

# Prospecting Permit Granted for Gold Exploration over Prospective Lammerlaw Area, Otago, NZ

ASX Release | 10 December 2019

## HIGHLIGHTS

- A Prospecting Permit for gold and other minerals over an area of 265.38 km<sup>2</sup> in the prospective Lammerlaw area, Otago, New Zealand was granted to NAE by New Zealand Petroleum & Minerals on 6 December 2019.
- The Permit is prospective for Macraes style gold deposits based on research by MacKenzie & Craw in 2016 which identified a 'mirror image' in the south of the Otago Schist belt (within the Permit) of the geology present in the north of the schist belt some 60km away which hosts the >10Moz Au Macraes gold mine within the Hyde Macraes Shear Zone ("HMSZ").
- MacKenzie & Craw (2016) proposed that the boundary of a lens shaped block in the south of the Otago schist belt defined by conductivity features (the majority of which lies within the Permit) may be analogous to the contact between Upper and Lower Greenschist Facies schist where the Macraes Footwall Fault and gold mines are located in the north of the Otago schist belt.
- The Permit contains historic gold and scheelite workings with minor occurrences of copper, silver and mercury. A historic antimony lode also exists to the north.
- New Zealand's largest alluvial gold deposit, Gabriels Gully (>0.5 Moz produced), is located approximately 3km directly to the south of the Permit and the source of the gold remains unidentified.
- NAE was granted the Permit after winning a competitive Newly Available Acreage process when the area became available after being relinquished by the previous holder, Vanuatu Mining Ltd in early 2019.
- The culmination of the analogous geological setting and similar conductivity lineaments to Macraes, the close proximity of New Zealand's largest alluvial gold deposit (Gabriels Gully) and historic gold mines being located on the Permit make it particularly prospective area for gold exploration.
- The prospective Lammerlaw Prospecting Permit strengthens NAE's position in Otago which includes the adjacent OPQ Exploration Permit 60502 where gold exploration is already well progressed and a significant gold soil anomaly has been defined over the historic OPQ gold mine.
- An initial work program comprising of mapping, soil and rock chip sampling is planned on the Permit for 2020 Q1 in combination with NAE's planned further exploration on the adjacent OPQ gold target within EP 60502.

NAE Executive Director, Joshua Wellisch commented; "NAE's technical team consider the recently granted Lammerlaw Prospecting Permit to contain the best Macraes style shear hosted gold exploration targets in the south of the Otago Schist belt which we are excited to now be the first to explore. This strengthens our position in Otago where we already have a well-advanced gold exploration program on the adjacent OPQ Exploration Permit and now provides us with the opportunity to advance exploration on both permits at once and increase our focus in the area".

## Prospecting Permit

New Age Exploration Limited ("NAE") recently received confirmation from New Zealand Petroleum & Minerals ("NZP&M") that its Prospecting Permit application lodged in May 2019 (60544) has now been granted over an area of 265.38 km<sup>2</sup> in the prospective Lammerlaw area, Otago, New Zealand ("the Permit").

The Permit was granted to NAE after winning a competitive Newly Available Acreage process run by NZP&M when the permit area became available after being relinquished early in 2019. The Permit adjoins NAE's OPQ Exploration Permit (60502) to the east.

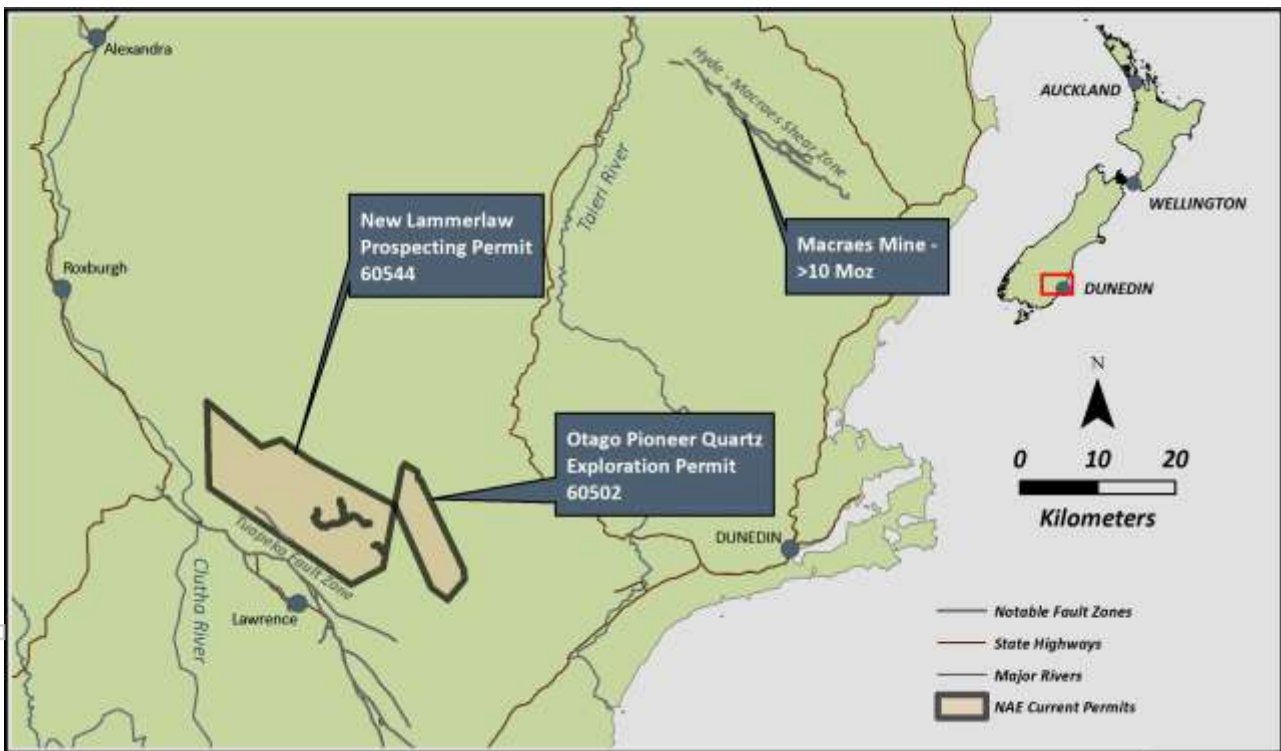


Figure 1 Location of NAE Permits in Otago, NZ

The Permit has been granted for an initial period of 2 years and with an annual fee of NZ\$8,622 p.a. Prospecting Permits allow low impact prospecting activities to be undertaken such as; geological mapping, soil and rock chip sampling, man-portable hand-held drilling and aerial surveys. An Exploration Permit is required prior to any deep drilling being undertaken which Prospecting Permit holders have the exclusive right of application for during the term of the Prospecting Permit.

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# Gold Exploration Targets

The regional geology is dominated by the Otago Schist belt, a high-grade metamorphic schist, which has a long history of both hard rock and alluvial gold mining. The Otago Schist is divided into structural blocks or zones of increasing metamorphic grade known as; Sub-Greenschist Facies, Lower Greenschist Facies, Upper Greenschist Facies and Amphibolite Facies. Gold mineralisation at the >10Moz Au Macraes deposits, hosted in the Hyde Macraes Shear Zone (“HMSZ”), occurs entirely within the Lower Greenschist Facies zone in the northeast of the Otago Schist belt (see Figure 2).

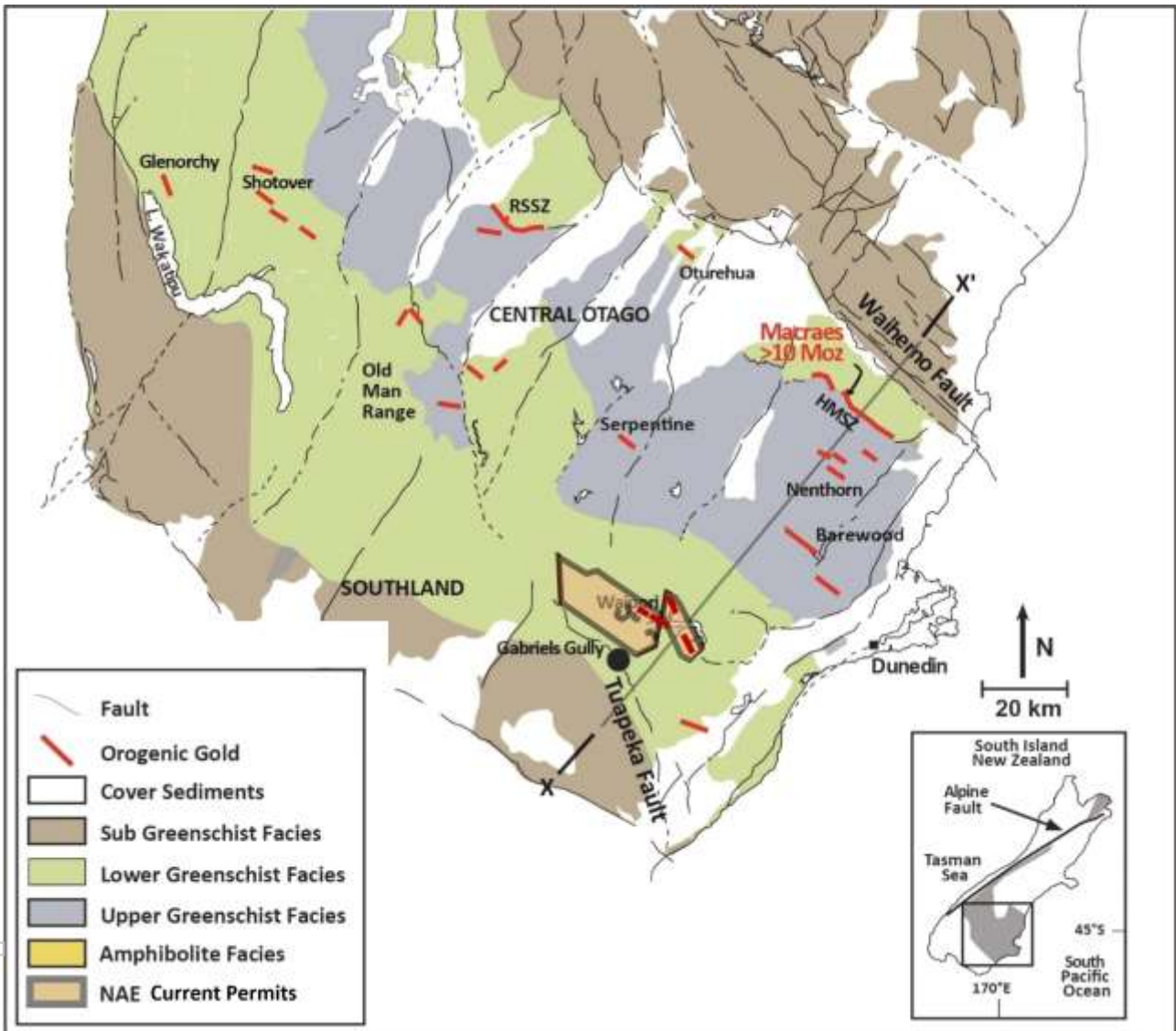


Figure 2 Geological Map - Shear Zone Hosted Gold Mineralisation within the Otago Schist Belt (X-X' shows the cross section line presented in Figure 3)

MacKenzie and Craw (2016) identified the potential for Macraes style shear zone hosted gold deposits to occur in the southern part of the Otago Schist belt within the Lower Greenschist Facies zone, inside the Permit area. These southern shear zone gold exploration targets have been identified as being a ‘mirror image’ of the geology present in the northern margin of the Otago Schist belt (approximately 60km to the northeast) containing the Hyde Macraes Shear Zone (“HMSZ”) which hosts the Macraes gold mine (>10 Moz) (See Figure 2).

Gold mineralisation such as that found along the HSMZ on the northeastern side of the Otago Schist belt may therefore also be present on the southwestern side of the Otago Schist belt within the Permit. This concept is shown in the schematic cross section in Figure 3 which also highlights conceptual southern shear zone gold exploration targets.

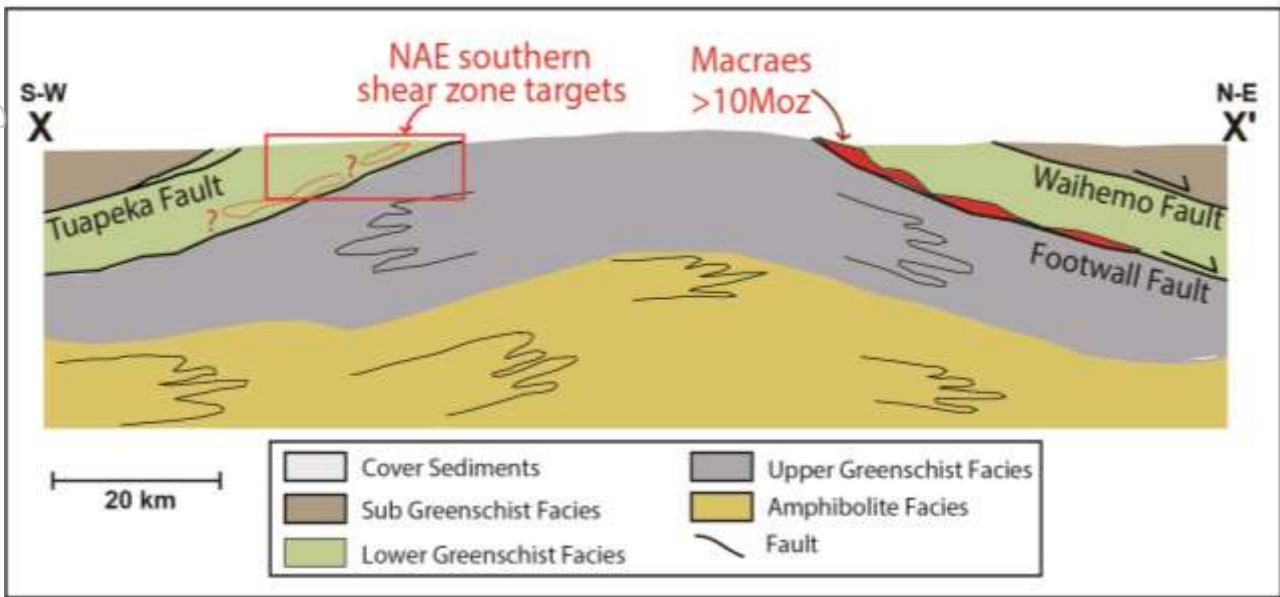


Figure 3 Geological Cross section - Otago Schist Belt & Southern Shear Zone Gold Exploration Targets (cross section line X-X' shown in Figure 2)

## Comparison with Macraes Gold Deposit

The Macraes gold deposit, including the Frasers Open Pit and Underground mine, is the largest gold mine in New Zealand and has produced more than 4 million ounces of gold since opening in 1990. It has a current mineral resource of over 6 Moz making the deposit >10 Moz in total. The Macraes mine is developed in a regionally continuous shear zone known as the Hyde Macraes Shear Zone (“HMSZ”). The HMSZ is up to 150m thick and dips at approximately 20° to the northeast.

The mineralised HMSZ and associated cross faults correlate with conductivity highs from an airborne geophysical survey flown for Glass Earth NZ Ltd in 2007 (see Figure 4a – warm colors (reds and oranges) mark areas of relatively high electrical conductivity).

Conductivity lineaments may therefore be used as a tool to help identify the occurrence of potentially mineralised shear zones in the ‘mirror image’ geological setting within Lower Greenschist Facies target zone in the southern part of the Otago Schist belt within the Permit.

## Conductivity Lineaments as an Exploration Tool

The South Shear Zone gold exploration targets within the Permit based on conductivity lineaments within the Lower Greenschist zone are shown in Figure 4b (warm colours (reds and oranges) mark potential targets with relatively high electrical conductivity).



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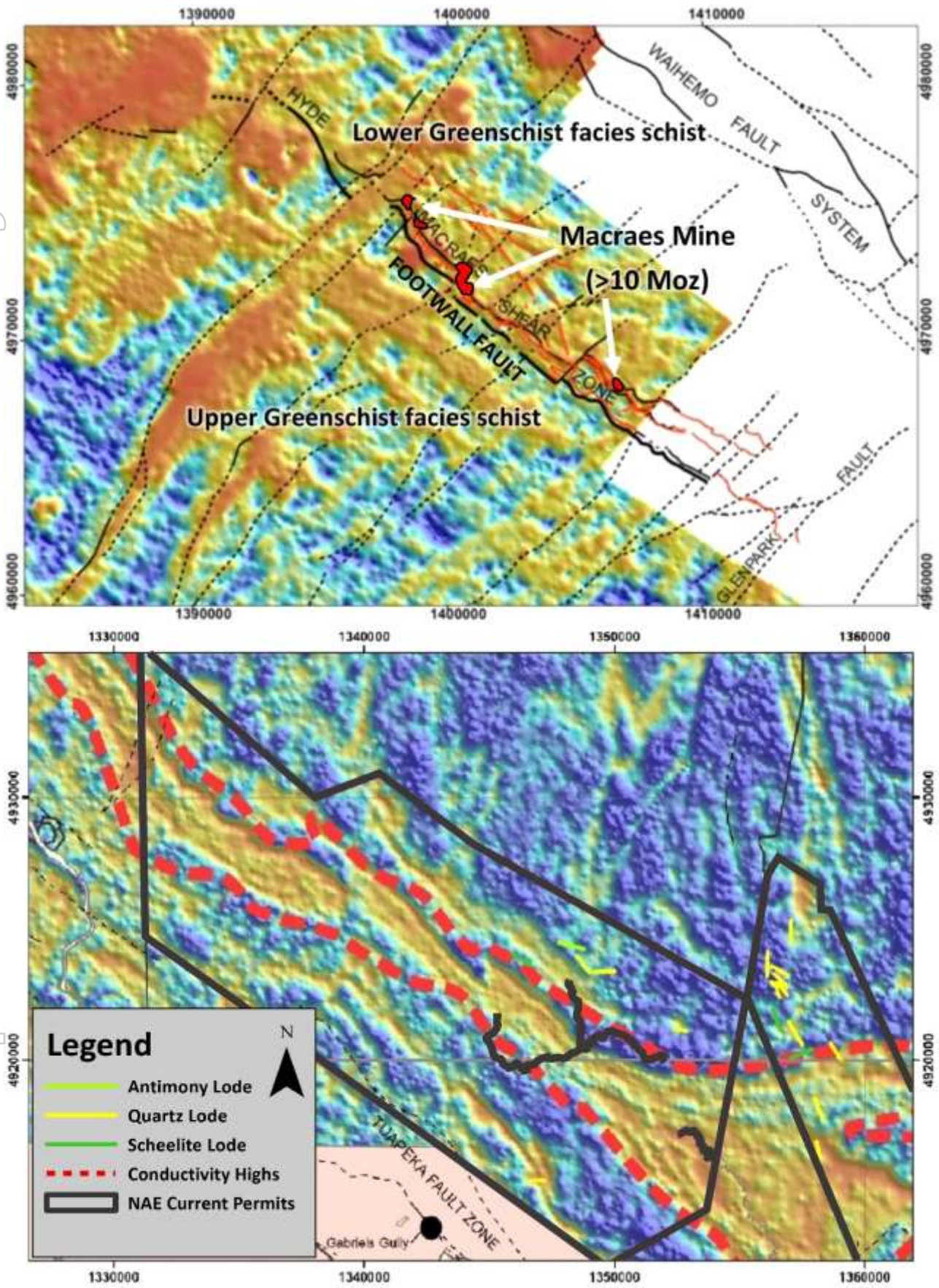


Figure 4; (a) Upper: Conductivity Lineaments over the Hyde Macraes Shear Zone on same scale for comparative purposes, (b) Conductivity Lineaments over NAE Lammerlaw Prospecting Permit and OPQ Exploration Licence Areas (conductivity images derived from the 8200Hz resistivity EM signal from 2007 Fugro airborne geophysical survey flown for Glass Earth NZ Ltd)



More specifically, MacKenzie & Craw (2016) propose that the boundary of a lens shaped block in the south of the Otago schist belt as defined by conductivity features (see Figure 5) may be analogous to the contact between Upper and Lower Greenschist Facies schist where the Macraes Footwall Fault and gold mines are located and the Tuapeka Fault Zone near the southern boundary of the Permit may be analogous to the Waihemo Fault System to the north of the Hyde Macraes Shear Zone.

The relinquished Mahinerangi Prospecting Permit (60254) to the east of the Permit and the relinquished Teviot Prospecting Permit (60255) to the west of the Permit contain only the eastern and western margins of this lens shaped target block. The main part of the lens shaped block within Lower Greenschist Facies in the southern part of the Otago Schist belt lies within the Permit and remains untested.

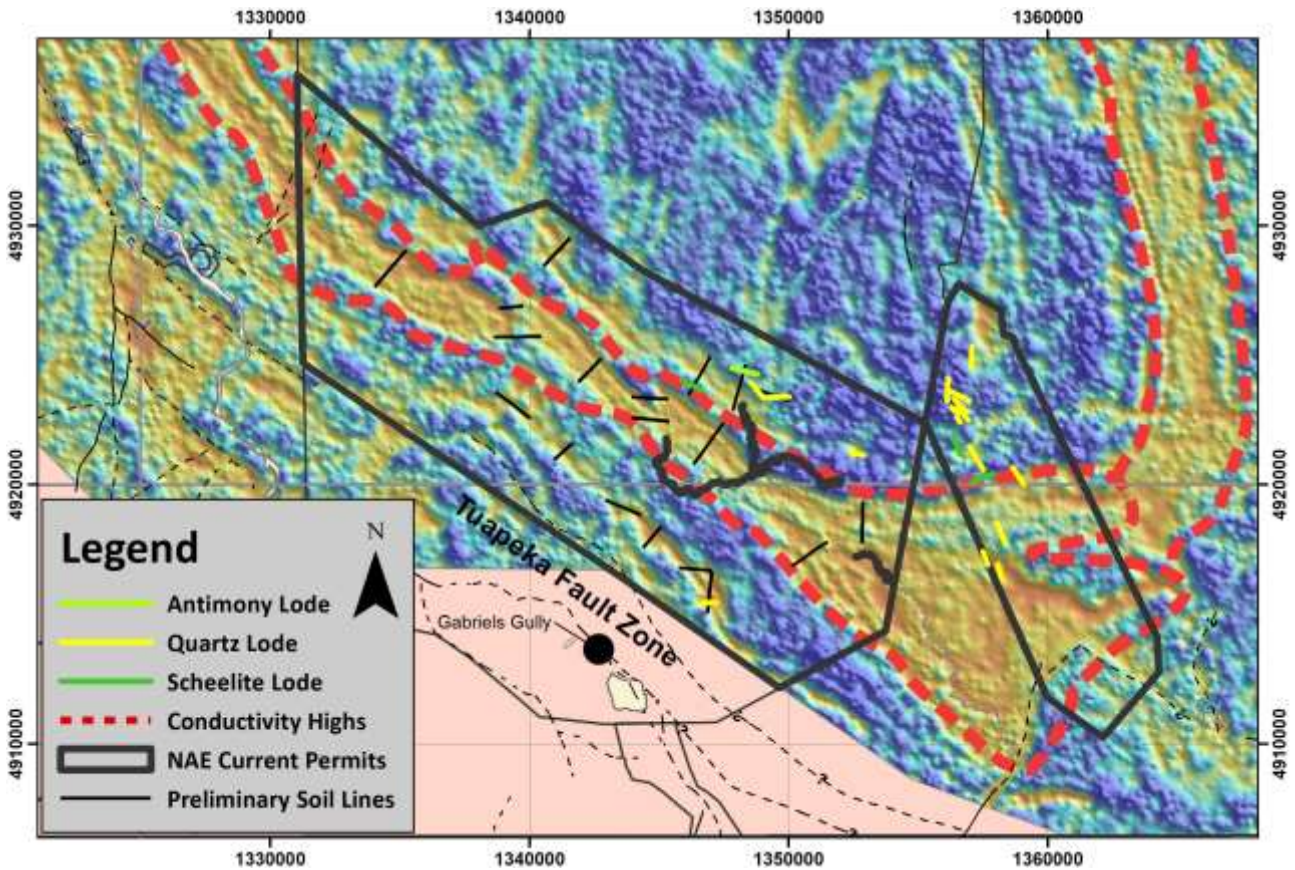


Figure 5 - Conductivity Lineaments over NAE Lammerlaw Prospecting Permit with Priority Exploration Target (Soil Sampling Lines) Marked (Black) (conductivity images derived from the 8200Hz resistivity EM signal from 2007 Fugro airborne geophysical survey flown for Glass Earth NZ Ltd)

## Historic Gold Mining

The Permit contains the historically mined Bella Lode where gold was mined in the late 1800's with an average grade of 15 g/tonne Au over 0.6-1.8m thickness, before the mine closed in 1901. The Permit also contains a historically mined antimony lode along and scheelite (tungsten) workings with minor occurrences of copper, silver and mercury.

New Zealand's largest alluvial gold deposit, Gabriels Gully (>0.5 Moz produced), is located approximately 3km directly to the south of the Permit the source of the gold remains unidentified.

## Planned Work Program

The culmination of the geological setting being analogous to the Hyde Macraes Shear Zone, the presence of conductivity lineaments similar to the Hyde Macraes Shear Zone to target exploration, the close proximity of New Zealand's largest alluvial gold deposit (Gabriels Gully), and historic gold mines being located on the Permit make it particularly prospective for gold exploration.

An initial exploration program will commence in 2020 Q1 in combination with planned further exploration on the OPQ gold target within the adjacent NAE Exploration Permit 60502. Initial fieldwork will focus on geological mapping soil sampling and rock chip sampling. Priority soil sampling lines are shown in black on Figure 5.

The initial work program has an expected cost of ~NZ\$90,000 which is fully funded.

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# COMPETENT PERSON'S STATEMENT

The information in this report that relates to Exploration Results is based on information reviewed by Kyle Howie, who is an exploration geologist and is a Member of the Australian Institute of Geoscientists. Kyle Howie has over 25 years experience in precious and base metal exploration and resource calculation including gold exploration and resource definition in the Otago region. Kyle Howie has sufficient experience which 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 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Kyle Howie consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

## FORWARD LOOKING STATEMENTS

This report contains "forward-looking information" that is based on the Company's expectations, estimates and forecasts as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to the Company's business strategy, plans, objectives, performance, outlook, growth, cash flow, earnings per share and shareholder value, projections, targets and expectations, mineral reserves and resources, results of exploration and related expenses, property acquisitions, mine development, mine operations, drilling activity, sampling and other data, grade and recovery levels, future production, capital costs, expenditures for environmental matters, life of mine, completion dates, commodity prices and demand, and currency exchange rates. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as "outlook", "anticipate", "project", "target", "likely", "believe", "estimate", "expect", "intend", "may", "would", "could", "should", "scheduled", "will", "plan", "forecast" and similar expressions. The forward looking information is not factual but rather represents only expectations, estimates and/or forecasts about the future and therefore need to be read bearing in mind the risks and uncertainties concerning future events generally.

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## JORC CODE, 2012 EDITION- TABLE 1

### Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>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.</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. 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.</li> </ul>	The east Otago region was covered by a helicopter-borne airborne geophysical survey that was flown by Fugro Airborne Surveys Ltd for Glass Earth NZ Ltd in 2007. The survey used Fugro's proprietary RESOLVE™ electromagnetic (EM) system combined with a magnetic gradiometer to target the top 100 metres of the earth's crust. Five different electromagnetic (EM) signals at frequencies of 400, 1800, 8200, 40K and 140K Hz were recorded to measure apparent resistivity of the underlying rocks. Flight lines were flown northeast-southwest and spaced 300 m apart with northwest-southeast tie lines flown every 3 km. The helicopter flew at a height of approximately 60 m and the sensor that was towed underneath maintained an average above-ground height of 30 m ± 10 m. Conductivity images used and interpreted in this study were derived from the gridded data lodged with and available from New Zealand Petroleum and Minerals (NZP&M) as Fugro; 2007; Airborne Geophysical Data; Ministry of Economic Development New Zealand Unpublished Mineral Report MR4327.
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>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.).</li> </ul>	Not Applicable
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <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 fine/coarse material.</li> </ul>	Not Applicable
<b>Logging</b>	<ul style="list-style-type: none"> <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
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <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</li> </ul>	Not Applicable

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Criteria	JORC Code explanation	Commentary
	<p><i>appropriateness of the sample preparation technique.</i></p> <ul style="list-style-type: none"> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <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></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <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></li> <li>• <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></li> </ul>	Not Applicable
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	Not Applicable
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>• <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></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<p>All data has been compiled on map grid system NZGD 2000 - New Zealand Transverse Mercator.</p> <p>Locations have been obtained from the 2007 aeromagnetic survey flown by Fugro Airborne Surveys Pty Ltd. in Fugro; 2007; Airborne Geophysical Data; Ministry of Economic Development New Zealand Unpublished Mineral Report MR4327</p>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <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></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<p>Geophysical data used and interpreted in this report was sourced from the aeromagnetic survey flown by Fugro Airborne Surveys Pty. Ltd. for Glass Earth Gold Ltd. in Fugro; 2007; Airborne Geophysical Data; Ministry of Economic Development New Zealand Unpublished Mineral Report MR4327.</p> <p>Details of this survey including the data spacing are provided above in the Sampling Techniques section.</p>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>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></li> </ul>	<p>The east Otago Schist metamorphic basement contains a predominant geological and structural trend direction, northwest – southeast, related to pervasive polyphase metamorphic deformation. Flight direction lines in the aeromagnetic survey were therefore oriented perpendicular to this geological trend and flown northeast – southwest at an azimuth of 45° to maximize coverage of the metamorphic and structural features in</p>

Criteria	JORC Code explanation	Commentary
		the basement rocks. Northwest-southeast tie lines were flown every 3km to allow for levelling of the survey data.
<b>Sample security</b>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	Not Applicable
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	The Competent Person is unaware of any reviews or audits which may have been completed other than that undertaken by the Competent Person himself

## Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li><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.</i></li> <li><i>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></li> </ul>	<p>In May 2019, New Age Exploration (“NAE”) applied for a Prospecting Permit for gold and other minerals covering an area of 266.1km<sup>2</sup> in the Lammerlaw Ranges in Otago, New Zealand.</p> <p>On 6 December 2019, New Zealand Petroleum &amp; Minerals (“NZP&amp;M”) granted NAE a Prospecting Permit Number 60544 over the majority of its application area (265.38 km<sup>2</sup>) in the Lammerlaw Ranges, excluding only a small area where an overlapping hobby permit alluvial gold application was made.</p> <p>NAE’s Lammerlaw Prospecting Permit was graded for an initial period of 2 years and the annual fee for the permit is NZ\$8,622 per annum. Prospecting Permits allow only minimum impact prospecting activities to be undertaken such as; geological mapping, soil and rock chip sampling and aerial surveys. An Exploration Permit is required prior to drilling being undertaken. Any Exploration Permit (which confers all or any of the same rights as a current Prospecting Permit in respect of all or part of the same land and the same minerals) may only be granted to a person other than the holder of the current permit with the prior written consent of the current permit holder.</p> <p>Surface land access consent from landowners is not required for the minimum impact exploration activities permissible under a prospecting permit however landowner notification prior to access is a requirement. Activities greater than minimum impact activities, such as drilling under any subsequent Exploration Permit, require a formal access arrangement for private and public conservation land.</p> <p>Government royalties on gold mined in New Zealand are the higher of:</p> <p>(a) an ad valorem royalty of 2% of the net sales revenue of the minerals obtained under the permit; and</p> <p>(b) an accounting profits royalty of 10% of the accounting profits, or provisional accounting profits, as the case may be, of the minerals obtained under the permit.</p>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	Alluvial gold was discovered in the Waipori area along the eastern boundary of the Lammerlaw Block in the early 1860’s after the significant discovery at Gabriels Gully to the south in 1861. Exploration and small scale mining of hard rock gold also began as early as the 1860’s



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		<p>with the most significant workings at Otago Pioneers Quartz (OPQ) lode from 1861 to 1903 (Galvin, 1906) to the east of the Permit area. Small claim workings continued throughout the late 1800's and into the early 1900's. An Antimony lode in the headwaters of Stony Creek was worked for some 20 years (Marshall, 1918). The early hard rock exploration of the neighbouring Waipori – Mahinerangi which includes the northeastern corner of the newly granted prospecting permit 60544 is described by Marshall (1918) and is summarised succinctly by P. Grieve in Mineral Report (MR) 3321 for the Macraes Mining Company.</p> <p>Alluvial gold prospecting was conducted in the Lammerlaw area by Alluvial Tin Ltd and British Developments Ltd in the 1930's (Williams, 1935; Wilson, 1935; and McDonnell, 1936). In the early 1970's a joint venture between Lime and Marble Ltd and AHI Minerals conducted prospecting for tungsten and antimony in the Lammerlaw area using panned concentrates, stream sediment sampling, channel sampling and soil sample lines (Riley and Coleman, 1972). Small alluvial gold prospecting licences were held over the Waipori River near Stony Creek in the early 1980's (Warburton, 1981). Homestake New Zealand Exploration Ltd and then BHP Gold Mines Ltd renewed hard rock exploration in the late 1980's by conducting stream and rock chip sampling (Kerber, 1988).</p> <p>Macraes Mining Company Limited bought into this exploration licence in 1990 and conducted geological mapping, rock chip and soil sampling (Au, As, Cu, Pb, Zn, Sb and Hg) throughout the early to mid 1990's (Grieve, 1994; and Yeo, 1997).</p> <p>Recent exploration efforts in the area include limited reconnaissance mapping by Middle Island Resources Ltd (Hardie, 2013) and regional work by Glass Earth. Glass Earth held a prospecting permit over a very large area of Otago which included the newly granted prospecting permit 60544 area (Glass Earth, 2010). Parts of the Glass Earth's prospecting permit were surrendered from the Glass Earth permit at stages throughout the permit life. Glass Earth compiled legacy data, conducted a regional geophysical survey (Fugro, 2007) and subsequently completed geochemical sampling. Glass Earth completed little geochemical sampling in the newly granted prospecting permit 60544 area before selling and leaving its South Island permits in 2013. Glass Earth (2010) references stream sampling conducted over the Permit area by Newmont – NAE has been unable to locate the source report for this data.</p> <p>The latest work completed in the newly granted NAE prospecting permit 60544 area was completed by Vanuatu Mining Ltd in their prospecting permit 56783. This large permit expired in December 2018 with little sampling conducted across their stated conceptual targets as defined by lineaments in aerial geophysics surveys. Within the Permit area, sampling conducted by Vanuatu was limited to 3 road corridors and the wide interval (~200 to 500m spacing) soil and rock chip samples received only portable XRF analysis with no supplementary fire assays (Tooley, 2018). The deepest soil sample taken was 1m in an area with various but</p>

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		<p>frequently thick loess cover. The work conducted by Vanuatu did not progress the understanding of potential mineralisation in the area to the point where exploration permit level work is practicable. Within their relinquishment report Vanuatu concedes that their field work was completed at a very late stage in their permit tenure (October and November 2018) and that the area requires more prospecting level work to progress the definition of the possible shear zone targets (Tooley, 2018).</p> <p>Current alluvial gold mining permits in the area include: 60196, Waipori River. 55730, Waitahuna River.</p> <p>References:</p> <p>Fugro Airborne Surveys Pty Ltd. 2007. Airborne Geophysical Data. Glass Earth Gold Ltd. Ministry of Economic Development, Wellington, New Zealand, unpublished open-file mineral report MR4327.</p> <p>Galvin. 1906. New Zealand Mining Handbook pg 163-166 Description of history of OPQ</p> <p>Glass Earth (NZ) Ltd. 2010. Combined Partial Surrender Report for PP 39322. Ministry of Economic Development. Unpublished Mineral Report MR4666.</p> <p>Greive, P. L. 1994. PL 31-25 3 6 Mahinerangi and PL31-25 3 7 Waipori, Otago, New Zealand. Three year technical work report for the period ending 6 October 1994. Ministry of Economic Development, Unpublished Mineral Report MR3321.</p> <p>Hardie Resources Ltd. 2013. PP 54359 Surrender Report for Mahinerangi Block. NZP&amp;M, Ministry of Business, Innovation &amp; Employment (MBIE), New Zealand. Unpublished Mineral Report MR4970</p> <p>Kerber, S. P. 1988. Exploration license 33305 Waipori, Otago, New Zealand, Final Report November 1988. Ministry of Economic Development, Unpublished Mineral Report MR2126.</p> <p>Marshall, P. 1918. The Geology of the Tuapeka District, Central Otago Division. Department of Mines, Geological Survey Branch, 124p.</p> <p>McDonnell, R. 1936 Borelogs Mitchells Flat, Waipori. Ministry of Economic Development, Unpublished Mineral Report MR2085.</p> <p>Riley, P., and Coleman, A. 1972. Report on geological and geochemical survey, Waipori area. Ministry of Economic Development, Unpublished Mineral Report MR2102.</p> <p>Tooley, L. 2018. Annual Technical and Relinquishment Report PP56783, Vanuatu Mining Ltd. Ministry of Economic Development, Unpublished Mineral Report MR5600.</p> <p>Warburton, E. L. 1981. Prospecting reports on PL 31613 and 31614 Waipori River near Stoney Creek. Ministry of Economic Development, Unpublished Mineral Report MR2113.</p> <p>Williams, F. A. 1935. Prospecting operations in Otago. Progress report for May 1935. Ministry of Economic Development, Unpublished Mineral Report MR3145.</p>

Criteria	JORC Code explanation	Commentary
		<p>Wilson, D. P. 1935. Borelogs Lammerlaw and North West Creek, Waipori. Ministry of Economic Development, Unpublished Mineral Report MR2455.</p> <p>Yeo, W. J. A. 1997. PL 31 2536, Mahinerangi and PL 31 2537, Waipori. Report for October 1991 to October 1997. Macraes Mining Co Ltd . Ministry of Economic Development, Unpublished Mineral Report MR 3544</p>
<b>Geology</b>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<p>MacKenzie and Craw (2016) proposed that the southwestern margin of the Otago Schist belt contains a block of Lower Greenschist Facies Schist containing NAE's southern shear zone targets that is analogous to and a geological 'mirror-image' of the northeastern Lower Greenschist Facies Schist block of the Otago Schist belt that hosts the HMSZ and the Macraes deposits. This research incorporates adjustments to the extent of the southwestern Lower Greenschist Facies Schist block and has demonstrated that regional structure in the schist basement of this block is much more complex than previously thought.</p> <p>Orogenic gold mineralisation such as that found along the HSMZ on the northeastern side of the Otago Schist belt may therefore also be present on the southwestern side of the Otago Schist belt within the newly granted NAE prospecting permit 60544 area.</p> <p>Reference:</p> <p>MacKenzie, D. J. and Craw, D. 2016. Structural and geophysical domains in the southwestern side of the Otago Schist belt, New Zealand. In Proceedings of the 49th Annual Conference New Zealand Branch of the Australasian Institute of Mining and Metallurgy: 223-232.</p>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>• <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:</i> <ul style="list-style-type: none"> <li>○ <i>easting and northing of the drill hole collar</i></li> <li>○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>○ <i>dip and azimuth of the hole</i></li> <li>○ <i>down hole length and interception depth</i></li> <li>○ <i>hole length.</i></li> </ul> </li> <li>• <i>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></li> </ul>	<p>Not Applicable – no drillholes are included in the Exploration Results</p>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> </ul>	<p>Not Applicable</p>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <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
<b>Diagrams</b>	<ul style="list-style-type: none"> <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>	Appropriate maps, plans, sections and other views of the interpreted mineralisation are included in the announcement.
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <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>	The announcement presents all of the salient exploration data that supports the results presented and where summarised is done so in such a way as to convey all of the results in a balanced manner.
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <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>	All relevant information has been presented in the announcement.
<b>Further work</b>	<ul style="list-style-type: none"> <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>	The announcement summarises the minimum work programme as stated in the granted permit 60544.

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