ASX Release
5 October 2023

WGR adds 9.5km strike to exploration target - Loberget graphite project

HIGHLIGHTS

- **Confirmation of high-grade Graphite potential at Loberget nr 100 project with rock chip sample of graphitic schist with 10% TGC.**
- **Recent field mapping confirms and supports graphite exploration model.**
- **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.**
- **New project application submitted with Hogabert nr 100 permit that extends exploration target by 9.5km along strike from and between the Woxna Graphite Mine and the Mattsmyra graphite resource.**
- **Eight diamond holes drilled within the Hogabert permit are held at the National Drill Core housed at SGU's Mineral Resources Information Office in Malå and will be inspected shortly.**

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 Loberget prospect. As part of the field assessment WGR completed a mapping program and a small rock chip sampling program given the limited outcrop within the permit area. Based on these field observations and historic data review, WGR applied for the new Hogabert permit (Figure 1) located north of the Woxna graphite mine.

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:

"Given the thick moraine cover within the tenement, the identification of outcropping graphitic shale is a testament to the hard work of the exploration team. The high TGC (10 % TGC) of the graphitic shale adds support to the exploration model that is targeting high-conductivity zones within the granitic basement. With a greater understanding of the geological and structural controls of graphite mineralisation WGR has applied for the Hogabert exploration permit, located between the Woxna Graphite

mine and Mattsmyra graphite resource. WGR believes that the area matches the exploration model successfully tested at the Loberget project, providing an additional 9.5km of strike length and improving the scale to the project".

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".

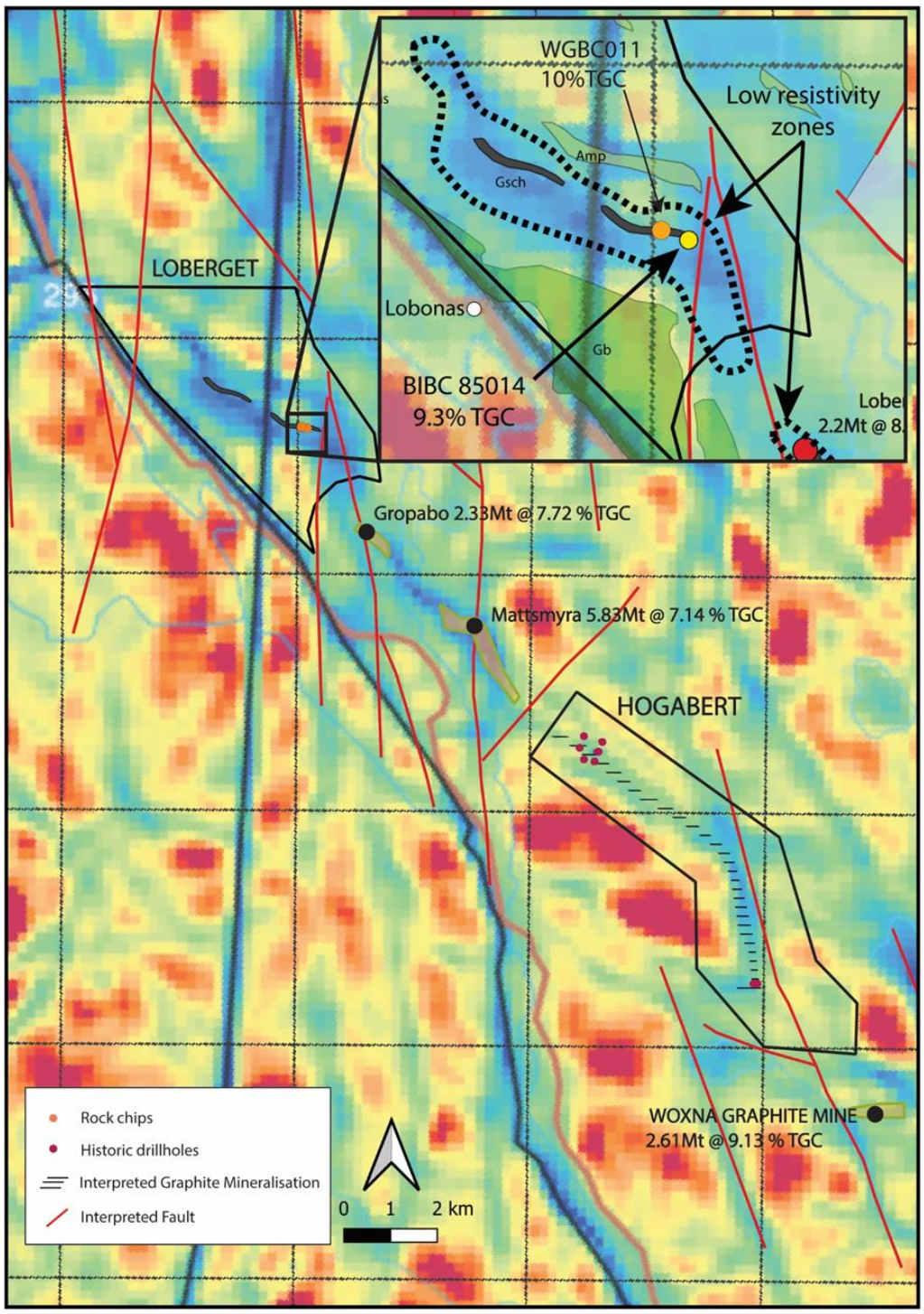

Figure 1. Loberget and Hogabert permit applications with interpreted graphite mineralisation displayed. Inset shows location of rock chip sample WGBC011.

Loberget Graphite Project

Graphite mineralization occurs in prehnite-bearing meta-tuffs, garnetiferous meta-argillites and pegmatitic gneiss in at least three discontinuous, stratiform graphite-pyrrhotite horizons. Based on unexplored geophysical targets of low resistivity, WGR has identified two favourable horizons that extend to the northwest of the Gropado resource (Figure 1). Structural interpretation supports previous field observations that north-trending dextral faults have cut the graphitic horizons into several bodies and folding attributing to the structural repetition of the mineralised zones. Individual bodies of mineralization have a thickness of 3-30m, but, due to structural repetition, may attain true thicknesses of up to 55m.

Svererigas Geolokista AB (SGAB)[1] had previously identified a boulder sample a high C (9.3%) value taken from the one sample (BIBC 85014) within the Loberget permit area. Four rock chip samples of basement rock were submitted for multi-element and TGC analysis (Table 1) were taken by WGR with one sample (WGBC011) containing 10% TGC (Figure 2).

Figure 2. Outcrop of graphitic shale at Loberget

Hogabert Graphite Project

The Sweden Geological Society (SGS) followed the discovery of the graphite in the region mineralisation with a systematic exploration programme from 1985 onwards

starting with a trenching programme, a diamond drilling campaign and both regional airborne and local ground-based electromagnetic (EM) surveys.

Flinders Mines[2] identified the continuation of mica-and carbonate-rich sedimentary rocks within quartz-feldspar rich sandstone and greywacke that extend south of the Mattsmyra graphite deposit. These sedimentary rocks host the graphite mineralisation of the Mattsmyra deposit and are coincident with high conductivity areas interpreted from a regional Slingram airborne survey (Figure 1). Eight diamond holes drilled within the Hogabert permit are held at the National Drill Core housed at SGU's Mineral Resources Information Office in Malå. No historic reports are available for these drill holes.

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
- Logging and sampling of historic drill core
- Reprocessing of existing geophysical surveys underway to aid in further target generation within Loberget and Hogabert projects.

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References

[1] PRAP 88536 Grafit Regionalt SGAB, 1988

2 Flinders Mine NI 43 -101 Technical Report – Woxna Graphite, 2021

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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.

Table 1. Rock chip multielement (AuME-TL44) and C assay results (C-IR18)

Name	Easting	Northing	Au	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W	Y	Zn	Zr	C Graphitic
WGB008	1477325	6825152	0.003	0.84	1.52	1.5	<10	10	0.44	0.66	0.93	1	30.2	6	46	0.66	207	4.97	6.8	0.12	0.29	0.02	0.076	0.11	15.1	8.5	0.7	314	4.45	0.02	0.25	9.2	490	12.8	8.6	0.004	1.24	0.07	6.4	2.5	1.9	12.2	<0.01	0.19	11.8	0.182	0.14	11.7	76	0.37	10.3	103	10.6	
WGB009	1477371	6825148	0.001	0.82	1.63	7.4	<10	10	0.29	0.34	0.43	0.69	7.1	13	17	1.16	275	6.68	6.7	0.07	0.06	0.02	0.051	0.07	3.4	12.3	0.4	217	11	0.03	<0.05	56.4	240	7.1	6.1	0.005	2.34	0.07	3.6	1.3	0.2	4.4	<0.01	0.31	1.6	0.046	0.49	8.5	54	0.11	2.91	171	2.2	
WGB010	1477460	6825134	0.001	0.39	0.79	1.1	<10	10	1.12	0.14	0.07	1.14	17.9	3.1	10	2.64	75.9	1.86	3.69	<0.05	0.03	0.02	0.039	0.24	8.5	9.2	0.42	159	3.72	0.05	0.2	15	120	10.8	16.2	0.003	0.84	<0.05	0.4	1.9	0.2	12.4	<0.01	0.07	4.3	0.008	0.18	1.48	7	0.11	2.73	199	1.2	
WGBC011	1477338	6825168	0.001	1.8	0.42	2.2	<10	10	0.11	0.71	0.02	0.2	48	2.1	44	0.62	256	4.92	6.63	0.13	0.16	0.02	0.103	0.08	22.9	1.6	0.13	46	37.4	0.03	0.12	9.9	130	10	4.8	0.016	0.2	<0.05	3.4	12.6	0.4	3.8	<0.01	0.38	16.6	0.103	0.08	5.96	176	<0.05	4.81	120	6.7	10

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 the 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.
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).*	• No drilling
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.*	• No drilling
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.
Sub-sampling techniques and	• *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*	• No drilling

sample preparation	*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.*	
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 4 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) ALS routinely inserts analytical blanks, standards and duplicates into the client sample batches for laboratory QAQC performance monitoring.

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		

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.*	• No drilling
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.*	• No drilling
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 land tenure status	• *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 security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.*	• The Loberget nr 100 and Hogabert nr 100 permit are under application and are not yet granted

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.*
		• No drilling

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	• *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*	• No drilling

intercept lengths	*clear statement to this effect (eg 'down hole length, true width not known').*	
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.*	• 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.