

## **Exploration results and detailed Geophysical review highlights expanded Gold potential at the Lammerlaw Project, NZ**

- **A review of recently acquired detailed geophysical data has highlighted compelling new Gold targets on under explored locations**
- **XRF elevated Arsenic results indicate a significant extension to known Gold anomalies**
- **Gold assays for auger, float and rock chip samples collected in May 2022 are currently being processed**
- **Contiguous tenement position at Lammerlaw allows proven targeting methodologies to be extended along the full ~25km of prospective structural corridor**
- **Extension of Duration granted for Lammerlaw Prospecting Permit PP60544, securing the strategic landholding.**

**New Age Exploration** (ASX:NAE) (**New Age** or the **Company**), is pleased to announce an update for the Company's Exploration activities on the Lammerlaw Gold Project in Otago, New Zealand.

Newly re-processed legacy geophysical data has been acquired for all NAE Otago permits. The resulting new imagery has had an immediate impact, highlighted areas of interest and confirming targeting methodologies.

Ongoing field campaigns within Lammerlaw Exploration Permit EP60807 have produced encouraging pXRF arsenic results from additional auger, float and rock chip sampling. New sampling extends arsenic-gold geochemical trends delineated by field campaigns carried out in November 2020 and February 2021 ([refer to ASX Announcement 28 April 2021](#)). Gold assays for samples collected in May 2022 have been submitted and are currently being processed.

An application submitted to New Zealand Petroleum & Minerals for an Extension of Duration (**EoD**) for Lammerlaw Prospecting Permit PP60544 has been granted, this allows continued surface exploration until 26 November 2023. Proven targeting methodologies will continue to be extended for along a ~25km prospective structural corridor held under Lammerlaw Prospecting Permit PP60544 and Lammerlaw Exploration Permit EP60807.



Figure 1: Location of NAE Permits in Lammerlaw, Manorburn and OPQ, Otago, NZ.

The Central Otago Schist Belt has a proven gold endowment highlighted by Santana Minerals Limited (ASX:SMI) recent discoveries at the Bendigo-Ophir Gold Project as well the World Class Macraes Gold Mine, owned and operated by Oceana Gold. NAE considers its Lammerlaw Project to potentially host structurally controlled orogenic gold mineralisation similar to the bulk tonnage Macraes and Bendigo-Ophir deposits, as well as high-grade quartz lode gold systems seen elsewhere in the Otago.

**New Age Exploration Executive Director, Joshua Wellisch, commented:**

*“The New Zealand gold portfolio continues to advance and mature with more exciting prospects emerging with each stage of the exploration. All the projects represent substantial opportunities for new Gold discoveries within the well-endowed Otago region NZ.”*

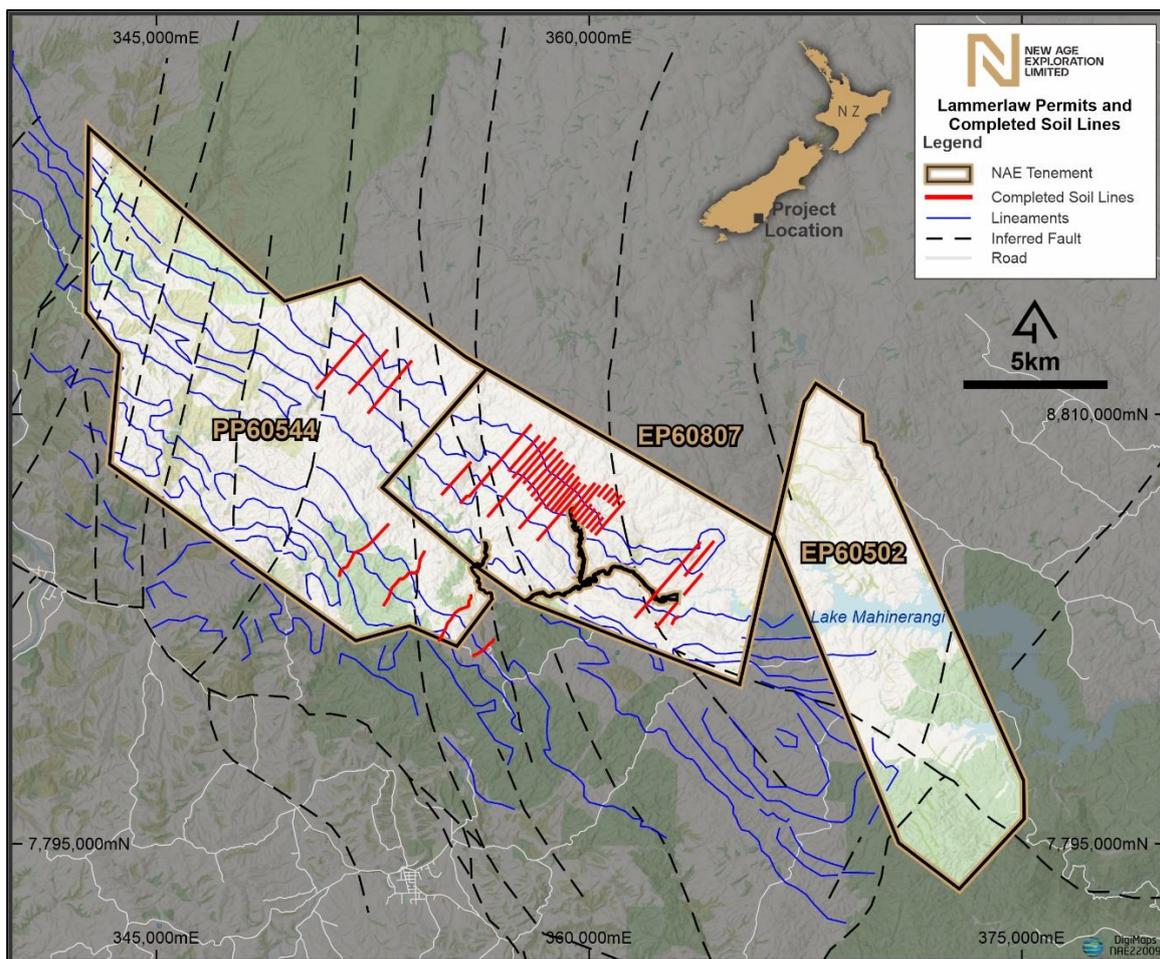


Figure 2: Location of NAE Permits in Lammerlaw (PP60544 and EP60807) and OPQ (EP60502), Otago, NZ. Red lines show the current extent of NAE auger sampling lines.

**Geophysical Data for NAE Otago Projects Re-Processed**

Legacy electromagnetics and magnetics geophysical surveys data covering NAE Otago permit areas has been reprocessed using the latest techniques by Fathom Geophysics Ltd (**Fathom**). Advance image processing over NAE Otago Project used cutting edge algorithms, to produce automated interpretation of topography, magnetics and electromagnetic images.

Fathom's structural detection algorithm produces images that highlight structural complexity and edge features (faults, contacts and other structures) to reduce subjectivity by the interpreter. When the products are combined with other exploration data sets such as geochemistry and mapping, target interpretation can be applied with limited cognitive bias. Results of this process have highlighted additional targets and improved structural understanding of the Lammerlaw area (Refer Figure 2, 3).

Important to this announcement is re-processed geophysics and geochemical trends confirm the likely continuation gold targets across the full length of the Lammerlaw permits. Targeted geochemical sampling will now be used to test concepts.

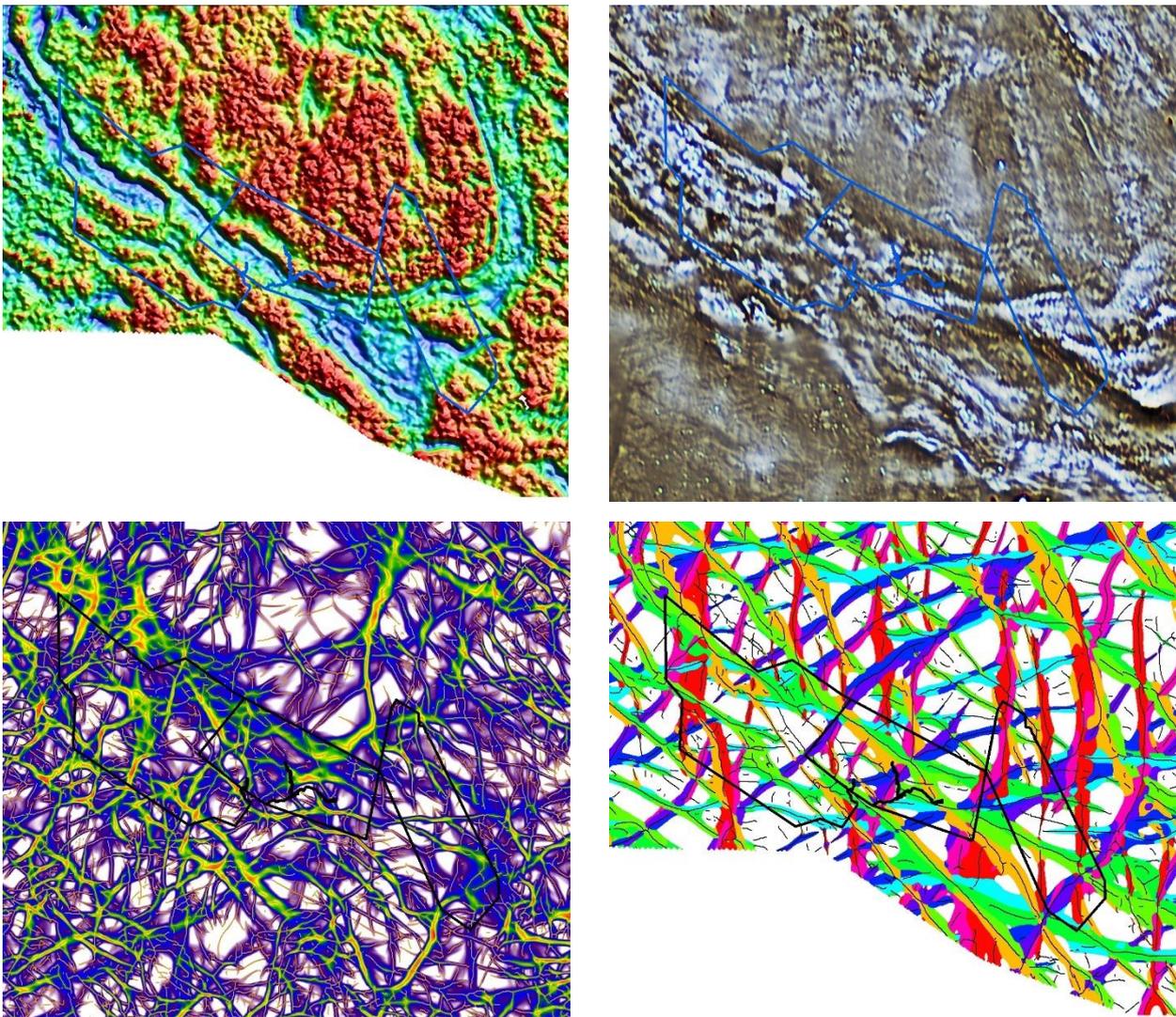


Figure 3: Examples of newly acquired geophysical images over the Lammerlaw/Mahinerangi area.

### **Anomalous Arsenic Zones Extended in Lammerlaw EP60807**

Ongoing activity in Lammerlaw Exploration Permit EP60807 has highlighted kilometer scale geochemical trends hosting anomalous arsenic-gold plus antimony and tungsten mineralisation ([refer to ASX Announcement 28 April 2021](#)). Arsenic geochemistry best highlights geochemical trends due to its common relationship with gold occurrence. Within Lammerlaw Exploration Permit EP60807 arsenic in

auger and rock samples highlights two sub-parallel, semi-continuous structures roughly 5-6km in length and a third smaller linking structure (Figure 4).

Outcrop exposure at Lammerlaw is sparse, with only competent psammitic schist outcropping on ridges and in creeks. Shear zones and pelitic schists which are more likely to host geochemical trends are recessive in the landscape and rarely outcrop.

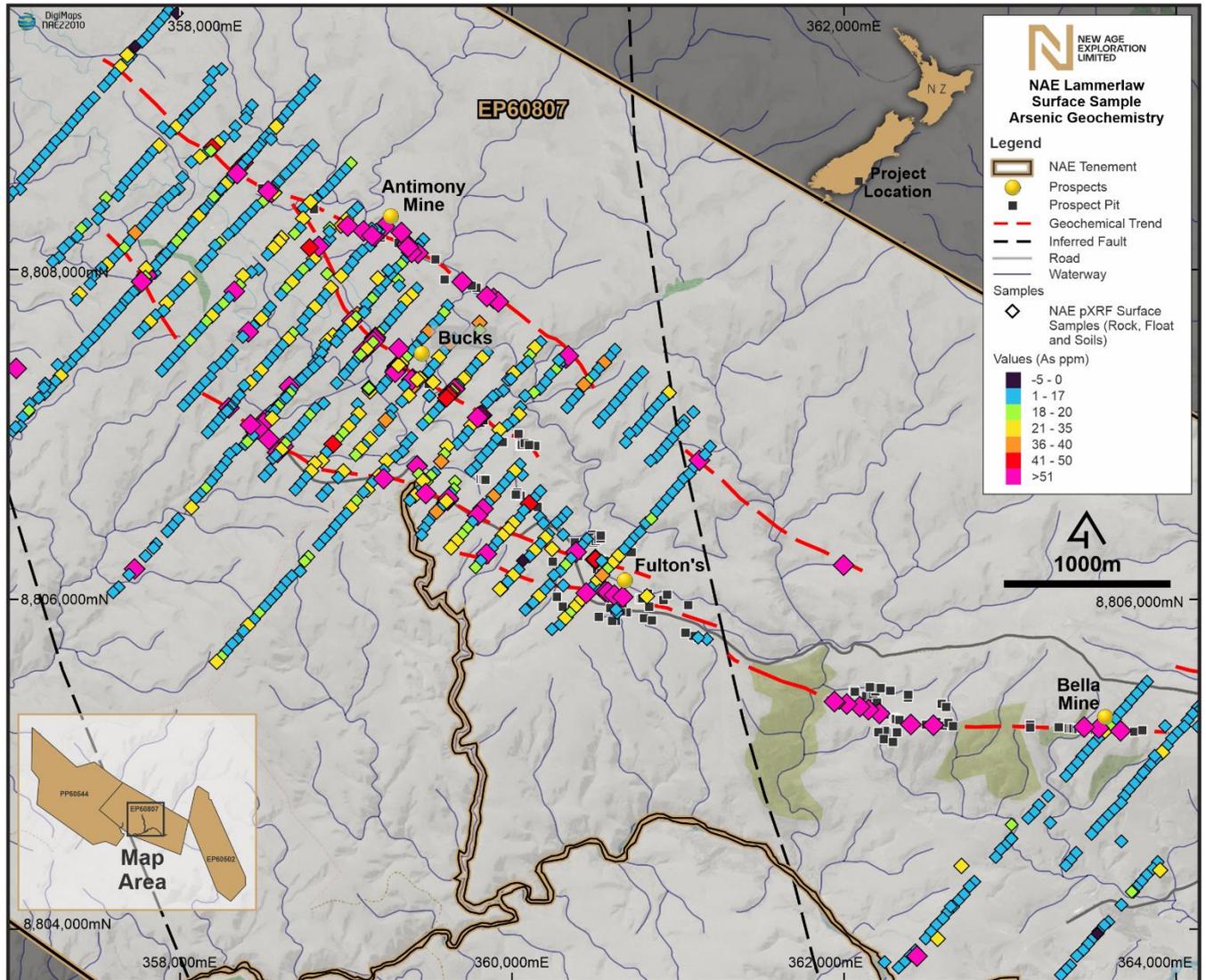


Figure 4: Arsenic pXRF geochemistry in surface samples (auger, float and rock samples) for Lammerlaw Exploration Permit EP60807. Red dashed lines show highlighted geochemical trends.

Recent field work has utilised historic aerial photography to locate surface prospecting pits and shafts dug in the 1870-90's. Old workings were often dug intermittently along lines, following indicators of gold mineralisation. Recently collected samples from old workings commonly record anomalous arsenic, antimony and tungsten geochemistry using pXRF. These results extended the strike of prospective geochemical trends by hundreds of meters in some locations. Soil auger sampling continues to be an effective way of testing geochemical trends at Lammerlaw. During May 2022, an additional 120 auger samples and 64 rock chip samples were collected to extend known mineralised trends.

Geochemical trends within Lammerlaw EP60807 can be divided into four main prospects, Antimony, Bucks, Fulton's and Bella. Each prospect has a historic legacy of mining and exploration, historic records are summarised below:

### **Antimony Mine**

The Antimony Mine was discovered in Stony Creek during the late 1870s, with intermittent mining occurring between 1880 and 1900. The lode strike WNW-ESE and dips 45° NE, with historic prospecting proving an 800m strike length. Two shafts were sunk in the bed of Stony Creek approximately 120m apart, from which mining of antimony rich ore took place. The structure hosting mineralisation is 1.2-1.5m wide with the stibnite-bearing material being typically 0.5m thickness within. In one location massive scheelite was extracted from the center of the lode (Marshall, 1918). Historic records note the lode was had poor gold content (Finlayson, 1908).

Modern prospecting of the Antimony Mine has been entirely by surface sampling. Early work highlighted a 1km long antimony and tungsten geochemical trend centered on the historic Antimony Mine. Limited gold focused exploration records a rock chip grade up to 9.57g/t Au and up to 22.6% Sb from mullock. Exploration completed by NAE has extended the length of the geochemical trend hosting the Antimony Mine to roughly 3.5km (Figure 3). Preliminary pXRF data for samples collected in May 2022 along newly defined geochemical trend, show anomalous geochemistry for arsenic, antimony and tungsten. All gold assays for recent field work are currently being processed.

### **Bucks Prospect**

There is no historical documentation for Bucks Prospect, although it is commonly indicated on historic maps. The rough location of Bucks is coincident with an arsenic-gold geochemical trend defined by NAE auger sampling (Figure 3). This 1.9km geochemical trend is now well defined by auger and rock chip samples with peak values of 92ppb Au and 349ppm As in NAE auger samples. These results reflect the position of recently sampled quartz-arsenopyrite breccia in float samples. All gold assays for float and rock chip collected during May 2022 currently being processed.

### **Fulton's Prospect**

Fulton's Prospect is a group of quartz vein occurrences in an area worked extensively for alluvial gold and tungsten (other names include Neighborhood, Golden Crown and Reeferk). Fulton's Creek located below prospect area was noted as remarkably rich in coarse alluvial gold. Extensive areas were hydrosluiced, feed by an extensive network of water races. Only a small amount of prospecting was on quartz lodes directly, discontinuous veins up to 3ft thick are recorded (Marshall, 1918). Remnant prospecting pit and adits commonly follow individual quartz veins and indicate a E-W strike of mineralisation.

Prior to NAE work in the Fulton's area, there was no significant modern exploration sampling in the area. The recent westward extension of the auger sampling completed in 2021 to cover Fulton's Prospect has proven a large gold-arsenic geochemical trend. These results indicate Fulton's Prospect is part of a 3.4km geochemical trend with probable parallel trend in places (Figure 3). Peak values of 300ppm As and 50ppb Au are recorded in previous NAE auger samples. Recent sampling of quartz vein float and from prospecting pits has recorded strongly anomalous arsenic and tungsten values. Further sampling work is

required at Fulton's to extend test the geochemical trend further west. All gold assays for auger, float and rock chip collected during May 2022 currently being processed.

### **Bella Lode**

The Bella Lode was discovered in the 1890's and worked intermittently until 1900. The Lode runs E-W and dips steeply N, with a maximum thickness of 6ft and averaged 15g/t Au. Underground working followed the vein for 400ft where it pinched and swelled between 0.6-1.8m wide. At 15m in depth, the vein reportedly pinched out leaving only sheared host rock. In addition to lack of ore for processing, Bella required chemical treatment to recover gold, indicating it was very fine or locked in sulfides. The Lode also contained some scheelite (Marshall, 1918).

Modern prospecting has included sporadic soil and rock sampling. Previous soil sampling proved ineffective owing to the lack of dispersion of mineralisation in wall rock. Historic samples collected from the Bella Lode gave peak Au assay of 17.3g/t.

Recent activity by NAE has used historic aerial photography to extend the strike length of the Bella geochemical trend to roughly 2km (Figure 3). Samples from prospecting pits and shafts provide anomalous As and W values when analysis with pXRF. Float samples of mineralised quartz vein were also located along strike from the Bella Mine. All gold assays for float and rock chip collected along the Bella geochemical trend during May 2022 currently being processed.

### **Other Areas of Interest**

As understanding of the Lammerlaw Project develops, it has become clear that there are overlapping chemistries of individual geochemical trends, as well as potentially narrow footprint size of anomalies. To ensure no potential targets have been overlooked within the existing soils grid, samples not previously sent for gold assay have now been submitted. This includes 109 samples from between the Fulton's and Bucks prospects.

Field work completed in May 2022 has highlighted the potential that geochemical trends may have semi-continuous strike across the Lammerlaw Project area. It now seems likely that Fulton's and Bella sit along the same structure. Further surface sampling will be used to highlight this potential in the area immediately north of Bella Prospect. In this area, a westward continuation of the Antimony Mine geochemical trend is projected and loosely defined by isolated sample points.

### **Extension of Duration for Lammerlaw PP60544 Granted**

NAE has been successful in application for an EoD for Lammerlaw Prospecting Permit PP60544. Importantly, this allows continued exploration along strike from the Lammerlaw Exploration Permit EP60807 where ongoing surface exploration continues to expand geochemical trends.

The extended permitting period for Lammerlaw Prospecting Permit PP60544 secures an extensive ground as holding part of the Company's 100% owned Otago Project. The granting of EoD for Lammerlaw Prospecting Permit PP60544 maintains NAE's Otago permitted ground, with the combination of the two contiguous Lammerlaw Permits provides ~25km of prospective structural corridor to test further (Refer Figure 1).

The initial Lammerlaw Prospecting Permit PP60544 was granted on 26 November 2019. Surface exploration in the subsequent two years highlighted the northeastern portion of the original Permit as the most prospective for structurally controlled orogenic gold mineralisation, and at completion of the initial two years of tenure, became Lammerlaw Exploration Permit EP60807. Contemporaneously, an EoD application for the original Lammerlaw Prospecting Permit PP60544 was sort. The balance of the original Lammerlaw Prospecting Permit area has been relinquished due to its lower perspectivity.

The targeting strategy for Lammerlaw uses contrasting high and low electromagnetics response as lineaments, potential indicators of favorable structural and lithological contacts for gold mineralisation. Results returned for surface sampling Lammerlaw Prospecting Permit PP60544 have successfully proven this concept. Coincident arsenic and gold geochemical trends follow contacts between high and low electromagnetic response. Re-processed geophysics now allows accurate delineation of these prospective lineaments.

### **Future Exploration Work**

Further exploration at Lammerlaw Project will include broadly spaced auger soil sampling lines within Lammerlaw Prospecting Permit PP60544 and prospecting work to extend strike length of mineralised trends within Lammerlaw Exploration Permit EP60807. However, exploration work is now contingent to winter conditions and upcoming spring farm activities.

Any mechanised exploration with in Lammerlaw EP60807 will be led by the receipt of all submitted gold assays. Results will indicate the potential of prospects to host economic mineralisation. It is likely only portions of the mineralised tends will become targets for further work. Due to the lack of outcrop in the Lammerlaw area, next steps will include trenching across mineralised trends to understand widths and controls on gold mineralisation. Results will be ranked against other Otago projects to determine the best targets for drill testing.

**-ENDS-**

**Authorised for release by the Board.**

**For more information, please contact:**

**Joshua Wellisch**  
Chief Executive Officer  
+61 3 9614 0600  
[joshua@nae.net.au](mailto:joshua@nae.net.au)

**Mark Flynn**  
Investor Relations  
+61 416 068 733  
[mark.flynn@nae.net.au](mailto:mark.flynn@nae.net.au)

## References

- Finlayson, A. M. 1908: The Geology of the Quartz Veins of the Otago Goldfields. Transaction of the New Zealand Institute 41: 66-84.
- Marshall, p. 1918: The geology of the Tuapeka District, Central Otago Division. Department of Mines Geological Survey Branch. Bulletin 19

## Competent Persons 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.