNW-SSE oriented low magnetic zones (mylonite zones) and a dominant fabric of WNW-ESE oriented magnetic features (bodies and banding). Most of the electrical conductors coincide and follow the positive magnetic units. There is a clear swing in the orientation of the magnetic fabric, from NW-SE at Loberget, WNW-ESE in the central part of Högaberg to E-W in the southeastern part of the Högaberg license area.

Mapping by SGAB¹ and follow-up drilling of 6 diamond drill holes² identified graphitic shales at Hälltjärnarna, located in the NW of the Hogaberg license (Figure 2). All six holes were logged (Table 1) at the diamond core held at the National Drill Core housed at SGU's Mineral Resources Information Office in Malå. Resampling of the holes was completed with samples were submitted to ALS laboratory in Sweden for multi-element analysis (ME-ICP61) and Total Graphitic Carbon (C-IR18). Diamond drill holes 91005 contained 5.00m @ 8.30% TGC demonstrating the high-grade potential of the geophysical targets (Figure 2; Targets D-H).

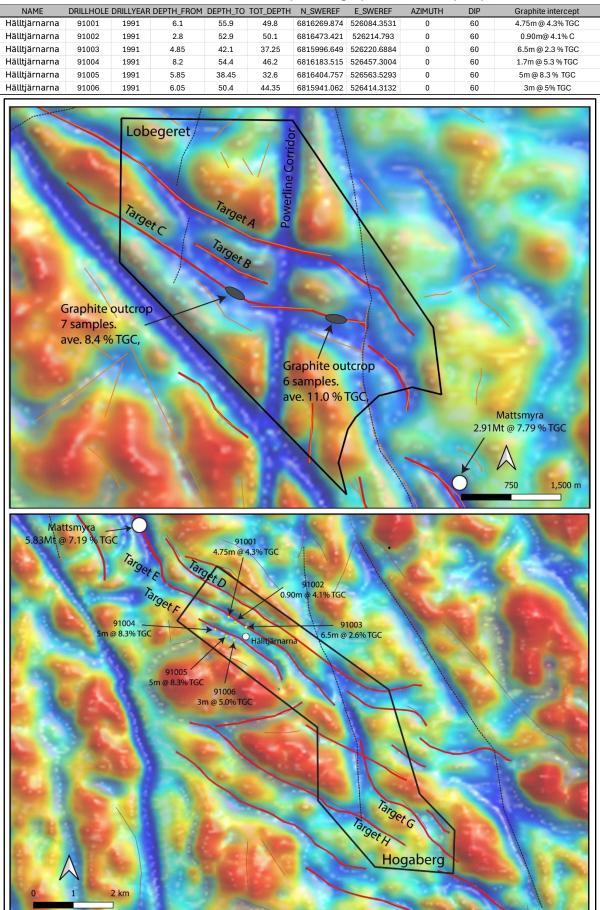


Table 2. Historic drillholes resampled for graphite at Rullbo prospect.

Figure 2. Geophysical targets at Loberget and Hogaberg licences, with previous rock chip and historic drill holes displayed (on Apparent Resistivity VLF)

The project area has seen previous exploration primarily for base metals with no active graphite exploration (see ASX Announcement 28th September

References

¹ NI 43-101 Technical Report - Woxna Graphite, 2021 ² PRAP 91524 Grafit - Voxna, Brorning, SGAB, 1984

Next Steps

With the significant progress made in the 2023, WGR will look to predominantly conduct geophysical programs over the coming winter.

The Company plans to undertake:

- Assess geochemical assays from re-assayed holes at Hogaberg.
- Complete Loupe EM survey over priority geophysical targets.
- Complete trenching campaign to determine width and grade of graphite mineralisation.

AUTHORISED FOR RELEASE ON THE ASX BY THE COMPANY'S BOARD OF DIRECTORS

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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. 	 Historical diamond drill holes have been sampled as half core and quarter core samples taken over two approximately 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. WGR relogged samples and recovery of core was measured using tape measure directly from core.
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 diamond core were qualitative.

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. 	• W ir	Diamond core Vhere previou ntervals were Io QA/QC sar	is samplir e either all	ng had be l half-core	en comple e or quarte	r-core.	core, WGR	sample
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. 	C S ra 7 A A a a ir A	 cutting and analysis. 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 A prepared sample (0.25 g) is digested with perchloric, nitric, hydrofluor and hydrochloric acids. The residue is topped up with dilute hydrochloric acid and the resulting solution is analyzed by inductively coupled plasma atomic emission spectrometry. Results are corrected for spectral interelement interferences. 						-2mm, passing drofluoric cochloric d plasma into the
		C	Lient sample ELEMENT Silver Aluminum Arsenic Barium Beryllium Bismuth Calcium Cadmium Cobalt Chromium Copper Iron Gallium Potassium	batches fill Ag Al As Ba Ba Ba Bi Ca Cd Ca Cr Cu Fe Ga K K	or labora ppm % ppm ppm ppm ppm ppm ppm	IOWER LIMIT 0.5 0.01 5 10 2 0.51 2.011 0.5 10 2.011 1.01 0.51 1.1 1.1 1.1 1.01 0.01 0.01	Performar 100 50 10,000 10,000 10,000 10,000 50 50 500 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10	DEFAULT OVER- LIMIT METHOD Ag-OG62 -	

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]
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 250m spacing 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 60° from horizontal to intersect the near vertical or sub-horizontal graphite mineralisation. As such, drill hole intersections are obligue 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 royalties, native title interests, historical sites, wilderness or national park and environmental settings. 	• The Loberget nr 100 and Hogaberg nr 100 licenses have been granted.				

land tenure status	•	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 local geology is dominated by steeply to moderately dipping porphyroblastic metavolcanic and meta-argillic lithologies with common intrusive alkali pegmatites. Bedrock mapping and geophysical interpretation indicate the presence of an offset off a regional-scale shear fault with dextral sense of motion. The graphite mineralisation is broken up into several discrete domains with lower-order faulting normal to this large fault zone.). The nearby Mattsmyra deposit seems to have higher grade metamorphism present, with prograde metamorphism to sillimanite grade and later retrograde metamorphism to chlorite grade, with chlorite, epidote, and phlogophite present in iron- and magnesium-rich lithologies
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 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. 	•	Drilling information shown in Table 1.
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 60° 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 avoiding 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.	•	Slingram VLF data (1991, SGU) was collected over Gropabo and Halltjararna with 3.6 kHz and 18 kHz, with coil separations of 40 m and 60 m (horizontal coils). The data are reported as Imaginary component in percent of the primary field. Positioning was done in local survey grids that later have been reprojected to RT90 2,5 gon väst by SGU.
			•	Halltjarnarna - Grid Datum, X 6817870N, 1452810E, Azi, 278. Point density 80x10m, Proton Magnetometer. Gropabo - Grid Datum, X 6813520N, 1486890E, Azi, 278. Point density 20x10m, Broton Magnetometer.
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.	•	20x10m, Proton Magnetometer. Systematic geochemical sampling of known mineral occurrences within the tenement in conjunction with reconnaissance geological mapping. Complete Loupe EM survey over priority geophysical targets. Complete trenching campaign to determine width and grade of graphite mineralisation