

# DHR TAKES STRATEGIC POSITION IN OTAGO GOLD PROPERTIES

# **ASX ANNOUNCEMENT**

**MONDAY, 7 SEPTEMBER 2020** 

**ASX Code: DHR** 

**Shares on Issue** 

4 Billion

**Cash on Hand** 

\$1.6m

**Market Capitalisation** 

A\$8m (at A\$0.002 per share)

#### Directors

Nick Mather (Non-Executive Chairman)
David Mason (Managing Director)
Brian Moller (Non-Executive Director)
Jason Beckton (Non-Executive Director)

### **Company Secretary**

Karl Schlobohm

#### **Contact Details**

Level 27, 111 Eagle Street Brisbane Qld 4000 Tel: +61 7 3303 0650 Fax: +61 7 3303 0681

www.darkhorseresources.com.au

Twitter: @ASX DHR

# **HIGHLIGHTS**

- ➢ Binding Term Sheet to earn 75% of the drill-ready Cap Burn Gold project in Otago, New Zealand. Comprehensive surface exploration to date shows anomalous Gold-Arsenic mineralisation over 6 km², with rock samples up to 3 g/t Gold, interpreted to be similar to the nearby Macraes Mine.
- Binding Term Sheet to acquire a 100% interest in the Rock and Pillar, Raggedy Range and Filly Burn Gold projects, where reevaluation of exploration geological data has indicated new theories for Gold mineralisation.
- Exploration Permit application over the Wild Dog Creek Gold project adjacent to the Macraes Mine.
- No upfront costs for the acquisition.

Dark Horse Resources Ltd (the Company, Dark Horse, ASX:DHR) is pleased to announce that it has executed the second phase of the new Strategic Business Plan. Binding Term Sheets have been executed to acquire, subject to regulatory approvals, interests in mineral permits in the Gold-rich Central Otago region of New Zealand's South Island (refer Location Map in Figures 1 & 2). The Company has:

- entered into a Binding Term Sheet to earn a 75% interest in the Cap Burn Gold Project.
- entered into a Binding Term Sheet to acquire a 100% interest in the:
  - Rock and Pillar Prospecting Permit Application (PPA) which surrounds the Cap Burn Project;
  - Filly Burn PPA adjacent to OceanaGold's Macraes Mine; and
  - the Raggedy Range PPA.
- applied for Exploration Permit Application (EPA) at Wild Dog Creek, adjacent to OceanaGold's Macraes Mine.

Managing Director, David Mason commented: "Dark Horse has obtained control over a large footprint of highly prospective Gold properties (total area 445 km²), including a drill ready target, for no upfront costs, in the Gold-rich province of Otago New Zealand.





The Company now holds strategic positions in several, exceptional Gold properties in Finland, New Zealand and Argentina, each with drill ready targets, which allows flexibility and optionality in these currently challenging times to achieve our goal of discovering and proving a Tier 1 Gold resource. Otago, New Zealand is a world class Gold mining jurisdiction, and cements our mission to provide geographical diversify withion our gold portfolio.

Dark Horse's recent capital raising activities have been well supported, and we are now well funded to advance exploration and resource definition drilling in all or some of these regions, depending on country and environmental factors during the coming months. Each of the drilling programs has moderate expenditure requirements, and Dark Horse's current treasury allows for the implementation of all three. It is important to note that there has been minimal cash required for us to secure this package of properties in New Zealand, and ongoing maintenance costs are relatively low. Dark Horse looks forward to the exciting upcoming months to put plans and drill designs in motion to forward the Company's standing and progress towards then aim of defining a JORC Gold resource within 1 year."

The status and strategy for each country is as follows:

- > The Finland exploration permits are being transferred from the vendor, Sotkamo, to Dark Horse's Finland subsidiary company. Some permits have been transferred, and the remainder are expected over the next several months. Drilling will commence once all permits are transferred.
- ➤ In Argentina, drilling permits, a drilling contract, and other contractual and logistic activities are being organised to allow drilling in the summer, planned for commencement in December 2020.
- ➤ The acquisition of the New Zealand Otago Gold properties, with Cap Burn drill-ready, allows the Company a third opportunity closer to home in a sought-after mining jurisdiction for the discovery and definition of a large Gold resource. Drilling is planned for summer 2020/2021.

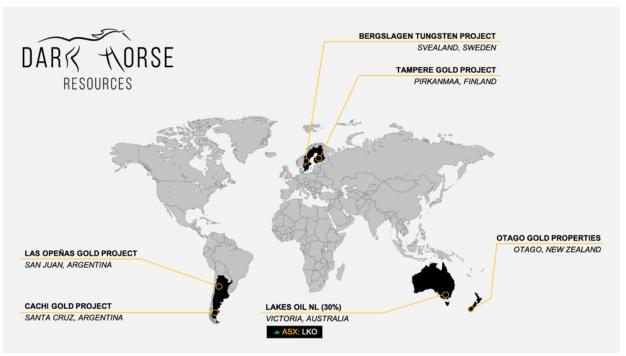


Figure 1: Location of Dark Horse's interests in world mineral properties and investments.





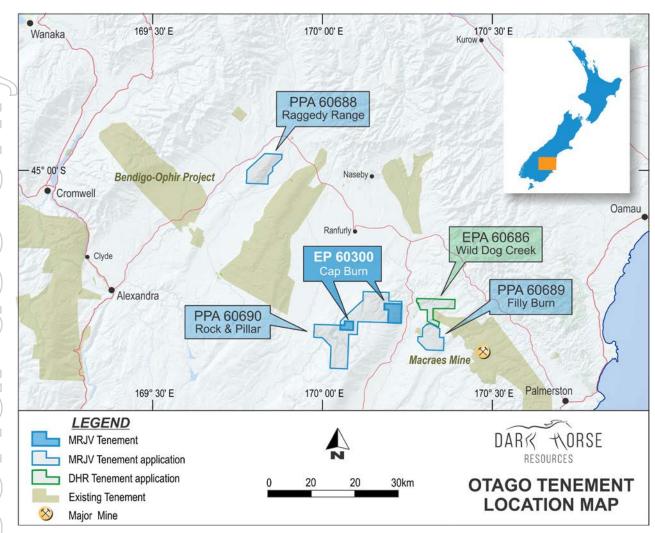


Figure 2: Location of the new Gold properties in Otago, New Zealand for which DHR has entered into joint venture or acquisition with MRJV (blue) or made lease application itself (green).

The data presented in this ASX release is considered to be an accurate representation of the available data and nothing has come to the attention of the Company to cause it to question the accuracy or reliability of the historical results. However, insufficient work has been undertaken by the Competent Person to disclose the results in compliance with the 2012 edition of the JORC Code. It is uncertain that following further evaluation and/or exploration work, these historical exploration results will be able to be reported under the 2012 edition of the JORC Code, or used in Mineral Resources or Ore Reserves in accordance with the 2012 edition of the JORC Code.



# **Cap Burn Gold Project**

The Cap Burn Gold Project is located in the Central Otago region of New Zealand, north-west and along strike of OceanaGold's Macraes Mine (**Figure 2**). The Cap Burn granted Exploration Permit EP60300 is owned by the Mineral Rangahau Joint Venture (MRJV) and consists of two separate blocks with a total area of 19.5km<sup>2</sup>.

Macraes Mine, operated by OceanaGold, is an open pit and underground mine which has produced 5 million ounces since 1990 and 172,475 ounces in 2019, with JORC Measured and Indicated resources of 3.5 million ounzes Gold (<a href="http://www.oceanagold.com/">http://www.oceanagold.com/</a>). It lies along 10km of the 30km long Hyde-Macraes Shear Zone.

The chief geologist of the MRJV, Kerry Stanaway, has been exploring for orogenic and alluvial gold in Central Otago NZ since 2010. Kerry says: "historically, orogenic gold recovery in Otago essentially ceased when mining reached refractory gold in arsenopyrite at shallow depths. Refractory processing like that used by current operators OceanaGold at the Macraes Mine coupled with deeper drilling may reveal known vein gold deposits in Otago to be larger than previously thought. More significant is the possibility that shear zones and other fluid conduits in appropriately oriented permeable schist, along or close to the metamorphic uplift boundary faults, could yield Gold as do those found in the Macraes Mine Shear Zone. Very little quartz veining may be present in such systems rendering them essentially invisible to casual prospecting and never found by old-time miners. There has been increased interest in Otago Gold in the recent past and numerous companies are now holding ground and exploring".

The Cap Burn EP60300 permit features two types of orogenic gold mineralization. Mineralization similar to that found at Macraes Mine occurs on the Eastern Block, while fracture veins similar to those found elsewhere in the Otago Schist occur on the Western Block. The MRJV has recently made application for a prospecting permit (Rock and Pillar) covering all the ground between and around the Cap Burn Exploration Permit (refer below description and **Figure 2**).

The MRJV has delineated 5 drill targets at Cap Burn. Dark Horse will work with the MRJV to implement this program, planned to commence in December 2020 or January 2021.

The Eastern Block covers approximately 13km² and lies on possible extensions of the Hyde-Macraes Shear Zone, straddling the same greenschist facies texture III/IV boundary found at the Macraes Mine. Soil sampling to date indicates anomalous Gold, Arsenic and Antimony in texture IV schist over 2-3km² (**Figure 3**). Gold mineralization of the Eastern Block is interpreted to be similar to that occurring at the Macraes Mine because of the sampled quartz float which has returned grades of up to 3g/t Gold and the foliation in the anomoulous area which has a similar strike and dip (15 to 20 degrees to the NE) as the shear zone which hosts the Macraes Mine deposit.





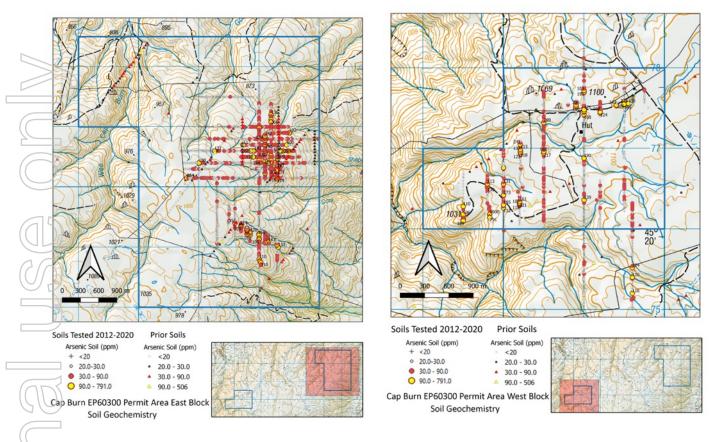


Figure 3: Cap Burn Eastern block showing soil sampling locations and Arsenic concentration results.

Figure 4: Cap Burn Western block showing soil sampling locations and Arsenic concentration results.

The Western Block hosts Gold mineralisation typical of that found in the brittle rock fracture lodes arising after rock metamorphism in the texture IV schist. Soil sampling to date has identified anomalous Gold, Aresenic and Antimony over a 3km<sup>2</sup> area (**Figure 4**). Of the 20 analysed quartz vein float, 19 returned anomalous Gold (>0.1 g/t Gold) with three of these returning values between 1 and 2 g/t Gold.

# Rock and Pillar Gold Project

The Rock and Pillar Prospecting Permit application area (**Figure 2**) encloses the two blocks of the Cap Burn Exploration Permit and covers several unexplored soil anomalies and one other distal to the schist uplift boundary demarcating the texture zone II and IV schist. It also covers ground that could be the source area for Gold placer workings. The placer workings around the Rock and Pillar Range, dating from the 1860's, had no known primary Gold source until soil sampling carried out over the last 10 years uncovered anomalous schist with only rare and minor quartz veining in the areas now enclosed by the Cap Burn Exploration Permit. Further geological mapping and soil sampling will be carried out to at Rock and Pillar with the target to define drilling targets.





# Filly Burn Gold project

The Filly Burn Prospecting Permit application area (**Figure 2**) lies close to the OceanaGold Macraes Mine, just south of the Coronation pit developed on the Hyde-Macraes shear zone. The shear zone is cut off by the schist texture III/IV boundary fault. The permit lies just south of the boundary fault. The exploration target is for mineralisation similar to that found at Cap Burn. This possibility is enhanced by the presence of Gold placer workings in Tertiary sediment remnants both to the east and to the west of the PPA. An initial soil sampling program is planned at Filly Burn to test this theory.

## **Wild Dog Creek Gold Project**

The Wild Dog Creek exploration permit application area (**Figure 2**) lies adjacent to the north of Filly Burn, close to the OceanaGold Macraes Mine. The EPA area is within the mineralised belt that contains the Macraes Mine and several other deposits. The geology of the northern half of the EPA is basement schist, distinuguished as textural zone III, whilst textural zone IV is present in the southern half. The fault contact between the two zones is equivalent to the "Footwall Fault", one of the bounding faults of the shear zone that hosts the Macraes Deposit. This contact between the 2 textural zones of the Otago Schist basement is partially hidden under a younger cover sequence of sediments and volcanics. Further geological mapping and soil sampling will be carried out at Wild Dog Creek to better define the stike of the Footwall Fault under cover in preparation for drilling to target mineralisation in a geological setting similar to that at Macraes Mine.

#### Raggedy Range Gold Project

The Raggedy Range prospecting permit application area (**Figure 2**) straddles the schist texture boundary with Gold veining worked in the past within 2km on the north side. Placers were worked for Gold in valley sediments east of the uplift mountain range. The target mineralisation is in schists lacking significant quartz which may occur on either side of the schist uplift boundary. An initial soil sampling program is planned at Raggedy Range.

# **Acquisition Terms**

#### Cap Burn EP60300

The major commercial terms of the Cap Burn Binding Term Sheet are:

- 75% ownership in the tenements will be transferred to DHR on executing transaction documentation, subject to regulatory approvals, within a 60 day period.
- DHR to spend NZ\$600,000 including drilling within 18 months, and will keep the property in good standing.
- Once DHR has satisfied these terms, the vendors may each separately 1) retain their interest (each 8.3%) and fund pari passu with DHR, or 2) offer to sell their interest to DHR (who has pre-emptive rights), or 3) revert to a 0.5% Net Smelter Royalty, plus a payment of NZ\$500,000.

#### **New Permit Applications**

DHR has a first right of refusal with MRJV to acquire 100% of each of Rock and Pillar, Raggedy Range and Filly Burn permits, and other permits applied for by MRJV or recommended to DHR in the Otago region, for an aggregate 2% Net Smelter Royalty carried interest. Wild Dog Creek permit is included in this arrangement as it was recommended to DHR by the MRJV.





The vendor, **Mineral Rangahau JV**, consists of three equal partners: Mineral Rangahau Limited, Western Wood (NZ) Limited and Western Mathew (NZ) Limited. The owners of these companies are senior professionals who have had senior executive roles with BHP, Rio Tinto and AWE, amongst others.

This Announcement has been authorised by the Board of Directors Mr Karl Schlobohm

**Company Secretary** 

#### For further information contact:

# **Mr David Mason**

Managing Director, Dark Horse Resources Ltd

Ph: +61 400 707 329

Email: <a href="mailto:dmason@darkhorseresources.com.au">dmason@darkhorseresources.com.au</a>

Company website: http://www.darkhorseresources.com.au

Follow us on Twitter: @ASX DHR

# **Karl Schlobohm**

Company Secretary, Dark Horse Resources Ltd Ph: +61 7 3303 0661

#### **COMPETENT PERSON'S STATEMENT**

The information herein that relates to Exploration Targets and Exploration Results is based information compiled by Mr Jason McNamara, who is a member of The Australasian Institute of Mining and Metallurgy. Mr McNamara is an independent geological consultant.

Mr McNamara has more than twenty five years experience which is relevant to the style of mineralisation and types of deposits being reported and the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves" (the JORC Code). This public report is issued with the prior written consent of the Competent Person(s) as to the form and context in which it appears.





# JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul> <li>No surface exploration was conducted by Dark Horse Resources Ltd (DHR) DHR has undertaken a desktop review of available information only.</li> <li>Surface sampling in the form of rock chip and soil samples (4,322) has been undertaken on the project</li> <li>The method used for collecting historical soil samples is not known at this time</li> <li>Soil sampling undertaken by Mineral Rangahau JV was carried out using a hand auger to depths ranging from 5-60cm</li> <li>Soil sampling spacing of part of the Eastern Block has been performed at 20m intervals along lines spaced 200 to 500m apart. The sample density of the Western Block is approximately 20m on 500m spaced lines.</li> </ul>
Drilling techniques	<ul> <li>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).</li> </ul>	Not Applicable as no drilling has been undertaken
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of</li> </ul>	Not Applicable as no drilling has been undertaken





	Criteria	JORC Code explanation	Commentary
		fine/coarse material.	
	Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> </ul>	<ul> <li>It is not know if geological descriptions were undertaken of the rock samples taken but they are predominantly described as quartz float.</li> <li>Mineral Rangahau JV soil samples were described lithologically</li> </ul>
		The total length and percentage of the relevant intersections logged.	
	Sub-sampling techniques and sample	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> </ul>	It is not known if rock samples were sub-sampled prior to analysis
	preparation	<ul> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> </ul>	
		<ul> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> </ul>	
(M)		<ul> <li>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.</li> </ul>	
		<ul> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	
	Quality of assay data and	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	<ul> <li>The assay methods used for analysis of the soil and rock samples is not known</li> </ul>
	laboratory tests	• 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.	
		<ul> <li>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.</li> </ul>	





Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	It is not known what forms of sampling and assaying verification has been undertaken
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>The method of locating samples is not known</li> <li>Sample locations are reported in New Zealand Transverse Mercator 2000 (NZTM2000)</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Data spacing is appropriate for this stage of exploration</li> <li>Sample spacing has been designed to allow appropriate targeting and anomaly definition for this early stage of exploration</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>For the Eastern block soil sample traverses have been aligned northeast – southwest and east - west whilst the Western Block soil sample traverses run northeast – southwest and north – south. These orientations are generally considered appropriate to test the NW and EW controls on mineralisation in the eastern and western blocks respectively</li> </ul>
Sample security	The measures taken to ensure sample security.	It is not known what sample security measures were taken
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	DHR is not aware of any reviews or audits of sampling techniques and data undertaken on the project





Section 2	2 Re	porting	of E	olgx	ration	Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>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.</li> </ul>	The Cap Burn project is covered by lease EP60300 which is owned by the Mineral Rangahau JV.
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>Aurora Minerals Limited carried out 1,264 soil samples</li> <li>Glass Earth Limited carried out 1,038 soil samples</li> <li>Mineral Rangahau JV has undertaken 2,020 soil samples, rock sampling as well as surface mapping over the lease.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The Cap Burn project features two types of orogenic gold mineralization.         Mineralization similar to that found at Macraes Mine occurs on the eastern         block, while fracture veins similar to those found elsewhere in the Otago         Schist occur on the western block.</li> </ul>
Drill hole Information	<ul> <li>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> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	Not Applicable as no drilling has been undertaken



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9	Criteria	JORC Code explanation	Commentary
	Data aggregation methods	<ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	Raw assay results for soil and rock samples are reported with no cutting of high grades
	Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	Not Applicable as no drilling has been undertaken
	Diagrams	<ul> <li>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.</li> </ul>	<ul> <li>A map showing all soil sample locations in relation to lease EP60300 is included in the announcement</li> </ul>
_	Balanced reporting	<ul> <li>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.</li> </ul>	<ul> <li>Images in the body of the text represent all the raw results with no exclusion based on grades</li> </ul>
	Other substantive exploration data	<ul> <li>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.</li> </ul>	Surface mapping has been undertaken over the lease area



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Criteria	JORC Code explanation	Commentary
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Compilation of all exploration data into an electronic database as a basis for further exploration. Field validation of this database.</li> <li>Field validation of existing geological interpretation and surface data, followed by exploratory drilling to test mineralisaiton continuity and controls at depth</li> </ul>