

ASX ANNOUNCEMENT 23 July 2020

# GRACE GOLD-COPPER PROJECT LATEST 3D AEROMAGNETIC MODELLING

- Grace Gold Project located 25km to the southeast of Newcrest's world class Telfer Mine and 40km to the southwest of the Havieron gold deposit in the Paterson province of WA.
- 3D Inversion modelling of aeromagnetic data on two significant magnetic anomaly trends, with one located just southeast of Grace-Bemm shear zone and another large parallel magnetic anomaly trend to the southwest, shows that the sources of the magnetic anomalies have not yet been systematically tested by previous drilling by other companies.
- Shallow inferred gold resource previously defined over portion of known mineralised Grace-Bemm shear zone indicates potential gold and copper mineralisation spatially associated with the magnetic anomaly trends, as well as adjacent untested IP anomalies.

Paterson Resources Limited ("Paterson" or "the Company") (ASX:PSL) is pleased to announce the results of the latest 3D magnetic inversion modelling below anomaly sources identified in aeromagnetic survey data covering the 100% owned Grace Gold Copper Project in the immediate vicinity of the open ended gold mineralisation at the Grace deposit.

The Grace tenements which includes multiple gold prospects is located 25km southeast of Newcrest's 32 Moz Telfer gold-copper mine in the highly prospective Paterson Province (Figure 1).



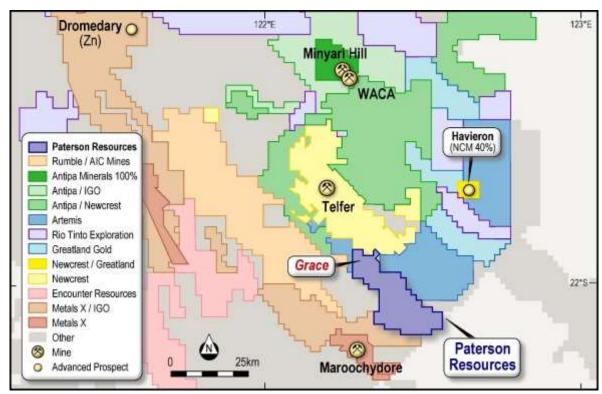


Figure 1. Grace Gold Project tenements (blue) located 25km to the southeast of the Telfer Gold Mine (Newcrest) and 40km to the southwest of the Havieron gold deposit (Greatland-Newcrest JV).

## **Geophysics - Aeromagnetics**

High resolution aeromagnetic survey data acquired at 100m survey line spacing show a strong NW-SE magnetic anomaly high trend following the southern side of the Grace-Bemm shear zone, and just to the south of this magnetic anomaly trend is another parallel magnetic anomaly trend with very strong magnetic anomalism, with both anomaly trends located entirely within the Company's tenements (Figure 2). The magnetic anomaly patterns suggest that hydrothermal magnetite and/or pyrrhotite have altered the dolomitic siltstone host rocks, similar to the Havieron gold deposit to the northeast, or have formed skarn contact zones related to underlying intrusive igneous rocks, similar to the O'Callaghans tungsten and base metal deposit located between Grace and Telfer, or are related to dolerite sills usually found lower down in the stratigraphic sequence. These magnetic anomaly zones have not yet been systematically drilled deep enough to fully assess the sources of the magnetic anomalies to see if they are related to associated zones of gold and copper mineralisation. The potential sources for the magnetic anomalies could be hydrothermal magnetite and pyrrhotite alteration associated with gold-copper mineralisation at depth, and 3D inversion modelling has been used to estimate depth to the magnetic source bodies for planning deep drilling into these target bodies by the Company.



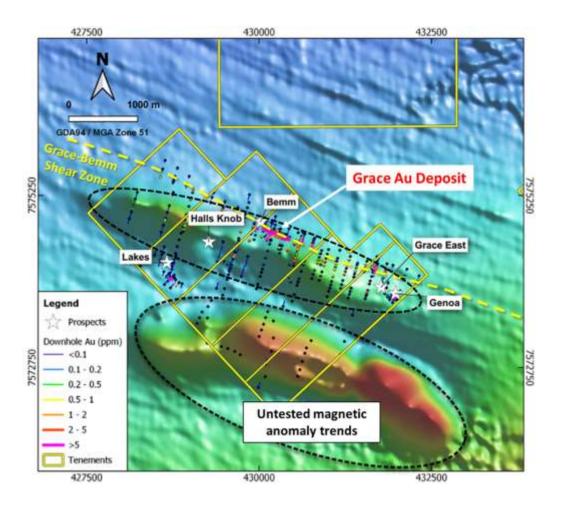


Figure 2. Grace magnetic anomaly image (TMI reduced to the magnetic pole and NE sun angle) showing a moderate strength anomaly trend following the Grace-Bemms shear zone in the north and a much stronger intensity magnetic anomaly trend in the south and running parallel to the Grace-Bemm shear zone trend (dashed black outlines). These large and intense magnetic anomaly zones sit entirely within the Company's tenements (yellow outline), they have not yet been systematically tested by enough deep enough drilling, and could be related to hydrothermal alteration, skarn contacts formed between carbonate host rocks and igneous intrusive rocks, or dolerite sills at greater depth.

3D inversion magnetic modelling has been used to help explain the subsurface magnetic source body geometry causing the two main parallel magnetic anomaly trends. This has resulted in an interpretation that places the tops of magnetic bodies at a greater depth than most drillholes from previous explorers, with only a few very wide spaced historical drillholes appearing to have intersected the tops of the magnetic bodies but did not penetrate deep enough into the cores of both source bodies modelled to cause the strong magnetic anomaly trends (Figures 3 and 4).



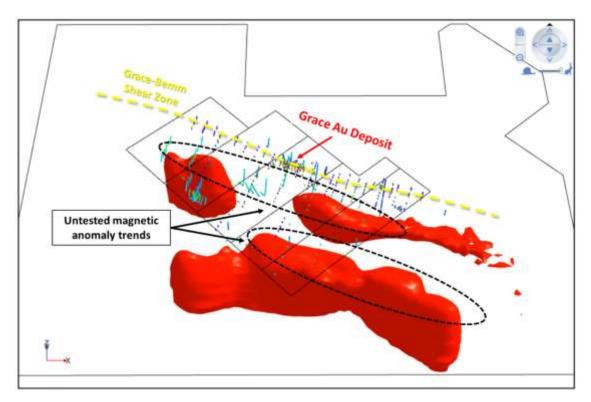


Figure 3. 3D view looking north from above on magnetic inversion modelling results, where magnetic source bodies are in red, also shown are Paterson tenement outlines (black), drilling coloured by increasing gold grade, and Grace-Bemm Shear Zone.

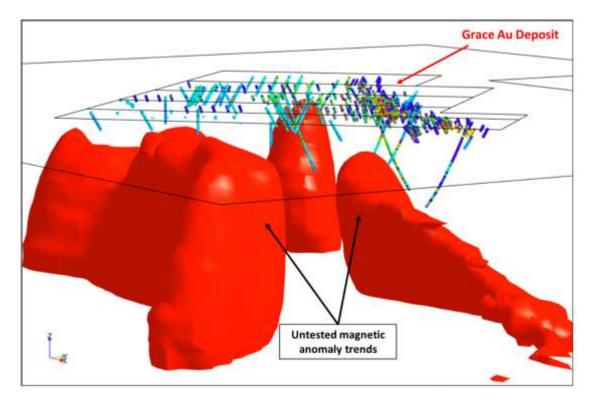


Figure 4. 3D view looking to the west on magnetic modelling results, where magnetic source bodies are in red, also shown are Paterson tenement outlines (black), and drilling coloured by increasing gold grade.



The Company is in the process of updating its drilling database with historical information to generate an updated gold resource estimate for the Grace deposit, and is using this information to plan an induced polarisation geophysical survey and maiden drilling program to test the magnetic anomaly trends, existing untested IP anomalies and any new IP anomalies, and drill along open zones around existing gold mineralisation at the Grace gold deposit (see PSL ASX announcement of 22 May 2002, Entitlement Issue Prospectus)\*

https://www.asx.com.au/asxpdf/20200522/pdf/44j13n99k5rb5j.pdf).

### **Grace Telfer Project Summary**

The Company's focus is to systematically explore the Telfer District projects which includes the advanced Grace asset and the considerable regional greenfields tenement applications covering 367 km<sup>2</sup>.

On review of existing drillhole data it is evident that a series of shallow dipping en-echelon stacked vein sets are related to gold mineralisation and have not yet been adequately tested at Grace. There is a strong geological case that supports further gold mineralisation to be found in additional stacked vein sets along strike and at depth. Furthermore, the vertical stockwork hydrothermal breccias present an exciting new type of gold target at Grace which have potential to increase the resource tonnage potential of the Grace prospect.

The Company is currently working up an exploration programme for the area which will include geochemical surveys, IP geophysical surveys and drill targeting on gold mineralised extensions and structural targets, IP anomalies and magnetic anomalies.

An Inferred Mineral Resource estimate of 1.59mt @ 1.35g/t Au (PSL ASX Announcement 22 May 2020 – Entitlement Issue Prospectus \*) was calculated from the historical drilling on a shallow portion of the mineralised zone covering 1,140m strike length from within a much larger total strike length of known gold mineralised zone extending over 4,130m along the Grace-Bemms shear zone. Additional exploration and infill drilling on the full 4,130m strike along the Grace-Bemms shear zone has the potential to expand and increase the confidence level of the known Resource.

(\* - The Company confirms that it is not aware of any new information or data that materially affects the information included in the previous announcement. All material assumptions and technical parameters pertaining to the resource estimate continue to apply and have not materially changed)

#### For further information, please visit <u>www.patersonresources.com.au</u> or contact:

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This announcement has been authorised for release to ASX by the Board of Paterson Resources Limited.



#### **About Paterson Resources:**

Paterson Resources (ASX: PSL) is a publicly listed, junior mineral resources company focused on the exploration and development of gold and copper projects. Paterson has aggregated a diversified portfolio of assets that are at multiple stages, commodities and jurisdictions. The Grace Gold Project located in the world class Paterson mineral province in Western Australia consists of two granted exploration licences and five granted prospecting licences (E45/4524, E45/5130, P45/2905, P45/2906, P45/2907, P45/2908, and P45/2909). The Company also has an extensive landholding prospective for gold in the Pilbara in Western Australia, with four exploration licences (E08/2880, E47/3578, E47/3827, and E45/5020). The Burraga Copper Gold Project, located in the world class minerals province of the East Lachlan Fold Belt in central western New South Wales consists of four contiguous exploration licences (EL6463, EL6874, EL7975 and EL8826) covering a total area of approximately 221km². Paterson is an active explorer with the aim of discovering a valuable mineral resource and delivering shareholder value.

#### **Disclaimer and Competent Person Statement**

#### **Competent Person's Statement**

The information in this announcement that relates to Exploration Results 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 Dr Jayson Meyers, a consultant to Paterson Resources Pty Ltd and a Director of Resource Potentials Pty Ltd. Dr Meyers is a Fellow of the Australasian Institute of Geoscientists. He 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. Dr Meyers consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears. Dr Meyers is also a share holder in the Company. The Exploration Results are based on standard industry practises for drilling, logging, sampling, assay methods including quality assurance and quality control measures as detailed in Appendix 1.

#### **Forward Looking Statements**

Some of the statements appearing in this announcement may be in the nature of forward-looking statements. You should be aware that such statements are only predictions and are subject to inherent risks and uncertainties. Those risks and uncertainties include factors and risks specific to the industries in which Paterson operates and proposes to operate as well as general economic conditions, prevailing exchange rates and interest rates and conditions in the financial markets, among other things. Actual events or results may differ materially from the events or results expressed or implied in any forward-looking statement. No forward looking statement is a guarantee or representation as to future performance or any other future matters, which will be influenced by a number of factors and subject to various uncertainties and contingencies,



many of which will be outside Paterson Resources (PSL) control.

The Company does not undertake any obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after today's date or to reflect the occurrence of unanticipated events. No representation or warranty, express or implied, is made as to the fairness, accuracy, completeness or correctness of the information, opinions or conclusions contained in this announcement. To the maximum extent permitted by law, none of PSL, its Directors, employees, advisors or agents, nor any other person, accepts any liability for any loss arising from the use of the information contained in this announcement. You are cautioned not to place undue reliance on any forward-looking statement. The forward-looking statements in this announcement reflect views held only as at the date of this announcement.

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**Appendix 1**. The following tables are provided to ensure compliance with the JORC Code (2012) requirements for the reporting of Exploration Results for the Grace Project.

# **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> <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>	Not Applicable     No Drilling or Sampling Completed
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     No Drilling or Sampling Completed
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> </ul>	Not Applicable     No Drilling or Sampling Completed



Criteria	JORC Code explanation	Commentary
	<ul> <li>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.</li> </ul>	
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> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	Not Applicable     No Drilling or Sampling Completed
Sub- sampling techniques and sample preparation	<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> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <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> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	Not Applicable     No Drilling or Sampling Completed
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <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>	Not Applicable     No Drilling or Sampling Completed
Verification of sampling and	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> </ul>	Not Applicable     No Drilling or Sampling Completed



Criteria	JORC Code explanation	Commentary
assaying	<ul> <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>	
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	Not Applicable     No Drilling or Sampling Completed
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>	Not Applicable     No Drilling or Sampling Completed
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>	Not Applicable     No Drilling or Sampling Completed
Sample security	The measures taken to ensure sample security.	Not Applicable     No Drilling or Sampling Completed
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Not Applicable     No Drilling or Sampling Completed

# **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	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.	<ul> <li>P45/2905-2909, E45/4524 &amp; E45/5310 are held directly or by entities controlled by Paterson Resources.</li> <li>All tenements are contained completely within land where the Martu People have been determined to hold native title rights. To the Company's knowledge no historical or environmentally sensitive sites</li> </ul>



Criteria	JORC Code explanation	Commentary
	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> <li>have been identified in the area of work.</li> <li>The tenements are in good standing and no known impediments exist.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Previous exploration was completed by Newcrest Mining Limited (Newcrest), including its predecessor Newmont Mining Australia, owners of the Telfer Gold Mine.</li> <li>Exploration completed included geological mapping, geophysical surveys (IP, ground magnetics and ground gravity), rock chip sampling and drilling (RAB, RC and diamond core drilling).</li> <li>WAMEX reports reviewed and utilised to complete the data compilation include A29118, A30479, A31642, A34922, A37495, A43922, A46877, A50323, A53741, and A79774.</li> <li>Open file data available from the Geological Survey of Western Australia and Geoscience Australia has also been reviewed.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The geological setting is the Paterson Province Proterozoic aged meta-sediment hosted hydrothermal shear, fault and strata/contact controlled precious and/or base metal mineralisation which is typically sulphide bearing. The mineralisation in the region is interpreted to be granite intrusion related. The Paterson is a low grade metamorphic terrane, but local hydrothermal alteration and/or contact metamorphic mineral assemblages and styles are indicative of a high-temperature local environment. Mineralisation styles include vein, stockwork, breccia and skarns.</li> <li>The Grace Gold-Copper Project, gold-copper mineralisation is hosted by laminated and banded carbonaceous pyritic dolomitic siltstones and micritic dolomite. Intrusive dolerite sill units are also known to be associated with mineralisation within the sequence, but granitic intrusion could occur at depth below the project area. The host rocks are variably contorted and brecciated with intense albite alteration. High grade gold, chalcopyrite, +/-arsenopyrite, +/- pyrite occurs as veins which appear linear features and are spaced up to 50m apart. Based on recent Leapfrog modelling of past work undertaken by Criterion, there appears to be ore shoots associated with secondary structures cutting the veins that have a plunge and have not been adequately tested.</li> <li>Two principal targets are being targeted. Stacked reefs associated</li> </ul>



Criteria	JORC Code explanation	Commentary
		with domal structure similar to the Telfer Gold— Copper Mine. The second target is gold mineralisation associated with shear zones cross cutting dolerite units intruding the sedimentary sequence.
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     No Drilling or Sampling Completed
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>	Not Applicable     No Drilling or Sampling Completed
Relationship between mineralisatio n 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     No Drilling or Sampling Completed
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>	Not Applicable     No Drilling or Sampling Completed



Criteria	JORC Code explanation	Commentary
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>	Not Applicable     No Drilling or Sampling Completed
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	<ul> <li>All meaningful and material information has been included in the body of the text or can sometimes be found in previous WA DMP WAMEX publicly available reports. Data from these reports is still being compiled and verified.</li> <li>The details of the Grace Project area Induced Polarisation surveys, including IP Chargeability and resistivity anomalies can be found in the WA DMP publicly available WAMEX reports A24465 (1988) and A53751 (1997).</li> </ul>
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>Future work includes desk top studies to interpret existing geological, drilling, geophysical and geochemical data sets for immediate drill targeting, twinning of selected historical drill holes to validate geology and assay results, and planning additional exploration programs, mainly soil geochemical surveying, IP surveying, aeromagnetic surveying in the southeast part of the project area covered only by regional spaced surveys, drilling target areas with air-core followed by reverse circulation and diamond drilling, and carry out studies to increase confidence in existing gold resources.</li> </ul>