



Quarterly Activities Report 31 December 2018

ASX Release

31 January 2019

Magnum Mining and
Exploration Limited
ABN 70 003 170 376

ASX Code

MGU

Non-Executive Chairman

Howard Dawson

Chief Executive Officer

Grant Button

Non-Executive Director

Francesco Cannavo

Company Secretaries

Grant Button
Jacqueline Barry

Issued Shares

279,578,818

Unlisted Options

9,000,000

Email

info@mmel.com.au

Website

www.mmel.com.au

Suite 2, Churchill Court
234 Churchill Avenue
SUBIACO WA 6008

PO BOX 8209
SUBIACO EAST WA 6008

T +61 8 6280 0245
F +61 8 9381 2855

HIGHLIGHTS

Gravelotte Emerald Project, South Africa

- **Successful completion of Trial Mining Phase 1.**
- **Trial Mining Phase 2 scheduled to commence in mid-February 2019, with emerald recovery scheduled for March 2019.**
- Extensive data derived from Trial Mining Phase 1, utilised to optimise the design of the crushing and wash plant for the Trial Mining Phase 2.
- Fabrication of the crushing and wash plant commenced in December 2018 and is scheduled to be commissioned on site commencing mid February.
- Extensive tests completed on various automated sorting methodologies. Debtech XRF sorting machine selected for Trial Mining Phase 2.
- Local mining contractor identified and final details of mining plan for the Trial Mining Phase 2 to be completed in January 2019.
- Onsite electrical, water, security and earthworks preparations for Trial Mining Phase 2 activities commenced.

Tanami West Project, Northern Territory

- Drilling intersected altered sequence with corresponding copper geochemical anomaly.
- Magnum assessing viability of a VTEM survey to test for conductors.

Corporate

- Successful completion of a \$1.25 million convertible note issue.

OPERATIONS

Gravelotte Project, South Africa

Magnum's 74%-owned Gravelotte Project is located in the Limpopo Province of South Africa. Emeralds were discovered in the province in 1927 and, since then, several companies have explored for and mined within the broader region for emeralds.

From 1929 to 1982 the total recorded emerald production from the Gravelotte Project, as well as the area surrounding the nearby Gravelotte township, was nearly 113 million carats.

It is reported that during the 1960's the Gravelotte Project itself was the largest emerald mine of its type in the world, employing over 400 sorters.

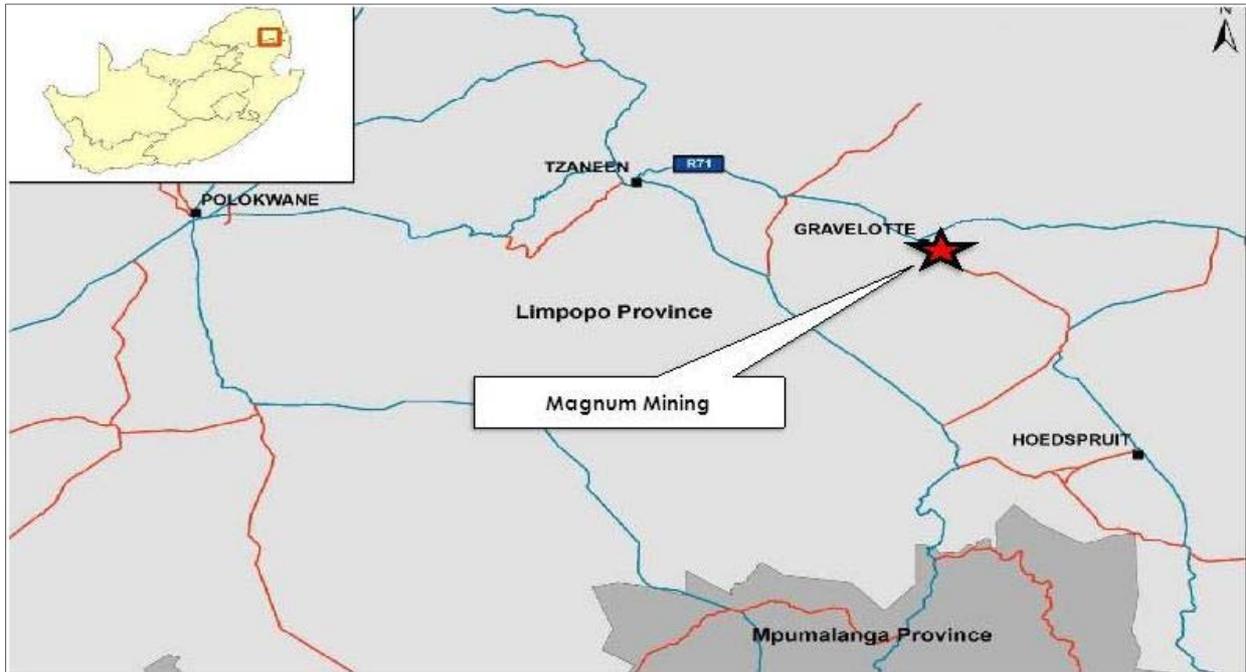


Figure 1: Gravelotte Location Map

Why is MGU at Gravelotte?

The Gravelotte project provides Magnum with a medium term production opportunity in a niche commodity such as emeralds where demand is growing.

The project offers established infrastructure, existing and accessible open cuts together with extensive low grade dumps, a large (albeit incomplete) historic data base, a nearby and available work force, local on-site technical expertise and a nearby township that can serve as a supply centre.



Photo 1: Aerial view of the Gravelotte Mine Site showing key infrastructure with Cobra and Discovery Pits in background.

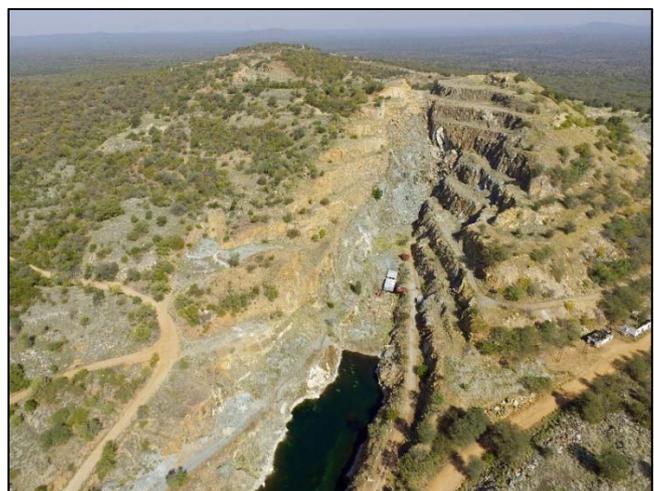


Photo 2: Cobra Pits.

During the past three years, Magnum has worked to re-establish the historical database and develop a strong understanding of the geology, structure and controls of mineralisation within the project area.

The Company has maintained and refurbished much of the extensive mine site infrastructure at Gravelotte including offices, laboratory, workshops, garages, management accommodation complex and a mine hostel to accommodate mine workers.

The mine site is well situated with utilities and logistics being serviced by ESKOM grid power, has a sealed road to the mine gate and has a working airstrip.

Successful completion of Trial Mining Phase 1

The Trial Mining Phase 1 sourced rock from the historic low grade and waste dumps to allow testing to compare the historic crushing, washing and sorting methodologies against new technologies. In addition, extensive testing was undertaken to gather sufficient information on the crushing and washing characteristics of the ore to finalise the design of the Phase 2 hard rock trial mining emerald recovery circuit.

The crushing testing was successful in determining the optimum crush size to minimise damage to the emeralds whilst maximising the liberation of the emeralds from the host rock.

This determination of the optimum crush size – in this case the crush size which will liberate the highest amount of emeralds without crushing the stones – will assist in the efficient recovery of emeralds in the sorting process.

In summary, the Trial Mining Phase 1 trial was successful in all of its objectives, and during the quarter the Company finalised the design of its crushing and washing plant suitable for the Phase 2 trial mining operation. This design was based upon extensive crush testing conducted on-site, washing characteristics of the material and the requirements of the XRF sorter.

During the quarter the Company has also selected the De Beers Technologies (Deb Tech) X-ray Fluorescence (“XRF”) sorter as its preferred sorting technology for the recovery of emeralds.



Photo 3: Schist host with emeralds



Photo 4: 41.5 carat emerald



Photo 5: Partially cleaned emeralds ranging from 3.5 to 41.5 carats in weight and 5-25mm in size



Phase 2 Trial Mining Operation to commence in February 2019

The Trial Mining Phase 2 involves the mining and processing of around 8,000 tonnes of hard rock from multiple locations within the existing Cobra and Discovery pits.

Contemporaneous with the mining of the hard rock Magnum will commission a crushing and washing plant capable of processing around 2,000 tonnes per month.

The resultant crushed and washed material will then be processed through the XRF sorter with the emeralds produced batched and then provided later this year for sale to various buyers to ascertain the price range for the Gravelotte stones.

An independent mining contractor has been engaged with mining scheduled to commence in early-mid February and estimated to take around 25-30 days for completion.

The crushing and washing plant is scheduled to arrive on-site in mid-February, with commissioning to be completed by the end of that month.

Recovery of emeralds utilizing XRF technology is scheduled to commence immediately post the commissioning of the crushing and washing plant.

What is the rationale for the Trial Mining Phase 2 Operation?

The Trial Mining Phase 2 has been designed to recover a parcel of emeralds from Gravelotte of a sufficient size to allow a commercial assessment of pricing for the emeralds through a tender process.

There has been a significant increase in demand for emeralds reported since 2000 so this will provide vital data for assessing the current demand and consequent pricing for emerald product from Gravelotte.

The Trial Mining Phase 2 will also provide geological, mining, processing and recovery data for input into financial modelling for a potential future commercial mining operation.

This data, together with extensive existing drill data and information from a proposed small drill programme later this year, will allow Magnum to prepare a JORC compliant resource statement for the Cobra, Cobra North and Discovery pits.

Work Completed During the December Quarter

During the quarter the final parameters of the Phase 2 trial mining were defined, and selection of appropriate equipment was completed, with commissioning and procurement underway.

In December, the Company commissioned the fabrication and refurbishment of a crusher and washing plant circuit designed to treat 2,000 tonnes of material per month.

Magnum completed its trial and assessment phase in relation to selecting a suitable sorting option for the Phase 2 hard rock trial mining operation.

The company has selected the Deb Tech XRF sorting machine as its preferred sorting option.



Magnum are very appreciative of the assistance provided by Deb Tech.

X-ray sorters operate by selecting setting appropriate parameters, resulting in emeralds that are partially and fully exposed in the crushed material to fluoresce. When the sorter detects an emerald particle, it ejects the emerald from the feed material into a separate container. The concentrate material will then be secured for further sorting/treatment.

Extensive testing has been conducted on run of mine material with highly encouraging results. Minimal recovery of non-emerald passenger particles was achieved whilst all emeralds were recovered and most importantly, the throughput capacity that is required is within design specifications.

A local mining contractor has been identified to undertake the mining phase of the Phase 2 trial. They have demonstrated local mining expertise and capacity and pricing was excellent due to low mobilisation costs. This supports Magnum's efforts to engage the local community as much as possible in current and future procurement and employment activities.

During the quarter, final selection of pit locations and volume parameters commenced and was completed in January 2019. The mine plan for the trial mining Phase 2 has been designed to assist with providing significant data required for the preparation of a JORC compliant resource calculation after the completion of the Phase 2 trial.

In preparation for the Phase 2 trial mining operation, upgrades and refurbishments were undertaken to the electrical and water infrastructure onsite.

In addition, the upgrading of 1.2 km section of the perimeter fencing, which was not previously electrified, commenced in December. This work was completed in January and completes the electrification of the entire perimeter fence for the first time. Further security upgrades to the site access road will commence once the perimeter upgrade is completed.

Tanami West Project, Northern Territory, Australia

Overview

The Tanami West Project consists of exploration licence 30256 and pursuant to an agreement with the tenement's 100% owner Ferdies Find Pty Ltd ("Ferdies"), Magnum can earn up to 80% of the issued capital of Ferdies subject to an exploration expenditure of \$1.1 million over a minimum of three years.

Location

The Tanami West project is located in the Northern Territory approximately 570km northwest from Alice Springs, 33km east of the West Australian border and 140km north of Lake MacKay (Figure 2).

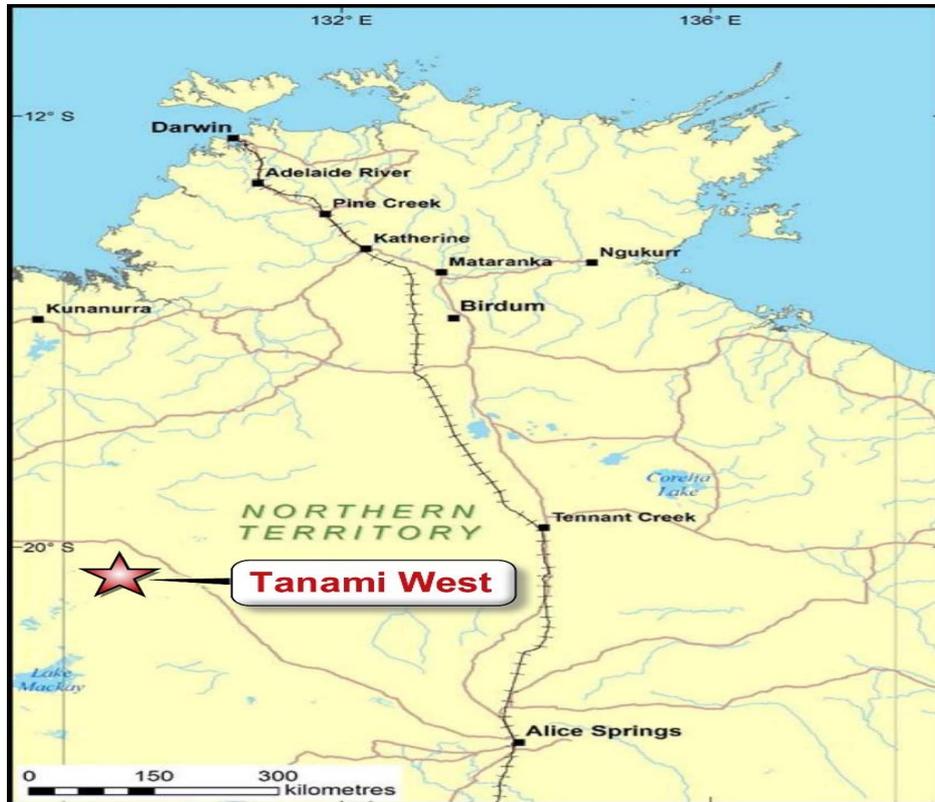


Figure 2: Tanami West Location Map

The project area is located to the east of Graveyard Bore in a soil and sand covered area with grass and mulga scrub (see Figure 3).

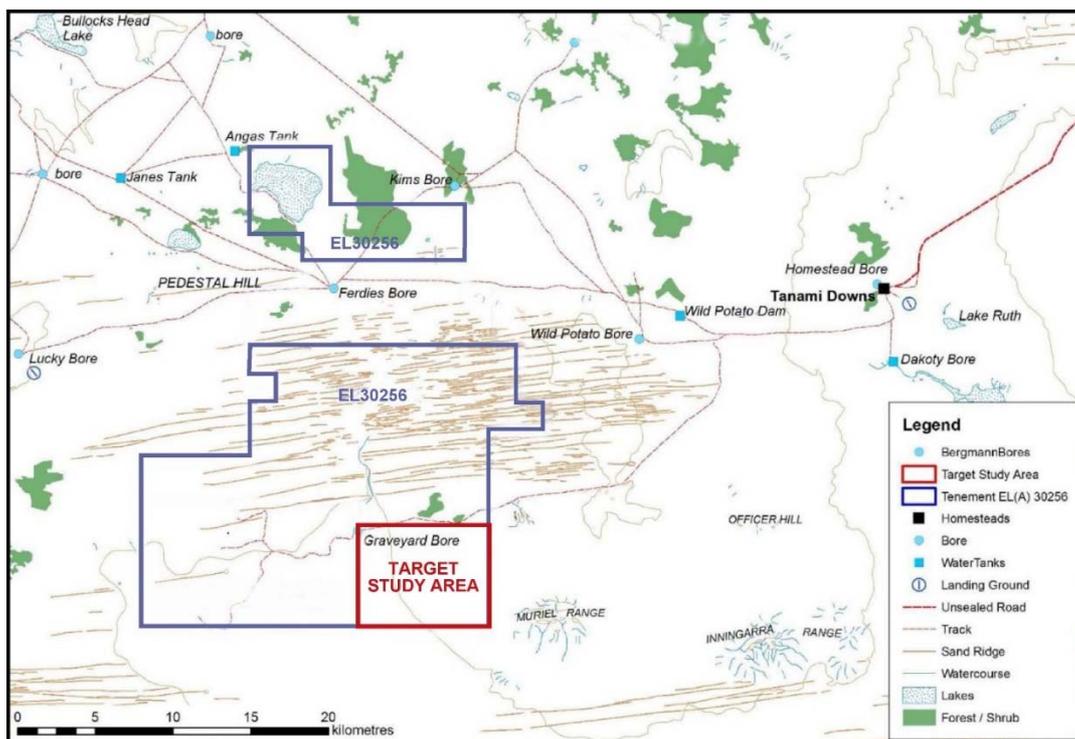


Figure 3: Tanami West Exploration Programme Target Study Area

Drilling Programme

During the December quarter the drilling results from the previous quarter's air core drilling programme were assessed.

The drilling confirmed that within the area targeted a thin unit of transported aeolian sand overlies a significantly leached weathering profile.

The dominant lithologies intersected were sandstones, siltstones and vesicular basalts and within the southern central section of the area drilled, a wide zone of intensely altered and fractured rocks which appear to be after siltstone and possibly volcanic fragmentals were intersected.

Within this altered sequence hard marble (metamorphosed limestone) was also intersected across two drill holes. This may indicate metasomatic alteration which could tie in with the alteration observed in the adjacent holes.

Because of the extensive cover it is proposed that a VTEM survey to explore for potential conductors will be the next stage of exploration.

CORPORATE

On 3 October 2018, the Company announced the resignation of Mr Scott Robertson as a Director.

On 2 November 2018 Magnum announced that it had completed of a capital raising through the issue of unsecured redeemable convertible notes to raise \$1,250,000 through the issue of 1,250 redeemable convertible notes, each with a face value of one thousand dollars (\$1,000) (Convertible Notes). The terms of the Convertible Notes are set out in the announcement which was released to ASX on 2 November 2018 titled "Capital Raising via Redeemable Convertible Notes."

The funds raised from the Redeemable Convertible Notes will be used for undertaking the Phase 2 trial mining program at the Gravelotte emerald project in South Africa and for general working capital purposes.

Early in the January 2019 quarter, subject to Ministerial approval, Magnum sold its rights to Exploration Licence Application E29/1052.

EXPLORATION INTERESTS

The following information is provided in accordance with ASX Listing Rule 5.3 for the quarter ended 31 December 2018:

1. Listing of tenements held:

Location	Project	Tenement Type	Number	Interest	Status
Limpopo Province, South Africa	Gravelotte	Mining Right	LP 153 CMR	74%	Granted

Limpopo Province, South Africa	Gravelotte	Prospecting Right	LP 30/5/1/1/3/2/1/204PR	74%	Granted
Kalgoorlie Boulder, Western Australia	Menzies	Exploration Licence	E29/1052	100%	Application pending grant

2. Listing of tenements acquired (directly or beneficially) during the quarter:

Location	Project	Tenement Type	Number	Interest	Status
Northern Territory	Tanami West	Exploration Licence	ELA32015	Earn in Agreement with Ferdies Find Pty Ltd	Earn in

ASX:MGU Announcements Released During the December 2018 Quarter

18/12/18	Change of Director's Interest Notice
02/11/18	Capital Raising via Redeemable Convertible Notes
31/10/18	Quarterly Activities and Cashflow Report
24/10/18	Retraction Statement
24/10/18	Institutional Roadshow Presentation (Amended)
22/10/18	Institutional Roadshow Presentation
03/10/18	Resignation of Director



GRANT BUTTON
Chief Executive Officer/Joint Company Secretary

Further information please contact:

Magnum Mining and Exploration Limited
 Grant Button
 +61 8 6280 0245
 email: info@mmel.com.au

Competent Persons Statement

The information in this announcement that relates to Exploration Results and Mineral Resources complies with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) and has been compiled and assessed under the supervision of Mr Howard Dawson, Non-Executive Director of Magnum Mining and Exploration Limited. Mr Dawson is a member of the Australian Institute of Geoscientists and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Mr Dawson consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears. The Exploration Results are based on standard industry practices for drilling, logging, sampling, assay methods including quality assurance and quality control measures as detailed in Annexures A and B.

THIS IS ANNEXURE A OF 7 PAGES

JORC CODE, 2012 EDITION – TABLE 1 REPORT TEMPLATE – GRAVELOTTE EMERALD PROJECT

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"> • <i>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.</i> • <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> • <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • The dumps were sampled using a front end loader and an excavator to take a whole cut across the centre of the dump. • The excavations were supervised by a geologist to ensure that only dump material was sourced. • 100% of the material excavated was then sent to a stockpile for processing.
Drilling techniques	<ul style="list-style-type: none"> • <i>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).</i> 	<ul style="list-style-type: none"> • Not applicable
Drill sample recovery	<ul style="list-style-type: none"> • <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> • <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • Not applicable
Logging	<ul style="list-style-type: none"> • <i>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</i> 	<ul style="list-style-type: none"> • The samples were not logged.

Criteria	JORC Code explanation	Commentary
	<p>studies.</p> <ul style="list-style-type: none"> • Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. • The total length and percentage of the relevant intersections logged. 	
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. 	<ul style="list-style-type: none"> • 100% of the excavated material was stockpiled according to dump number. • 100% of the material was then weighed and then 100% of the material was then processed by dump number. • Processing was by crushing and then washing 100% of the crushed sample and then wet screening through a 3mm mesh of 100% of the crushed sample. The remaining sample was then hand sorted for visual determination and recovery of any emeralds.
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 (ie lack of bias) and precision have been established. 	<ul style="list-style-type: none"> • No assays were carried out. • For emerald count the sample was crushed, washed, screened and then hand sorted. • For quality control all sorters underwent at least 20 hours of training and were supervised whilst sorting.
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. 	<ul style="list-style-type: none"> • The excavations were supervised by a Geologist.
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. 	<ul style="list-style-type: none"> • Sample locations are the midpoint of the dumps and were recorded in latitudes and longitudes by GPS and plotted on base maps at site.

Criteria	JORC Code explanation	Commentary
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. 	<ul style="list-style-type: none"> Not applicable, this programme was simply to source material to test crushing, screening and processing (hand sorting) techniques.
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. 	<ul style="list-style-type: none"> Not applicable.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> All processing was supervised by the onsite Geologist or senior site manager.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> Not applicable.

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. 	<ul style="list-style-type: none"> Mining Right, Portion 7 of the Farm Farrell 781LT, LP30/5/1/2/2/0153MR, located 2km from Gravelotte in the Phalaborwa magisterial district of South Africa. The Company has a 74% ownership of the project with the remaining portion owned by Black Economic Empowered (“BEE”) shareholders to ensure compliance with South African BEE ownership requirements.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Much of the historic exploration and production results by previous mine owners cannot be located. Magnum has engaged consultants to assemble and digitize as much data as can be sourced.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> Hydrothermal breccia.
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"> eastings and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in 	<ul style="list-style-type: none"> Magnum is not using or reliant on previous exploration as historic data base is too incomplete.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> metres) of the drill hole collar o dip and azimuth of the hole o down hole length and interception depth o 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. 	
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. 	<ul style="list-style-type: none"> • Not applicable.
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'). 	<ul style="list-style-type: none"> • Not applicable.
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. 	<ul style="list-style-type: none"> • Not applicable.
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. 	<ul style="list-style-type: none"> • Not applicable.
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. 	<ul style="list-style-type: none"> • Not applicable.

Criteria	JORC Code explanation	Commentary
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. 	<ul style="list-style-type: none"> Not applicable.

Section 5 Estimation and Reporting of Diamonds and Other Gemstones

(Criteria listed in other relevant sections also apply to this section. Additional guidelines are available in the 'Guidelines for the Reporting of Diamond Exploration Results' issued by the Diamond Exploration Best Practices Committee established by the Canadian Institute of Mining, Metallurgy and Petroleum.)

Criteria	JORC Code explanation	Commentary
Indicator minerals	<ul style="list-style-type: none"> Reports of indicator minerals, such as chemically/physically distinctive garnet, ilmenite, chrome spinel and chrome diopside, should be prepared by a suitably qualified laboratory. 	<ul style="list-style-type: none"> Not applicable.
Source of diamonds	<ul style="list-style-type: none"> Details of the form, shape, size and colour of the diamonds and the nature of the source of diamonds (primary or secondary) including the rock type and geological environment. 	<ul style="list-style-type: none"> Emeralds, introduction into breccia of Cr rich solutions through hydrothermal activity
Sample collection	<ul style="list-style-type: none"> Type of sample, whether outcrop, boulders, drill core, reverse circulation drill cuttings, gravel, stream sediment or soil, and purpose (eg large diameter drilling to establish stones per unit of volume or bulk samples to establish stone size distribution). Sample size, distribution and representivity. 	<ul style="list-style-type: none"> Historic waste and low grade ore dumps. Dumps cannot be considered representative.
Sample treatment	<ul style="list-style-type: none"> Type of facility, treatment rate, and accreditation. Sample size reduction. Bottom screen size, top screen size and re-crush. Processes (dense media separation, grease, X-ray, hand-sorting, etc). Process efficiency, tailings auditing and granulometry. Laboratory used, type of process for micro diamonds and accreditation. 	<ul style="list-style-type: none"> On site treatment facilities, supervised onsite geologist and senior management personnel. Crushing, washing, screening, hand sorting.
Carat	<ul style="list-style-type: none"> One fifth (0.2) of a gram (often defined as a metric carat or MC). 	<ul style="list-style-type: none"> 1 gram = 5 carats
Sample grade	<ul style="list-style-type: none"> Sample grade in this section of Table 1 is used in the context of carats per units of mass, area or volume. The sample grade above the specified lower cut-off sieve size should be reported as carats per dry metric tonne and/or carats per 100 dry metric tonnes. For alluvial deposits, sample grades quoted in carats per square metre or carats per cubic metre are acceptable if 	<ul style="list-style-type: none"> Determined by weight of emeralds recovered from each sample.

Criteria	JORC Code explanation	Commentary
	<p>accompanied by a volume to weight basis for calculation.</p> <ul style="list-style-type: none"> In addition to general requirements to assess volume and density there is a need to relate stone frequency (stones per cubic metre or tonne) to stone size (carats per stone) to derive sample grade (carats per tonne). 	
Reporting of Exploration Results	<ul style="list-style-type: none"> Complete set of sieve data using a standard progression of sieve sizes per facies. Bulk sampling results, global sample grade per facies. Spatial structure analysis and grade distribution. Stone size and number distribution. Sample head feed and tailings particle granulometry. Sample density determination. Per cent concentrate and undersize per sample. Sample grade with change in bottom cut-off screen size. Adjustments made to size distribution for sample plant performance and performance on a commercial scale. If appropriate or employed, geostatistical techniques applied to model stone size, distribution or frequency from size distribution of exploration diamond samples. The weight of diamonds may only be omitted from the report when the diamonds are considered too small to be of commercial significance. This lower cut-off size should be stated. 	<ul style="list-style-type: none"> Only emeralds 3mm or greater reported.
Grade estimation for reporting Mineral Resources and Ore Reserves	<ul style="list-style-type: none"> Description of the sample type and the spatial arrangement of drilling or sampling designed for grade estimation. The sample crush size and its relationship to that achievable in a commercial treatment plant. Total number of diamonds greater than the specified and reported lower cut-off sieve size. Total weight of diamonds greater than the specified and reported lower cut-off sieve size. The sample grade above the specified lower cut-off sieve size. 	<ul style="list-style-type: none"> Not applicable
Value estimation	<ul style="list-style-type: none"> Valuations should not be reported for samples of diamonds processed using total liberation method, which is commonly used for processing exploration samples. To the extent that such information is not deemed commercially sensitive, Public Reports should include: <ul style="list-style-type: none"> diamonds quantities by appropriate screen size per facies or depth. details of parcel valued. number of stones, carats, lower size cut-off per facies or depth. 	<ul style="list-style-type: none"> Not applicable

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> • <i>The average \$/carat and \$/tonne value at the selected bottom cut-off should be reported in US Dollars. The value per carat is of critical importance in demonstrating project value.</i> • <i>The basis for the price (eg dealer buying price, dealer selling price, etc).</i> • <i>An assessment of diamond breakage.</i> 	
<i>Security and integrity</i>	<ul style="list-style-type: none"> • <i>Accredited process audit.</i> • <i>Whether samples were sealed after excavation.</i> • <i>Valuer location, escort, delivery, cleaning losses, reconciliation with recorded sample carats and number of stones.</i> • <i>Core samples washed prior to treatment for micro diamonds.</i> • <i>Audit samples treated at alternative facility.</i> • <i>Results of tailings checks.</i> • <i>Recovery of tracer monitors used in sampling and treatment.</i> • <i>Geophysical (logged) density and particle density.</i> • <i>Cross validation of sample weights, wet and dry, with hole volume and density, moisture factor.</i> 	<ul style="list-style-type: none"> • On site security provided by senior on site management.
<i>Classification</i>	<ul style="list-style-type: none"> • <i>In addition to general requirements to assess volume and density there is a need to relate stone frequency (stones per cubic metre or tonne) to stone size (carats per stone) to derive grade (carats per tonne). The elements of uncertainty in these estimates should be considered, and classification developed accordingly.</i> 	<ul style="list-style-type: none"> • Not applicable.

THIS IS ANNEXURE B OF 5 PAGES

JORC CODE, 2012 EDITION – TABLE 1 REPORT FOR TANAMI WEST PROJECT

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
<i>Sampling techniques</i>	<p><i>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.</i></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p> <p><i>In cases where ‘industry standard’ work has been done this would be relatively simple (e.g. ‘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 (e.g. submarine nodules) may warrant disclosure of detailed information.</i></p>	<p>Air core drilling was used to collect 1 metre bulk samples via a cyclone mounted on the drill Rig. 1- 6 metre composite samples were collected from the 1 metre split samples by channel or grab sampling and were sent to Australian Laboratory Services, a reputable company with many laboratories operating worldwide. Analysis for Au was by fire assay using a 30 g charge. The multi element analysis was by mixed acid digest with HF and analysis by ICPAES. Ore grade samples are analysed by four acid digest and ICPAES finish.</p>
<i>Drilling techniques</i>	<p><i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.).</i></p>	<p>Air Core drilling was conducted by a reputable contractor (Bullion Drilling). The very large majority of samples were dry.</p>
<i>Drill sample recovery</i>	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p><i>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.</i></p>	<p>Air Core sample recovery was good with consistent volumes achieved across each 1 metre interval. Only one hole had to be terminated due to water flow. There was no bias or differentiation caused through grain size.</p>
<i>Logging</i>	<p><i>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.</i></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i></p>	<p>All intervals were logged from a representative grab sample from the 1 metre samples. Due to the small size of these geological samples the logging is qualitative and visual estimates are therefore unreliable and laboratory analysis only will be reported. The logging included the noting of any mineralisation visually present.</p>

Criteria	JORC Code explanation	Commentary
	<i>The total length and percentage of the relevant intersections logged.</i>	
<i>Sub-sampling techniques and sample preparation</i>	<p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p> <p><i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p> <p><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></p> <p><i>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.</i></p> <p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p>	Detailed previously
<i>Quality of assay data and laboratory tests</i>	<p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p> <p><i>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.</i></p> <p><i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i></p>	Australian Laboratory Services is a reputable company with many laboratories operating worldwide.
<i>Verification of sampling and assaying</i>	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <p><i>Discuss any adjustment to assay data.</i></p>	<p>This was a reconnaissance drill programme. Consequently, no holes were twinned.</p> <p>Data was collected on site by suitably trained personnel and entered into a digital file.</p>
<i>Location of data points</i>	<p><i>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.</i></p> <p><i>Specification of the grid system used.</i></p> <p><i>Quality and adequacy of topographic control.</i></p>	<p>Holes were surveyed by GPS with sub metre accuracy</p> <p>Drill coordinates and azimuths are GDA_94 MGA zone 54</p>
<i>Data spacing and distribution</i>	<p><i>Data spacing for reporting of Exploration Results.</i></p> <p><i>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.</i></p>	Not applicable

Criteria	JORC Code explanation	Commentary
	<i>Whether sample compositing has been applied.</i>	
<i>Orientation of data in relation to geological structure</i>	<i>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.</i>	Drill lines were orientated at 90 degrees to the regional geological strike. All holes were drilled vertical.
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	Reputable Labs and transport companies were used and field sampling was being carried out by trusted and experienced contractors.
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	None necessary.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<i>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.</i>	The drilling was undertaken within EL30256 which is 100% owned by Ferdies Find Pty Ltd. A Native title site clearance was undertaken prior to the drilling programme. Conduct and Compensation Agreements are in place with the relevant landholders. The Abovementioned EPMS are secure and compliant with the Conditions of Grant. There are no known impediments to operate in the area.
<i>Exploration done by other parties</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	Prior to the drilling by Magnum the only other company to work in the area was Ferdies Find Pty Ltd. Magnum have been provided with a copy of the work that company completed.
<i>Geology</i>	<i>Deposit type, geological setting and style of mineralisation.</i>	Targeted mineralisation is VMS Cu +/- Au.
<i>Drill hole Information</i>	<i>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: eastings 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.</i>	Individual hole results have not been reported.
<i>Data aggregation methods</i>	<i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. 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.</i>	No composite results have been reported.

Criteria	JORC Code explanation	Commentary
<i>Relationship between mineralisation widths and intercept lengths</i>	<i>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 (e.g. 'down hole length, true width not known').</i>	Drill holes have been drilled as close as possible to perpendicular to the regional geological strike.
<i>Diagrams</i>	<i>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.</i>	The locations of the Tenement is shown in Figure 1 in the body of this document.
<i>Balanced reporting</i>	<i>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.</i>	Not applicable
<i>Other substantive exploration data</i>	<i>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.</i>	No other substantive data has been omitted in the context of this report. The extensive data is currently being reviewed and any material observations will be reported in due course.
<i>Further work</i>	<i>The nature and scale of planned further work (e.g. 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.</i>	Geophysics. Likely VTEM subject to availability and cost.

Appendix 5B

Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

Name of entity

Magnum Mining and Exploration Limited

ABN

70 003 170 376

Quarter ended ("current quarter")

31 December 2018

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
1. Cash flows from operating activities		
1.1 Receipts from customers		
1.2 Payments for		
(a) exploration & evaluation	(286)	(841)
(b) development		
(c) production		
(d) staff costs	(25)	(104)
(e) administration and corporate costs	(162)	(403)
1.3 Dividends received (see note 3)		
1.4 Interest received		
1.5 Interest and other costs of finance paid		
1.6 Income taxes paid		
1.7 Research and development refunds		
1.8 Other (provide details if material)	-	23
1.9 Net cash from / (used in) operating activities	(473)	(1,325)
2. Cash flows from investing activities		
2.1 Payments to acquire:		
(a) property, plant and equipment	(88)	(92)
(b) tenements (see item 10)		
(c) investments		
(d) other non-current assets		

Mining exploration entity and oil and gas exploration entity quarterly report

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (12 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) property, plant and equipment		
	(b) tenements (see item 10)		
	(c) investments		
	(d) other non-current assets	47	47
2.3	Cash flows from loans to other entities		
2.4	Dividends received (see note 3)		
2.5	Other (provide details)		
2.6	Net cash from / (used in) investing activities	(41)	(45)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of shares		
3.2	Proceeds from issue of convertible notes	1,250	1,250
3.3	Proceeds from exercise of share options		
3.4	Transaction costs related to issues of shares, convertible notes or options	(60)	(62)
3.5	Proceeds from borrowings		
3.6	Repayment of borrowings		
3.7	Transaction costs related to loans and borrowings		
3.8	Dividends paid		
3.9	Other (disposal of employee share plan shares)	-	580
3.10	Net cash from / (used in) financing activities	1,190	1,768

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	225	501
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(473)	(1,325)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(41)	(45)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	1,190	1,768

Mining exploration entity and oil and gas exploration entity quarterly report

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (12 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	2
4.6	Cash and cash equivalents at end of period	901	901

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	901	225
5.2	Call deposits		
5.3	Bank overdrafts		
5.4	Other (provide details)		
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	901	225

6. Payments to directors of the entity and their associates

Current quarter \$A'000

6.1 Aggregate amount of payments to these parties included in item 1.2

60

6.2 Aggregate amount of cash flow from loans to these parties included in item 2.3

6.3 Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2

Consulting fees paid to Wilberforce Pty Ltd, where Mr G Button is a director and consulting fees paid to HG & L Dawson Discretionary Trust, where Mr H Dawson is a trustee.

7. Payments to related entities of the entity and their associates

Current quarter \$A'000

7.1 Aggregate amount of payments to these parties included in item 1.2

7.2 Aggregate amount of cash flow from loans to these parties included in item 2.3

7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2

Mining exploration entity and oil and gas exploration entity quarterly report

8. Financing facilities available <i>Add notes as necessary for an understanding of the position</i>	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
8.1 Loan facilities		
8.2 Credit standby arrangements		
8.3 Other (convertible notes)	1,250	1,250
8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.		

Unsecured convertible notes issued with a 12 month maturity date from the date of issue (2 November 2018) with interest of 10% per annum. The terms of the Convertible Notes are set out in the announcement which was released to ASX on 2 November 2018 titled "Capital Raising via Redeemable Convertible Notes."

9. Estimated cash outflows for next quarter	\$A'000
9.1 Exploration and evaluation	350
9.2 Development	
9.3 Production	
9.4 Staff costs	30
9.5 Administration and corporate costs	80
9.6 Other (provide details if material)	
9.7 Total estimated cash outflows	460

10. Changes in tenements (items 2.1(b) and 2.2(b) above)	Tenement reference and location	Nature of interest	Interest at beginning of quarter	Interest at end of quarter
10.1 Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced				
10.2 Interests in mining tenements and petroleum tenements acquired or increased				

Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.



Sign here:

Date: 31 January 2019

Print name: Grant Button
Company Secretary

Notes

1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.