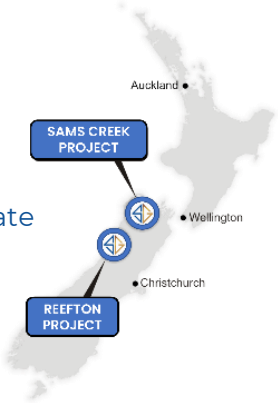
ASX Announcement

17 January 2024

Bonanza Gold and Antimony Grades Confirmed at Langdons



Siren Gold Limited (ASX: **SNG**) (**Siren** or the **Company**) is pleased to provide an update on its **Langdons Prospect.**

Highlights

- Siren's maiden fieldwork at the **Langdons** prospect has recorded **bonanza gold and antimony grades at surface** of up to **506g/t Au** and **9.3% Sb**.
- **Langdons** is a more recent tenement application and contains a number of **high-grade Au-Sb reefs**, that were mined historically with a recovered grade of **60g/t Au**.
- Early reported historical mining grades at Langdon were up to **2,610g/t Au** and **1,120g/t Ag**.
- A trench across the Liberty reef **300m along strike** from the historic Langdons' antimony mine returned **1.75m @ 4.5g/t Au**.
- Anomalous **gold, stibnite and arsenic soil geochemistry** extends **over an additional 400m of strike length** with several mapped quartz reefs.
- The high grade system extends to the edge of the overlying cover and it is expected that the mineralisation will continue under the cover.

Executive Chairman Brian Rodan commented:

"These bonanza results confirm high grade gold and antimony mineralisation at Langdons and importantly, complement the existing high-grade gold and antimony Resource at Auld Creek.

This fieldwork confirms Langdons has the potential to be a second high grade gold and antimony project at Reefton and demonstrates the significant potential of antimony and gold mineralisation throughout the entire Reefton field".

Registered Address

Siren Gold Limited
Level 2
41 Ord Street
West Perth WA 6005

ASX: **SNG**
ACN: **619 211 826**

t: +61 8 6458 4200
e: admin@sirengold.com.au
w: sirengold.com.au

Corporate

Brian Rodan
Managing Director

Paul Angus
Technical Director

Keith Murray
Non-Executive Director

Victor Rajasooriar
Non-Executive Director

Sebastian Andre
Company Secretary

Projects

Sams Creek Project
Reefton Project

Capital Structure

Shares: 160,885,137
Options: 9,293,262

Background

The Langdons prospecting permit (PP 60893) is located in the Paporoa goldfield, approximately 50km SW of Reefton (Figure 1). The Greenland Group rocks that host the mineralisation in the Reefton goldfield also outcrop in a NE trending belt, 25kms to the west. This belt of Greenland Group rocks hosts the historical Langdons and Croesus gold and antimony mines (Figure 2).

The reefs in the Paporoa goldfield strike WNW-ESE and dip shallowly to moderately to the north and south. This differs from the Reefton Goldfield where the reefs strike N-S. In both instances the reefs are parallel to the fold axis, indicating that the Paparoa block has been rotated ~90°.

The Langdons PP area contains a relatively small exposure (5kms long by 1km wide block) of the Greenland Group, which is unconformably overlain by late cretaceous Paporoa Coal Measures that host a number of open cut coal mines approximately 65kms to the north (Figure 3).

The unconformity surface is exposed at the head of the west branch of Langdons Creek and dips to the SW at 20-30° sub-parallel to the regional dip of the coal measures and topography. Greenland Group rocks are exposed to the NW of the unconformity and indicate that the sediments may only be a thin veneer overlying the Greenland Group.

The main targets within the PP are a number of outcropping reefs at Langdons (Figure 4), but other mineralised Greenland Group rocks could be hidden under the cover to the west.

The prospecting permit was granted for two years on 25 May 2023 and the Department of Conservation (DoC) granted access on 1 November 2023.

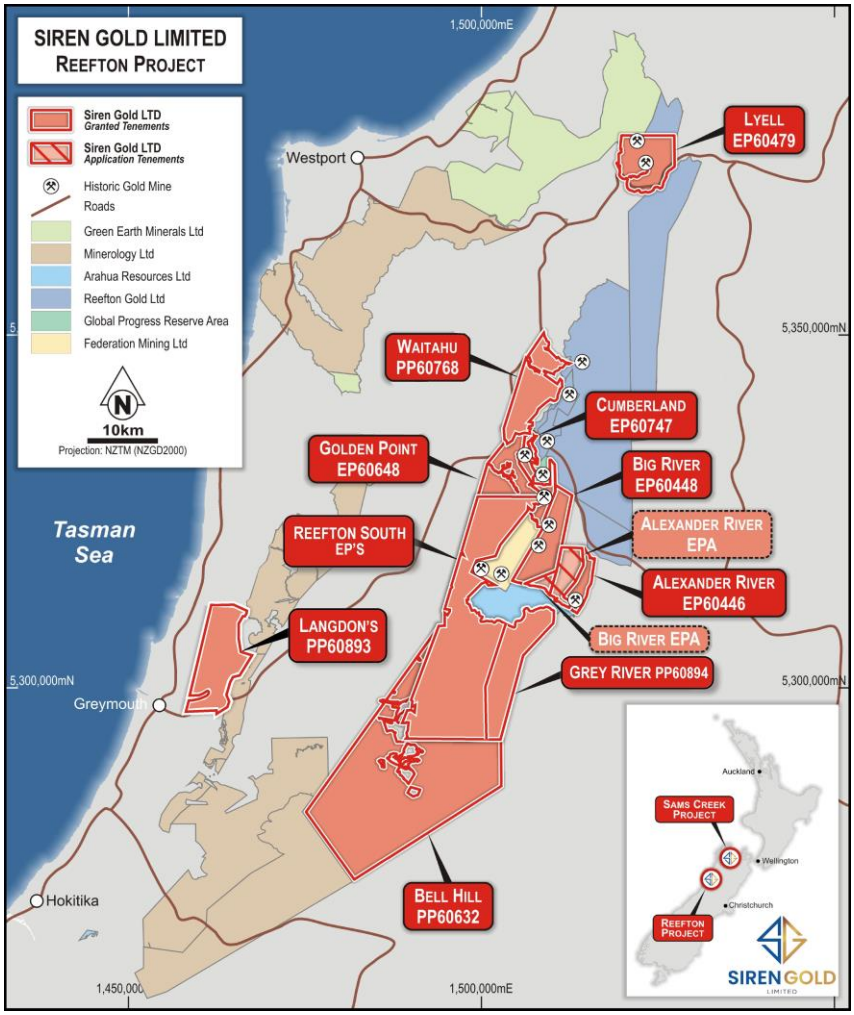


Figure 1. Reefton tenement map.

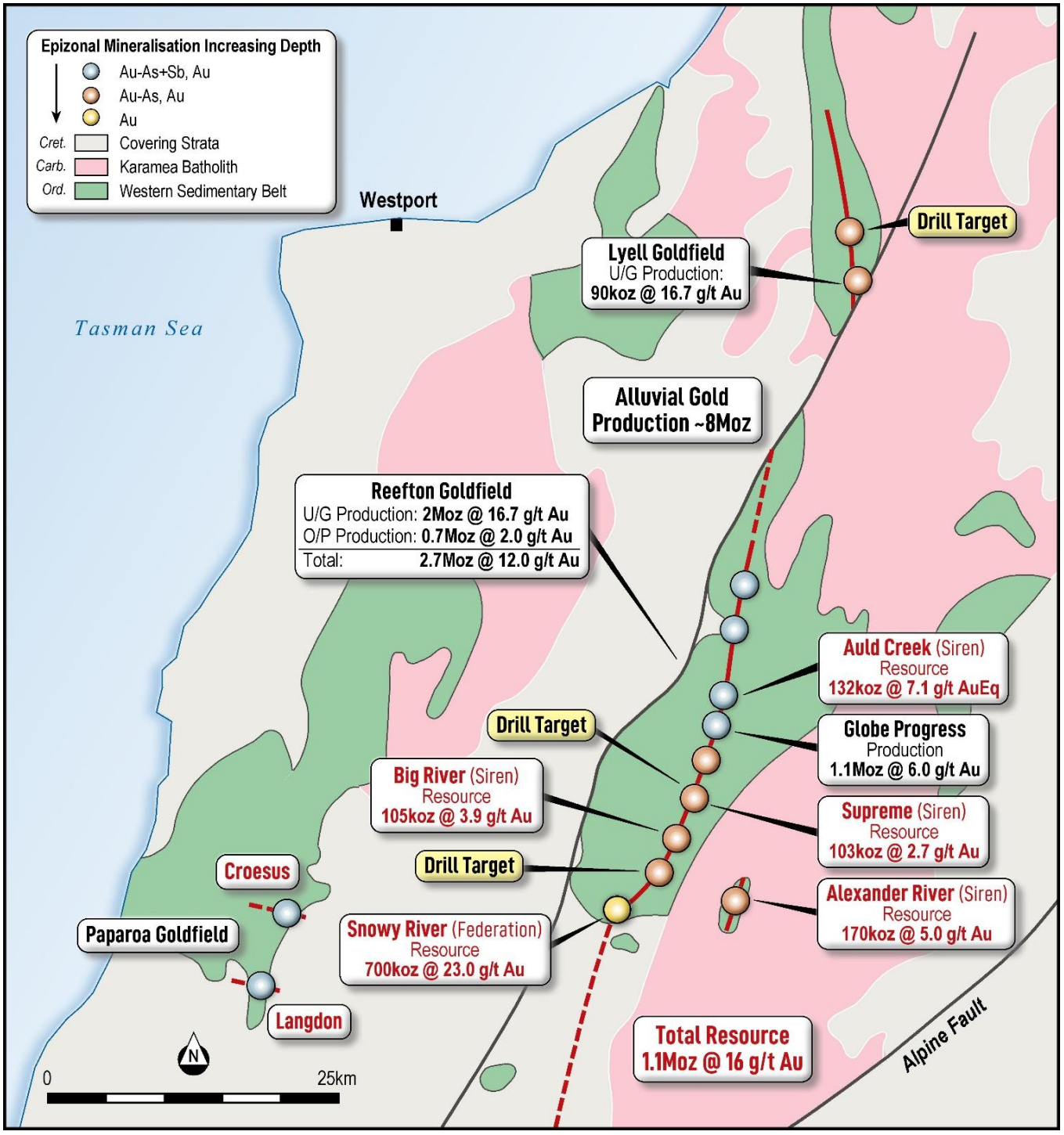


Figure 2. Simplified Geology plan of Reefton Lyell and Paparoa goldfields.

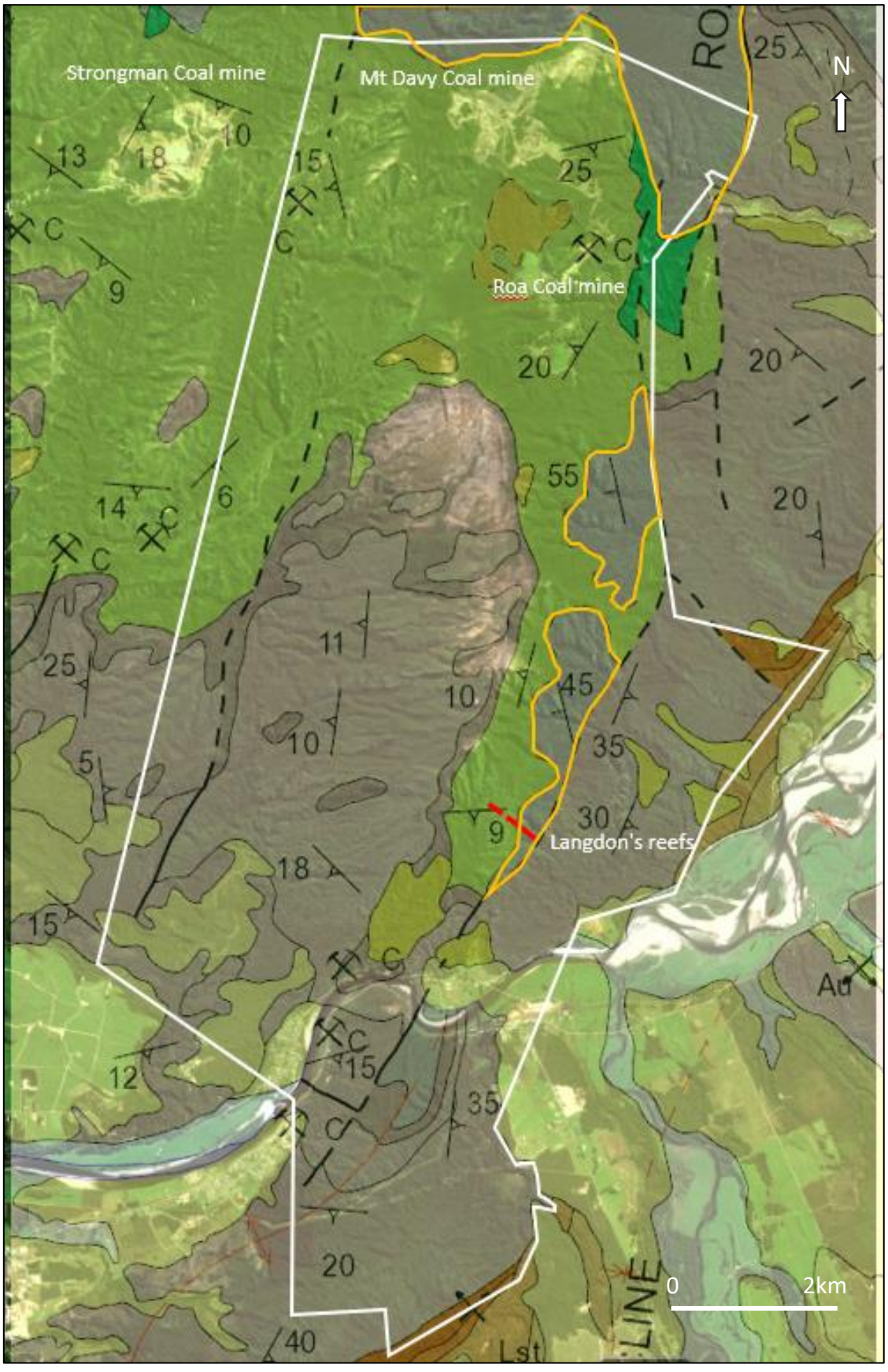


Figure 3. Geology map of the Langdons PP. Slithers of Greenland Group rocks highlighted in orange. Note the Roa and Mt Davy open cut coal mines 6kms to the north of Langdons.

Mining History

The Langdons Reef, or Langdons Antimony Lode was discovered in 1879. Several mines were opened on various reefs, including Langdons, Victory, Julian, Bonanza and Wilsons. A battery was established in Langdons Creek in 1885. Early reported grades were up to **2,610g/t Au and 1,120g/t Ag**. The Langdon and Victory reefs were mined successfully for five years, with a reported production of 1,586oz of gold from 809 tons of ore for an **average grade of 60g/t Au**. A second battery was constructed in Stoney Creek to the SW of the reefs in 1890. This processed ore was conveyed by an aerial ropeway, but no production figures are available[1].

After WWII, the Langdons and Victory mines were revitalised. A new aerial ropeway was constructed, 60m of new drive mined and 105m of existing drive rehabilitated. Work ceased in 1952 due to insufficient ore. No production data is available from this period[1].

An outcrop of the Langdons Reef was sampled by Morgan in 1911 and Dominion Laboratories in 1933[1]. No thickness was given but Morgan's sample assayed 8.8g/t Au, 2.9g/t Ag and 14.1% Sb, and Dominion Laboratories' sample assayed 89.9g/t Au, 6.9g/t Ag and 64.1% Sb.

The Victory Reef located 200m to the east of Langdons Reef was mined over three levels. A 1936 plan shows a drillhole into the No 3 Level that intersected a 1m thick reef assaying 30g/t Au[1].

A description of the nearby Victory Reef noted that gold could be observed in white quartz, stibnite and pyrite[2]. Thin quartz veinlets with stringers of stibnite were also found at Langdons Reef and reported to return "no less than two ounces of gold". Gold and arsenopyrite were also found in the wall rock, suggesting a similar As-Au relationship to that observed in the Reefton Goldfield. Some unnamed reefs mined around Langdons Reef also contained Cu sulphides.

Recent Exploration

Outcrop in the area is sparse and only minor quartz vein development not removed by historic mining can be identified[3].

Since mining finished in 1952 there has only been very limited exploration in the 1980's, which included mapping, rockchip, stream sediment and soil sampling completed by Tasman Gold Developments. Anomalous gold, stibnite and arsenic soil geochemistry have been found over a strike length of 400m (Figure 4). This anomaly is 150m wide and includes the Langdons, Julian, Liberty and Midnight reefs.

Since DoC access was granted, Siren has located the Langdons Antimony mine and Liberty and Midnight reefs (Figure 4).

Siren collected six samples from the **Langdons** mullock heap. Gold grades ranging from **4 to 506g/t Au** and up to **9.3% antimony** (Figure 4). Langdons Reef outcrop extends west to the contact with the Paporoa coal measures (Figure 4). It is likely that the reef extends further west under the coal measures and it remains a key exploration target.

The **Liberty reef** is located 300m along strike to the east from Langdons Reef (Figure 4 and 5). Siren trenched across a Liberty Reef outcrop, returning **1.75m @ 4.5g/t Au**.

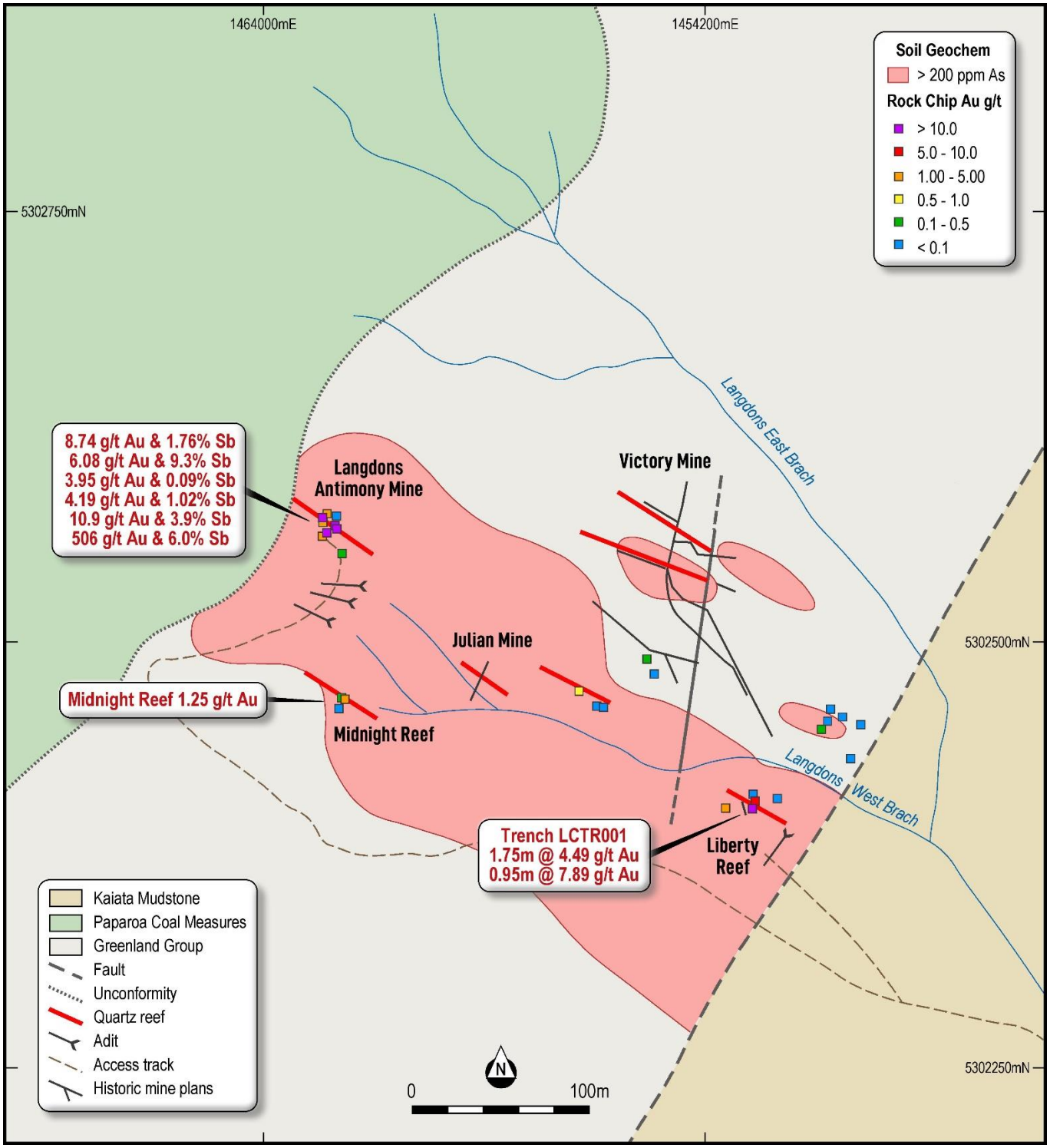


Figure 4. Geology plan of the Langdons area.

Figure 5. Outcrop of the Liberty Reef.

Next Steps

The next steps include;

- structural mapping to identify location and orientation of the anticline hinge/s;
- continued field mapping and rock chip sampling to identify addition mineralisation;
- trenching mineralised outcrops to identify the true width and grade of the mineralisation;
- a passive seismic survey over the Paparoa coal measures to confirm the depth to the Greenland Group basement and the amount of cover; and
- an Ionic Leach soil geochemistry survey over the Paparoa coal measures to identify buried mineralisation.

References

1. Aliprantis, M.M., 1988. Progress Report on PL 31-1320 Langdons Creek, Stillwater Westland (to 15 April 1988). Tasman Gold Development Ltd. MR1528.
2. Cotton, R.J., 1987. Preliminary Exploration Report Langdons Creek Au-Sb Reefs, Stillwater, Westland. Mineral Resources NZ Ltd. MR1514.
3. Cotton, R.J., Stewart, M., 1989. Final Report Langdons reefs area, PL31-1320, PLA 31-1848 Grey Valley, Westland, New Zealand. Tasman Gold Development Ltd. MR2589.

This announcement has been authorised by the Board of Siren Gold Limited

Enquiries

For more information contact:

Brian Rodan
Managing Director
+61 8 6458 4200

Paul Angus
Technical Director
+64 274 666 526

Competent Person Statement

The information in this announcement that relates to exploration results, and any exploration targets, is based on, and fairly represents, information and supporting documentation prepared by Mr Paul Angus, a competent person who is a member of the Australasian Institute of Mining and Metallurgy. Mr Angus has a minimum of five years' experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a competent person as defined in the 2012 Edition of the Joint Ore Reserves Committee Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Angus is a related party of the Company, being the Technical Director, and holds securities in the Company. Mr Angus has consented to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

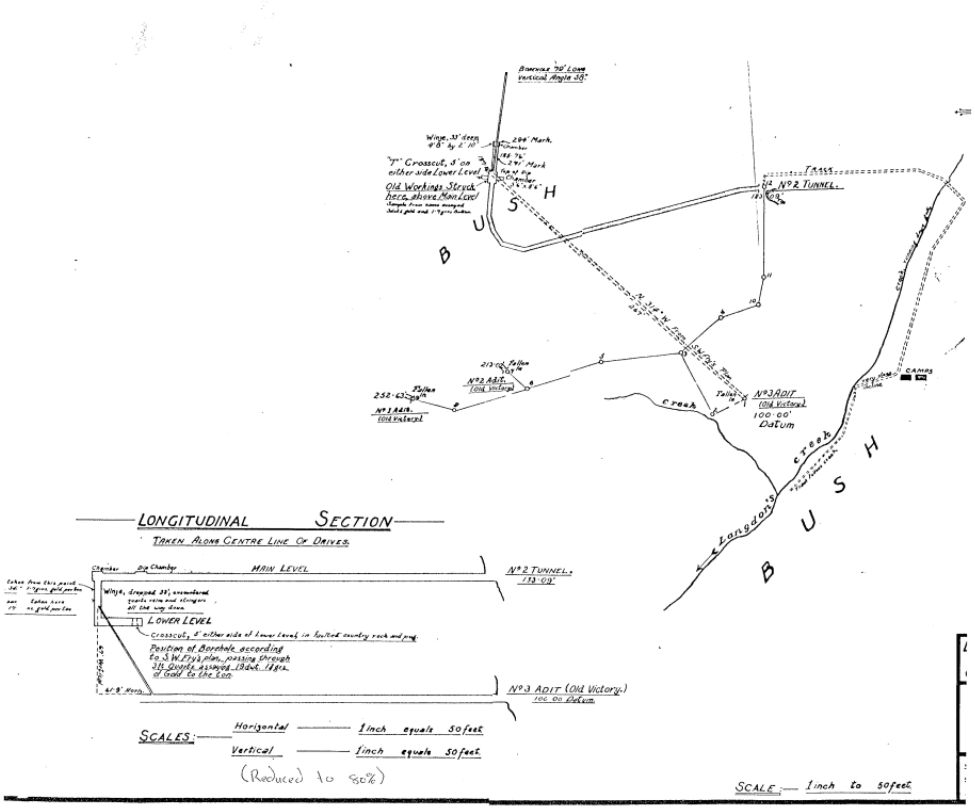
JORC Code, 2012 Edition – Table 1

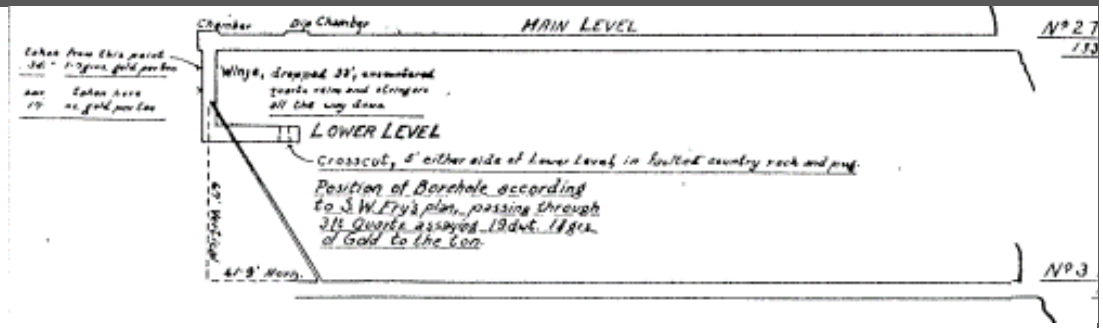
Section 1 Sampling Techniques and Data

Note: Historical information is sourced from three reports written by Tasman Gold Developments Ltd in 1987, 1988 and 1989. See References section in this announcement.

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code Explanation	Commentary
Sampling techniques	• *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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *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.*	• Tasman Developments Limited (Tasman) completed stream sediment, soil and rock sampling in the 1980's. • Siren Gold Limited (SGL) trench sampling was taken based on 1m samples unless determined by lithology or mineralisation. In situ rock samples collected by geology hammer with average sample size of 2 kg.
Drilling techniques	• *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).*	• Only one hole was drilled in 1936 but there is no information on the type of drilling completed.

Criteria	JORC Code Explanation	Commentary
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	• No information could be found on what type of samples were collected, how it was sampled or what was recovered.
Logging	• *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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Only one drillhole was completed from underground in the 1930's. No drillhole log is available, just a reference on a 1936 map (Cotton 1987). 

Criteria	JORC Code Explanation	Commentary
		 The map states that the drillhole passed through 3-foot quartz reef, assaying 19dwt 11 grains per ton (30g/t). • SGL trench and DC logging is based on RRL core logging templates with similar quantitative data captured as OGL. • Photos are taken of the trench and of each sample.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representativity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• No historic information on any sub-sampling is available. • SGL trench sample length is based on 1m with field duplicates taken on 1:20 samples.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in*	• Stream sediment, pan concentrates and rock chip samples were submitted to W Grayson & Associates (Auckland) for fire assay of gold and wet assay for silver, copper, lead, zinc, arsenic, antimony and mercury (only 13 samples were assayed for mercury).

Criteria	JORC Code Explanation	Commentary
	determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. • *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.*	• No information on whether standards or blanks were used. • 2023 SGL rock chip and channel samples were sent to SGS New Zealand. SGS laboratories carry a full QAQC program and are ISO 19011 certified where they were assayed by 30g fire assay. Screen Fire Assays are undertaken if there is visible gold. Pulps from the laboratory are analysed by RRL with a pXRF. • Antimony is analysed by pXRF with round robin check samples sent to ALS Brisbane where they are analysed by XRF.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Tasman's 37 soil samples were submitted to both Grayson's and Independent Service Laboratories (ISL) in Nelson. A comparison of assay results for Au, As and Sb was reported in Aliprantis 1988. Similar values were obtained for the various elements. • SGL data is stored in excel, Dropbox and Leapfrog. The data storage system is basic but robust. All SGS assay results received by SGL are signed PDF lab certificates hard copies that are stored.
Location of data points	• *Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Tasman sample points were located or set using a tape and compass. • SGL used handheld Garmin 64s to pick up trench and rock chip locations. • SGL trenches are surveyed at the collar and azimuth and dip are taken at any changes along the trench length.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	• Tasman's soil samples were collected on 50 spaced lines at 20m intervals.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *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.*	• Tasman's soil lines were orientated NE-SW orthogonal to the mineralisation.
Sample security	• *The measures taken to ensure sample security.*	• No information available for the Tasman samples. • SGL rock samples are stored in a locked core shed until despatch. Samples are

Criteria	JORC Code Explanation	Commentary
		transported to SGS, Westport by SGL. • SGL rock and trench coarse rejects and pulps are stored at the Reefton core shed.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No information available.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *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.*	• The Prospecting Permit (PP60893) was granted for a period of 2-years on 25 May 2023. An additional 2-years can be applied for. After 4 years the permit can be progressed to an Exploration Permit (EP) which can extend to 5 + 5 years. • The Prospecting Permit (PP) is over land administered by a mixture of private and public land ownership. Department of Conservation (DoC) areas include Roa – Blackball conservation land, Brunner Forest Conservation Area, Sewell Peak Conservation Area, McLeans Creek Conservation Area, Kaiata Creek Reserve, Kaiata Creek Marginal Strip and Grey River Marginal Strip. • A PP allows low impact exploration only i.e. aerial or hand held methods. An EP is required for drilling. The PP can be converted to an EP at any stage. • A Minimum Impact Activity (MIA) access agreement was granted by DoC land on. Siren already has MIA's for Alexander River EP, Big River EP, Reefton South PP, Lyell EP, Golden Point EP, and Cumberland EP. Siren has Doc AA's that allow for drilling at Alexander River, Big River, Golden Point (Auld Creek) and Sams Creek and has application with the DoC for Cumberland and Lyell EP's.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• All exploration results to date have been completed by Tasman between 1987 and 1989.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Langdons reef is located in the Greenland group that host the significant gold deposits in the Reefton Goldfield 25kms to the east. The Reefton Goldfield lies in late Cambrian to early Ordovician Greenland Group sedimentary rocks. These are interbedded, massive to thinly bedded, quartz rich sediments comprising gradational psammitic (greywacke) and pelitic (argillite) rock types. These are interpreted to be a proximal turbidite succession derived from the erosion of a mature continental landmass, which lay to the east and southeast. • The Greenland Group sediments are moderately deformed and have undergone a late

		Silurian to mid Devonian, low grade metamorphic event. Metamorphism is to sub/low greenschist facies, with illite clay predominating (Gage, M. 1948). Widespread folding was probably synchronous with metamorphism, and this deformation predates granitoid emplacement. • Deformation due to east – west compression resulted in the formation of close – tight, upright, north – south trending fold axes with a single pervasive and penetrative steeply-dipping, axial – planar cleavage (Rattenbury and Stewart, 1996). As deformation progressed, fold hinges were commonly sheared out by high angle reverse faults and bedding concordant quartz veins formed between discrete bedding planes. These discordant shear zones now host the bulk of the gold mineralisation in the Reefton Goldfield and are thought to have formed as a late-stage, partially strike-slip, event at the culmination of the deformation. • Gold mineralisation in the Reefton Goldfield is structurally controlled; the formation of the different deposit types is interpreted to be due to focussing of the same hydrothermal fluid into different structural settings during a single gold mineralisation event. However, some of the deposits (e.g., Globe-Progress to the north) appear to have been reworked with gold and sulphide mineral remobilisation having occurred during a later phase of brittle deformation. • Regionally the goldfield, on the basis of a geophysical interpretation of airborne magnetic data (Craven 1996), can be divided into a number of structural elements. Central within the area is a northwest trending feature informally titled the Globe-Progress Corridor. This corridor is fault bounded and is speculated to have some control on arsenic anomalism. This corridor, which contains the highly deformed Globe-Progress deposit, appears to have displaced two anticlinoriums. These major folds have been defined by magnetic stratigraphy with the major historical producers forming a corridor on the western limbs of these anticlinoriums. • In general, two end members of mineralisation styles exist, which are possibly related to the structural setting outlined above. The Blackwater style is comprised of relatively undeformed quartz lodes; while the Globe-Progress style comprises highly deformed quartz – pug breccia material.
Drillhole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:* o *easting and northing of the drillhole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *hole length.* • *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*	• Only one hole has been drilled in 1936. The hole was drilled azimuth of ~210 degrees and a dip of -58 degrees. Hole depth measure of a 1936 plan was approximately 80 feet or 25m. • The intercept depth is not provided other than a 3 ft quartz reef was intersected.

	of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No sampling or assay data has been found other than reference on a 1936 mine plan that states the drillhole passed through 3-foot quartz reef assaying 19dwt 11 grains per ton (30g/t).
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	• The drillhole results are report as downhole intercept.
Diagrams	• *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 drillhole collar locations and appropriate sectional views.*	• See Announcement
Balanced reporting	• *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.*	• Not applicable
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test*	• Not applicable

	results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	
`*Further work*	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Structural mapping to identify location and orientation of the anticline hinge/s. • Continued field mapping and rock chip sampling to identify addition mineralisation. • Trenching mineralised outcrops to identify the true width and grade of the mineralisation. • A Passive seismic survey over the Paparoa coal measures to confirm the depth to the Greenland Group basement and the amount of cover. • An Ionic Leach soil geochemistry survey over the Paparoa coal measures to identify buried mineralisation.