

9 August 2018



ACN: 610 168 191

Level 1
675 Murray Street
West Perth WA 6005

PO Box 1088
West Perth WA 6872

Mobile 0411 475 376
info@blackearthminerals.com.au
blackearthminerals.com.au

ASX Announcement

Huge Potential for Growth at Maniry Project

- **Exploration Target for the Maniry Project estimated at 260-380Mt @ 6-8% TGC**
- **Exploration in Q4 2018 to focus upon high grade Razafy Domain**
- **Priority geophysical target identified along strike of Razafy**
- **2,000m Resource Definition Drill Program at the Haja Prospect >95% complete**

Cautionary Statement: The Exploration Targets reported herein are not JORC compliant Mineral Resources. The potential quantity and grade of the Exploration Targets are conceptual in nature, there has been insufficient exploration to determine a Mineral Resource and there is no certainty that further exploration work will result in the determination of a Mineral Resource

BlackEarth Minerals NL (ASX: BEM) (the **Company** or **BlackEarth**) is pleased to provide an Exploration Target for the Maniry Graphite Project in Southern Madagascar. A review of all available data has highlighted the Project to have an Exploration Target of 260-380Mt @ 6-8% Total Graphitic Carbon (TGC). The review has also highlighted the Razafy Domain as a priority for exploration in Q4 2018 with the ultimate aim of defining further high-grade resources proximally to the high grade Razafy Deposit.

Maniry Exploration Target

The estimation has been undertaken by the extrapolation of the recently defined resource at Razafy (ASX 9 August 2018 – Razafy Maiden Resource Estimation), utilising the information gathered by the historical mapping and rock chipping and observations from a historical VTEM survey flown in 2008.

The Maniry Project has been broken down into three regional domains of graphite mineralisation which are depicted in Figure 1 and are briefly described as follows:

- **The Razafy Domain** is a large-scale fold on the north and eastern margins of the Maniry area. The domain is characterised by multiple high-grade lenses such as the recently defined Razafy and Razafy East Lenses. The Exploration Target for this domain, including the Razafy lens, is 85 - 125Mt @ 7- 8% TGC. Exploration in Q4 2018 will focus upon this domain in an attempt to delineate further high-grade mineralisation proximal to the Razafy Deposit.
- **The Ivan Domain** is located centrally at Maniry. The Domain is characterised by large scale, outcropping graphitic schist's containing localised folding which appears to have provided localised areas of high grade mineralisation within the broader lens. The Exploration Target for this domain is 35-75Mt @ 6-7% TGC.
- **The Haja Domain** is characterised by a large-scale fold of the graphitic schist on the western side of the Maniry Project. The domain contains the Haja lens in the interpreted fold nose position, theoretically a position for higher grade mineralisation. This prospect is currently being systematically drill tested, with a JORC compliant resource estimation due in Q4 2018. The Exploration Target for this domain, including the Haja lens, is 140 -180Mt @ 6-7% TGC.

The three domains have a total Resource Target for the Maniry Project of 260 - 380Mt @ 6-8% TGC as outlined in the Table 1.

For personal use only

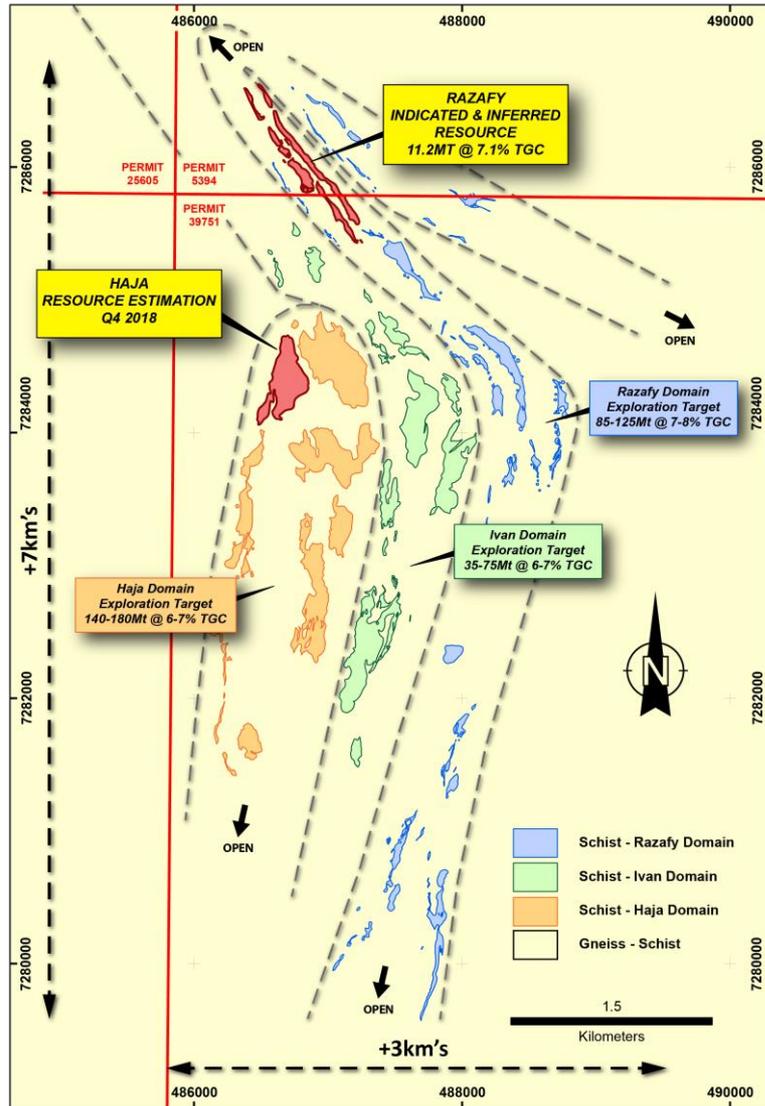


Figure 1 – Maniry Project – Resources and Exploration Targets

Domain	No. of Lens	Area (m ²)	Depth (m)	Volume (m ³)	SG	Ore Tonnes (t)	Grade Ranges	Tonnage Ranges
Haja	18	900,971	80	72,077,680	2.25	162,174,780	6-7%	140-180 Mt
Ivan	10	306,752	80	24,540,160	2.25	55,215,360	6-7%	35-75 Mt
Razafy	138	585,009	80	46,800,720	2.25	105,301,620	7-8%	85-125 Mt
TOTALS	166	1,792,732		143,418,560		322,691,760	6-8%	260-380 Mt

Table 1 – Exploration targets for the Maniry graphite domains and supporting assumptions

Descriptions of the assumptions and methodologies used to derive the Exploration Targets are provided below. All data sets and results used for the estimation have previously been disclosed in previous ASX announcements. The details of the VTEM survey can be found in the attached JORC table found as an appendix to this ASX release.

Lenses were mapped and rock chipped by BEM staff under the previous project owner Malagasy Minerals Ltd, these have been verified by the current BEM technical team and have reported within the Company Replacement Prospectus dated 24 November 2017. Schist depth is an assumption of the depth of anticipated mining given the morphology of the graphitic lenses and weathering profiles. The SG (Density) is based upon observations from test work undertaken at Razafy as reported within the Razafy Resource

Estimation ASX announcement. Grade ranges have been estimated from assays received from drilling under the previous owner, again these are reported within the company prospectus.

The potential size and grade of the Exploration Targets are presented in Table 1 as a range of values, which in the Competent Person's opinion, represent reasonable approximations based on the level of available information and estimation methodologies applied.

Razafy Domain - Exploration

A review of exploration data sets has further highlighted the Razafy Domain as a priority area for further exploration with the aim of delineating further high-grade resources proximally to Razafy Resource (Figure 2).

VTEM data, which was collected by the former project owner Malagasy Minerals Ltd in 2008 for nickel-copper sulphide exploration, in conjunction with mapping and rock chipping has been used to identify a large-scale fold that will provide the focus of a combined mapping, rock chipping and trenching program in Q4 2018. Of particular interest, a large, prevalent VTEM anomaly is situated in an interpreted fold nose position (Figure 3). Fold noses are well known structural positions for high grade graphite mineralisation, an example of this would be the Molo Graphite Deposit (Next Source Materials – 141Mt @ 6.1% TGC) situated 65km north of the Maniry Project. BlackEarth's second graphite project in Madagascar, The Ianapera Project, is located along strike of Molo, exploration will also be undertaken here in Q4 2018.

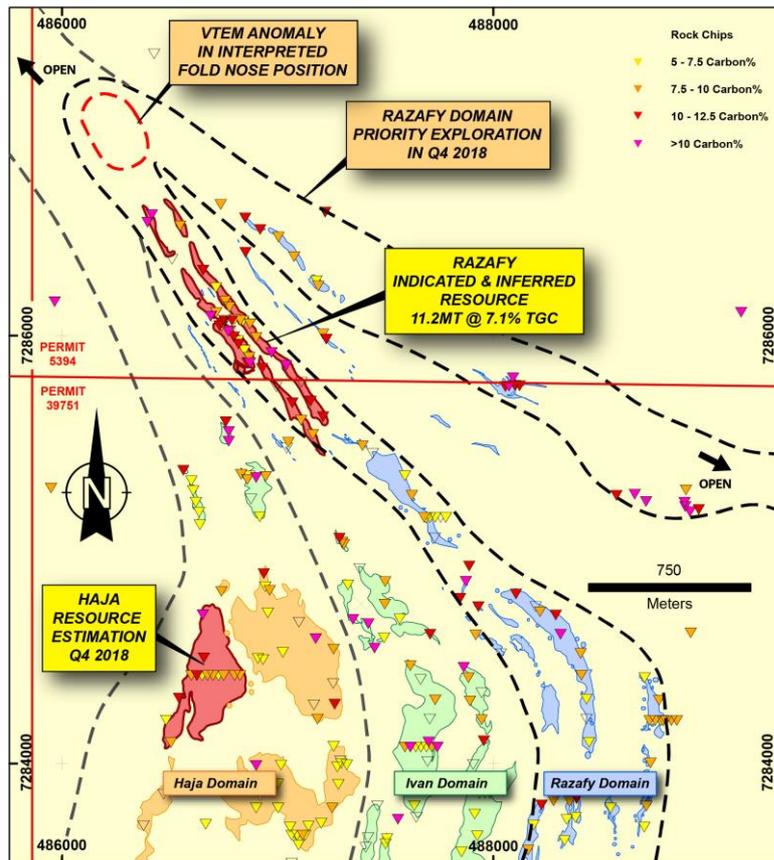


Figure 2 – Razafy Domain – Exploration Potential

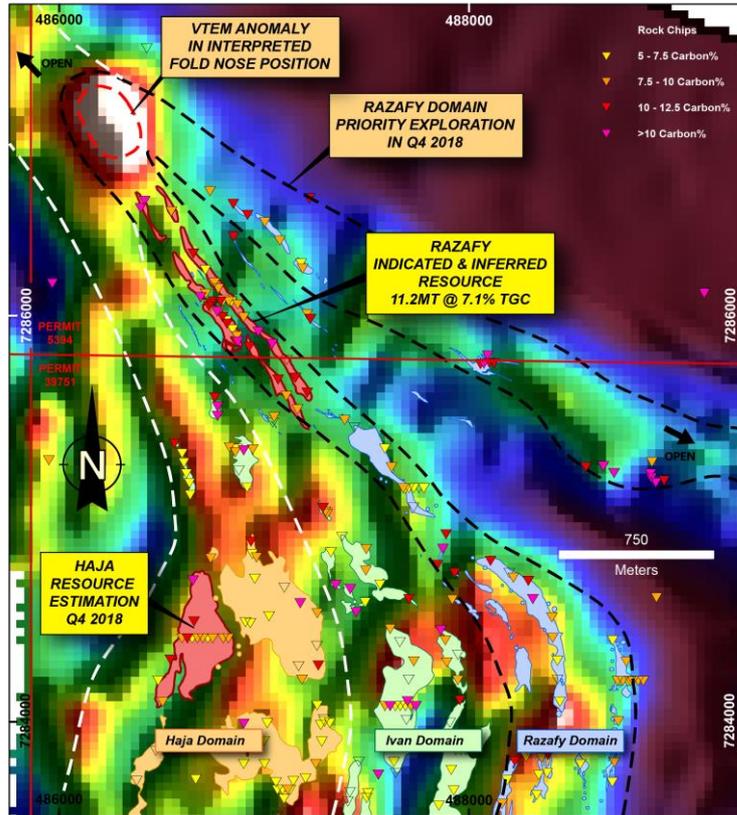


Figure 3 – Razafy Domain - VTEM

Haja Drilling Update

BEM is also pleased to provide an update of the 2,000m drilling program at the Haja Prospect where 23 of the 25 planned drill holes have been completed. Drilling is progressing well and is expected to be completed within the coming days with a maiden resource estimation in Q4 2018. Previous drilling at the Haja Prospect (see Replacement Prospectus dated 24 November 2017 – page 107) has identified extensive thicknesses of graphite mineralisation including intersections of 70m @ 5.3% Total Graphitic Carbon.

Managing Director, Tom Revy commented:

“This Exploration Target in the range of 260 – 380 million tonnes at 6-8% demonstrates the significant potential of the Maniry Graphite Project.”

MEDIA CONTACTS

Tom Revy	BlackEarth Minerals NL	08 6145 0289 0411 475 376
Barry Woodhouse	BlackEarth Minerals NL	08 6145 0289 0438 674 259

Competent Person’s Statement

The information contained in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Mr. Peter Langworthy, a member of The Australasian Institute of Mining and Metallurgy. Mr. Langworthy has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.” Mr. Langworthy consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

For more information – www.blackearthminerals.com.au

About BlackEarth Minerals NL (www.blackearthminerals.com.au)

BlackEarth Minerals NL (ASX: BEM) ("Company") is an ASX listed company focused primarily on the exploration and development of its 100% owned Madagascan graphite projects.



The location of the Company's primary graphite projects: Madagascar (Maniry & Ianapera - above)

The Company's Madagascan projects consist of two primary exploration areas: the main Maniry project ("Maniry") in the south, and the Ianapera project ("Ianapera") in the north. Maniry is highly prospective for large-scale, high-quality graphite deposits and is currently at an advanced evaluation. Results, from current diamond drilling have confirmed that the Razafy Prospect (contained within the Maniry Project area) consists of high grade, thick outcropping graphitic mineralisation contained within distinct lenses which remain not only open along strike but also at depth. Recent identification of further lenses to the east also highlights the prospectivity of the immediate area which, based on mapping and previous exploration only represents 5% of the current Maniry Project area.

Ianapera is located approximately 50km north of Maniry. It consists of a series of high-grade outcrops, up to 800m long and 30m wide, of graphite mineralisation within a broader graphite trend. Identified as a large conductive body, potential exists for the presence of a large graphitic mineralised system.

The Company's Western Australian graphite assets include 4 early stage project areas that have been partially explored by a number of companies in the past, with encouraging results reported from several locations.



JORC Code, 2012 Edition – Table 1 report template		
Section 1 Sampling Techniques and Data		
(Criteria in this section apply to all succeeding sections.)		
Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (eg 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. 	<p>Helibourne VTEM (Versatile Time Domain EM Survey) survey flown in 9-30th October 2018 by Geotech Airbourne Limited. Approximately 624km2 area for 3333.5 line km's. Aircraft - AS350-BA Helicopter. Reciever Coil Area 113.1m2 (1.2m Diameter, 100 turns) Window Channel - Standard 26 CH, 83us to 7828us. Line spacing 200m, 2-4m station spacing. Transmitter loop size - 26m diameter (4 turns). Coordinates - WGS84 - 36S. Base Frequency - 30Hz. Duty Cycle - 37%. Nominal Terrain Clearance - 80m. EM Loop clearance - 41m. Recording Sample - 10 samples per second. Waveform - Trapezoid, Pulse Width 7360us. Peak Current - 180A. Peak Dipole Moment - 382,000 N/A.</p>
Drilling techniques	<ul style="list-style-type: none"> 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). 	NA
Drill sample recovery	<ul style="list-style-type: none"> 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. 	NA
Logging	<ul style="list-style-type: none"> 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. 	NA
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> 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. 	NA
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> 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 (i.e. lack of bias) and precision have been established. 	As above
Verification of sampling and assaying	<ul style="list-style-type: none"> 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. 	NA
Location of data points	<ul style="list-style-type: none"> 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. 	NA
Data spacing and distribution	<ul style="list-style-type: none"> 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. 	Lines flown on 115-295 degree - Parallel with much of the stratigraphy at Maniry
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> 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. 	Lines were flown generally parallel with stratigraphy at Maniry on 200m spaced tanerses. This is not ideal and leads to issues with modelling of EM targets. The dta is used in this instance as a proxy for mineralisation in the area.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	NA
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	Data collected was reviewed by Bill Peters SGC - WA Geophysical Consultants

Section 2 Reporting of Exploration Results		
(Criteria listed in the preceding section also apply to this section.)		
Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> 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. 	<p>Work was undertaken upon permits 5394 & 39751</p> <ul style="list-style-type: none"> The tenements are located within the inland South West of Madagascar approximately centred on the township of Ampanihy. Tenements are held 100% by Mada-Aust SARL. Ultimately a wholly owned subsidiary of BlackEarth Minerals NL through Madagascar Graphite Ltd. No overriding royalties are in place There is no native title agreement required Tenure does not coincide with any historical sites or national parkland Semi-arid, thinly vegetated, relatively flat to low lying hills with sub-cropping rock. Tenements are currently secure and in good standing
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	Regional mapping by BRGM, Historical diamond drilling and trenching by Malagasy Minerals. Ltd. (2014-2016)
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<p>The project overlies a prominent 20km wide zone consisting of a folded assemblage of graphite and quartz-feldspar schists (<60% graphite), quartzite and marble units, with lesser intercalated amphibolite and leucogneiss.</p> <p>This zone, termed the Ampanihy Belt is a core component of the Neoproterozoic Graphite System. The belt is interpreted as a ductile shear zone accreted from rocks of volcanic and sedimentary origins.</p>
Drill hole Information	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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. 	NA
Data aggregation methods	<ul style="list-style-type: none"> 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. 	NA
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> 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'). 	NA
Diagrams	<ul style="list-style-type: none"> 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. 	NA
Balanced reporting	<ul style="list-style-type: none"> 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. 	NA
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	Refer to BEM Prospectus and previous announcements
Further work	<ul style="list-style-type: none"> 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. 	Haja resource estimation - Q4 2018 and resumption of field exploration - mapping, rock chipping and trenching