

# NZ Gold Results Indicate Potential Shear Hosted Mineralisation

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## HIGHLIGHTS

- Multiple anomalous gold/arsenic results identified from regional soil sampling carried out in June 2020
- Results indicate strong potential for shear hosted gold mineralisation along the metamorphic boundaries
- The anomaly in the east of MPP60544 coincides with anomalous gold and arsenic from historical soil sampling, which currently is 1.5km in strike length and extends in areas 600m from the metamorphic boundary
- Further work is planned to determine if the gold/arsenic anomalies continue along strike throughout the regional metamorphic boundaries
- A further 14 regional soil sampling lines and Wacker drilling are planned in 2020.
- The projects are 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 Permits) 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").
- The Permits contain historic gold and scheelite workings with minor occurrences of copper, silver and mercury. A historic antimony lode also exists to the north.

*NAE Executive Director, Joshua Wellisch commented; "NAE's technical team is very encouraged by the recent gold results which provide further support for the potential discovery of shear hosted gold deposits. We look forward to advancing the exploration as early as possible."*

New Age Exploration Limited ("NAE" or "the Company") is pleased to provide the following update on the completion of soil, rock chip sampling and field mapping over several areas identified in recently completed review of detailed airborne geophysical data covering both of the Company's New Zealand Gold projects.

The projects include the Otago Pioneer Quartz ("OPQ") Project within NAE exploration permit (EP 60502) and the Lammerlaw Project which includes prospecting permit (PP 60544) adjoining OPQ to the west (Figure 1).

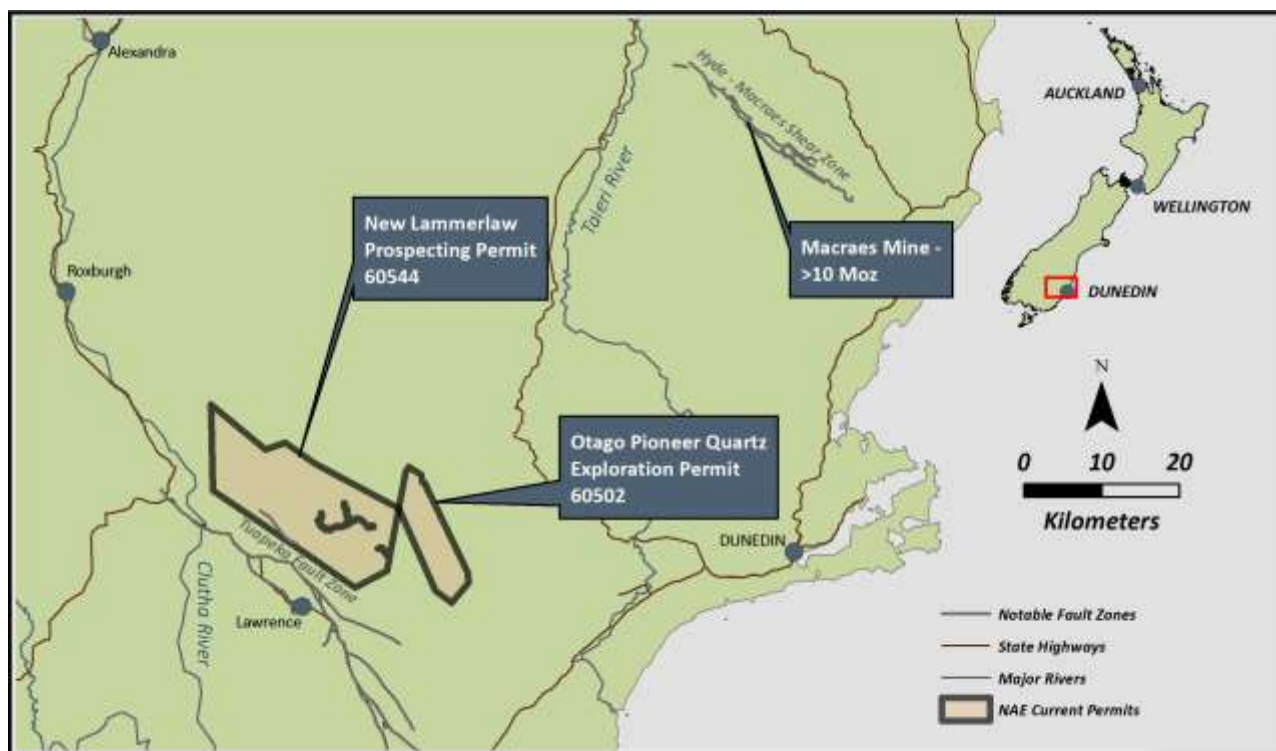


Figure 1: Location of NAE Permits in Otago, NZ

## CURRENT WORK PROGRAM

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

NAE commissioned a report by Anthony Coote, (APSAR Ltd) to examine regional geophysical and other data in March 2020 in the Lammerlaw and OPQ permits. The details of this are outlined in NAE's announcement on 23 April 2020 "NZ Gold Project Exploration Update". A regional soil sampling programme is targeting the contacts between contrasting metamorphic rocktypes comprising carbonaceous pelitic schists overlying psammitic mafic schists. These contact zones preferentially host mineralised shearing and veining in other deposits in Otago.

Figure 2 below shows the priority regional soil sample lines.

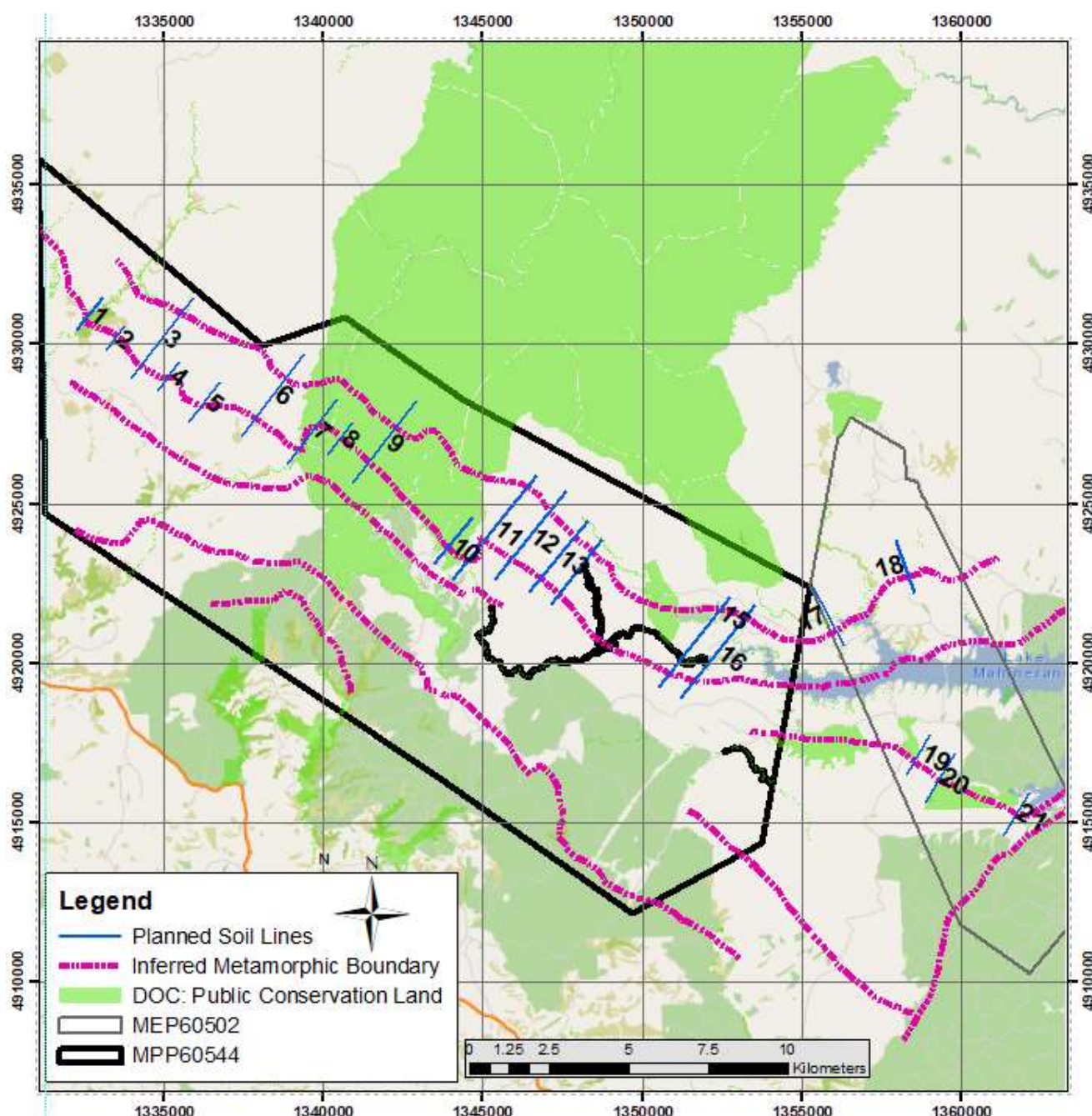


Figure 2: Regional Soil Sampling Lines

NAE's previous soil sampling targeting the OPQ gold target could not be used to interpret whether shear hosted gold is present as previous sampling was orientated in an east-west direction to test the north-south trending OPQ structure. The metamorphic boundary in the area trends northeast-southwest and southeast-northwest as shown in Figure 2. NAE's previous soil samples also do not traverse the metamorphic boundary.

Field work was carried out in June 2020 following the end of work restrictions due to COVID-19. The Initial fieldwork has focused on geological mapping, soil sampling and rock chip sampling targeting potential shear host gold mineralisation. Work was restricted to lower elevation areas due to winter weather conditions freezing the ground at higher elevations. See NAE's announcement on 30 June 2020 (NAE: Ground Work Completed at NZ Gold Projects & A\$1.8m received).



## RESULTS OF FIELDWORK

Soil and rock chip sampling along with geological mapping have been completed over seven of the 21 soil lines identified by the geophysical interpretation (soil lines 15 to 21). Only four of the seven lines adequately traversed the interpreted metamorphic contact, see Figure 3 below.

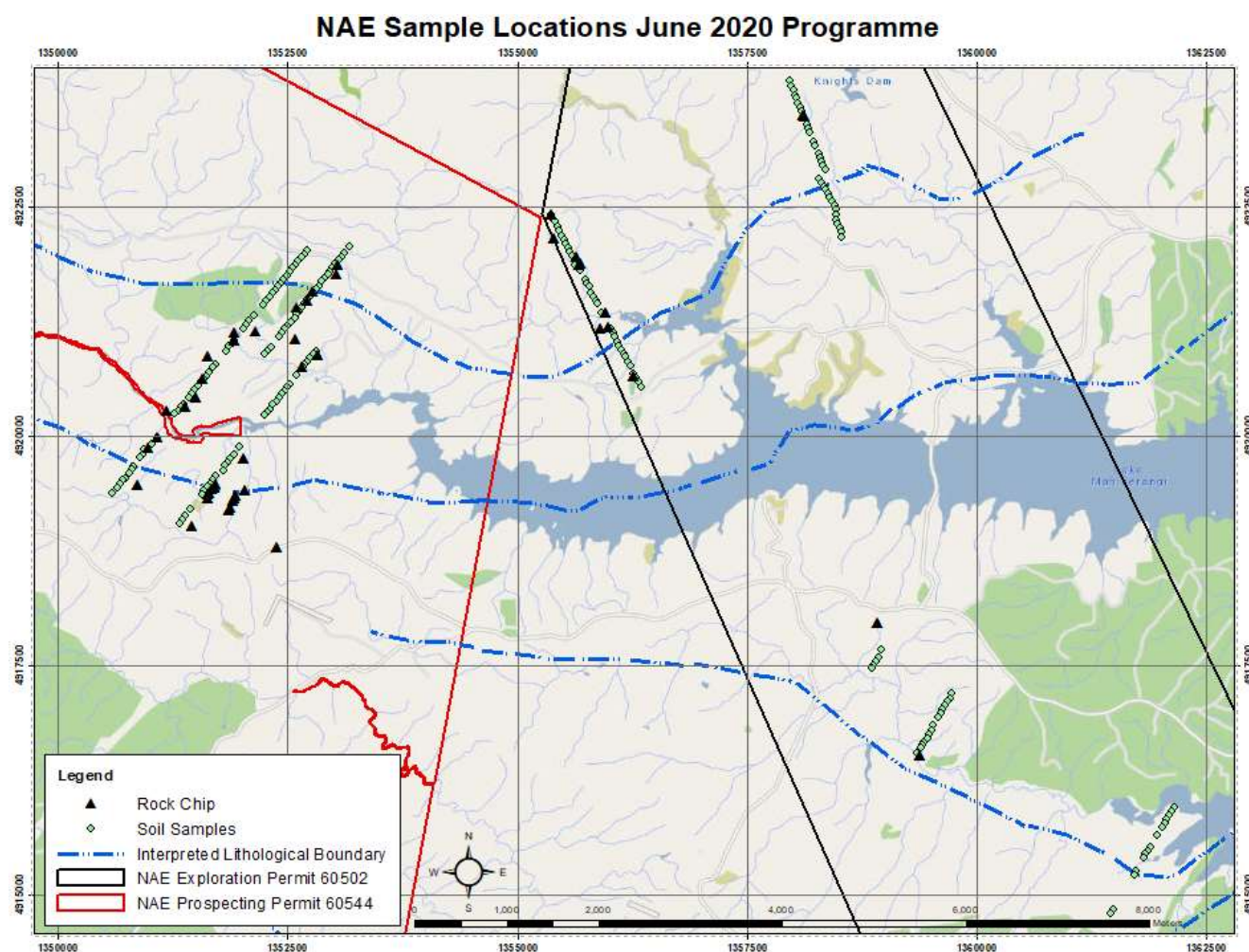


Figure 3: Location of Sample Collected for Analysis

A Total of 269 samples (217 soil and 52 rock chip) have been analysed by pXRF and sent to the laboratory for gold analysis. Seven soil samples had anomalous gold results over 10ppb, see Table 1 below. These anomalous gold samples had either corresponding anomalous arsenic results or adjacent to soils with anomalous arsenic results.

| Sample Name         | Co-ordinates (m, NZ Traverse Mercator Projection 2000) | Soil Horizon | Depth to C Horizon (m) | Total Depth (m) | As (ppm) | Au (ppb) |
|---------------------|--|--------------|------------------------|-----------------|----------|----------|
| 2020 60544 LN15 ST4 | 1352609.427mE<br>4921913.558mN                         | C            | 0.4                    | 0.6             | 10.8     | 14       |
| 2020 60544 LN15 ST9 | 1352453.766mE<br>4921715.507mN                         | C            | 0.4                    | 0.6             | 21.6     | 18       |

|                   |       |                                |   |      |     |       |    |
|-------------------|-------|--------------------------------|---|------|-----|-------|----|
| 2020<br>LN16 ST1  | 60544 | 1353172.882mE<br>4922079.664mN | C | 1.7  | 1.9 | 27    | 19 |
| 2020<br>LN16 ST9  | 60544 | 1352896.106mE<br>4921725.805mN | C | 0.2  | 0.4 | 11.9  | 25 |
| 2020<br>LN17 ST42 | 60502 | 1356317.225mE<br>4920595.483mN | C | 0.1  | 0.2 | 100.4 | 12 |
| 2020<br>LN21 ST4  | 60502 | 1362078.326mE<br>4915826.113mN | C | 0.7  | 0.9 | 11.9  | 22 |
| 2020<br>LN21 ST14 | 60502 | 1361822.834mE<br>4915406.278mN | C | 0.95 | 1.2 | 8.6   | 33 |

Table 1: Significant Gold Assay Results from June 2020 Field Work

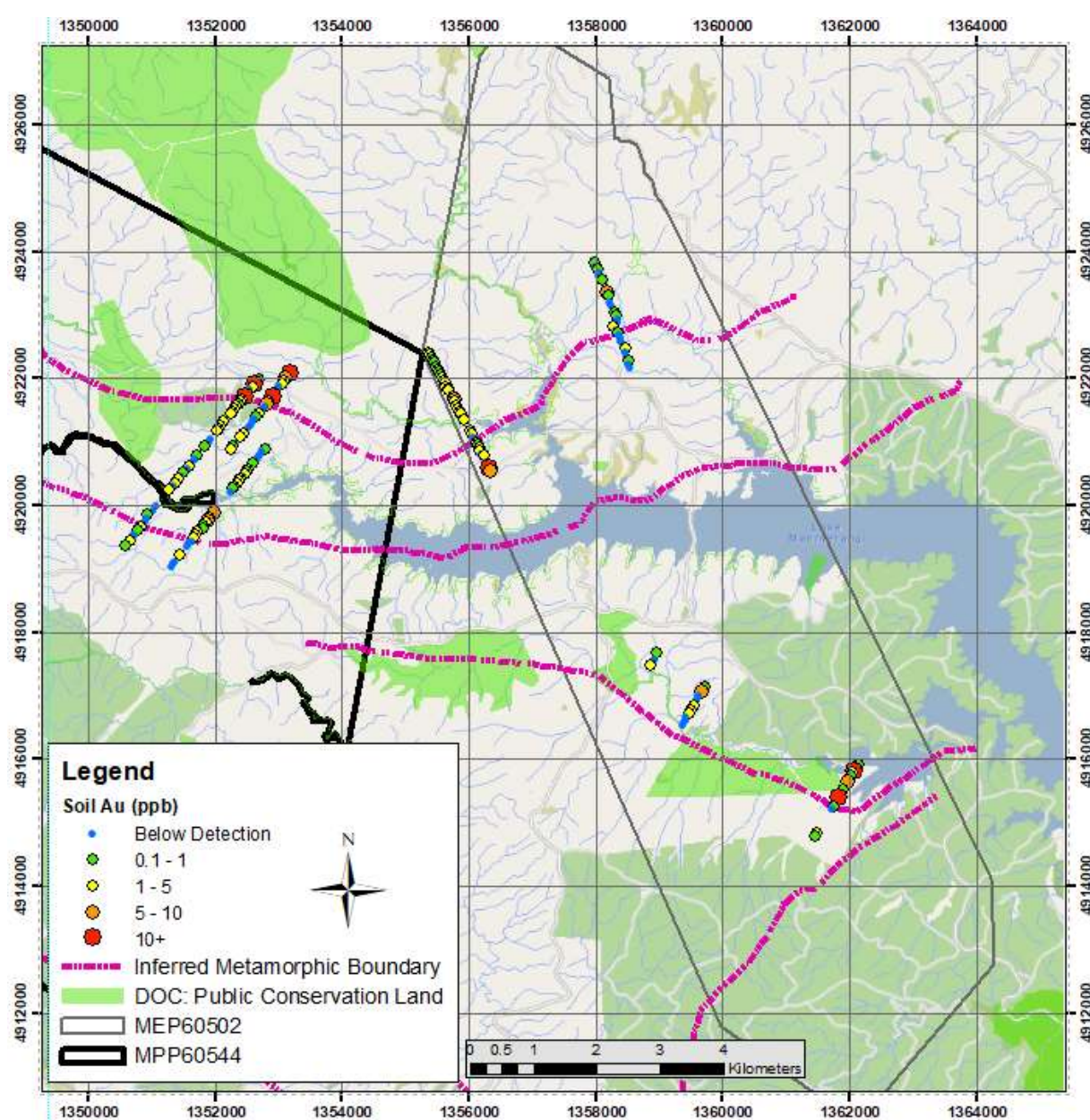


Figure 4: Soil Sampling Results for Gold



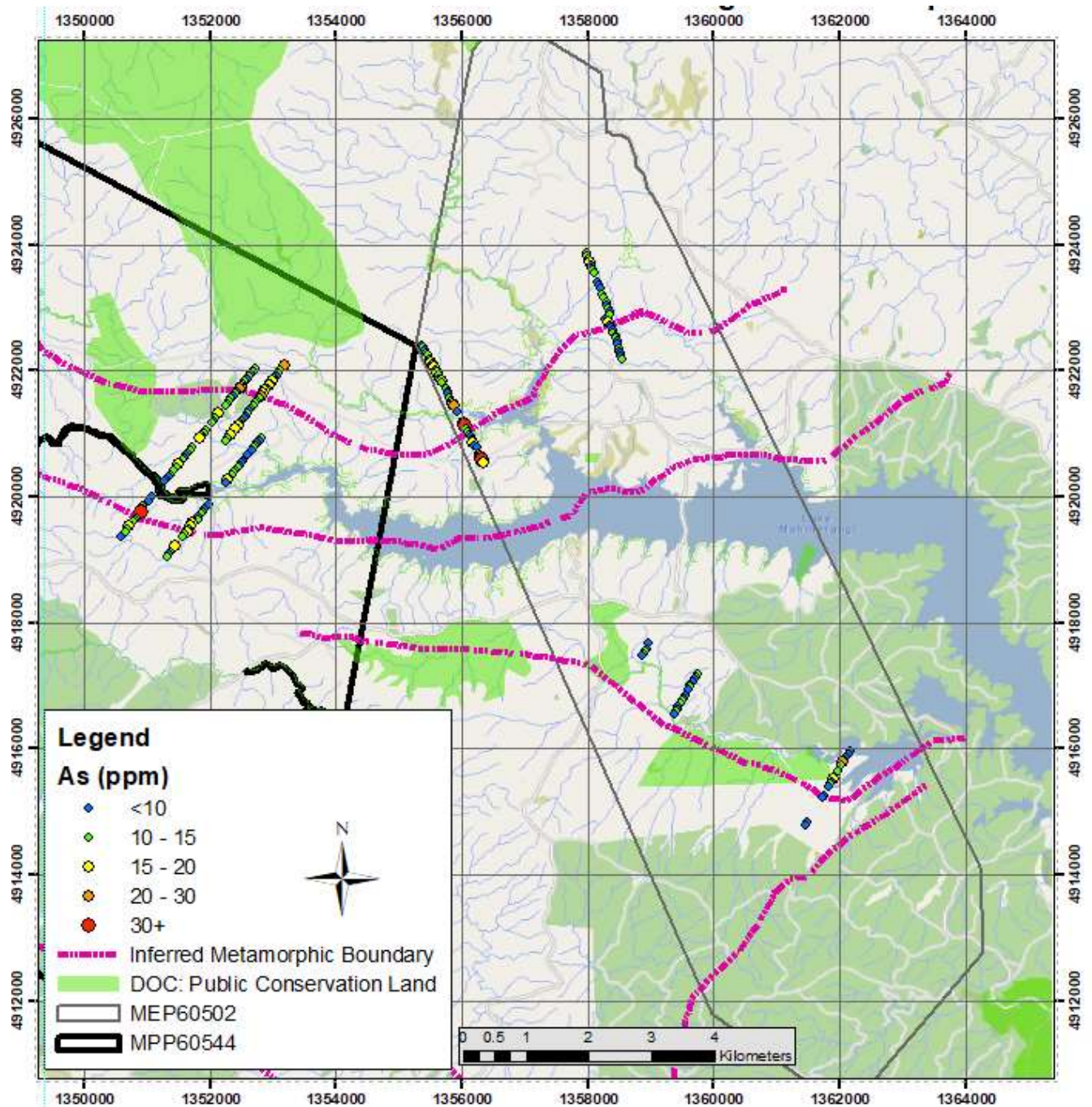


Figure 5: Soil Sampling Arsenic Results

Three of the four soil lines that traversed the interpreted metamorphic boundary had a gold and arsenic anomaly on or near the boundary. Line 21 in the south of MEP60502 sampled up to but not fully over the boundary but a gold/arsenic anomaly was identified here.

The most prominent geochemical feature of gold mineralised shear zones in the Otago Schist (from Hyde-Macraes and Rise & Shine shear zones) is locally enriched arsenic. However, auriferous quartz vein systems also have arsenic anomalies, as such other geochemical signatures associate with enriched arsenic.

Other elements known to occur with enriched As and Au at the Hyde-Macraes Shear Zone include Sb and Cr and minor enrichment in Bi and Mo (Craw et al 2007).

Key results from the June 2020 soil sampling programme include:

- Four anomalous gold (14, 18, 19 and 25ppb) samples and arsenic occur at the northern end of line 15 and 16 along the interpreted metamorphic boundary near the historic Bella mine. The anomaly is in the east of MPP60544. This area coincides with anomalous gold and arsenic from historical soil sampling carried out by Macraes Mining Company in the 1990s (Grieve, 1994). Together with the historical soil samples the anomaly is over 1.5km in strike length and extends in areas 600m from the metamorphic boundary. The historic Bella mine is over approximately 120m of strike in the center of this zone. There is Cr and Mo enrichment in the area with minor Bi and a couple of anomalous Sb (>30ppm) soil samples near anomalous gold samples.
- Anomalous gold (12ppb) and arsenic (100ppm) at the southern end of line 17 in the northwest of MEP60502. The anomaly is within 200m of the metamorphic boundary. The anomalous area is within the pelitic schist which is conducive for shear hosted gold mineralisation. There is local enrichment of Cr and Mo with minor Bi enrichment
- Two anomalous gold samples (22 and 33ppb) with adjacent anomalous arsenic are located on soil line 21 in the southeast of MEP60502. The anomaly is over 200m and within 400m of the metamorphic boundary. There is enriched Bi and Cr associated with or near the gold/arsenic anomaly and minor Sb and Mo enrichment as well

There were also areas on the interpreted metamorphic boundary that did not have gold over 10ppb but have minor gold enrichment with enriched arsenic and varying levels of enrichment for the other pathfinder elements, notably on lines 17 and the southern end of lines 15 and 16. Although anomalous gold was not identified in the soil samples in these areas the pathfinder elements shows there is potential for anomalous gold in the area associated with shear related mineralisation.

Rock chip samples did not return any significant gold results but several rock chip samples did have anomalous As (>100ppm) near the metamorphic boundary south of Waipori River.

With three of the four regional soil lines over the metamorphic boundary identifying a gold/arsenic anomaly with varying levels of enrichment of key pathfinder elements for shear hosted gold mineralisation, and a fourth line having an anomaly near the boundary, the results are encouraging for potential shear hosted mineralisation to be present. With only 8km of a 32km strike area having been tested by regional soil sampling there is potential for further anomalies along strike to be identified and further investigation around known anomalies to determine their extents

## NEXT STEPS

Further sampling and mapping will be required to determine if the gold/arsenic anomalies along with enrichment in pathfinder elements for shear hosted gold mineralisation continue along the interpreted lithological boundary between the pelitic and psammitic schist. The 14 regional soil sample lines further to the west along the metamorphic boundary will assist in determining whether the anomalies identified at the metamorphic boundary to date are located around the historic Bella mine or are part of a larger regional structure. The soil sampling along these other lines are planned for later in 2020 when weather conditions allow for work at higher elevations.

Wacker drilling is also planned to test areas that could not be adequately sampled by soil sampling.

In the three areas of anomalous gold/arsenic closer spaced sampling along with geological mapping will need to be carried out to identify potential trenching and drill targets.

NAE's technical team are continuing to plan for trenching and drilling to occur targeting the vein hosted OPQ gold target.

## 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 >Moz 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 6).

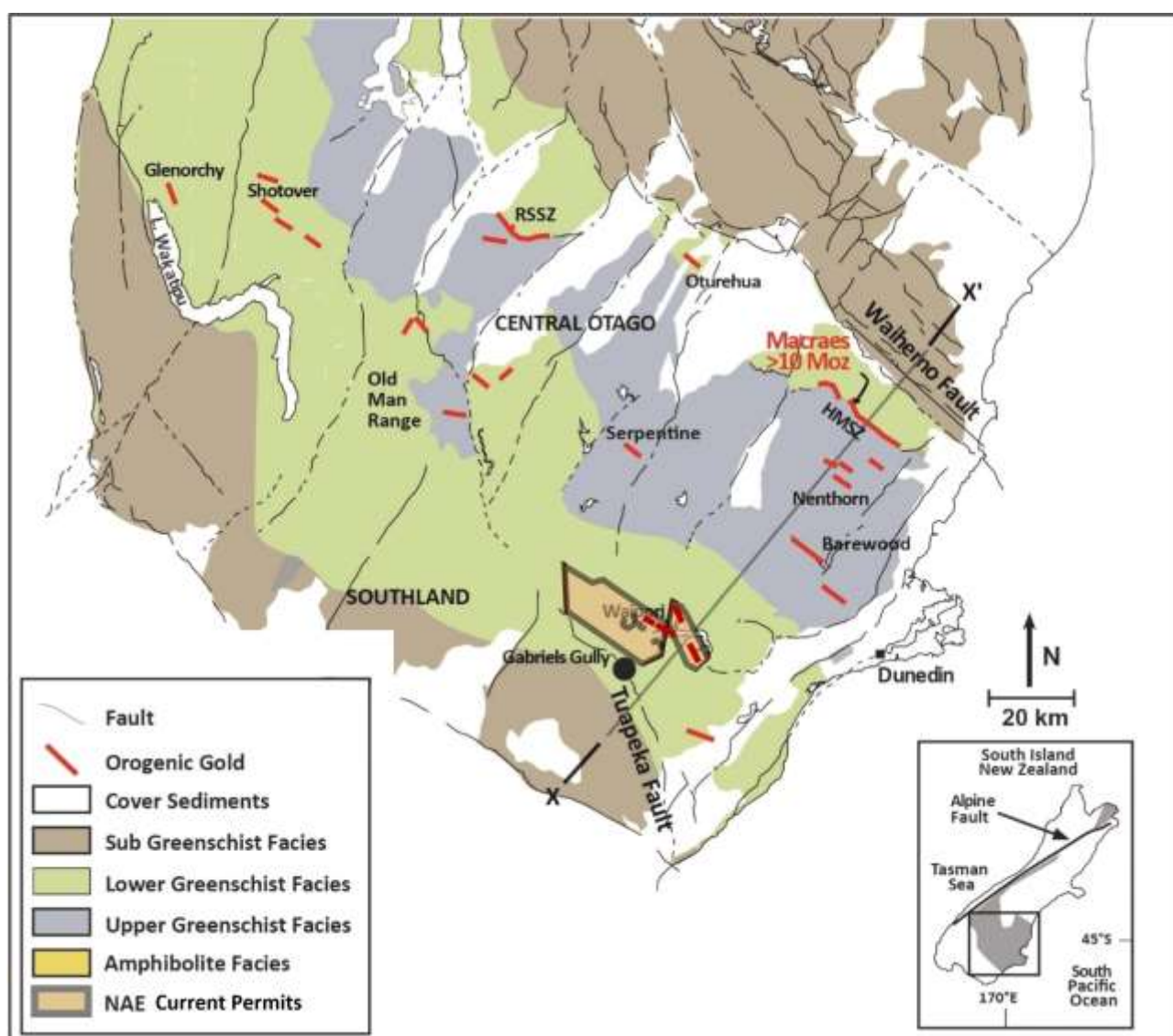


Figure 6: Geological Map - Shear Zone Hosted Gold Mineralisation within the Otago Schist Belt

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 1).

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 7 which also highlights conceptual southern shear zone gold exploration targets.

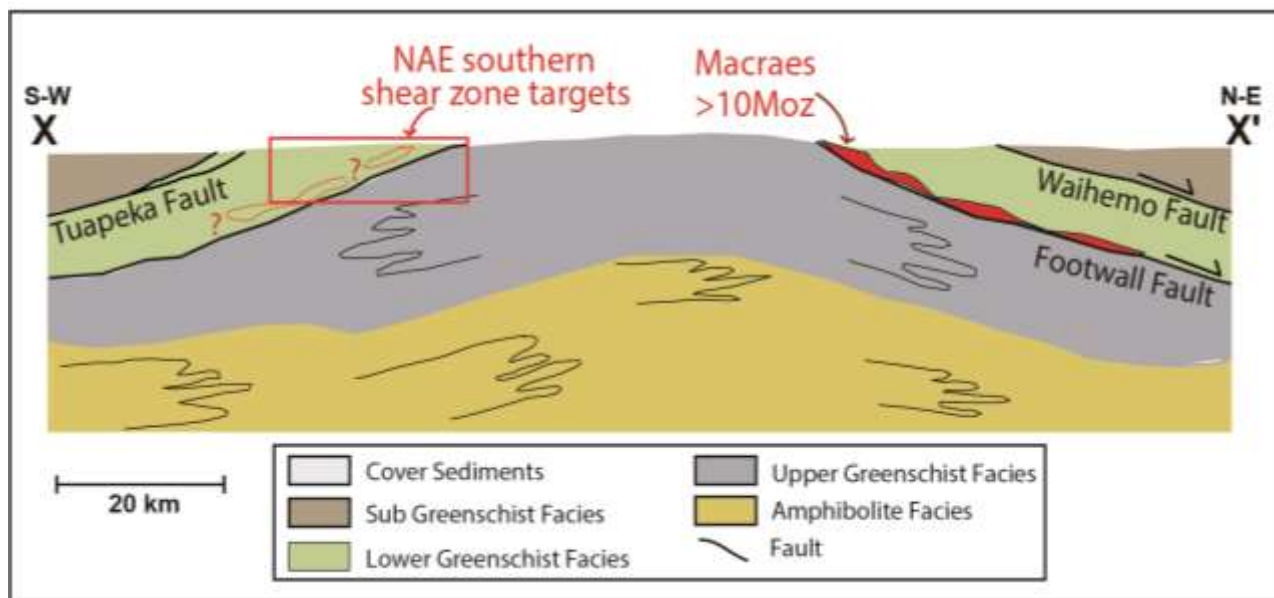


Figure 7: Geological Cross section - Otago Schist Belt & Southern Shear Zone Gold Exploration Targets

## 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 5 million ounces of gold since opening in 1990. It has a current mineral resource of over 4.5 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.

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.

## 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.

Released with the authority of the Board



Joshua Wellisch  
Director

## 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> | <p><b>Soil Sampling</b> – . Samples were collected using a hand auger with a penetration depth of 3 metres. Only 217 samples were adequate for analysis due to the hand auger not able to penetrate overlying windblown Loess up to 3 metres thick and areas covered by alluvial gravel or swamp material as such soil sampling would not give appropriate data to test for Au mineralisation of the basement Otago Schist. Samples obtained for analysis will be analyzed using a portable XRF instrument. Where bedrock is shallow, soil samples were retrieved using trenching shovel and hand trowel to avoid auger refusal. Samples were bagged in zip lock, clear ~50micron thick polyethylene bags. No samples were composited. All soil samples were submitted for fire assay gold.</p> <p><b>Rock Chip Sampling</b> – Rock chips samples were collected and analyzed using a portable XRF instrument. Samples were taken using rock hammer or trenching shovel. No samples were composited. All rock chip samples were submitted for fire assay gold.</p> |
| <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, no drilling undertaken   |
| <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, no drilling undertaken   |
| <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, no drilling undertaken   |
| <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>  | <p><b>Soil pXRF samples</b> – These were approximately 150-400g. Samples were hand screened to remove any contaminant organic matter (e.g. roots). Samples were bagged in zip lock, clear ~50 micron thick polyethylene</p>  |



| 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>   | <p>bags and whole samples analysed in the bags at field (in situ) moisture.</p> <p>Due to the sampling taking place in winter there was some inherent moisture in some of the soils. No sampling was undertaken on days of excessive rain due to there being an effect of wet samples on analysis on key elements (such as As). Any samples identified as over 20% moisture were noted in the field and were left to dry for at least 24 hours under a heat pump before being analysed.</p> <p><b>Rock chip pXRF samples</b> - Rock chips were initially analysed through the clear ~50 micron thick polyethylene bags on flat surface on the rock at multiple points. This has given varying results as such rock chip samples will be dried and crushed to &lt;6mm then pulverised to &gt;75µm and the pulps will be analysed to ensure homogeneity of the sample compared to analysing a flat in-situ section of the rock. The</p> <p><b>Soil and rock chip fire assay samples-</b> All samples submitted for fire assay gold were dried and crushed to &lt;6mm then pulverised to &gt;75µm.</p> <p>The nature and quality of the sample preparation technique is appropriate for fire assay gold analysis. The sample sizes are considered appropriate to the grain size of the material.</p>   |
| Quality of assay data and laboratory tests | <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> | <p><b>Soil and Rock Chip pXRF analysis</b> – All Soil and Rock Chip samples were analyzed by a Vanta M Series portable XRF instrument supplied by Verum Group Ltd with reading times of 30 seconds per beam for each sample using Geochem Mode. The excitation source for this analyser is a 10–40 keV, 5–50 µA, W anode X-ray tube and the detector is a thermo-electrically cooled Si PIN diode with a resolution of &lt;280 eV. Portable XRF analysis was carried out for the following suite of metals for all samples; As, Mg, Al, Si, P, S, K, Ca, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Se, Rb, Sr, Y, Zr, Nb, Mo, Ag, Cd, Sn, Sb, Ba, W, Hg, Pb, Bi, Th, and U .</p> <p>The Vanta portable XRF instruments was calibrated daily using Alloy Certified Reference Materials produced by Analytical Reference Materials International (ARMI), and the calibration verified using Soil Certified Reference Materials produced by National Institute of Standards and Technology (NIST). Analysis of Certified Reference Material and a SiO<sub>2</sub> blank were conducted every 20 analysis and at the start and end of every soil sample line. It was identified that the portable XRF instrument was over-reading the As of the Certified Reference Material by 10%.</p> <p>Duplicate or triplicate analyses was undertaken randomly on samples within the reduced prospecting permit areas using the Vanta portable XRF in the field.</p> |

| Criteria                              | JORC Code explanation   | Commentary   |
|---------------------------------------|---|--|
|                                       |   | <p>A comparison analysis of portable XRF results was undertaken of random samples comparing results of samples analysed through the plastic sample bag and then the same samples not in the plastic bag. This was to determine if the analysis through the plastic bag had an impact on the reading or key pathfinder elements such as As. It was identified that the bag introduced a -18% bias on As compared to non-bagged samples. A correction to As will be applied to the final data.</p> <p>From analysing the results of the Certified Reference Material and the results of the effect of the plastic sample bag, the following correction factors were applied to the find portable ERF data:</p> <ul style="list-style-type: none"> <li>• As: 1.08</li> <li>• Ti: 1.137</li> <li>• V: 1.277</li> <li>• Mn: 1.14</li> </ul> <p>All samples for fire assay gold were prepared by SGS Laboratories at 5 Lyttleton St, Westport, and then analysed by SGS Laboratories, 43 Victoria Street, Waihi, NZ. Analyses were conducted to ppb level (ICP-MS Gold analysis finish after Fire Assay 30g). A blank was analysed before every batch of samples with an internal standard analysed every 20 samples. Duplicates were analysed every 15 samples and a replicant every 30 samples. Three field duplicates were also analysed. The certified reference gold standards included in batches by were supplied by Rocklabs Ltd</p> |
| Verification of sampling and assaying | <ul style="list-style-type: none"> <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> | <p>Portable XRF results and relative GPS location points will be downloaded onto a field laptop daily and cross referenced with written notes. During download the GPS locations are plotted for a qualitative check against georeferenced aerial photos raster files. These results and the corresponding location points will be compiled into a single Excel spreadsheet. Precision for each element is recorded by the pXRF instrument and are uploaded into the results table. All fire assay gold results will be entered into this spreadsheet and then imported into GIS software for plotting. Potted results were cross-referenced against field notes.</p> <p>All data will be compiled on map grid system NZGD 2000 - New Zealand Transverse Mercator.</p> <p><b>Airborne Resistivity Survey</b> - Locations have been obtained from the 2007 aeromagnetic survey flown by Fugro Airborne Surveys Pty Ltd. in Fugro; 2007; Airborne Geophysical Data; Unpublished Mineral Report MR4327.</p> <p><b>Soil and Rock Chip Sampling</b> – Locations of all soil and rock chip sampling were recorded using a handheld Garmin GPSMAP 66i GPS using the New Zealand Transverse Mercator projection based on the New</p>   |

| Criteria   | JORC Code explanation  | Commentary  |
|--|--|---|
|  |  | <p>Zealand Geodetic Datum 2000. In general, these points have an accuracy of +/-5m.</p> <p><b>Geological Mapping</b> – all mapping points have been recorded using Garmin GPSMAP 66i with expected accuracy of <math>\pm 5</math>m using New Zealand Transverse Mercator 2000 projection based on the New Zealand Geodetic Datum 2000 using the GRS80 reference ellipsoid.</p>  |
| <b>Location of data points</b>                                 | <ul style="list-style-type: none"> <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>  | <p>All soil samples were predetermined in GIS and exported as a GPX file onto a Garmin GPSMAP 66i using the New Zealand Transverse Mercator projection based on the New Zealand Geodetic Datum 2000. In the field soil lines were walked, navigated by the GPS to each soil sample location with accuracy within 5m. If the sample location was unsuitable the sample locations were moved. The location for each hole dug then marked by waypoint on the GPS unit in the same projection and datum as the predetermined locations. Locations were cross referenced with up to date satellite imagery from Google Earth and Land Information New Zealand (LINZ) Rural Aerial Photo and LINZ Topo50 Topographic Map series images.</p> |
| <b>Data spacing and distribution</b>                           | <ul style="list-style-type: none"> <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>                                 | <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>Soil sampling was completed on 50 metre spacings. Soil lines spacing were based on the interpretation of the geophysical data. As a first pass soil sampling programme 50m sample spacing is determined to be adequate to identify geochemical signatures at the interpreted lithological contact.</p> <p>No Sample compositing has been applied.</p>  |
| <b>Orientation of data in relation to geological structure</b> | <ul style="list-style-type: none"> <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> | <p>The east Otago Schist metamorphic basement contains a predominant geological and structural trend direction, northwest – southeast, related to pervasive polyphase metamorphic deformation.</p> <p>The interpreted lithological boundaries are in a NW-SE orientation within MPP 60544 and the south of MPE 60502 move to a more ENE-WSW orientation in the north of MEP 60502 due to nose of the plunging Lammerlaw antiform. Soil sample lines are perpendicular to these lithological contacts with soil lines in MPP 60544 and the south of MEP 60502 orientated NE-SW and soil lines in the north of MEP 60502 orientated NNE-SSW orientation.</p>  |
| <b>Sample security</b>   | <ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>  | <p>All samples analysed by pXRF were analysed either in the field or at accommodation unit, with a small portion analysed (e.g. un bagged and duplicates) back at Verum Groups Christchurch lab. All samples were stored under</p>  |



| Criteria                 | JORC Code explanation  | Commentary  |
|--------------------------|--|---|
|                          |  | <p>supervision of field geologists in the field including in locked storage overnight. Samples at Verum's Christchurch office were security stored in a locked and alarmed storeroom.</p> <p>Samples couriered to SGS were tracked and traced and are currently at SGS's secure laboratory following fire gold assay.</p> |
| <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   |
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| <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>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. NAE are fully compliant with their mineral tenements.</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 with the most significant workings at Otago Pioneers Quartz (OPQ) lode from 1861 to 1903 (Galvin, 1906) to   |

| Criteria | JORC Code explanation | Commentary  |
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|          |                       | <p>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 frequently thick loess cover. The work conducted by Vanuatu did not progress the understanding of potential</p> |

| Criteria | JORC Code explanation | Commentary   |
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|          |                       | <p>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:</p> <p>60196, Waipori River.</p> <p>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> <p>Wilson, D. P. 1935. Borelogs Lammerlaw and North West Creek, Waipori. Ministry of Economic Development, Unpublished Mineral Report MR2455.</p> |



| Criteria                        | JORC Code explanation  | Commentary   |
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|                                 |  | 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  |
| <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> | Not Applicable – no drillholes are included in the Exploration Results   |
| <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> <li>• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>   | Not Applicable, no aggregation was data was undertaken   |

| Criteria  | JORC Code explanation  | Commentary  |
|---|--|---|
| <b>Relationship between mineralisation widths and intercept lengths</b> | <ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>• <i>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').</i></li> </ul> | Not Applicable, no drilling or channel sampling was undertaken  |
| <b>Diagrams</b>   | <ul style="list-style-type: none"> <li>• <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i></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>• <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></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>• <i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>                           | All relevant information has been presented in the announcement.  |
| <b>Further work</b>   | <ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>  | The announcement summarises the minimum work programme as stated in the granted permit 60544.   |