

15 July 2019

Dissemination of a Regulatory Announcement that contains inside information according to REGULATION (EU) No 596/2014 (MAR).

Greatland Gold plc ("Greatland" or "the Company")

Paterson Range East – Airborne Survey Results and Exploration Update

Numerous high-priority targets identified following detailed, low-level aeromagnetic survey covering entire Paterson Range East licence

Greatland Gold plc (AIM: GGP), the precious and base metals exploration and development company, is pleased to announce that it has identified numerous high-priority exploration targets at Paterson Range East following a high-resolution, low-level aeromagnetic survey conducted over the entire licence area.

The Paterson Range East licence, E45/4928, is 100% owned by Greatland and lies approximately 25 kilometres north of the Company's Havieron gold-copper prospect. The licence covers 224 square kilometres of Proterozoic basement rocks prospective for Havieron style gold-copper mineralisation.

Key Highlights

- New aeromagnetic data collected across Paterson Range East successfully identifies and defines numerous high-priority targets with a similar magnetic signature to Havieron.
- Modelling of high-priority aeromagnetic targets is underway and these will be subject to detailed, grid-based ground gravity and surface geochemical work.
- Comprehensive ground gravity and surface geochemistry is expected to commence in August.
- High-priority targets will then be subject to further modelling and follow-up work, which may include Induced Polarisation ("IP") and/or Electromagnetic ("EM") geophysical surveys, prior to drill testing.

Gervaise Heddle, Chief Executive Officer, commented: "We are very pleased with the encouraging data collected from this detailed, high-resolution survey, which clearly defines numerous high-priority targets at Paterson Range East with a similar discrete magnetic signature to Havieron. We plan to quickly follow up these results with the launch of comprehensive ground gravity and surface geochemical surveys next month.

"The combination of a focused suite of geophysical and geochemical tools provides us with a fast, effective and relatively low-cost method to screen for high-priority targets over a large area. We look forward to providing more detail on our exploration activities at Paterson Range East as the programme progresses."



An image of the detailed aeromagnetic data collected across the Paterson Range East licence can be found on the Paterson project page of Greatland's website at: www.greatlandgold.com/paterson/

Overview of Paterson Project and Paterson Range East licence

The Company's Paterson project comprises the Havieron, Paterson Range East, and Black Hills licences, located in the Paterson region of northern Western Australia. The three licences collectively cover more than 385 square kilometres and are prospective for Telfer style gold-copper deposits, and Havieron style gold-copper mineralisation.

The Paterson region is currently one of the most active exploration areas in Australia. Recent exploration success achieved by Greatland and Rio Tinto demonstrates the region has been underexplored, particularly the extensive areas under cover. As well as hosting several large gold and copper deposits such as Telfer and Nifty, more recent exploration has outlined several other deposits including Magnum (Au), Calibre (Au), O'Callaghans (W, Cu) and Maroochydore (Cu). The region is remote, however infrastructure is good with several operating mines, roads, formed tracks and rail networks nearby which branch out from the regional industrial hub of Port Hedland 500km to the west.

The Paterson Range East licence, E45/4928, lies approximately 25 kilometres north of the Havieron gold-copper prospect. The Havieron prospect is currently under a Farm-In agreement with Newcrest Operations Limited, while Paterson Range East remains 100% owned and operated by Greatland. The Paterson Range East licence covers 224 square kilometres of Proterozoic basement rocks prospective for Havieron style gold-copper mineralisation. Basement rocks are covered by varying amounts of younger Permian sediments ranging in depth from less than 100m up to more than 400m based on sparse historical drilling.

It is widely recognised that additional gold-copper discoveries in the Paterson will come from areas under cover, and that geophysics is a critical component of the discovery process. For example, Greatland's exploration success at Havieron was largely driven by the application of detailed aeromagnetic and ground gravity geophysical data sets and subsequent modelling.

Following an internal review of historical regional geophysical and geochemical data over the western Paterson region, approximately 50 targets were identified with some 25 in ground held by Greatland, and around twenty within the Paterson Range East licence. Basement rocks are interpreted to be predominantly calcareous rich sandstones intruded by several late stage granitic bodies. Historically, several of these targets have been subject to initial first-pass work and show promise at hosting mineralisation as seen at Havieron. The geophysical signature of these targets is similar to that at Havieron, i.e. the targets display a strong magnetic response relative to the surrounding rocks.

A detailed, low-level 50m line spaced aeromagnetic survey was collected over Havieron in 2005 (by a previous operator) and this data was critical in delineation and drill targeting for Greatland's highly successful 2018 campaign (HAD001-HAD009). To expand this successful approach, Greatland commissioned a new, detailed, low-level airborne magnetic survey to cover the entire Paterson Range East licence. The survey comprised approximately 5,200 line



kilometres at a line spacing of 50m with a mean terrain clearance of 40m. Previous aeromagnetic coverage of the area included 200m and 400m line spaced surveys.

The new 50m line spaced aeromagnetic survey by Greatland is complete and final data received. The data provides significantly increased resolution of basement features and has been successful in identifying and defining numerous high priority magnetic targets similar to that seen at Havieron (Figure 1). The data will also assist in geological and structural interpretation of basement features over the entire licence area.



Figure 1 – Paterson Range East Aeromagnetic Targets

Modelling of high-priority aeromagnetic targets within the Paterson Range East licence is underway and these will be subject to detailed, grid-based ground gravity and surface geochemical work. Comprehensive ground gravity and surface geochemistry is scheduled to commence next month. Detailed aeromagnetic and ground gravity information will then be modelled with modern 3D inversion techniques and subject to a multi-stage screening process which may include IP (Induced Polarisation) and/or EM (Electromagnetic) follow-up geophysical surveys. Drill testing of selected targets will then be undertaken.

Additional information on the Paterson Range East licence can be found at the Company's web site: www greatlandgold.com

In addition to this release, a PDF version of this report, with supplementary information can be found at the Company's web site <u>www.greatlandgold.com/media/jorc</u>



Competent Person:

Information in this announcement that relates to exploration results is based on information compiled by Mr Mick Sawyer, a full time employee and Exploration Manager for Greatland Pty Ltd, who is a member of the Australian Institute of Geoscientists and is a Registered Professional Geoscientist (R.P.Geo #10194). Mr Sawyer has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which has been undertaken to qualify as a Competent Person as defined by the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code) and under the AIM Rules - Note for Mining and Oil & Gas Companies. Mr Sawyer consents to the inclusion in the announcement of the matters based on their information in the form and context in which it appears.

Information in this announcement that relates to Paterson Range East exploration results has been extracted from the following announcements:

"Exploration to Commence at Paterson Range East", dated 22 May 2019 "Rio Tinto Exploration Update – Winu project" dated 6 June 2019 "Rio Tinto Exploration Update – copper-gold mineralisation discovered in the Paterson Province in the far eat Pilbara region of Western Australia" dated 27 Feb 2019

Enquiries:

Greatland Gold PLC

Gervaise Heddle/Callum Baxter Tel: +44 (0)20 3709 4900 Email: info@greatlandgold.com www.greatlandgold.com

SPARK Advisory Partners Limited (Nominated Adviser)

Andrew Emmott/James Keeshan Tel: +44 (0)20 3368 3550

SI Capital Limited (Broker) Nick Emerson/Alan Gunn Tel: +44 (0)14 8341 3500

Luther Pendragon (Media and Investor Relations)

Harry Chathli/Alexis Gore/Joe Quinlan Tel: +44 (0)20 7618 9100

Notes for Editors:

Greatland Gold plc is a London-listed (LON:GGP) natural resource exploration and development company with a current focus on gold, copper and nickel exploration projects.



The Company has six main projects; four situated in Western Australia and two in Tasmania. All projects are 100% owned by Greatland.

In March 2019, Greatland signed a Farm-in Agreement with Newcrest Operations Limited, a wholly-owned subsidiary of Newcrest Mining Limited (ASX:NCM), to explore and develop Greatland's Havieron gold-copper project in the Paterson region of Western Australia. Newcrest has the right to acquire up to a 70% interest in a 12-block area within E45/4701 that covers the Havieron target by spending up to US\$65m.

Greatland is seeking to identify large mineral deposits in areas that have not been subject to extensive exploration previously. It is widely recognised that the next generation of large deposits will come from such under-explored areas and Greatland is applying advanced exploration techniques to investigate a number of carefully selected targets within its focused licence portfolio.

The Company is also actively investigating a range of new opportunities in precious and strategic metals and will update the market on new opportunities as and when appropriate.

JORC Code 2012: Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	Explanation	Commentary				
Sampling	• Nature and quality of sampling (eg cut	Aircraft Type				
techniques	channels, random chips, or specific specialised industry standard measurement	Cessna 210				
	tools appropriate to the minerals under	Acquisition system				
	sondes, or handheld XRF instruments, etc).	 High speed digital data acquisition system 				
	limiting the broad meaning of sampling.	Sample rates up to 20 Hz				
 Include reference to m ensure sample repress appropriate calibrat measurement tools or Aspects of the de mineralisation that are 	 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 	 Integrated Novatel OEM DGPS receiver providing positional information, to tag incoming data streams in addition to providing pilot navigation guidance High precision caesium vapour 				
	Public Report. In cases where 'industry	magnetometer				
	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	 Visual real time on-screen system monitoring / error messages to limit re-flights due to equipment failure 				
	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.	Magnetometers				
		 Tail sensor mounted in a stinger housing 				
		 Model / Type - G-823 caesium vapour magnetometer 				
		Resolution - 0.001 nT resolution				
		• Sensitivity - 0.01 nT sensitivity				
		 Sample Rate - 20 Hz (approximately 3.5 m) 				
		 Compensation - 3-axis fluxgate magnetometer 				
		Gamma-Ray Spectrometer				
		 RSI RS-500 gamma-ray spectrometer, incorporating 2x RSX-4 detector packs 				
		Total Crystal Volume: 32 L				
		Channels: 1024				
		• Sample Rate: 2 Hz				
		 Multi-peak automatic gain stabilisation 				

Magnetic Base Stations							
GE Sci pre ma	M GSM-19 Overhauser and intrex Envi-Mag proton ecession base station agnetometers.						
• Re	solution - 0.01 / 0.1 nT						
• Ac	curacy - 0.1 / 0.5 nT						
• Sa	mple Rate - 1.0 / 0.5 Hz						
Th sec column	e GEM GSM-19 sampling at 1 cond was used for all rrections.						
See below details	v for addition airborne mag-spec survey						
• Th	is release has no reference to eviously unreported drill results.						

Criteria	Explanation	
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 reported.
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 reported.
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 logaed. 	• No drilling reported.

Sub- sampling techniques and sample preparatio n	 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. 	 See below for airborne magnetic survey details.
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. 	• N/A
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. 	 Internal quality control completed by MAGSPEC Airborne surveys syn and post acquisition flight(s) Externally quality control completed by Merlin Geophysics Pty Ltd Data deemed to be of high quality
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. 	 Location information Integrated Novatel OEM719 DGPS receiver: L1/L2 + GLONASS Multi Frequency 555-channel All data were synchronised to a one pulse per second triggered by the GPS time.

		Height Information
		Bendix/King KRA 405 radar altimeter
		Resolution - 0.3 m
		• Sample Rate - 20 Hz
		• Range - 0-760 m
		Renishaw ILM-500R laser altimeter
		Resolution - 0.01 m
		• Sample Rate - up to 20 Hz
		• Range - 0-500 m
		 50m traverse E-W orientated line spacing
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. Whethersample compositing has been applied. 	 50m traverse E-W orientated line spacing 500m tie N-S oriented line spacing Nominal sensor height 30m Magnetometer: 20Hz sample rate (~3.5m) Spectrometer: 2Hz sample rate (~0.35m) Altimeter: 20Hz sample rate (~3.5m) GPS: 2Hz sample rate (~0.35m) This release has no reference to previously unreported drill results, sampling, assays or mineralisation.

Criteria	Explanation	
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. 	 GPS: 2Hz sample rate (~0.35m) Traverse flight lines oriented 090-270°roughly perpendicular to regional geological strike Tie lines oriented 000-180° No drilling reported.
Sample security	• The measures taken to ensure sample security.	• N/A •
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	 No audits have been completed. No reviews are considered required due to the nature of the survey type and the context in which the data is reported. The project is in early phase of exploration.

Secction 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	Explanation	
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 licence to operate in the area. 	 The Paterson Range East Project is located wholly within the following Exploration Licence: E45/4928 (granted) Greatland Pty Ltd holds a 100% interest in E45/4928 Newcrest Operations Limited holds right of first refusal as per Farm-in Agreement dated 12th March 2019. The tenements are in 'good standing' with the WA – DMIRS. No known impediments exist, including a licence to operate in the area.
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	 Exploration in the region of the Paterson Range East Project has involved the following companies: Newmont (1987-1989) Newcrest (1990 - 1996) BHP Minerals (1993 - 1995)
Geology	• Deposit type, geological setting and style of mineralisation.	 Paterson Province Geological Setting: Proterozoic meta-sedimentary rocks. Mineralisation styles include: Stratigraphic/contact controlled gold; vein and reef style gold/copper mineralisation.
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. 	 This release has no reference to previously unreported drill results. Reports prepared by Greatland Pty Ltd are available to view on: <u>www.greatlandgold.com</u>

Data aggregatio n 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 chould be stated. 	 This release has no reference to previously unreported drill results.
	examples of such aggregations should be shown in detail.	
	 The assumptions used for any reporting of metal equivalent values should be clearly stated. 	
Relationship between mineralisatio	 These relationships are particularly important in the reporting of Exploration Results. 	 This release has no reference to previously unreported drill results.
n widths and intercept lengths	 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'). 	
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. 	 This release has no reference to previously unreported drill results. Appropriate diagrams are available with this report.

Criteria	Explanation	
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. 	 The company believes this announcement is a balanced report, and that all material information has been reported.
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. 	 Previous exploration results included in this announcement can be found on the company website: <u>www.greatlandgold.com</u>

Further work	 The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). 	•	Planned gravity, s electrical	further surface geophys	work geochem sics.	includ iistry,	les and	ground ground
	 Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 							