

ASX RELEASE

20 July 2022

COMPANY

ASX: SNG
ACN: 619 211 826

CAPITAL STRUCTURE

Shares: 95,925,475
Options: 14,293,262

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PROJECTS



Alexander River Maiden Mineral Resource Estimate

Siren Gold Limited (ASX: **SNG**) (**Siren** or the **Company**) is pleased to announce the Maiden Mineral Resource for the Alexander River Project.

Highlights

- Maiden Alexander River **Inferred** Mineral Resource Estimate (**MRE**) of 1Mt @ 4.1g/t Au for 131koz at a 1.5g/t cut-off and 35g/t top-cap. The MRE has been depleted for historic mining.

| Shoot | Tonnes (kt) | Grade (g/t Au) | Ounces (koz) | % MRE |
|--------------|--------------|----------------|--------------|--------------|
| McVicar East | 14 | 6.5 | 3 | 2.3 |
| Bull East | 355 | 2.1 | 24 | 18.5 |
| Bruno East | 32 | 5.9 | 6 | 4.6 |
| Loftus-McKay | 218 | 4.6 | 32 | 24.6 |
| McVicar West | 382 | 5.3 | 65 | 50.0 |
| Total | 1,000 | 4.1 | 131 | 100.0 |

Tonnages are dry metric tonnes and minor discrepancies may occur due to rounding.

- The McVicar West Shoot contains 50% of the MRE, with an average grade of 5.3g/t Au when a top-cap of 35g/t Au is used (i.e. 1m tonnes of gold composites capped to a maximum of 35g/t Au in the MRE). The McVicar West Shoot contains diamond drillhole AX84, which intersected 2.5m @ 358g/t Au. The 35g/t top-cap has had a significant impact on the average grade of the McVicar West Shoot. If a top-cap of 200g/t Au is used the average declustered and capped mean grade increases from 5.4g/t to ~8.3g/t (>50% increase).
- Given the style of deposit, it is likely that further infill drilling may present additional high-grade samples and will help assess whether these values are true outliers, or a higher-grade sub-population (sub-domain). In the latter case, top-cuts upwards of 50–200g/t Au may be considered appropriate.
- The reported Mineral Resource was depleted for historical mining and constrained at depth by the available drillhole spacing, nominally 260m below surface topography. AX87 was the last hole included in the MRE. AX89 (2.3m @ 10.2g/t Au), that extended the McVicar West Shoot a further 100m down plunge, is not included.
- If the Loftus-McKay, McVicar West and Bull West shoots extend for 1,500m (~500mRL) and are similar to the McVicar West Shoot then Siren considers that the Alexander River **Exploration Target** of 500-700koz @ 5-7g/t Au inclusive of the Inferred resource, is still valid. The nearby Blackwater shoots extend to 2,400m and are open at depth.

Background

The Reefton Goldfield in the South Island of New Zealand was discovered in 1866 and produced +2M oz of gold at an average recovered grade of 16g/t from 84 historic mines. Most underground mining ceased by 1942, with the famous Blackwater mine closing in 1951 when the shaft failed after producing ~740koz of gold down to 710m and below surface. Surface drilling has extended the mineralisation to 1,500m below surface (2,400m down plunge) and is open at depth.



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The Reefton Goldfield was originally part of the Lachlan Fold Belt (refer to announcement dated 25 March 2022) that contains the Victorian Goldfields. There are two distinctive sub-types of orogenic gold mineralisation in Victoria. The deeper (6-12kms) mesothermal deposits that formed almost all the significant gold deposits in the Bendigo and Stawell zones and the shallower (<6km) epizonal gold deposits in the Melbourne zone and eastern Bendigo zone, including Fosterville. The latter gold mineralising event in Victoria is characterised by acicular arsenopyrite / pyrite hosted refractory gold and stibnite associated gold, which are indicative of a shallower emplacement depth. The gold mineralisation at Reefton is also associated with acicular arsenopyrite and stibnite mineralisation.

At Fosterville the gold hosted arsenopyrite is pervasive throughout the deposit but a narrow window of vein hosted gold-stibnite mineralisation exists from ~800m to 1,350m depth, below which there is vein hosted gold mineralisation only. The acicular arsenopyrite mineralisation at Alexander River looks very similar to the Fosterville mineralisation and probably represents that same initial gold mineralisation event. When the Fosterville arsenopyrite mineralisation was initially mined the mill feed grade was 4-5 g/t Au (feed grade between 2009-2014). The mill feed grade increased up to 15.7g/t in 2017 g/t when the stibnite – gold mineralisation was being mined and increased to 33.9g/t in 2020 when the vein hosted visible gold was intersected (Updated NI 43-101 Technical Report - Fosterville Gold Mine, April 2019, Agnico Eagle website).

Project Geology

The Alexander River Project (Exploration Permit 60446) is located ~26 km southeast of Reefton and is located in a mostly fault-bounded sliver of Greenland Group rocks 7km southeast of the main Reefton Goldfield block. It is bounded by undeformed granite to the west, and by a metamorphic core complex to the east.

The Alexander mineralisation outcrops for over 1.2kms (Figure 1) and is comprised of high-grade quartz reefs and disseminated mineralisation. Surface trenching and channel sampling shows that the mineralisation ranges from 2-15m thick, with an average thickness and grade of 4m @ 8g/t Au. Surface sampling identified four mineralised shoots, named Bull, McVicar, Bruno and Loftus-McKay. Only the McVicar East Shoot was mined to any extent, with the shallow plunging shoot mined to 250m below surface, extracting 41koz at an average recovered grade of 26g/t Au before the mine closed in 1942.

Structural mapping has confirmed that the Alexander River mineralised zone can be divided into two structural domains. The Bull-McVicar-Bruno reef track is ENE striking, steeply SE dipping, while the Loftus-McKay reef track extends from Bruno into Mullocky Creek and is NNE-striking and dips 50° to the NW. In both structural domains it appears that the intersection between anticline hinge and a mineralised fault likely control the trend and plunge of Au-bearing shoots.

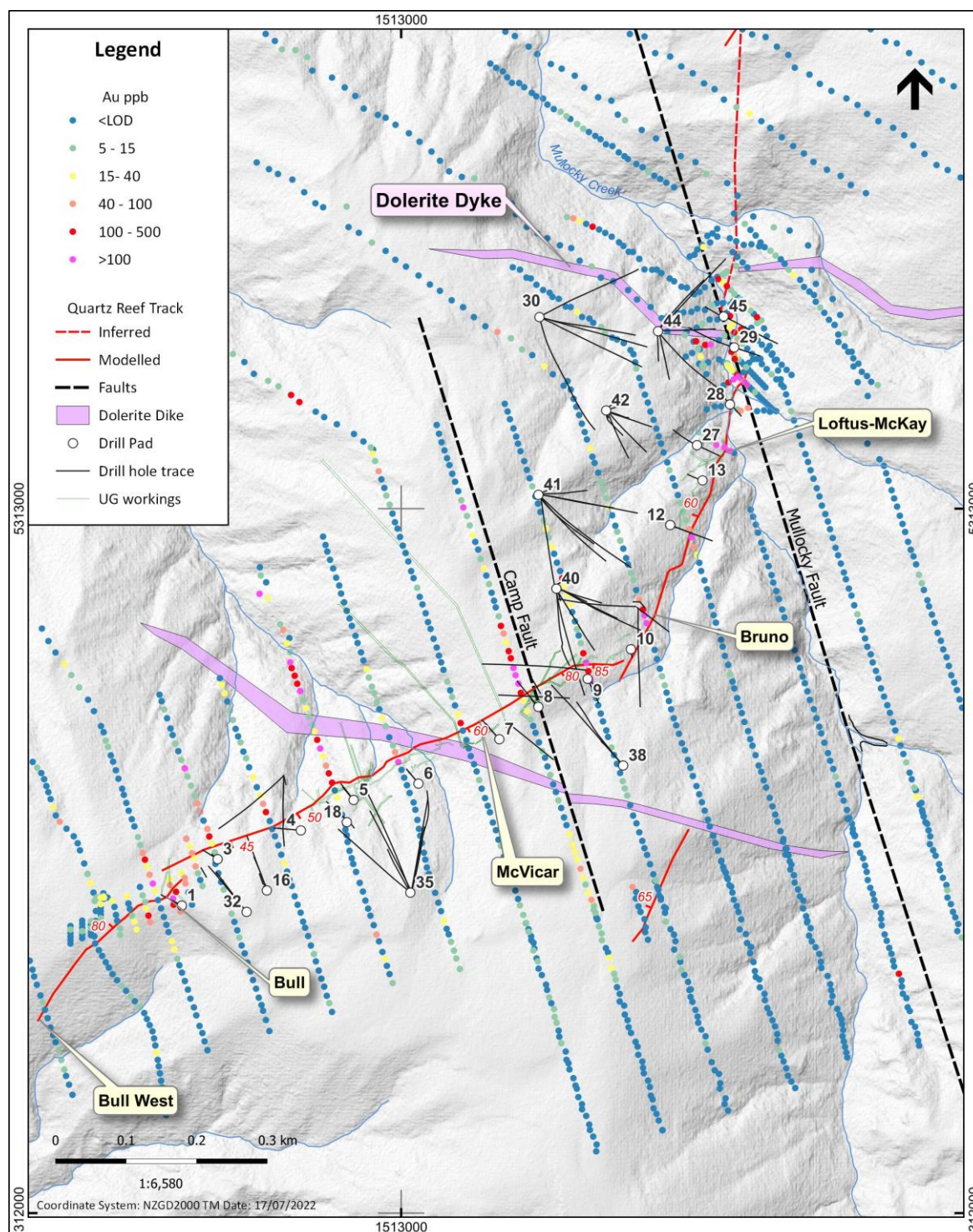
The arsenic soil anomaly extends from Bull and ends around the last known outcrop of the Loftus-McKay Shoot near Pad 28, where the shoot is interpreted to be offset approximately 150m to the north by a NNW trending Mullocky Fault (Figure 1). This interpretation is based on the offset of a dolerite dike and absence of the Loftus-McKay Shoot in holes drilled from the next two pads to the north. The northern extension of the Loftus-McKay Shoot can be targeted from Pad 46.

The Alexander mine was discovered in 1920 when a farmer picked up a rock to throw at his dog Bull and saw that it contained significant visible gold. It took two years to trace the source of the rock to an outcrop 500m above the valley floor. The Bull reef was trenched and shown to be a 2-3m thick quartz reef ranging from 2-20g/t Au that dipped steeply to the west. An adit was excavated under the outcrop but failed to find the reef and the miners eventually explored further along strike and discovered the McVicar reef, which was successfully mined.

Drilling by Siren has shown that the Bull reef dip changed from west to east just NE of the discovery outcrop and has now been intersected in a number of drillholes (Figure 2). At this stage the **Bull East Shoot** doesn't appear to contain any quartz reefs and comprises solely of moderately disseminated acicular arsenopyrite mineralisation with previously reported drillhole intercepts (*refer announcement dated 6 July 2022*) shown in Table 1. From the drillhole intercepts this shoot averages 4.5m true width and is approximately 50m high. At this stage the shoot extends down plunge for around 350m and has not been intersected beyond AX79. This is similar to where the McVicar Shoot dip changes from east to west (Figure 2), and a similar change is interpreted for the Bull Shoot. The **Bull West Shoot** has only been intersected in one hole to date and is not included in the MRE.



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The outcrop of the **McVicar East Shoot** is exposed in a number of trenches and comprises both quartz reef and disseminated acicular arsenopyrite mineralization, with the gold grades in the disseminated mineralisation often higher than in the quartz. Historical reports, and limited drilling to date, indicate that the historic miners targeted the quartz reefs and left the disseminated mineralisation behind, as the gold was difficult to recover.



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Diamond holes AX10 and AX66 drilled into the McVicar mine intersected stopes (Figure 2). AX10 intersected a stope with 5m of disseminated mineralisation averaging 7.3g/t Au in the footwall, while AX66 intersected 7.8m of disseminated mineralisation averaging 2.6g/t in the hangingwall of a stope. AX15 was the only other hole drilled into the mine and intersected a number of stopes but no mineralisation. Additional drilling is required to better define the remaining mineralisation down to Level 5, where the east dipping reef and McVicar East Shoot appear to pinch out. The McVicar mine extended for around 400m down plunge but only a small 75m section of the McVicar East Shoot has been included in the MRE and was heavily depleted due to the historic workings.

A west dipping reef was intersected between Level 5 and Level 6 of the McVicar mine. Mining stopped on Level 6 in 1942, with only minor stoping of the west dipping reef (Figure 2). Macraes Mining Company Limited (MMCL) drilled a diamond hole (A6-3), from Level 6 in 1992 and intersected the west dipping quartz reef around 25m below Level 6. The reef was 5.4m thick and assayed 5.3g/t Au.

Siren drilled AX49 from surface to intersect close to A6-3 to confirm the west dip of the reef. AX49 intersected a 4.1m mineralised zone, comprising a 1.2m thick quartz reef that contained some specks of visible gold that assayed 14.4g/t Au, and 2.9m of disseminated acicular arsenopyrite mineralisation that assayed 9.4g/t Au, for a combined intersection of 4.1m @ 10.6g/t Au and confirmed the west dip of the reef.

Siren has now drilled 14 diamond holes into the **McVicar West Shoot** which have been previously reported (refer announcement dated 6 July 2022) and shown (in Table 2 and Figure 2). The McVicar West Shoot has an average true thickness of around 3-4m, is around 80m high, extends down plunge for 750m and is open at depth. The shoot generally contains a 0.5-1.0m thick quartz reef with visible gold in the hangingwall with disseminated acicular arsenopyrite mineralisation in the footwall. A 0.6m quartz reef in AX84 intersected significant visible gold with a total intersection of 2.5m @ 358g/t Au.

Assessment and application of top-capping for the estimate was undertaken on the gold variable within individual domains. One statistical and spatial outlier (817 g/t) was capped in the McVicar West shoot, removing 70% of the metal within this domain. SNG noted that the treatment of this one composite was arguably material to the McVicar West estimation outcome.

The impact of increasing the top-cap on the McVicar West grade:

- top-cap of 35g/t: Declustered and capped mean of 5.4g/t Au
- top-cap of 50g/t: Declustered and capped mean of 5.7g/t Au
- top-cap of 200g/t: Declustered and capped mean of 8.3g/t Au

Entech and SNG acknowledge that grade representation in this style of deposit is highly sensitive to sampling volume. Additional challenges include narrow, high-grade zones within shoots (as evidenced in McVicar historical mining) which can be difficult to target and intercept even with close spaced drilling centres. With increased drilling, statistical support and geological knowledge, a sub-population may be identified and top-caps increased to reflect this higher grade metal area.

The **Bruno East Shoot** outcrops on the crest of a hill and is interpreted to be the east dipping remnant of the west dipping Loftus-Mckay Shoot. This shoot is exposed in a number of trenches and intersected in three drillholes, as previously reported (refer announcement dated 6 July 2022) and shown in Figure 2. The average drillhole intersection is around 2-3m (Table 3). Trench K intersected thicker higher-grade mineralisation averaging 9.3m @ 10.7g/t Au, including 3m @ 20g/t Au but trench results were not included in the MRE.

The **Loftus-Mckay Shoot** is west dipping and outcrops for around 300m down the plunge of the shoot before it is offset by a fault in Mullocky Creek (Figure 2). The shoot has been intersected by 8 diamond holes as previously reported (refer announcement dated 6 July 2022) (Table 4). The true thickness of this shoot intersected in the drillholes is around 2-4m. A channel sample across the fully exposed reef in Mullocky Creek returned 8m @ 4.1g/t Au.

Table 1. Bull East Shoot drillhole intercepts

| Hole ID | From (m) | To (m) | Interval (m) | True Thickness (m) | Au (g/t) |
|----------|----------|--------|--------------|--------------------|----------|
| AXDDH016 | 62.0 | 70.0 | 8.0 | 7.0 | 2.6 |
| AXDDH017 | 108.0 | 110.0 | 2.0 | 1.5 | 2.1 |
| | 113.0 | 116.0 | 3.0 | 2.0 | 1.9 |
| AXDDH018 | 26.0 | 34.0 | 8.0 | 7.0 | 2.9 |
| | 47.0 | 50.0 | 3.0 | 2.5 | 4.1 |
| AXDDH019 | 24.0 | 25.0 | 1.0 | 1.0 | 4.1 |
| | 29.0 | 33.0 | 4.0 | 4.0 | 1.3 |
| | 38.0 | 39.0 | 1.0 | 1.0 | 2.8 |
| AXDDH032 | 125.0 | 131.4 | 6.4 | 6.2 | 1.3 |
| AXDDH033 | 117.0 | 123.0 | 5.2 | 5.2 | 5.3 |
| AXDDH059 | 127.0 | 134.4 | 7.4 | 6.2 | 3.3 |
| AXDDH079 | 257.1 | 265.0 | 7.9 | 7.2 | 3.3 |
| AXDDH086 | 251.0 | 258.9 | 7.9 | 7.7 | 1.0 |

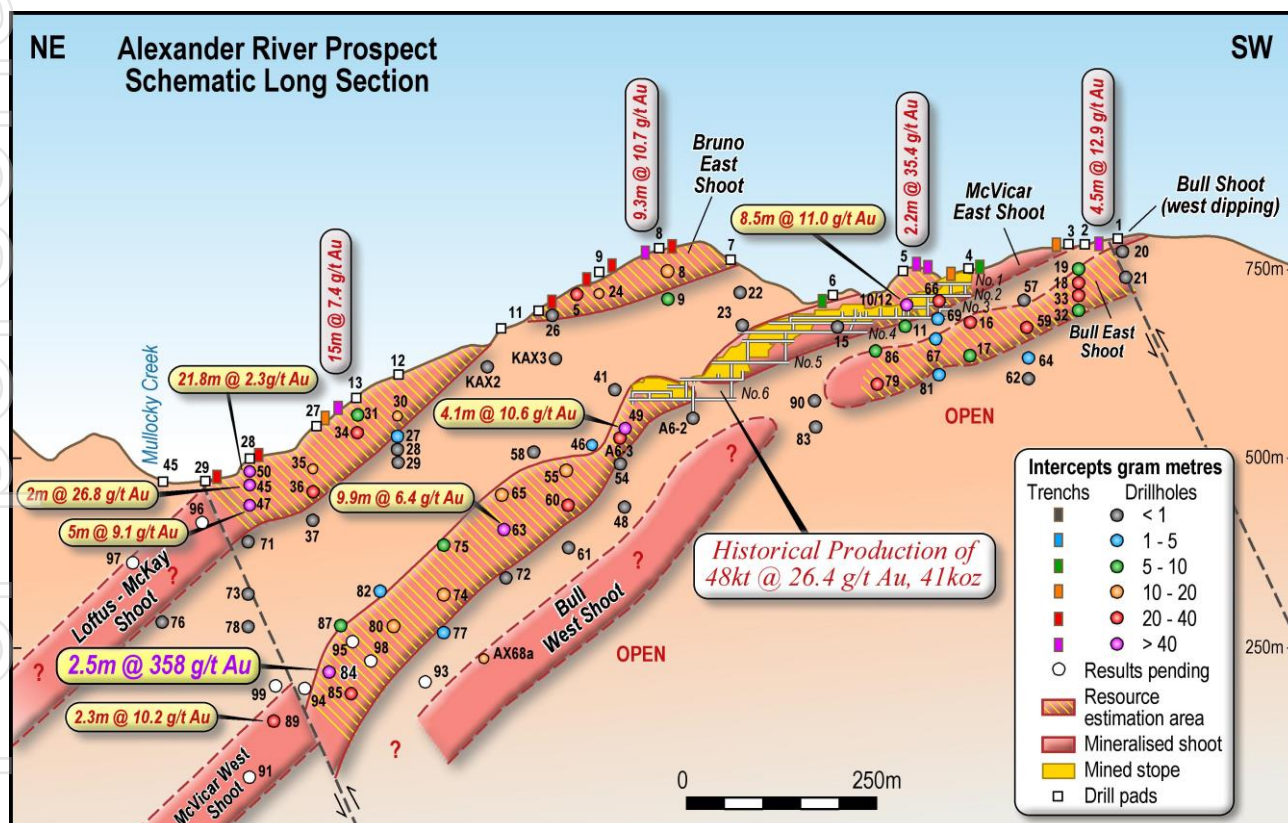


Figure 2. Alexander River schematic long section with MRE area hatched.



Figure 3. Significant visible gold intersected in the McVicar West Shoot in AX84.

Table 2. McVicar West Shoot drillhole intercepts

| Hole ID | From (m) | To (m) | Interval (m) | True Thickness (m) | Au (g/t) |
|----------|----------|--------|--------------|--------------------|----------|
| AXDDH049 | 198.5 | 202.6 | 4.1 | 4.1 | 10.6 |
| AXDDH055 | 214.6 | 217.0 | 2.4 | 2.4 | 7.0 |
| AXDDH060 | 221.0 | 223.4 | 2.4 | 2.4 | 5.8 |
| AXDDH063 | 261.1 | 272.0 | 9.9 | 9.9 | 6.4 |
| AXDDH065 | 225.0 | 234.0 | 9.0 | 8.5 | 1.8 |
| AXDDH074 | 312.8 | 315.5 | 2.8 | 2.5 | 6.6 |
| AXDDH075 | 278.0 | 281.8 | 2.8 | 2.3 | 2.7 |
| AXDDH077 | 337.4 | 338.9 | 1.6 | 1.5 | 2.0 |
| AXDDH080 | 252.2 | 254.2 | 2.0 | 1.6 | 8.2 |
| AXDDH082 | 233.9 | 237.2 | 3.3 | 3.0 | 1.3 |
| AXDDH084 | 275.4 | 277.9 | 2.5 | 1.8 | 358.2 |
| AXDDH085 | 276.9 | 279.0 | 2.1 | 1.9 | 19.3 |
| AXDDH087 | 251.0 | 256.0 | 5.0 | 4.0 | 1.6 |
| AXDDH089 | 293.2 | 296.5 | 3.3 | 3.0 | 7.4* |

*not included in the MRE.

Table 3. Bruno East Shoot drillhole intercepts

| Hole ID | From (m) | To (m) | Interval (m) | True Thickness (m) | Au (g/t) |
|----------|----------|--------|--------------|--------------------|----------|
| AXDDH005 | 26.0 | 27.5 | 1.5 | 1.3 | 13.5 |
| AXDDH008 | 23.3 | 28.0 | 4.7 | 4.5 | 2.9 |
| AXDDH024 | 22.8 | 24.3 | 1.5 | 1.2 | 11.5 |

Table 4. Loftus-McKay Shoot drillhole intercepts

| Hole ID | From (m) | To (m) | Interval (m) | True Thickness (m) | Au (g/t) |
|----------|----------|--------|--------------|--------------------|----------|
| AXDDH030 | 52.5 | 54.3 | 1.8 | 1.8 | 6.7 |
| AXDDH031 | 23.3 | 26.0 | 2.7 | 2.4 | 2.5 |
| AXDDH034 | 43.0 | 46.0 | 3.0 | 2.5 | 10.8 |
| AXDDH035 | 46.0 | 48.0 | 2.0 | 2.0 | 6.1 |
| AXDDH036 | 62.7 | 66.0 | 3.3 | 3.0 | 7.0 |
| AXDDH045 | 30.0 | 32.0 | 2.0 | 2.0 | 26.8 |
| AXDDH047 | 56.0 | 61.0 | 5.0 | 3.5 | 9.1 |
| AXDDH050 | 4.2 | 26.0 | 21.8 | 21.8 | 2.3 |

Mineral Resource Estimate (MRE)

The Maiden Mineral Resource Statement (MRE) for the Alexander River Gold Project was prepared by independent consultant Entech Pty Ltd (**Entech**) during July 2022 and is reported according to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the 'JORC Code') 2012 edition.

This MRE includes 15,675m of drilling from 100 diamond (DD) drillholes completed up to 9 May 2022 by the Company. The depth from surface to the current vertical limit of the Mineral Resources is approximately 260m.

The Inferred Mineral Resources comprise transitional and fresh rock. The Mineral Resource Statement is presented in Table 5 at various cut-offs and in Table 6 by material type. Table 7 shows the resource by geological domain (shoot).

A longitudinal section of the MRE with the shoot domains and block grades is shown in Figure 4. This section shows that the grade of the McVicar West and Loftus-McKay shoots appears to be increasing with depth.

The McVicar West Shoot has a top-cap of 35g/t Au, which resulted in a 70% metal reduction.

This high percentage of metal reduction is due to a single statistical and spatial composite outlier of 817g/t Au in AX84. Given the style of deposit, it is likely that further infill drilling may present additional statistical outliers and will help assess whether these values are true outliers, or a higher tenor sub-population (sub-domain). In the latter case, top-cuts upwards of 50–200g/t Au may be considered appropriate.

The MRE drillhole cut-off the McVicar West Shoot has been extended a further 100m down plunge, with AX89 drilled on the NE side of the fault intersection 2.3m @ 10.2g/t Au.



Table 5. Inferred Resource Summary at different cut-off grades

| Cut-off Grade | Tonnes (kt) | Grade (g/t Au) | Ounces (koz) |
|---------------|-------------|----------------|--------------|
| 1.0 | 1,200 | 3.6 | 139 |
| 1.1 | 1,192 | 3.6 | 139 |
| 1.2 | 1,164 | 3.7 | 138 |
| 1.3 | 1,096 | 3.8 | 135 |
| 1.4 | 1,038 | 4.0 | 133 |
| 1.5 | 1,000 | 4.1 | 131 |
| 2.0 | 832 | 4.5 | 122 |

Tonnages are dry metric tonnes and minor discrepancies may occur due to rounding.

Table 6: Inferred Resource by Material Type – 1.5 g/t Au Cut-off

| Material Type | Tonnes (kt) | Grade (g/t Au) | Ounces (koz) | % MRE |
|---------------|--------------|----------------|--------------|-------|
| Transition | 302 | 2.9 | 28 | 21.4 |
| Fresh | 699 | 4.6 | 103 | 78.6 |
| Total | 1,000 | 4.1 | 131 | |

Tonnages are dry metric tonnes and minor discrepancies may occur due to rounding.

Table 7: Inferred Resource by Geological domain at a 1.5 g/t Au Cut-off

| Cut-off Grade | Tonnes(kt) | Grade (g/t Au) | Ounces (koz) | % MRE |
|---------------|--------------|----------------|--------------|--------------|
| McVicar East | 14 | 6.5 | 3 | 2.2 |
| Bull East | 355 | 2.1 | 24 | 18.6 |
| Bruno East | 32 | 5.9 | 6 | 4.6 |
| Loftus-McKay | 218 | 4.6 | 32 | 24.7 |
| McVicar West | 382 | 5.3 | 65 | 49.7 |
| Total | 1,000 | 4.1 | 131 | 100.0 |

Tonnages are dry metric tonnes and minor discrepancies may occur due to rounding.

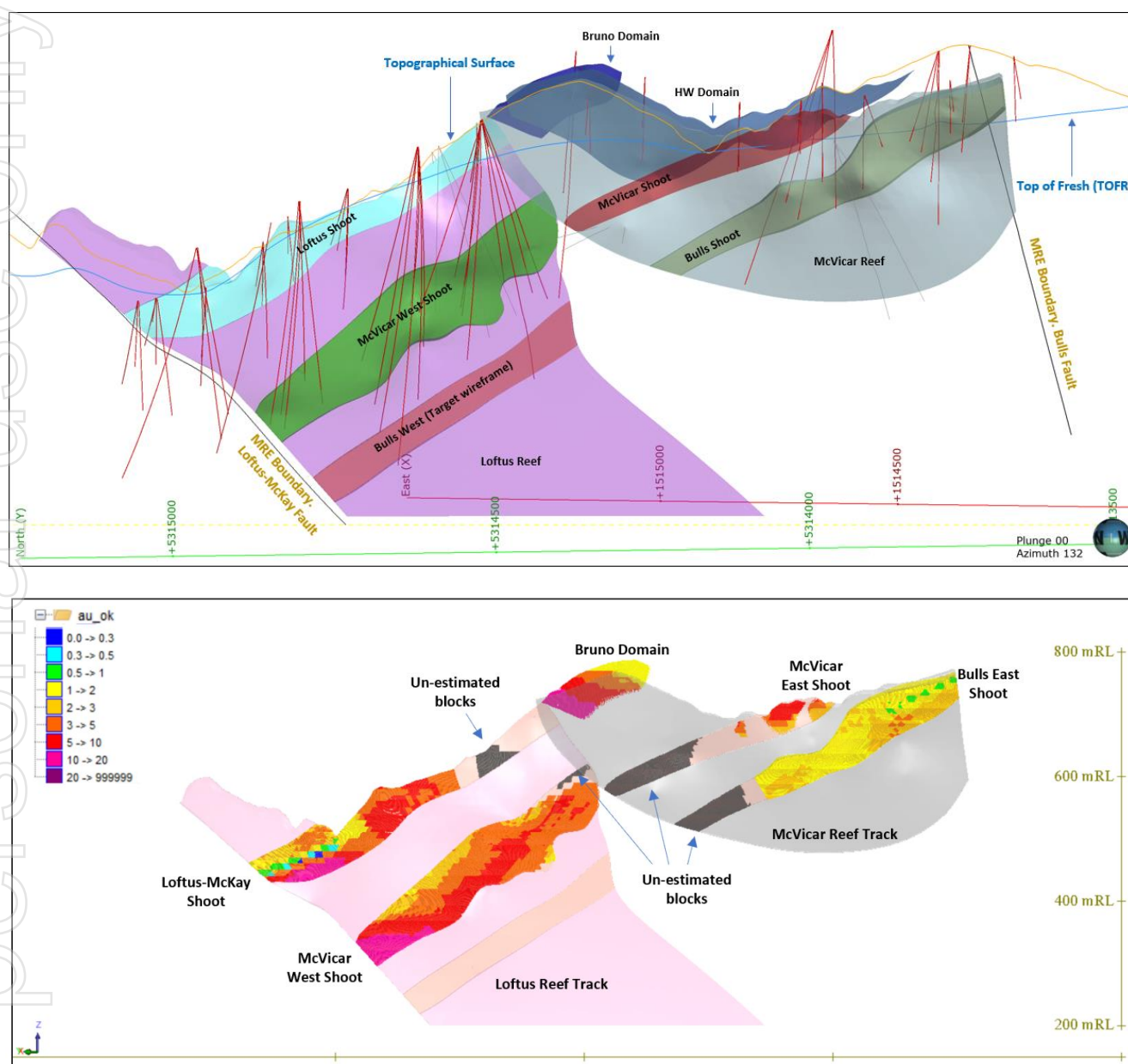


Figure 4. Long Section showing shoot domains (top) and MRE block grades (bottom).

Next Steps

The McVicar West shoot extends below the MRE with AX89 intersecting 2.3m @ 10.2g/t Au a further 100m down plunge (Figure 2). Over the rest of 2022 the McVicar West Shoot will be targeted around 500m below the MRE (Figure 5). Targeting the Bull West Shoot on the SE side of the fault and targeting the Loftus-McKay Shoot on the NE side of the fault will also be undertaken. Siren still considers that the Alexander River Exploration target of 500-700koz @ 5-7g/t Au inclusive of the Inferred Resource, is still valid¹ and this drilling if successful, will increase the confidence in that target.

¹ The potential quantity and grade of the exploration target is conceptual in nature as there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource beyond what is reported in this announcement. The Company refers to the announcements dated 19/08/2021, 23/09/2021 and 3/05/2022 where further information is set out in respect to the exploration target.

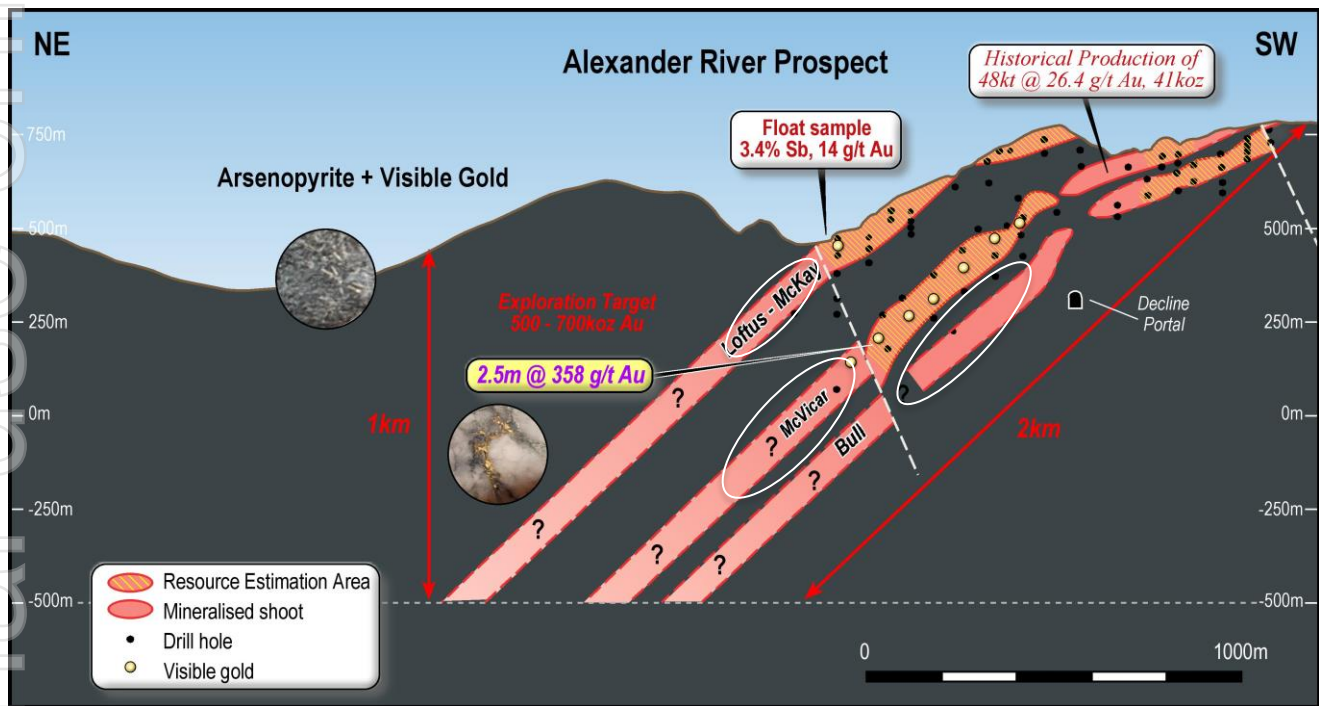


Figure 5. Target areas for the remainder of 2022 drilling shown by white ellipses.

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

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Competent Person Statement

The information in this announcement that relates to mineral resources, exploration results and 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.

MATERIAL SUMMARY

ALEXANDER RIVER MAIDEN MINERAL RESOURCE ESTIMATE

Material information summary as required under ASX Listing Rule 5.8 and JORC Code (2012) reporting guidelines.

Mineral Resource Statement

The Mineral Resource Statement for the Alexander River Gold Maiden Mineral Resource Estimate (MRE) was prepared during June 2022 and is reported according to the *Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves* (the 'JORC Code') 2012 edition.

The MRE includes 15,674.8 m of drilling from 100 diamond core holes completed since 1993. Of the drill metres underpinning the Mineral Resource, 84% were completed by Siren Gold Ltd (SNG). Historical drilling includes 16 holes (16% of the drill metres) completed by previous owners between 1993 and 2011. The depth from surface to the current vertical limit of the Mineral Resources is approximately 260 m.

In the opinion of Entech, the resource evaluation reported herein is a reasonable representation of the global gold Mineral Resources within the Alexander River deposit, based on sampling data from diamond drilling available as of 9 May 2022. The Inferred Mineral Resources are reported excluding historical mining voids and comprise transitional and fresh rock. The Mineral Resource Statement is presented in Table 1.

Table 1 Alexander River Maiden Mineral Resource at a 1.5 g/t Au cut-off by weathering status.

| Project Area | Resource Category | Weathering | Tonnes (kt) | Gold (g/t) | Gold Ounces (kOz) |
|-----------------|-------------------|--------------|-------------|------------|-------------------|
| | | | | | |
| Alexander River | Inferred | Transitional | 302 | 2.9 | 28 |
| | | Fresh | 699 | 4.6 | 103 |
| Total | | | 1000 | 4.1 | 131 |

Tonnages are dry metric tonnes. Minor discrepancies may occur due to rounding. Cover/soil material contributes 0.3% to the MRE and has been included within Transitional counts (equal density).

A total of 15,674.8 m of drilling from 100 drill holes was available for the MRE. Mineralisation interpretations were informed by diamond drilling (100 holes, of which 73 intersect the resource), for 12,399.3 m of drilling intersecting the resource.

A further breakdown of Mineral Resources by reef shoot is presented in Table 2.

Table 2 Alexander River Maiden Mineral Resource at a 1.5 g/t Au cut-off, by Reef Shoot

| Project Area | Resource Category | Lode Name | Tonnes (kt) | Gold (g/t) | Gold Ounces (kOz) |
|-----------------|-------------------|--------------------|-------------|------------|-------------------|
| | | | | | |
| Alexander River | Inferred | Bruno | 32 | 5.9 | 6 |
| | | Bulls East Shoot | 355 | 2.1 | 24 |
| | | Loftus-McKay Shoot | 218 | 4.6 | 32 |
| | | McVicar East Shoot | 14 | 6.5 | 3 |
| | | McVicar West Shoot | 382 | 5.3 | 65 |
| Total | | | 1000 | 4.1 | 131 |

Tonnages are dry metric tonnes. Minor discrepancies may occur due to rounding.

This MRE comprises Inferred Mineral Resources, which are unable to have economic considerations applied to them, nor is there certainty that further sampling will enable them to be converted to Measured or Indicated Mineral Resources.

Drilling Techniques

Drilling has been completed from surface using PQ and HQ diamond drilling techniques (triple tubed). NQ is used where appropriate, due to ground conditions. Historical underground drilling used HQ diamond drilling techniques.

SNG has recently employed an open-hole strategy (Strata-Pack) for 17 drill holes in each drill fan, excluding the initial hole of each fan. The open-hole strategy is typically carried out to ~100 m. The process comprises drilling the first hole in a fan with full diamond core. If ground conditions suit SNG will use open hole methodology and monitor for survey deviation.

Oriented core has been collected on SNG drillholes by Eco Drilling Ltd using REFLEX survey tools. Entech noted that intersections of highly broken core were often intersected, with areas of poor reliability noted by driller and geologist noted in core logs.

A registered surveyor has picked up the 79 of the 100 drill hole collar locations. The remaining 21 locations were determined using tape and compass measurements from adjacent surveyed holes drilled from the same drill pad. Entech understands historical drill holes were picked up by surveyor, with SNG undertaking GPS checks on co-ordinates for 80% of the drill holes in the database. A handheld GPS instrument was used for placement of drill hole collars in New Zealand Transverse Mercator 2000 (NZTM). Entech completed GPS verifications on three collar locations during the 2022 site visit.

The surveyed drill collars are on excavated pads in steep, vegetated terrain. Downhole surveys were completed using REFLEX tools (EZ-TRAC and Gyro).

Historical Drilling

The historical drilling at the Alexander River deposit comprises 16 diamond drill holes drilled between 1993 and 2011. Of the drill holes used in the MRE, 84% were drilled by SNG in the period from 2020 to 2022 for a total of 14,417.2 m.

A key focus of the SNG drilling (2020–2022) was to infill areas of the MRE informed by historical drill information and to support the compilation of a Maiden MRE. Additional focus for the drill programs

included increasing geological, structural knowledge and testing for down plunge mineralisation extensions.

Entech understands historical drilling was surveyed both at collar locations and down hole.

Sampling and Sub-Sampling Techniques

The Alexander River deposit has been sampled using 100 diamond drill holes.

SNG drill holes are selectively sampled, typically with a 4–5m buffer zone into the hanging wall and footwall of the mineralised zone. In addition to mineralised zones, earlier drillholes also selectively sampled areas of interest, namely structural zones and different rock types. Diamond drill sample intervals were marked on the core, which was sawn in half lengthways with a diamond cutting saw. The resulting core was taken for the laboratory sample and remaining core was archived in the core box.

The diamond drilling half core sample size (2–3 kg) is considered appropriate to the grain and particle size for representative sampling.

There are 29 historical and recently sampled trenches at the project. Entech understands resampling of historical trenches was completed with a geological hammer across the trench in 1 m sample lengths. Often trenches did not transect the entire mineralised zone of the deposit and intersected the ore shoot at suboptimal angles (optimal being perpendicular). Three trenches were considered to be orientated perpendicular to the deposit.

It was noted that resampling by Kent (2009/2010) of historical CSA (1988) trenches showed similar grade tenor and lengths. SNG and Entech used trenches for surface confirmation of shoot plunge and dips; however, due to uncertainty regarding spatial location, sampling method, orientation with respect to the deposit and risk of preferential sampling bias, the trench samples were not included in the estimate.

Historical Sampling

Historical sampling of 16 diamond drill holes drilled from 1993 to 2011 were used in the resource estimation: 9 holes were drilled by Kent Exploration and 7 were drilled by Macraes Mining Co Ltd (MMCL). All historical drill holes were sampled using half-core sample size.

Kent Exploration's drill holes KAX001–KAX004 (formerly AX001–AX004) were sampled in continuous 1 m length sections. Holes KAX005–KAX007 (formerly AX005–AX005) were sampled by geological sections typically between 0.5 m and 1.5 m in length. Historical metadata for MMCL drill hole sampling and assaying was limited, but it is understood sample intervals ranged between 1 m and 2 m.

Entech understands no sampling issues were reported for the historical drilling. It should be noted that the extensive drilling programmes completed by SNG since 2020, comprising 84% of drillholes within the database underpinning Mineral Resources, has correlated well with historical drilling intercept locations, widths and grade tenor. No direct twin drilling was completed of historical drilling.

Sample Analysis Method

The samples are crushed and split at the laboratory, with up to 3 kg pulverised and 30 g samples

analysed by fire assay analysis. Sample preparation of diamond drilling and trench samples by SGS Laboratories in Westport comprises drying, crushing, splitting (if required) and pulverising to obtain analytical samples of 250 g with >95% passing 75 µm.

A 48-element suite completed by SGS is undertaken using ICP-MS up to drill holes AX23. Gold is assayed by 30 g fire assay by SGS Waihi or SGS Macraes. For later drill holes, the pulps returned from the laboratory were analysed for multi-element by SNG using a portable XRF (pXRF) instrument.

Field duplicates such as quarter core, laboratory duplicates and laboratory repeats were collected and assayed with one duplicate per assay submission. Grind size is not routinely recorded.

Historical Analysis

Kent Exploration employed a 9-element suite analysed by Fire Assay Analysis (FAA505 - 50 g charge) and ICP-MS after aqua regia digest (ARM133) at SGS Laboratories for Au, Ag, As, Bi, Cu, Mo, Pb, Sb and Zn. Original SGS assay certificates were sighted for the Kent Exploration drill holes.

Historical information is restricted for MMCL drill hole sampling, but Entech understands MMCL employed a 6-element suite analysis for surface drill holes (AX4–AX7) for Au, As, Sb, Cu, Pb and Zn. A 7-element suite analysis was carried out for underground drill holes (A6/1–A6/3) for Au, Ag, As, Sb, Cu, Pb and Zn.

Geology and Geological Interpretation

The Alexander River tenement area is located in the Reefton Goldfield. The Reefton Goldfield is hosted by late Cambrian to early Ordovician Greenland Group sedimentary rocks. The Greenland Group are folded sediments comprising (greywacke) with interbedded psammitic (sandstone) and pelitic (argillite) rock types understood to be a proximal turbidite succession. Locally, the Alexander River deposit lies in a separate fault-bound block of the Greenland Group surrounded by Karamaea Batholith granitoid rocks.

Mineralisation is broken into several prospects: Bull, Fimiston, McVicar, Bruno, McKay and Loftus. The geological sequence is comprised of quartz reefs within the Greenland Group Greywacke (GWK) host rock. The dominant host rock for gold mineralisation is the quartz reefs. Disseminated mineralisation is comprised of silicified acicular arsenopyrite within adjacent siltstone and sandstone. Mineralisation dips to the southeast in the southern portion of the deposit, and to the northwest in the northern portion. Portions of the reef that are barren are nominally called 'reef tracks' and portions of the reef that are mineralised are called 'reef shoots'.

Entech understands that the reef tracks and reef shoots are structurally controlled. Structural mapping and reports were available with structural understanding an ongoing process. In Entech's opinion the available drilling density supports the continuity implied by the interpreted mineralisation domains, both along strike and down dip. Based upon structural documentation and measurements Entech undertook rudimentary structural modelling to define an offsetting fault zone north of Loftus-McKay, resulting in a 25–30 m sinistral offset. The southern extent of mineralisation is truncated by the Bulls Fault.

The reefs are defined by drill core (73 holes) and supported by a nominal drill density of 80–100 m

along strike × 50 m down dip. Limited lithological modelling has been undertaken outside of the reefs, with two dolerite intrusions modelled in the southern area of the deposit. No further lithological modelling has been undertaken, with the host rock largely considered to be GWK. Further drilling will define minor felsic units present at the deposit.

Reef track host units were modelled prior to the mineralisation domain interpretation commencing. Mineralisation domains were constrained within reef tracks and plunge orientations determined using lithology, mineralogy and arsenic as an elemental proxy to gold mineralisation. The potential for rheological contrasts between the quartz reef and disseminated mineralised units is one feature that appears to control grade tenor.

Weathering surfaces were created by interpreting existing drill logging for soil and oxidation state and were extended laterally beyond the limits of the Mineral Resource model. Entech reviewed the weathering contacts in relation to mineralisation controls but found no clear evidence of a relationship between weathering contacts and grade distribution.

Interpretations of domain continuity were undertaken using diamond drilling data in Leapfrog software, with mineralisation intercepts correlating to individual domains manually selected prior to creation of a vein model using Leapfrog Geo implicit modelling software. Interpretation was a collaborative process with SNG geologists to ensure modelling appropriately represented observations and the current understanding of geology and mineralisation controls.

A cut-off grade of 1.0 g/t Au was used to guide the geological continuity of the interpreted reef shoot mineralisation. The cut-off grade was selected based on the reef shoot contact correlating with mineralisation greater than 1.0 g/t Au. Within the mineralised wireframe, if an intercept fell below the nominal cut-off but continuity was supported by host lithologies, the intercept was retained for continuity purposes due to the commodity and the style of deposit.

Nine domains were interpreted at the Alexander River deposit (Figure 1), comprising seven mineralisation domains (reef shoots) and two host reef tracks. Of note, the Bulls West mineralisation domain was underpinned by one intercept. This was interpreted for SNG drill targeting purposes and was not classified with a JORC framework. The mineralisation package at Alexander River extends over a 1,200 m strike length. Lode widths are highly variable and range from 2 m to 15 m. Mineralisation domains are interpreted to outcrop at surface (as observed during the site visit) and extend to 260 m in depth (300 mRL).

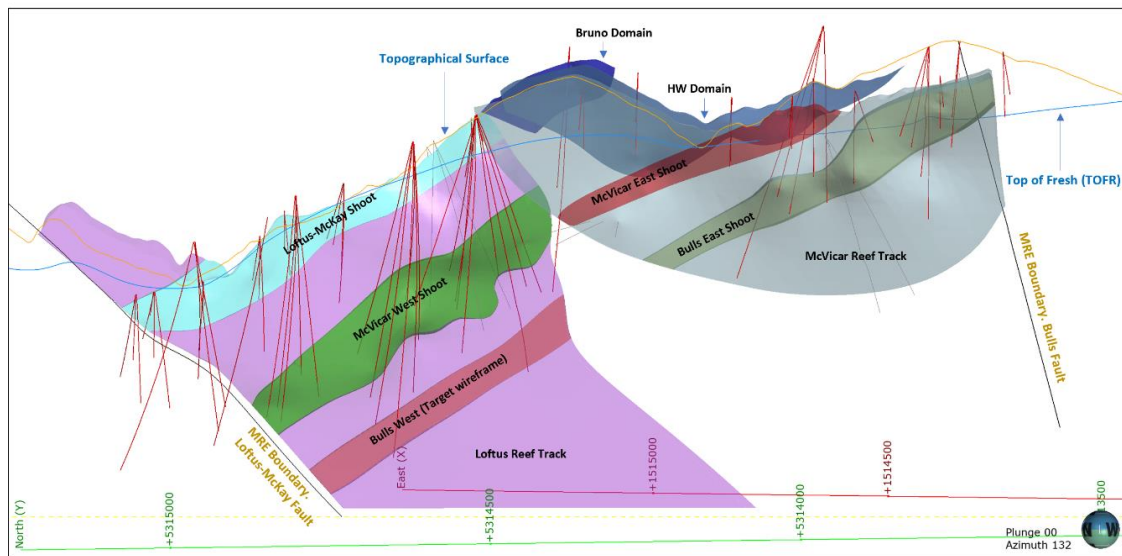


Figure 1 Oblique section of Alexander River deposit (azimuth 132°) showing drill hole traces, mineralised domains, weathering and topography.

Note: Red=SNG's 2020-2022 drilling. Mineralised domains (as interpreted) do not represent MRE classification extents. The HW and Bulls West domains demonstrate drill targets (due to limited drill information) and were not included in the Mineral Resource.

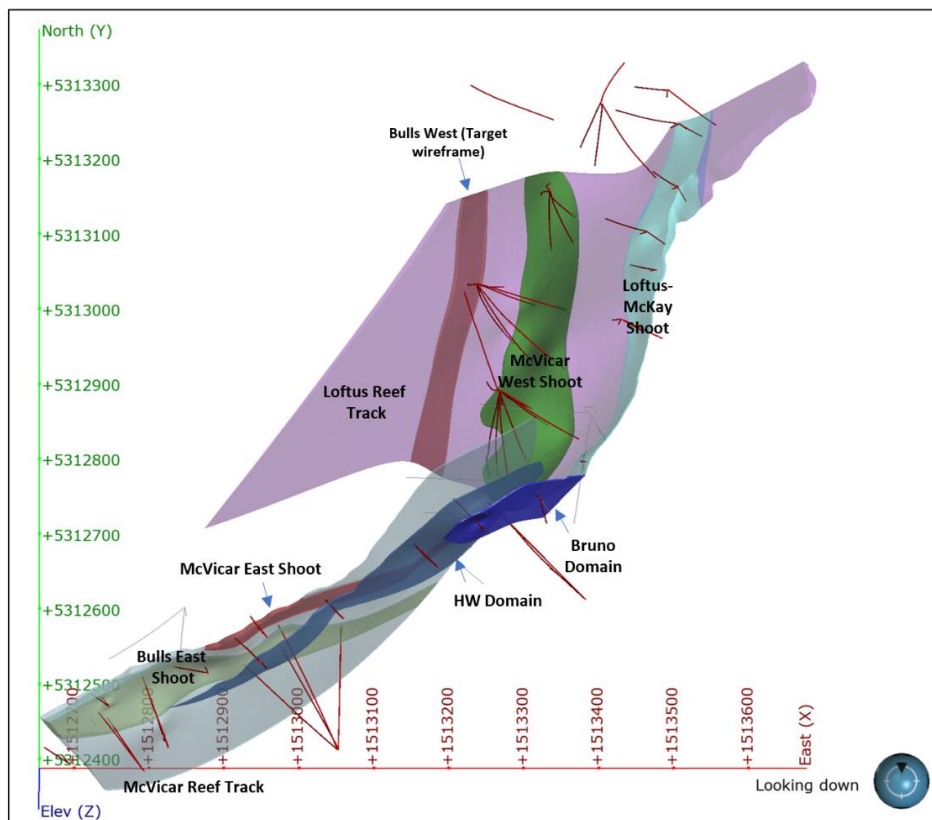


Figure 2 Plan section of Alexander River deposit showing drill hole traces and mineralisation domains

Note: Red=SNG's 2020-2022 drilling. Mineralised domains (as interpreted) do not represent MRE classification extents.

Alternative mineralisation geometries were compared against indicator based numerical modelling (Leapfrog Indicator RBF Interpolants) at varying cut-offs and probability outcomes. All modelling was underpinned by statistical and spatial (variogram) analysis. These alternative models supported the metal distribution within the estimation outcomes.

Entech considers confidence in mineralisation continuity and distribution, as implied within the MRE classification, is moderate given the mineralisation consistency, continuity and well-oriented drilling undertaken by SNG.

Estimation Methodology

Sample data within mineralisation domains were composited to 1 m downhole lengths using a best fit methodology and 0.6 m minimum threshold on inclusions, residuals (two instances) were reviewed and included in the final composite dataset.

Exploratory Data Analysis (EDA) of the declustered (20 mN, 10 mE, 20 mZ) composited gold variable within the mineralised domain groups was undertaken using Datamine's Supervisor software. Analysis for sample bias, domain homogeneity and top-capping was undertaken. Evidence for further sub-domaining of composite data by weathering or lithology boundaries, for the purposes of interpolation, was not supported by statistical and spatial analysis.

Assessment and application of top-capping for the estimate was undertaken on the gold variable within individual domains. One statistical and spatial composite outlier (AXDDH084 - 817 g/t) was capped to 35 g/t in the McVicar West shoot, capping 70% of the metal within this domain. SNG noted that the treatment of this one composite was arguably material to the McVicar West estimation outcome, thus the sensitivities on different top caps is presented below for disclosure purposes:

- McVicar West top-cap of 35 g/t: Declustered and capped mean of 5.41 g/t Au
- McVicar West top-cap of 50 g/t: Declustered and capped mean of 5.67 g/t Au
- McVicar West top-cap of 200 g/t: Declustered and capped mean of 8.29 g/t Au.

Entech applied a 35 g/t top cap to the one composite outlier in McVicar West (AXDDH084). There was no other composites across the deposit above the applied top cap of 35 g/t. Entech and SNG acknowledge that grade representation in this style of deposit is highly sensitive to sampling volume. Additional challenges include narrow, high grade zones within shoots (as evidenced in McVicar East historical mining) which can be difficult to target and intercept even with close spaced drilling centres. With increased drilling, statistical support and geological knowledge, a sub-population may be identified and top-caps increased to reflect this higher grade metal area.

However, given the Inferred stage of the project, commodity under consideration, existing drill hole spacing and gold values of other composites within McVicar West shoot, (Figure 3), it is Entech's opinion that the top-cap selected appropriately represents metal content supported by 99.75% of the mineralised statistical population.

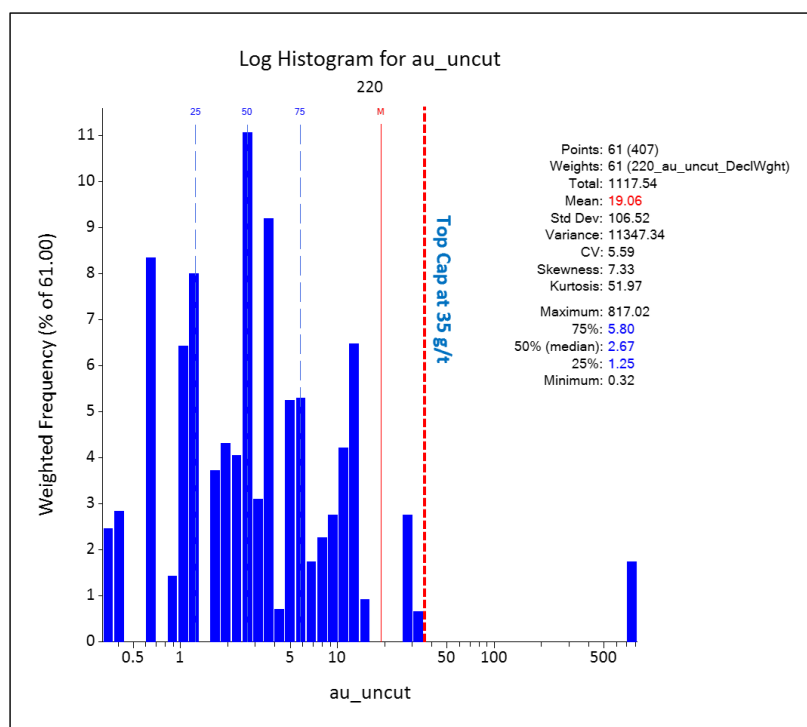


Figure 3 Log histogram – McVicar West shoot

Variography was undertaken on the capped, declustered gold variable within McVicar West and Loftus-McKay mineralisation domains, grouped by spatial and statistical similarities. Robust variogram models with a moderate nugget (20%) were delineated and used in Qualitative Kriging Neighbourhood Analysis (QKNA) to determine parent cell estimation size and optimise search neighbourhoods. It should be noted that although the maximum continuity modelled within the variogram was 100 m, the bulk of spatial variability (70%) was modelled within the first 7 m.

Interpolation was undertaken using Ordinary Kriging (OK) in GEOVIA Surpac™ within parent cell blocks. Dimensions for the interpolation were Y: 10 mN, X: 5 mE, Z: 10 mRL, with sub-celling of 0.625 in Y, X and Z. Considerations relating to appropriate block size include drill hole data spacing, conceptual mining method, variogram continuity ranges, geological understanding of the deposit (two dominant strike orientations) and search neighbourhood optimisations (QKNA).

A two-pass estimation search strategy was employed. All domains were estimated within a maximum distance of 110 m and the number of neighbourhood composites ranged from a minimum of 6 to a maximum of 16 samples for the first pass, a minimum of 4 for the second pass.

Domain boundaries represented hard boundaries, whereby composite samples within that domain were used to estimate blocks within the domain. Global and local validation of the gold variable estimated outcomes was undertaken with statistical analysis, swath plots and visual comparison (cross and long sections) against input data. Internal audits and peer review underpin Entech's validation process, with a focus on independent resource tabulation, block model validation, verification of technical inputs, and peer review of approaches to domaining, interpolation and classification.

The 3D block model was coded with density, weathering and Mineral Resource classification prior to evaluation for Mineral Resource reporting.

Classification Criteria

Mineral Resources were classified as Inferred to appropriately represent confidence and risk with respect to data quality, drill hole spacing, geological and grade continuity and mineralisation volumes. Additional considerations were the stage of project assessment, style of deposit and current understanding of mineralisation controls. In Entech's opinion, the drilling, surveying and sampling undertaken, and the analytical methods used are appropriate for the style of deposit under consideration.

While Entech noted several quality control improvements are required, on review and assessment, Entech was of the opinion the current practices do not pose a material risk to the data quality underpinning the Mineral Resources.

Inferred Mineral Resources were defined where a low to moderate level of geological confidence in geometry, continuity and grade was demonstrated, and were identified as areas where drill spacing averaged a nominal 80 m or less, or where drilling was within 70 m of the block estimate.

The reported Mineral Resource was depleted for historical mining and constrained at depth by the available drill hole spacing, nominally 260 m below surface topography. All classified Mineral Resources were reported inside the tenement boundary, as provided by SNG to Entech. Mineralisation within the model which did not satisfy the criteria for Mineral Resources remained unclassified.

Mineral Resources that are not Ore Reserves do not have demonstrated economic viability. The MRE does not account for selectivity, mining loss and dilution. Variances to the tonnage, grade, and metal tonnes of the MRE are expected with further definition drilling.

The delineation of Inferred Mineral Resources appropriately reflects the Competent Person's view on continuity and risk at the deposit.

Cut-off Grade

The Mineral Resource cut-off grade for reporting of global gold resources at the Alexander River deposit was 1.5 g/t. This was based on consideration of grade-tonnage data (Figure 4), selectivity and benchmarking against comparable-sized deposits of similar mineralisation style and tenor. Tonnages were estimated on a dry basis. All Mineral Resource tabulations are exclusive of historical mining voids.

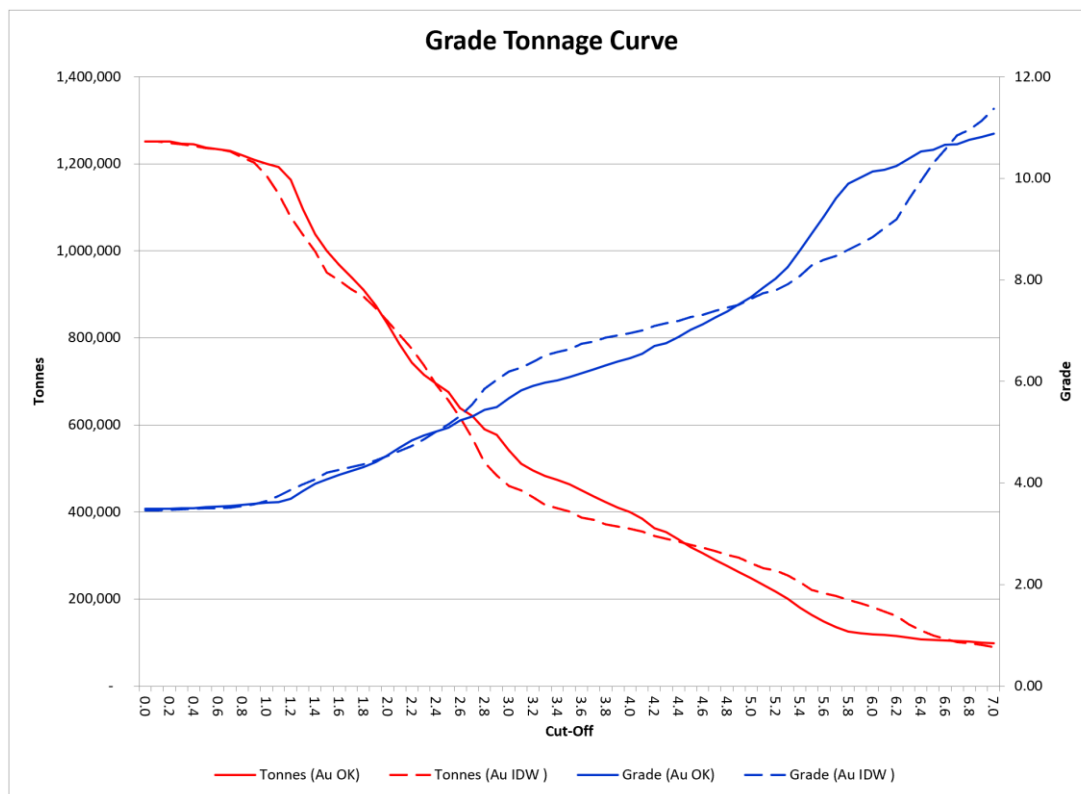


Figure 4 Grade-tonnage curve for the Alexander River deposit – Indicated and Inferred Mineral Resources

Bulk Density

Bulk density values at the Alexander River deposit were derived from 363 validated measurements collected by SNG during 2021/2022. The samples were located between 5,312,400 mN and 5,313,300 mN and nominally from 4 m to 376 m downhole, providing a representative density profile between mineralised domains, and depth profile within a centralised portion of the Mineral Resource.

SNG analysis of the bulk density data indicated specific gravity (SG) values between 2.36 and 3.00, but typically values fall within 2.6–2.75 and increase incrementally between transitional and fresh rock profiles at Alexander River. Bulk density values were supplied by SNG. Entech independent verified the raw data and carried out a density data study. The following values were determined and applied in the block model:

- Cover and soil: 2.63 t/m³
- Transitional: 2.63 t/m³
- Fresh: 2.75 t/m³.

Assessment of Reasonable Prospects for Eventual Economic Extraction

The reported Mineral Resource was depleted for historical mining, constrained at depth by the available drill hole spacing outlined for Inferred classification, nominally 260 m below surface and within the SNG tenement boundary. Entech considers Mineral Resources at this depth would fall under the definition of 'reasonable prospects for eventual economic extraction' (RPEEE) within an underground mining framework.

Mining and Depletion

Historical underground mining was undertaken at the project in the early 1900s until the mine closed in 1943. The bulk of mining focused on the McVicar East shoot, however other areas were accessed, developed and mined to varying extents (Loftus-McKay, Bruno).

It should be noted that surveyed void information for the historical mining was not lodged at completion of mining and no current access to underground workings from which to undertake surveys is possible. Thus locations and extents of development drives and stoping were limited to digitisation from level plans, sourced by SNG. Entech understands the level plans are considered, by SNG, to accurately represent the number of levels developed during ore extraction, which was evidenced in visible adits (Entech site visit) that correlated well with level plan information. It was also noted Macraes Mining Co Ltd (MMCL) re-entered workings (Level 6) in 1992 to undertake drilling (down dip) from underground and no adjustments to voids were made or identified during this re-entry.

Mined volumes have been derived by Entech through digitisation of the level plans and generation of 3D wireframes for use within the block model. These void volumes may contain potential errors in spatial position and may not account for all mining historically completed.

Taking these limitations into account the assessment of historical mining voids within the context of RPEEE was based on a conservative approach to delineation of void extents and height. Where historical production records were limited (Loftus-McKay, Bruno) or extensive development had been completed, such as McVicar East, Entech assumed half or full height mining back to the access drive. Entech also assumed the full width of reef shoots were mined (from hangingwall to footwall).

Discussions with SNG indicated that increased mining selectivity was likely in some shoots, however in the absence of detailed historical production data, or sample information, it was not possible to assume, or apply, selective mining of lode widths on specific shoots or development levels.

Entech understands that a historical production of 41 koz gold was extracted from Alexander River between 1920 and 1943 with tonnages ~48 kt and grade ~26 g/t gold.

The depletion applied for the Mineral Resource removed 141 Kt of material at a grade of 1.3 g/t. The assumption of full width reef shoot mining and absence of historical assay data to support the grades reportedly intercepted during mining accounts for the delta between the historical number and 3D digital representation of the mined voids.

No dilution or cost factors were applied to the estimate.

Metallurgy

Independent metallurgical testwork undertaken in April 2022 on six fresh Alexander River composite samples (Bull East, McVicar and Loftus McKay) indicates all samples comprise refractory material and all respond to flotation. Based on a metallurgical testwork on five of the Alexander River intercepts, a gold recovery of 94%¹ may be possible by processing through a gravity circuit followed by flotation to a concentrate product. Laboratory testing using a Falcon concentrator followed by an intensive cyanide leach indicated the proportion of the gravity component of recoverable gold for this five-

¹ Siren Gold, Metallurgy Report, July 10, 2022. Graham Brock, Leo Consulting, p. 4.

sample composite was 32.2%. An average head grade of 3.3 g/t Au for the five-sample composite was recorded.

Based on documentation reviews and discussions with SNG geologists, Entech understands there are no metallurgical amenability risks which would be material to the Mineral Resource estimate.

No metallurgical recovery factors were applied to the Mineral Resource tabulations.

END.

Appendix 1. JORC Code Table 1

SECTION 1 SAMPLING TECHNIQUES AND DATA

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

| Criteria | JORC Code explanation | Commentary |
|----------------------------|--|--|
| Sampling techniques | <ul style="list-style-type: none"> <i>Nature and quality of sampling (eg cut trenches, 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.</i> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> <i>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i> | <p>Sampling at Alexander River has been completed by a combination of half and quarter diamond drill core drilling. A nominal grid spacing of 80–100 m along strike × 50 m down-dip has been used in the core of the orebody. Trench sampling exists at various surface exposures along strike. Trench sampling information was not included in the estimation.</p> <p>Alexander River has been sampled using predominantly diamond drill holes from both surface and underground.</p> <p>Geological logging and selection of mineralised intervals were done by geologists. Sample lengths range from 0.05 m to 3.7 m, with an average length of 0.91 m in the mineralised zone. SNG has implemented a QAQC protocol since 2020: insertion of blanks, certified reference materials (CRMs), field duplicates and repeat analyses.</p> |
| Drilling techniques | <ul style="list-style-type: none"> <i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i> | <p>Drilling has been completed from surface using PQ and HQ diamond drilling techniques (triple tubed). NQ is used where ground conditions were considered poor. Historical underground drilling used HQ diamond drilling techniques.</p> <p>SNG has employed an open-hole strategy (Strata-Pack) for 17 drill holes. The initial hole was drilled with diamond core from the drill pad. The open-hole strategy is typically carried out to ~100 m (down dip from the initial hole).</p> <p>Oriented core has been collected on all drill holes since 2020 by Eco Drilling Ltd using REFLEX survey tools. Entech noted that intersections of highly broken core were often intersected, resulting in poor confidence in some orientation information.</p> |

| Criteria | JORC Code explanation | Commentary |
|---|---|--|
| Drill sample recovery | <ul style="list-style-type: none"> 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. | <p>During SNG's core logging, downhole depths were reviewed and recoveries recorded. A record of core recovery is stored in the MS Excel individual logging spreadsheets of each drill hole, but not currently in the master database.</p> <p>Recorded recovery for the diamond drilling is 96.0%. During the drill core photography review, statistical analysis and during site visit, instances of correlation between poor sample recovery and grade was not observed (outside of historical stoping areas). A sample bias due to preferential loss or gain of material was not identified.</p> <p>The database contained instances of samples adjacent to recorded intervals of core loss due to poor core competency or historical stoping. Some occurrences were noted where the sample interval (and corresponding assay value) had been extended across a non-sampled interval, so that a small portion of core sample is attributed to a much larger interval. Entech addressed this issue with the compilation of depletion void wireframes, adjusting sample intervals to match drill core photography of recovered sample lengths and diluting non-sampled intervals (not associated with historical stoping) with inserted assay values (at half detection limit). Entech has created depletion shapes to account for this in the final block model.</p> |
| Logging | <ul style="list-style-type: none"> 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, trench, etc) photography. The total length and percentage of the relevant intersections logged. | <p>All diamond drill core samples were logged to record lithology, structure, mineralogy and weathering (oxidation state). Logging is both qualitative and quantitative. A visual percentage estimate for mineralogy was routinely recorded, and summary comments provided. Photography was available for all SNG drill core underpinning the Mineral Resources.</p> <p>Drill core was photographed (wet) before sampling, after mark-up. All diamond drill core trays are stored for future reference at the coreshed/logging facility in Reefton.</p> <p>The level of detail is considered sufficient, in Entech's opinion, to support Mineral Resource estimation (Inferred), and preliminary metallurgical studies. Geotechnical logging had commenced with data collected by SNG geologists.</p> |
| Sub-sampling techniques and sample preparation | <ul style="list-style-type: none"> 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 representivity of samples. | <p>SNG drill core is selectively sampled, typically with a 3-5m buffer zone into the hanging wall and footwall of the mineralised zone. Diamond drill sample intervals were marked on the core, which was sawn in half lengthways with a diamond cutting saw. The resulting core was taken for the laboratory sample and remaining core was archived in the core box.</p> <p>The diamond drilling half core sample size (2-3 kg) is considered appropriate to the grain and particle size for representative sampling. Recommendations have been provided to SNG to increase sample support (consistent use of half core sampling and coarse reject resampling) wherever possible, given the style of deposit and commodity under consideration.</p> <p>The samples are crushed and split at the laboratory, with up to 3 kg pulverised and 30 g</p> |

| Criteria | JORC Code explanation | Commentary |
|---|--|---|
| | <ul style="list-style-type: none"> 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. | <p>samples analysed by fire assay analysis. Sample preparation of diamond drilling and trench samples by SGS Laboratories in Westport comprises drying, crushing, splitting (if required) and pulverising to obtain analytical samples of 250 g with >95% passing 75 µm where gold is assayed by 30 g fire assay by SGS Waihi or SGS Macraes.</p> <p>A 48-element suite completed by SGS is undertaken using ICP-MS up to drill holes AX23. Gold is analysed using fire assay analysis. For later drill holes the pulps returned from the laboratory were analysed for multi-element by SNG using a portable XRF (pXRF).</p> <p>Field duplicates such as quarter core, laboratory duplicates and laboratory repeats were collected and assayed with one duplicate per assay submission. Grind size is not routinely recorded.</p> <p>A total of 29 historical and recently sampled trenches exist at the project. Entech understands resampling of historical trenches was completed with a geological hammer across the trench in 1 m sample lengths. Often trenches did not transect the entire mineralised zone of the deposit and intersected the ore shoot at suboptimal angles (optimal being perpendicular). Three trenches were considered to be orientated perpendicular to the deposit.</p> <p>It was noted that resampling by Kent (2009/2010) of historical CSA (1988) trenches showed similar grade tenor and lengths. SNG and Entech used trenches for surface confirmation of shoot plunge and dips; however, due to uncertainty regarding spatial location, sampling method, orientation with respect to the deposit and risk of preferential sampling bias, the trench samples were not included in the estimate.</p> |
| Quality of assay data and laboratory tests | <ul style="list-style-type: none"> 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 determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. | <p>Analyses have been completed at SGS Laboratories, which is an independent commercial analytical laboratory with relevant in-house calibration and duplicate analysis practices. The methods are considered appropriate and suitable for the evaluation of mineralised intercepts and incorporation in resource estimation work.</p> <p>Soil samples were sent to SGS in Westport to be analysed by low detection gold.</p> <p>Diamond drill and trench samples are sent to SGS Westport and Waihi or Macraes, New Zealand. The SGS laboratories carry a full QAQC program and are ISO 17025 certified.</p> <p>Multi-element samples are sent to SGS Townsville, Australia for IMS40Q which is ICP-MS analysis after DIG40Q four-acid digest. Holes drilled after AX23 were analysed by pXRF for multi-element analysis.</p> <p>For each diamond drill hole, the sampling included:</p> <ul style="list-style-type: none"> At least two gold certified Rocklab standards positioned at the end of each submission. |

| Criteria | JORC Code explanation | Commentary |
|--|---|--|
| | | <ul style="list-style-type: none"> A minimum of one blank per submission. Blanks are predominantly positioned at the start of each submission. Entech recommends using blank samples following mineralisation zones. At least one laboratory duplicate per drill holes or taken every 25 samples. Approximately one field duplicate is requested for every second submission. Laboratory repeats are recorded. Screen fire assays are requested periodically. Quartz flushes are rarely requested. Entech recommends requesting quartz flushes immediately after samples containing expected high-grade mineralisation or visible gold. <p>Standards, duplicates and blanks are checked after receiving the results. The final QAQC results supplied by SNG, and reviewed by Entech, confirmed appropriate precision and accuracy of assay data for the commodity under consideration. It should be noted that prior to estimation, three batches (1% of database assays) were resubmitted due to failure of SNG blank and standard thresholds. All resubmitted batches subsequently performed within expected SNG thresholds and the assays from these batches were used in then estimation process.</p> <p>QAQC protocols at the project can be improved to increase confidence in quality control outcomes and recommendations to SNG included:</p> <ul style="list-style-type: none"> implementation of certified blanks and higher insertion rate in batches. implementation of a check assaying program, inclusive of coarse rejects, pulp repeats and umpire analysis <p>SNG has a full working pXRF protocol and QAQC procedures for operation of the pXRF for analysis of pulps and samples. The pXRF standards and blanks are used as well duplicate data being taken every 25 samples.</p> <p>An increase in field duplicates, positioning blanks/standards in the samples of each submission and the addition of umpire analyses should be included in any future drill program to obtain a better understanding of the precision of the data.</p> |
| Verification of sampling and assaying | <ul style="list-style-type: none"> <i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> <i>Discuss any adjustment to assay data.</i> | <p>All laboratory assay results were received by SNG stored in both CSV and laboratory signed PDF laboratory certificates.</p> <p>No drill holes have been twinned at Alexander River.</p> <p>Drill data are logged onto MS Excel spreadsheets in the core shed. The logging spreadsheets include drop downs to limit data entry outside of approved codes. The spreadsheet entries are validated and combined in an overarching database using MS Excel spreadsheets. Drilling results are visually reviewed and validated in Leapfrog. The data storage system is reliant on</p> |

| Criteria | JORC Code explanation | Commentary |
|--------------------------------|--|---|
| | | <p>copying and pasting of data and typographical errors were identified in the assay database. Entech undertook verification checks of assay data against source laboratory reports for 65% of the assays in the database prior to using the data in the interpretation and estimation process. Any errors identified were rectified and communicated with SNG.</p> <p>Entech undertook an independent review of quality control and quality assurance (QAQC) raw data supplied by SNG and also by the SGS Westport and Macraes laboratories. Outcomes identified several failed batches, which were resubmitted by SNG (from coarse rejects stored at the laboratory). Resubmitted assays subsequently passed QAQC protocols and were used in the estimation process.</p> <p>Entech undertook a site visit during February 2022, inspecting surface mineralisation exposures, trenches, historical adits, core drill rigs, sampling and preparation areas. Entech did not undertake independent sampling of significant intersections.</p> |
| Location of data points | <ul style="list-style-type: none"> • <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i> • <i>Specification of the grid system used.</i> • <i>Quality and adequacy of topographic control.</i> | <p>A registered surveyor has picked up the 79 of the 100 drill hole collar locations. The remaining 21 locations were determined using tape and compass measurements to known surveyed drill hole collar locations. Entech understands historical drill holes were picked up by surveyor, with SNG undertaking GPS checks on co-ordinates for 80% of the drill holes in the database. Handheld GPS was used for placement of drill hole collars as well as trench sampling in New Zealand Transverse Mercator 2000 (NZTM). Entech completed GPS verifications on three collar locations during the 2022 site visit.</p> <p>Downhole surveys were completed with REFLEX Tools (EZ-TRAC and Gyro). A small proportion of surveys were estimated owing to azimuth readings affected by proximity to casings or broken survey tools. Entech did not review downhole survey data against database information.</p> <p>Mine workings were completed circa. 1943 and are considered to appropriately represent the number of levels developed during ore extraction, as evidenced in adits that correlate with digital drive information across the project. However, it should be noted that no surveyed as-builts of mine workings were created at completion of mining in 1943, thus accurate locations and extents of stoping voids were largely limited to digitisation from level plans. Where extensive development had been completed, Entech assumed half or full height mining back to the access drive. Access to the underground workings to independently verify void extents is not currently possible; however, Entech noted that Macraes Mining Co Ltd (MMCL) re-entered workings (Level 6) in 1992 to undertake drilling (down dip) from underground and no adjustments to voids were made or identified during this re-entry.</p> <p>A LiDAR survey has been flown and the resultant topographic surface used in the Mineral</p> |

| Criteria | JORC Code explanation | Commentary |
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| | | Resource estimate. Entech observed RL (elevation) discrepancies between surveyed drill hole collars and LiDAR owing to the use of different vertical datums. To align the collar survey data with the LiDAR vertical datum, all drill hole collar RLs were adjusted from MSL Lyttleton 1937 Datum by -1.03 m to NZVD2016. Remaining collar RL discrepancies were handled by moving the LiDAR surface locally to the drill hole collar on the basis that the collar pick-ups were a better representation of the steep terrain true surface. |
| Data spacing and distribution | <ul style="list-style-type: none"> • <i>Data spacing for reporting of Exploration Results.</i> • <i>Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i> • <i>Whether sample compositing has been applied.</i> | <p>Drill spacing is 80–100 m along strike × 50 m down dip. Drilling directions and distances are constrained by access and topography considerations.</p> <p>Multiple drill holes are drilled off each drill pad. A moderately dipping hole is drilled first, followed by a steeper drill hole to target mineralisation down dip.</p> <p>Entech considers the data spacing to be sufficient to demonstrate the continuity of host reef tracks and orientation of mineralised shoots in the reefs to support a Mineral Resource to an Inferred level of confidence.</p> <p>Sample compositing was applied in the estimation process.</p> |
| Orientation of data in relation to geological structure | <ul style="list-style-type: none"> • <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> • <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i> | <p>Drilling design is planned to intercept the mineralisation at high angles but steeper angled drilling with multiple holes from a single heli-drill pad does intercept the mineralisation at a lower angle. Oriented diamond drill core assists in understanding contacts, thickness and mineralisation orientation.</p> <p>Considering the deposit type, Entech was of the opinion the predominant drilling orientation does not introduce sample bias, nor pose a material risk to Mineral Resource estimate outcomes and is suitable for delineation of the mineralisation volume at the Alexander River deposit.</p> |
| Sample security | <ul style="list-style-type: none"> • <i>The measures taken to ensure sample security.</i> | <p>Diamond drill samples taken for the purposes of laboratory analysis were secured on trailers on site and transported to the relevant laboratories by SNG personnel.</p> <p>Samples were stored in a locked core shed until despatch.</p> |
| Audits or reviews | <ul style="list-style-type: none"> • <i>The results of any audits or reviews of sampling techniques and data.</i> | <p>Entech undertook an independent review of quality control and quality assurance (QAQC) raw data supplied by SNG and also by the SGS Westport and Macraes laboratories. Outcomes identified several failed batches, which were resubmitted by SNG (from coarse rejects stored at the laboratory. Resubmitted assays subsequently passed QAQC protocols and were used in the estimation process. One standard failed SNG QAQC but was accepted on the basis that the three laboratory standards in this submission passed SGS QAQC.</p> <p>The assessment of field duplicates, standards and blanks did not identify material precision or</p> |

| Criteria | JORC Code explanation | Commentary |
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| | | accuracy bias in the drill hole data underpinning the Mineral Resource. |

SECTION 2 REPORTING OF EXPLORATION RESULTS

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

| Criteria | JORC Code explanation | Commentary |
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| Mineral tenement and land tenure status | <ul style="list-style-type: none"> 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. | <p>The Company's tenements comprise 7 granted and 2 under application are shown in the map below. It should be noted that all SNG tenements or applications are 100% owned by Reefton Resources Limited (wholly owned subsidiary of Siren Gold Ltd). The tenements fall predominantly within the Department of Conservation (DoC) estate. Minimum Impact Activity (MIA) Access Agreements have been issued by DoC for Alexander River, Big River, Lyell and Reefton South. DoC Access Agreements that allow drilling have been granted for Alexander River (47 drill pads), Big River (40 drill pads) and Golden Point (22 pads). Variations to the Access Agreements are required for additional drill sites.</p> |

| Criteria | JORC Code explanation | Commentary |
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| | | <p>Map showing mineral resource estimates and historical production data for various tenements in the Alexander River area. The map includes a north arrow, a scale bar (0 to 20 km), and a legend.</p> <p>Tenements and Historical Production Data:</p> <ul style="list-style-type: none"> Lyell: Tenement: EP60479, Area: 54.23km², Hist. Prod: 91koz@18.4g/t Au Kirwans East: PP 6554, Area: 497.08km², Hist. Prod: Nil Kirwans Hill: Tenement: EP 60624.01, Area: 298.12km², Hist. Prod: 11koz@15.3g/t Au Capleston: Tenement: EP 60491, Area: 24.2km², Hist. Prod: 649koz@ 18.9 g/t Au Globe Progress: Tenement: NAA1035_41164, Area: 22.52 km², Hist. Prod: 45koz@ 14.2 g/t Au Bullswool: Tenement: EP60460, Area: 16.12km², Hist. Prod: Nil Blackwater: Tenement: MP 60473, Area: 29.06km², Hist. Prod: 740koz@ 14.2 g/t Au Big River: Tenement: EP 60448, Area: 44.87km², Hist. Prod: 136koz@ 34.1 g/t Au Reefton South: PP 60465, Area: 301.74km², Hist. Prod: Nil Upper Grey River: Tenement: EP6351, Area: 51.65km², Hist. Prod: Nil - Alluvial Au focused Beli Hill: Tenement: PPA 60632.01, Area: 365.30km² Waitahu: Tenement: PPA 60758.1, Area: 49.99 km² Globe Progress: Tenement: Reserved Area, Area: 1.93 km², Hist. Prod: 418koz@ 12.2 g/t Au Golden Point: Tenement: EP 60648.01, Area: 46.27 km² Alexander: Tenement: EP 60446, Area: 16.75km², Hist. Prod: 41koz@26.4 g/t Au <p>Legend:</p> <ul style="list-style-type: none"> Siren Gold Ltd Reefton Gold Ltd (Advent) Oceana Gold Limited / Federation Mining Limited Federation Mining Ltd Arapura Resources Ltd Historical gold mine Oceana Gold processing plant <p>PERMIT DATA: NZPAM web services PROJECTION: NZGD 2000 New Zealand transverse mercator</p> |

| Criteria | JORC Code explanation | Commentary |
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| Exploration done by other parties | <ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. | <p>Quartz float was discovered at Alexander River in 1920. Mining activity continued to 1924 until the closure of the mine in 1943. During this time, it is reported that 41,091 ounces of gold was extracted from Alexander River. Reports vary in tonnages with both 47,726 tonnes and 48,494 tonnes reported for the same ounces.</p> <p>CRAE carried out exploration activities from 1986 to 1988, focusing on stream sediment, soil and trench sampling, and also carried out a regional aeromagnetic survey in 1988.</p> <p>In 1992 MMCL recovered and re-entered the Level 6 adit, undertaking mapping/sampling and 328 m of underground diamond drilling in 1993 from Level 6. Four shallow diamond drill holes were drilled from surface intersecting the Bruno Shoot.</p> <p>Kent Exploration NZ Ltd undertook exploration activities from 2009 to 2013, involving nine diamond drill holes from surface, the re-sampling of CRAE's trenches, ground dipole-dipole resistivity and induced polarisation (IP) surveys over a portion of the Alexander River area.</p> <p>SNG secured an Exploration Permit in 2018 for a 5-year period.</p> |
| Geology | <ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. | <p>The Reefton Goldfield is hosted by late Cambrian to early Ordovician Greenland Group sedimentary rocks. Locally, the Alexander River deposit lies in a separate fault-bound block of the Greenland Group surrounded by Karamea Batholith granitoid rocks.</p> <p>The geological sequence is comprised of quartz reefs and disseminated mineralisation in the Greenland Group Greywacke (GWK) host rock. Mineralisation is broken into several prospects – Bull, Fimiston, McVicar, Bruno, McKay and Loftus. Disseminated mineralisation comprises silicified acicular arsenopyrite mineralised siltstone and sandstone. Mineralisation dips to the southeast in the southern portion of the deposit, and to the northwest in the northern portion. Portions of the reef that are barren are nominally called 'reef tracks', and portions of the reef that are mineralised are called 'reef shoots'.</p> |
| Drill hole Information | <ul style="list-style-type: none"> A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth | <p>All relevant drill holes used for the modelling and estimation of the Mineral Resources have been previously reported in the body of related ASX reports and also in the relevant Additional Details Table in the Annexures of those reports.</p> |

| Criteria | JORC Code explanation | Commentary |
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| | <ul style="list-style-type: none"> ○ 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 of the report, the Competent Person should clearly explain why this is the case. | |
| Data aggregation methods | <ul style="list-style-type: none"> • 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. • 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 Exploration Results are being reported as part of this Mineral Resource. |
| Relationship between mineralisation widths and intercept lengths | <ul style="list-style-type: none"> • These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drill hole 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 (eg 'down hole length, true width not known'). | The general strike and dip of the Alexander River mineralisation is considered to be consistent up to 80 m down dip, with recent drilling generally intercepting mineralisation close to planned depths. Drill holes intersect target surfaces approximately perpendicular to the strike and dip of mineralisation at shallow levels. Intersections are more oblique at depth. |
| Diagrams | <ul style="list-style-type: none"> • 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. | Plans, long sections and cross sections have been provided in previously lodged reports. |
| Balanced reporting | <ul style="list-style-type: none"> • 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. | No Exploration Results are being reported as part of this Mineral Resource report. |

| Criteria | JORC Code explanation | Commentary |
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| Other substantive exploration data | <ul style="list-style-type: none"> 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. | <p>The Alexander River project has a long history of geological investigation.</p> <p>Datasets that represent other meaningful and material information include:</p> <ul style="list-style-type: none"> Geophysics – regional aeromagnetic surveys, ground dipole-dipole resistivity and IP surveys Geochemistry – gold soil geochemistry datasets across the project and rock chip sampling in outcrop areas. |
| Further work | <ul style="list-style-type: none"> 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. | <p>Entech understands further drilling is planned to target discrete zones of high-grade gold mineralisation which underpinned historical mining. These zones are considered to contain ounce-grade mineralisation.</p> |

SECTION 3 ESTIMATION AND REPORTING OF MINERAL RESOURCES

| Criteria | JORC Code explanation | Commentary |
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| Database integrity | <ul style="list-style-type: none"> Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. | <p>Drill data are logged onto MS Excel spreadsheets in the core shed. The logging spreadsheets include drop-downs to limit data entry outside of approved codes. The spreadsheet entries are validated and combined into an overarching database using MS Excel spreadsheets. Drilling results are visually reviewed and validated in Leapfrog.</p> <p>Drilling data are centrally stored in SNG's Reefton office. The MS Excel database is updated as new information is acquired. Historical data, and SNG's recent drilling are verified and checked by SNG Senior Geologists. No cross checks are conducted by an external third party with expertise in database management.</p> <p>Prior to using the drilling data in the Mineral Resource estimate, Entech undertook a database audit. Entech's database checks included the following:</p> <ul style="list-style-type: none"> Checking for duplicate drill hole names and duplicate coordinates in the collar table. Checking for missing drill holes in the collar, survey, assay, and geology tables based on drill hole names. Checking for survey inconsistencies including dips and azimuths <0°, dips >90°, azimuths >360°, and negative depth values. Checking for inconsistencies in the 'From' and 'To' fields of the assay and geology tables. The inconsistency checks included the identification of negative values, overlapping intervals, duplicate intervals, gaps and intervals where the 'From' value is greater than the 'To' value. <p>Database checks were conducted in MS Excel, MS Access, Leapfrog and Surpac™ Mining software.</p> <p>Where the independent checks identified material errors Entech verified, validated and rectified the erroneous data against source information (e.g., laboratory assay reports). Entech also undertook a site visit as part of its due diligence process.</p> <p>The drill hole data were considered suitable for underpinning Mineral Resource estimation of Inferred global gold ounces and incorporated drilling results available up to and including 9 May 2022.</p> |
| Site visits | <ul style="list-style-type: none"> Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the | <p>Entech visited the Alexander River Project on 23 and 24 February 2022 to inspect mineralisation exposures, drilling and sampling processes for diamond drilling and drill core in relation to the upcoming Mineral Resource estimate.</p> |

| Criteria | JORC Code explanation | Commentary |
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| | case. | <p>Observations and recommendations relevant to the Mineral Resource estimate, as observed during the site visit, were as follows:</p> <ul style="list-style-type: none"> • Conduct survey pickups of finished drillhole collars • Undertake a density measurement campaign to build on the existing limited dataset. • Ensure sampling intervals honour geological/lithological logging. • Complete lithological and structural models. • Execute check assay programs (including standards), pulp repeats and umpire analysis • Implement umpire testing of blank material from Blackhead Quarry. • Insert blanks after mineralised zones and match CRMs matrix/grade to the expected grade of mineralisation and/or surrounding material. • Request quartz flushes immediately after samples containing expected high-grade mineralisation or visible gold. • Collect sample weights either on site, or during the laboratory sample preparation stage. • Give consideration to use of 50 g fire assay charge for additional sample volume. <p>Site visits have been completed.</p> |
| Geological interpretation | <ul style="list-style-type: none"> • <i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i> • <i>Nature of the data used and of any assumptions made.</i> • <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i> • <i>The use of geology in guiding and controlling Mineral Resource estimation.</i> • <i>The factors affecting continuity both of grade and geology.</i> | <p>Entech was supplied with MS Excel spreadsheets 'AR_DB_Collar.csv, AR_DB_DHSurvey.csv, AR_DB_Full_Lith.csv, AR_DB_SumLith.csv, AR_DB_Assay.csv, AR_DB_Minz.csv' comprising 105 collar records. Five collar records were in progress or complete but not analysed at the time of interpretation. These data, together with input from SNG geologists, guided the initial approach to the interpretation of the mineralisation in the Alexander River deposit.</p> <p>Mineralisation is broken into several prospects (Bull, Fimiston, McVicar, Bruno, McKay and Loftus). The geological sequence is comprised of quartz reefs and disseminated mineralisation within the Greenland Group Greywacke (GWK) host rock. Disseminated mineralisation comprises silicified acicular arsenopyrite mineralised siltstone and sandstone. Mineralisation dips to the southeast in the southern portion of the deposit, and to the northwest in the northern portion. Portions of the reef that are barren are nominally called 'reef tracks' and portions of the reef that are mineralised are called 'reef shoots'.</p> <p>Entech understands that the reef tracks and reef shoots are structurally controlled. Structural mapping and reports were available with structural understanding an ongoing process. In Entechs opinion the available drilling density supports the continuity implied by the interpreted mineralisation domains, both along strike and down dip. Based upon structural documentation and measurements Entech undertook rudimentary structural modelling to define an offsetting fault zone north of Loftus-McKay, resulting in a 25–30 m sinistral offset.</p> |

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| | | <p>The southern extent of mineralisation is truncated by the Bulls Fault.</p> <p>The reefs are defined by drill core (73 holes) and supported by a nominal drill density of 80–100 m along strike × 50 m down-dip.</p> <p>Factors which limited the confidence of the geological interpretation include:</p> <ul style="list-style-type: none"> • broad drill spacing, limited confidence with respect to defining quartz reef and disseminated boundaries internal to mineralisation. <p>Factors which aided the confidence of the geological interpretation included:</p> <ul style="list-style-type: none"> • globally consistent and continuous geometry of the mineralisation package • arsenic values providing a reliable proxy for gold mineralisation. <p>Limited lithological modelling has been undertaken outside of the reefs, with two dolerite intrusions modelled in the southern area of the deposit. No further lithological modelling has been undertaken, with the host rock largely considered to be GWK. Further drilling will define minor felsic units present at the deposit. Entech considers confidence in mineralisation continuity and distribution, as implied within the Mineral Resource estimate classification of Inferred, is moderate, given the mineralisation consistency, continuity and well-oriented drilling undertaken by SNG.</p> <p>Mineralisation interpretations, or reef shoots, were informed by 56 diamond drill holes.</p> <p>Mineralisation interpretations were largely based on host lithology modelling, with the lateral extent and orientation of these lithologies limited by logging data.</p> <p>A cut-off grade of 1.0 g/t Au was used to guide the geological continuity of the interpreted reef shoot mineralisation. The cut-off grade was selected based on the reef shoot contact correlating with mineralisation greater than 1.0 g/t Au. Within the mineralised wireframe, if an intercept fell below the nominal cut-off but continuity was supported by host lithologies, the intercept was retained for continuity purposes due to the commodity and the style of deposit.</p> <p>A total of 9 domains were interpreted at Alexander River: 7 mineralisation domains (reef shoots) and 2 host reef tracks. Of note, the Bulls West mineralisation domain was underpinned by one intercept. This was interpreted for SNG drill targeting purposes and was not classified with a JORC framework.</p> <p>Alternative mineralisation geometries were compared against indicator-based numerical modelling (Leapfrog Indicator RBF Interpolants) at varying cut-offs and probability outcomes. All modelling was underpinned by statistical and spatial (variogram) analysis. These alternative models supported the metal distribution in the estimation outcomes.</p> |

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| | | <p>Reef track host units were modelled prior to the mineralisation domain interpretation commencing. Mineralisation domains were constrained within reef tracks, and plunge orientations were determined using lithology, mineralogy and arsenic as an elemental proxy to gold mineralisation.</p> <p>Weathering surfaces were created by interpreting existing drill logging for soil and oxidation state and were extended laterally beyond the limits of the Mineral Resource model. Entech reviewed the weathering contacts in relation to mineralisation controls but found no clear evidence of a relationship between weathering contacts and grade distribution.</p> <p>The potential for rheological contrasts between the quartz reef and disseminated mineralised units is one feature that appears to control grade tenor.</p> |
| Dimensions | <ul style="list-style-type: none"> The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource. | <p>Mineralised domains at Alexander River extend over a 1,200 m strike length. Lode widths are highly variable and range from 2 m to 15 m. Mineralisation exists from surface and extends 260 m to a lower limit of 300 mRL at its deepest.</p> |
| Estimation and modelling techniques | <ul style="list-style-type: none"> The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to | <p>Interpretations of domain continuity were undertaken in Leapfrog software, with mineralisation intercepts correlating to individual domains manually selected prior to creation of a vein model using Leapfrog Geo implicit modelling software. Interpretation was a collaborative process with SNG geologists to ensure modelling appropriately represented observations and the current understanding of geology and mineralisation controls. Domain interpretations used all available validated diamond drilling data.</p> <p>Sample data were composited to a 1 m downhole length using a best fit method. Top-caps were applied prior to block grade estimation, with the maximum distance of possible extrapolation within each domain being based on variogram analysis and the geological understanding of the deposit (~100 m).</p> <p>Exploratory Data Analysis (EDA) and variography analysis of the capped and declustered (20 mN, 10 mE, 20 mZ) composited gold variable within domain groups where relation similarities were underpinned through observed spatial and statistical analysis. All EDA was completed in Datamine's Supervisor software and exported for further visual and graphical review.</p> <p>An Ordinary Kriging (OK) interpolation approach in GEOVIA Surpac™ was selected for all interpreted domains. All estimates used domain boundaries as hard boundaries for grade estimation where only composite samples within that domain are used to estimate blocks coded as falling within that domain.</p> <p>Estimation parameters, including estimate block size and search neighbourhoods, were derived through a combination of the geological understanding of the deposit and Kriging</p> |

| Criteria | JORC Code explanation | Commentary |
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| | <p><i>control the resource estimates.</i></p> <ul style="list-style-type: none"> <i>Discussion of basis for using or not using grade cutting or capping.</i> <i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i> | <p>Neighbourhood Analysis (KNA).</p> <p>Following variography analysis on grouped domains Loftus and McVicar West, a two spherical structure normal scores variogram, anisotropic model was applied to all domain groups. Domains were grouped based on spatial, statistical and mineralisation similarities. A nugget of 0.2 was calculated with continuity ranges of 100 m in the major and 40 m in the semi-major/minor directions.</p> <p>A check estimate in 3D was undertaken for all domains using Inverse Distance Squared and gold parts per million (ppm). The check estimate results were, on average, 1% lower in metal content.</p> <p>No assumptions with respect to by-products were made.</p> <p>No estimation for deleterious elements or other non-grade variables was made.</p> <p>Interpolation was undertaken using Ordinary Kriging (OK) in GEOVIA Surpac™ within parent cell blocks. Dimensions for the interpolation were Y: 10 mN, X: 5 mE, Z: 10 mRL, with sub-celling of Y: 0.625 mN, X: 0.625 mE, Z: 0.625 mRL. The model was not rotated. Considerations relating to appropriate block size include undulating domains with two dominant strike orientations (ENE and NNE) and search neighbourhood optimisations (QKNA).</p> <p>Diamond drill data were used in the Mineral Resource estimate. The average drill spacing ranges from 60 m to 80 m, with a nominal 80 m spacing maintained for all classified domains.</p> <p>A two-pass estimation search strategy was employed. All domains were estimated within a maximum distance of 110 m and number of neighbourhood composites ranged from a minimum of 6 to a maximum of 16 samples for the first pass, a minimum of 4 for the second pass.</p> <p>No selective mining units were assumed.</p> <p>No correlated variables have been investigated or estimated.</p> <p>All domain estimates were based on mineralisation domain constraints underpinned by geological logging (lithology, mineralogy and veining) and a nominal cut-off grade of 1.0 g/t Au. The mineralisation constraints have been used as hard boundaries for grade estimation wherein only composite samples within that domain are used to estimate blocks coded as falling within that domain.</p> <p>Assessment and application of top-capping for the estimate was undertaken on the gold variable within individual domains:</p> <ul style="list-style-type: none"> McVicar West Domain: Top-cap = 35 g/t Au and 70% metal reduction. Note that the high |

| Criteria | JORC Code explanation | Commentary |
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| | | <p>percentage of metal reduction is due to a single statistical and spatial composite outlier of 817 g/t Au (AXDDH084).</p> <ul style="list-style-type: none"> Given the style of deposit, it is likely that further infill drilling may present additional statistical outliers; however, increasing drill density will assist SNG in assessing whether these values are true outliers or a higher tenor sub-population (sub-domain). In the latter case, top-caps upwards of 50–200 g/t Au may be considered appropriate. No other domains contained composites above the top cap of 35 g/t. <p>Validation of the estimation outcomes was completed by global and local bias analysis (swath plots) and statistical and visual comparison (cross and long sections) with input data.</p> |
| Moisture | <ul style="list-style-type: none"> Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. | The tonnages were estimated on a dry basis. |
| Cut-off parameters | <ul style="list-style-type: none"> The basis of the adopted cut-off grade(s) or quality parameters applied. | <p>The Mineral Resource estimate cut-off grade for reporting of open pit global gold resources at Alexander River was 1.5 g/t Au. This was based on consideration of grade-tonnage data, potential underground mining method, and benchmarking against comparable-sized deposits of similar mineralisation style and tenor.</p> <p>Mineral Resources are reported excluding all historical mining voids.</p> |
| Mining factors or assumptions | <ul style="list-style-type: none"> Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. | <p>Underground mechanised mining methods are assumed. No mining dilution or minimum mining widths were assumed or applied within the Mineral Resource.</p> <p>The Mineral Resource estimate extends nominally 260 m below the topographic surface. Entech considers material at this depth would fall under the definition of 'reasonable prospects for eventual economic extraction' (RPEEE) in an underground mining framework.</p> <p>Historical underground mining was undertaken at the project in the early 1900s until the mine closed in 1943. The bulk of mining focused on the McVicar shoot, however other areas were accessed, developed and mined to varying extents (Loftus, Bruno).</p> <p>It should be noted that no surveyed as-builts of mine workings was created at completion of mining in 1943, thus locations and extents of stoping voids were limited to digitisation from level plans, sourced by SNG. Mined volumes have been derived by Entech through digitising the level plans and generation of 3D wireframes for use within the block model. These void volumes contain potential errors in spatial position and may not account for all mining historically completed.</p> <p>Taking these limitations into account the assessment of historical mining voids within the</p> |

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| | | <p>context of RPEEE was based on a conservative approach to delineation of void extents and height. Where historical production records were limited (Loftus, Bruno) or extensive development had been completed, such as McVicar, Entech assumed half or full height mining back to the access drive. Entech also assumed the full width of reef shoots were mined.</p> <p>Discussions with SNG indicated that increased mining selectivity was likely in some shoots, however in the absence of historical production information it was not possible to assume, or apply, selective mining of lode widths on specific shoots or development levels.</p> <p>Entech understands that a historical production of 41 koz was extracted from Alexander River between 1920 and 1943 with tonnages ~48 kt.</p> <p>The depletion applied for the Mineral Resource removed 141 Kt of material at a grade of 1.3 g/t. The assumption of full width reef shoot mining and absence of historical assay data to support the grades reportedly intercepted during mining accounts for the delta between the historical number and 3D digital representation of the mined voids.</p> <p>No dilution or cost factors were applied to the estimate.</p> |
| Metallurgical factors or assumptions | <ul style="list-style-type: none"> <i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</i> | <p>Independent metallurgical testwork undertaken in April 2022 on six fresh Alexander River composite samples indicates all samples comprise refractory material and all respond to flotation. Based on a composite sample of five of the Alexander River intercepts, a gold recovery of 94% can be expected by processing through a gravity circuit followed by flotation to a concentrate product. Laboratory testing using a Falcon concentrator followed by an intensive cyanide leach indicated the proportion of the gravity component of recoverable gold for this five-sample composite was 32.2%. An average head grade of 3.3 g/t Au for the five-sample composite was recorded.</p> <p>Based on documentation reviews and discussions with SNG geologists, Entech understands there are no metallurgical amenability risks which would be material to the Mineral Resource estimate.</p> <p>No metallurgical recovery factors were applied to the Mineral Resources or resource tabulations.</p> |
| Environmental factors or assumptions | <ul style="list-style-type: none"> <i>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly</i> | <p>No environmental factors were applied to the Mineral Resources or resource tabulations. The deposit is located on an existing exploration permit.</p> |

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| | <i>for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</i> | |
| Bulk density | <ul style="list-style-type: none"> Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. | <p>Bulk density values at the Alexander River deposit were derived from 363 validated measurements collected by SNG during 2021/2022.</p> <p>The samples were located between 5,312,400 mN and 5,313,300 mN and nominally from 4 m to 376 m downhole, providing a representative density profile between mineralised domains, and depth profile in a centralised portion of the Mineral Resource estimate.</p> <p>SNG's analysis of the bulk density data indicated specific gravity (SG) values between 2.36 and 3.00, but typically values fall within 2.6–2.75 and increase incrementally between transitional and fresh rock profiles at Alexander River. Bulk density values were supplied by SNG. Independent verification of raw data and a density data study was carried out by Entech and the following values were determined and applied in the block model:</p> <ul style="list-style-type: none"> Cover and soil: 2.63 t/m³ Transitional: 2.63 t/m³ Fresh: 2.75 t/m³. <p>Archimedes density measurements were undertaken on transitional (129) and fresh (233) drill core samples during the on-site sampling process. This approach is adequate in accounting for void spaces and moisture in the deposit.</p> <p>Due to the statistical variation in lithology, bulk densities were averaged in each weathering unit for soil, transitional and fresh material. An average bulk density value based on weathering coding has been assigned for tonnage reporting.</p> |
| Classification | <ul style="list-style-type: none"> The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. | <p>Mineral Resources were classified as Inferred to appropriately represent confidence and risk with respect to data quality, drill hole spacing, geological and grade continuity and mineralisation volumes. Additional considerations were the stage of project assessment, amount of diamond drilling undertaken, current understanding of mineralisation controls and selectivity within an underground mining environment.</p> <p>In Entech's opinion, the drilling, surveying and sampling undertaken, and analytical methods and quality controls used, are appropriate for the style of deposit under consideration.</p> <p>Inferred Mineral Resources were defined where a low to moderate level of geological confidence in geometry, continuity and grade was demonstrated, and were identified as areas</p> |

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| | | <p>where:</p> <ul style="list-style-type: none"> drill spacing averaged a nominal 80 m or less, or where drilling was within 70 m of the block estimate <p>The reported Mineral Resource was depleted for historical mining and constrained at depth by the available drill hole spacing outlined for Inferred classification, nominally 260 m below surface. All classified Mineral Resources were reported inside the tenement boundary, as provided by SNG.</p> <p>Mineralisation in the model which did not satisfy the criteria for Mineral Resources remained unclassified.</p> <p>Consideration has been given to all factors that are material to the Mineral Resource outcomes, including but not limited to confidence in volume and grade delineation, quality of data underpinning Mineral Resources, mineralisation continuity and variability of alternate volume interpretations and grade interpolations (sensitivity analysis).</p> <p>In addition to the above factors, the classification process considered nominal drill hole spacing, estimation quality (conditional bias slope, number of samples, distance to informing samples) and reliability of input data.</p> <p>The delineation of Inferred Mineral Resources appropriately reflects the Competent Person's view on continuity and risk at the deposit.</p> |
| Audits or reviews | <ul style="list-style-type: none"> The results of any audits or reviews of Mineral Resource estimates. | Internal audits and peer review were undertaken by Entech with a focus on independent resource tabulation, block model validation, verification of technical inputs, and peer review of approaches to domaining, interpolation and classification. |
| Discussion of relative accuracy/confidence | <ul style="list-style-type: none"> Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the | <p>Variances to the tonnage, grade, and metal tonnes of the Mineral Resource estimate are expected with further definition drilling. It is the opinion of the Competent Person that the classification criteria for Inferred Mineral Resources appropriately capture and communicate these variances and risks.</p> <p>The Mineral Resource estimate is considered fit for the purpose of drill targeting.</p> <p>The Mineral Resource Statement relates to global tonnage and grade estimates.</p> <p>No formal confidence intervals nor recoverable resources were undertaken or derived.</p> |

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| | <i>estimate should be compared with production data, where available.</i> | |

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