SIREN GOLD LIMITED

ASX ANNOUNCEMENT

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COMPANY

ASX: SNG
ACN: 619 211 826

CAPITAL STRUCTURE

Shares: 116,925,475
Options: 9,292,262

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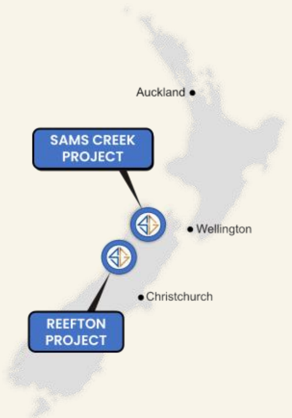
PROJECTS



Global Resource Reaches Key 1Moz Milestone

Siren Gold Limited (ASX: **SNG**) (**Siren** or the **Company**) is pleased to provide an update on the Mineral Resource Estimate (MRE) for the Alexander River and Sams Creek Projects.

Highlights

- Global resource has increased to **10.2Mt @ 3.0g/t Au for 994koz** (100% basis) at a 1.5g/t Au cut-off.
- The Alexander River **Inferred** MRE has increased to **1.07Mt @ 5.0g/t Au for 170koz** at a 1.5g/t cut-off.
- Alexander River **Resource increase of 30%** with **grade increasing 22%**, based on the inclusion of data from 31 trenches.
- Sams Creek MRE has increased to **9.1Mt @ 2.8g/t Au for 824koz** at a 1.5g/t cut-off.
- Sams Creek Resource now **incorporates data from the Bobby Dazzler deposit** of 16.7koz at 2.6g/t Au.
- Significant exploration potential exists at both Sams Creek and Alexander River for further Resource increases, with **deposits open along strike and at depth**.

Table 1. Updated Global Resource at 1.5g/t cut-off (100% basis).

Project	Tonnes (kt)	Grade (g/t Au)	Ounces (koz)
Sams Creek Indicated	3,290	2.80	295.6
Total Indicated	***3,290***	***2.80***	***295.6***
Sams Creek Inferred	5,810	2.83	528.8
Alexander River Inferred	1,066	4.95	169.9
Total Inferred	***6,876***	***3.16***	***698.4***
Total Indicated + Inferred	**10,166**	**3.04**	**994.0**

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

Managing Director Brian Rodan commented *"Siren Gold has advanced a long way in the 2 years since the IPO. Today's announcement of a high grade 1Moz JORC Global Resource is another major leap forward for the Company's strategy of developing a significant regional gold mining operation at Reefton and Sams Creek in New Zealand. Siren has also successfully consolidated our tenement position to ~1,000 km² with the recent inclusion of the Cumberland Permit. We believe there is potential for a multi-million ounce gold mining operation in Reefton / Sams Creek and we look forward to delivering more Resource updates from ongoing exploration over 2023."*

Background

Siren holds a large, strategic package of tenements in the Reefton, Lyell and Sams Creek Goldfields in the South Island of New Zealand. Western New Zealand was originally part of Gondwana and lay adjacent to eastern Australia until around 80 Ma ago. The NW of the South Island of New Zealand comprises an area of predominantly early Paleozoic rocks in broad northerly trending belts that terminate at the Alpine Fault (Figure 1). The Paleozoic sequence is divided into the Buller Terrane, Takaka Central and Takaka Eastern Belts. These belts are interpreted to correspond with the Western, Central and Eastern belts of the Lachlan Fold Belt. The Buller and Western Lachlan belts contain orogenic gold deposits like Bendigo, Ballarat and Fosterville in Australia and the Reefton and Lyell Goldfields in New Zealand. The Eastern Takaka and Eastern Lachlan belts host Sams Creek porphyry-Au and porphyry copper-gold deposits, like Cadia and Ridgeway, respectively.

The Reefton Goldfield was discovered in 1866 and produced +2M oz of gold at an average recovered grade of 16g/t from 84 historic mines, plus an estimated alluvial gold production of 8Moz. 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 below surface.

Siren’s key projects include Alexander River, Big River, Auld Creek, Cumberland, Lyell and Sams Creek.

The Sams Creek Gold Project is located 140 km NE of Reefton and 100 km NE of Lyell (Figure 1). The Sams Creek Dyke (SCD) is up to 60m thick, can be traced for over 7kms along strike, has a vertical extent of at least 1km and is open at depth. The SCD was not historically mine and was discovered in 1974. Drilling to date has focused on a 1.5km section of the dyke from the SE Traverse to the Main Zone.

The Project comprises two exploration tenements: EP 54454, which is 100% held by Sams Creek Gold Limited (SCGL) a wholly owned subsidiary of Siren, and EP40338, which is 81.9% held by SCGL under a joint-venture agreement with New Zealand’s largest gold miner, OceanaGold Limited (OGL), who own the remaining 18.1% interest.

Figure 1. Fold belt Paleozoic rocks at the top of the South Island.

Alexander River

Geology

The Alexander River Project (Exploration Permit 60446) is located ~26km southeast of Reefton, in a mostly fault-bounded sliver of Greenland Group rocks 7kms 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 2) and is comprised of high-grade quartz reefs and disseminated mineralisation. Surface trenching and channel sampling show 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 50º to the NW. In both structural domains, it appears that the intersection between an anticline hinge and a mineralised fault likely controls 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 2). This interpretation is based on the offset of a dolerite dyke and the absence of the Loftus-McKay Shoot in holes drilled from the next two pads to the north.

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 several 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 2. At this stage, the shoot extends down plunge for around 350m and has not 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 four holes to date and is not included in the MRE.

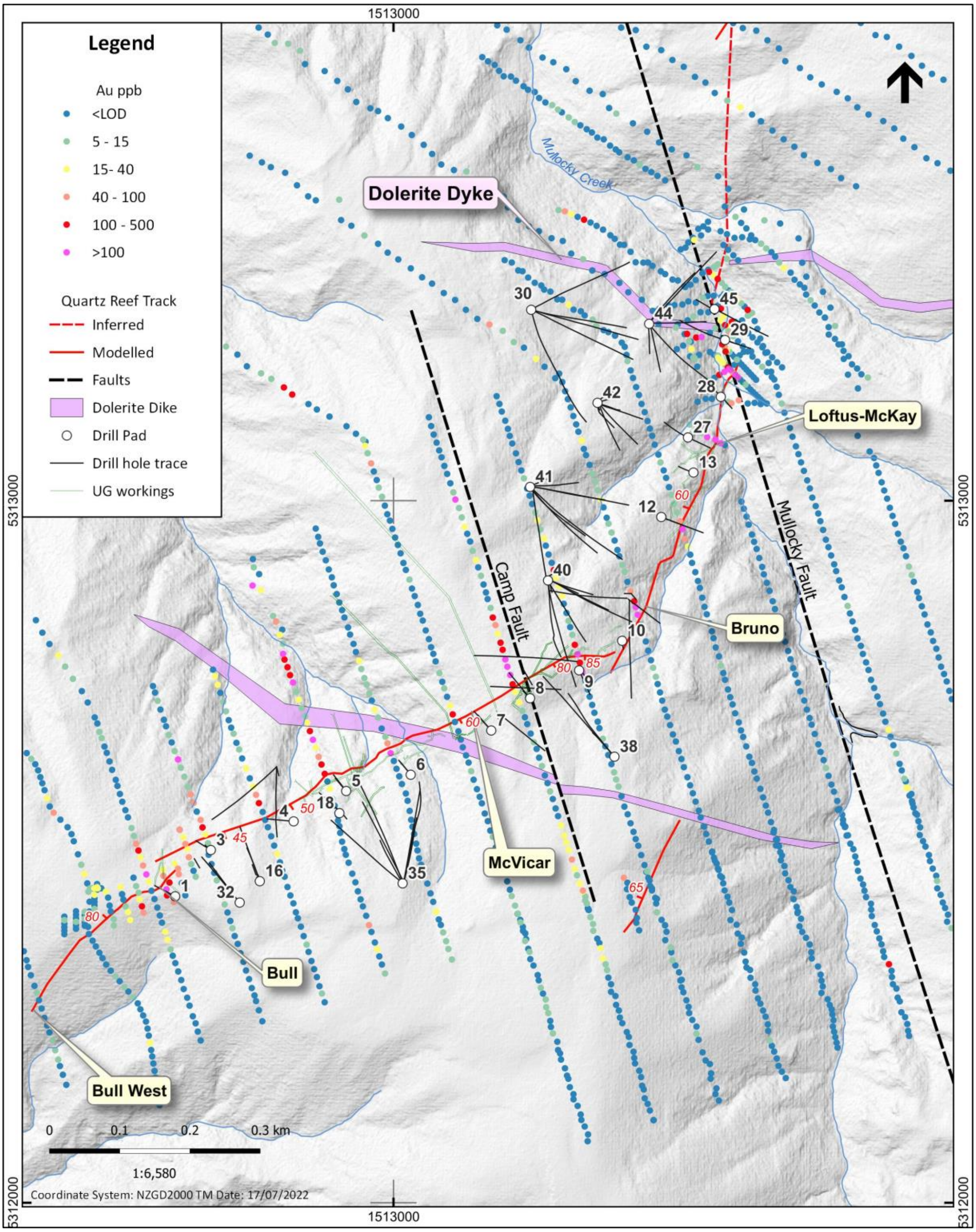


Figure 2. Dolerite dyke and reef track potentially offset along the Mullocky Fault at Alexander River.

The outcrop of the **McVicar East Shoot** is exposed in several trenches and comprises both quartz reef and disseminated acicular arsenopyrite mineralisation, 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. Diamond holes AX10 and AX66 drilled into the McVicar mine intersected stopes (Figure 3). 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 several 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 3). 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 16 diamond holes into the **McVicar West Shoot**, which have been previously reported (*refer announcement dated 6 July 2022*) and shown in Table 3 and Figure 3. The McVicar West Shoot has an average true thickness of around 3-4m, is around 80m high, extends down plunge for 700m and is open at depth. The shoot generally contains a 0.5-1.0m thick quartz reef with visible gold in the hanging wall, 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 (Figure 4).

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 several trenches and was intersected in three drillholes, as previously reported (*refer announcement dated 6 July 2022*) and shown in Figure 3. Trench K intersected thicker higher-grade mineralisation averaging 9.3m @ 10.7g/t Au, including 3m @ 20g/t Au.

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 3). The shoot has been intersected by 8 previously reported (*refer announcement dated 6 July 2022*) diamond holes (Table 5). 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 2. 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	6.0	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

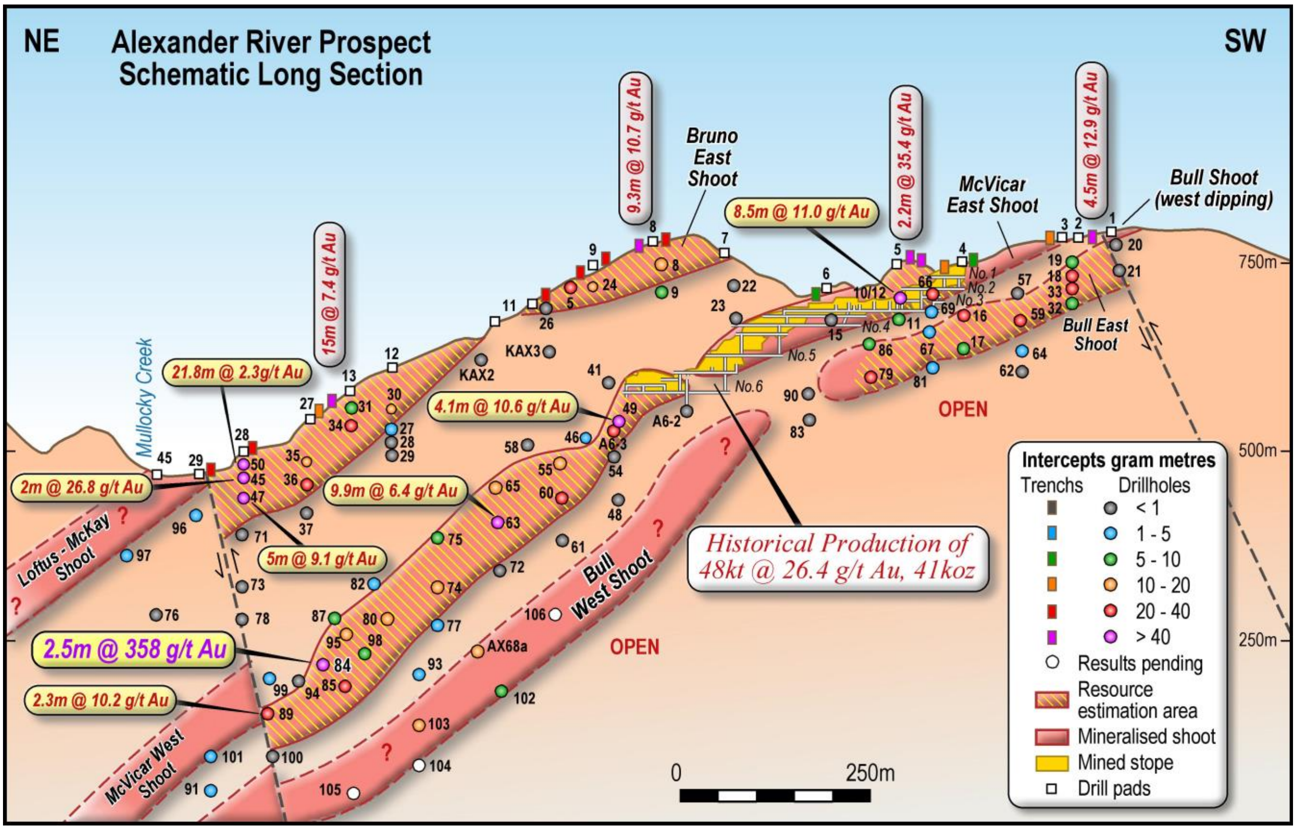


Figure 3. Alexander River schematic long section with MRE area hatched.

Figure 4. Significant visible gold intersected in the McVicar West Shoot in AX84.

Table 3. 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	2.7	2.5	6.6
AXDDH075	278.0	281.8	2.8	2.3	2.7
AXDDH077	337.4	338.9	1.5	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
AXDDH095	268.9	269.8	0.9	0.9	16.7
AXDDH098	277.6	279.0	1.4	1.4	3.7

Table 4. 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 5. 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)

Siren contracted independent mining consultants Measured Group (MG) to deliver a JORC Resource Estimate for the Alexander River Gold Project, utilising the geological observations and geochemical analysis data from 121 diamond drillholes and 31 trenches completed at the project.

In January 2023, Measured Group reported a Total Inferred Mineral Resource of **1.07 million tonnes, containing 4.95 g/t Au at a 1.5 g/t Au cut-off**, compiled in accordance with JORC (2012).

Details regarding the estimation of the Mineral Resources for the Alexander River Project are provided in the attached JORC Table One.

Geology and Geological Interpretation

Geological interpretation is based on available field mapping data, structural mapping, drillhole lithology and grade data. Modelling was completed using Leapfrog Geo modelling software. Wireframing and geological modelling were carried out by MG and reviewed by SNG.

The six mineralised wireframes reporting in the MRE are defined using the 121 drillholes in the database of which 55 intercept the modelled mineralised domains. In addition, 31 surface trenches were used to assist with wireframing and helped guide the surface trace of the mineralised shoots (Figure 5). Detailed structural surface mapping (Jongens, 2020) was also used to guide the geological interpretation of the mineralised shoots, as well as discussion with an SNG Senior Geologist who has extensive field experience in the mineral deposit area.

A nominal cut-off grade of 0.50 g/t Au was used to guide the continuity of the mineralised wireframes, however, at the modelling geologist's discretion, intervals of <0.75 g/t Au were occasionally included within the wireframes (e.g. if low-grade intercept was encompassed by higher grade material) and >0.50 g/t Au omitted from wireframes (e.g. on the periphery of mineralisation or where laddered with the unmineralised host).

Mineralisation domain wireframes were modelled using the Leapfrog Geo vein modelling technique. Oxidised and Fresh domain wireframes were modelled in Leapfrog Geo using the geological logging data available. Due to the drillhole spacing and steep topographic relief, to avoid outcropping of 'Fresh' material, the fresh-oxidised surface used the topography as a guide surface whilst also honouring the drilling data.

Depletion volumes for historical mine workings were also created based on the data available. Historical maps and plans have been digitised by SNG geologists to produce 3D shapefiles of known mine workings. The spatial accuracy of the shapefiles cannot be fully verified without a detailed survey of the underground workings, which is not currently practical or safe, but validations based on the surface shaft and adit locations and drilling intercepts of voids suggest a reasonable degree of accuracy. Areas known to have been stoped (e.g. McVicar workings) have been fully depleted but in areas where mining comprised of single drives and adits, a distance of 2m radius from the digitised centre line has been depleted.

Sampling and Analysis

Selective sampling of drill core was completed where gold intercepts were geologically logged in the core. The intervals selected for sampling were photographed, halved (along the axis of the core) at 1m intervals, unless determined by lithological boundaries or observations e.g. quartz vein contact, and sampled, ensuring all orientation marks were retained. This methodology of sampling drill core is industry standard and deemed appropriate.

Estimation Methodology

For this resource estimate, MG has completed the following:

- Geological interpretation and wireframing in Leapfrog Geo;
- Hard boundary compositing in Leapfrog – Edge Module (Leapfrog Edge);
- Variography and Ordinary Kriging in Leapfrog Edge; and
- Block Model Estimation in Leapfrog.

Composites were based on 1m composites. Outlier grades were assessed by reviewing composite histograms of gold grade for each wireframe. Extreme outlier grades were identified in one domain, McVicar West. During estimation, the outlier grades were restricted by either clamping at a specified search distance (Pass 1 and Pass 2) or discarding at a specified search distance (Pass 3 and Pass 4). No extreme outlier grades were identified in the other domains and no top cuts were applied.

Estimation wireframes were created for each mineralised domain area. In total, six domains make up the Mineral Resource Estimate (Figures 6 and 7). For domains that were contiguous with other domains (McVicar East/West and Bull East), soft boundaries with a 30m buffer were applied between the bordering domains and a hard boundary for contact with the host rock. All other domains were treated as hard boundary domains. Individual domain search distances, number of passes, and minimum and maximum sample numbers are outlined in the Alexander River Mineral Estimate Report.

Previous mineral resource estimates have been conducted on the Alexander River project, including a 2022 estimate completed by Entech. This block model was made available to MG during the resource estimate work. Previous resource estimates have used ordinary kriging estimation. To confirm the appropriateness of this technique both inverse distance and nearest neighbour were estimated as a comparison. Comparing these through Leapfrog's Swath Plots function it was determined that the Ordinary Kriging showed the most representative estimator for the underlying composited data. Swath plots for each area are shown in the final Mineral Estimate Report. Block model validation included block statistics review, swath plots, visual inspection of grade distribution against composites, as well as sensitivities to block size and estimation variable changes undertaken.

Mining Factors

The MRE has been completed with the assumption that it will be mined using underground mining methods. No other detailed assumptions have been made to date.

Classification of Mineral Resource confidence

The Alexander River project mineral resources are classified by the independent Competent Person as 'Inferred' based on the current understanding of geological and grade continuity. The classification reflects the Competent Person's confidence in the location, quantity, grade, geological characteristics and continuity of the Mineral Resources. The Mineral Resource Estimate (MRE) has been classified as Inferred based on the following relevant factors:

- Drillhole density;
- Style of mineralisation and geological continuity;
- Data quality and associated QA/QC and grade continuity; and
- The consistency of the thickness and grade results from drillholes.

The resource classification accounts for all relevant factors. Two methods were used to determine the optimal drill spacing between boreholes for resource classification at the Alexander River Project. These were:

- Variogram methodology which analyses the different proportions of the sill; and
- An estimation variance methodology.

The data spacing and distribution are sufficient to establish geological and grade continuity appropriate for Mineral Resource estimation and classification and the results appropriately reflect the Competent Person's view of the deposit.

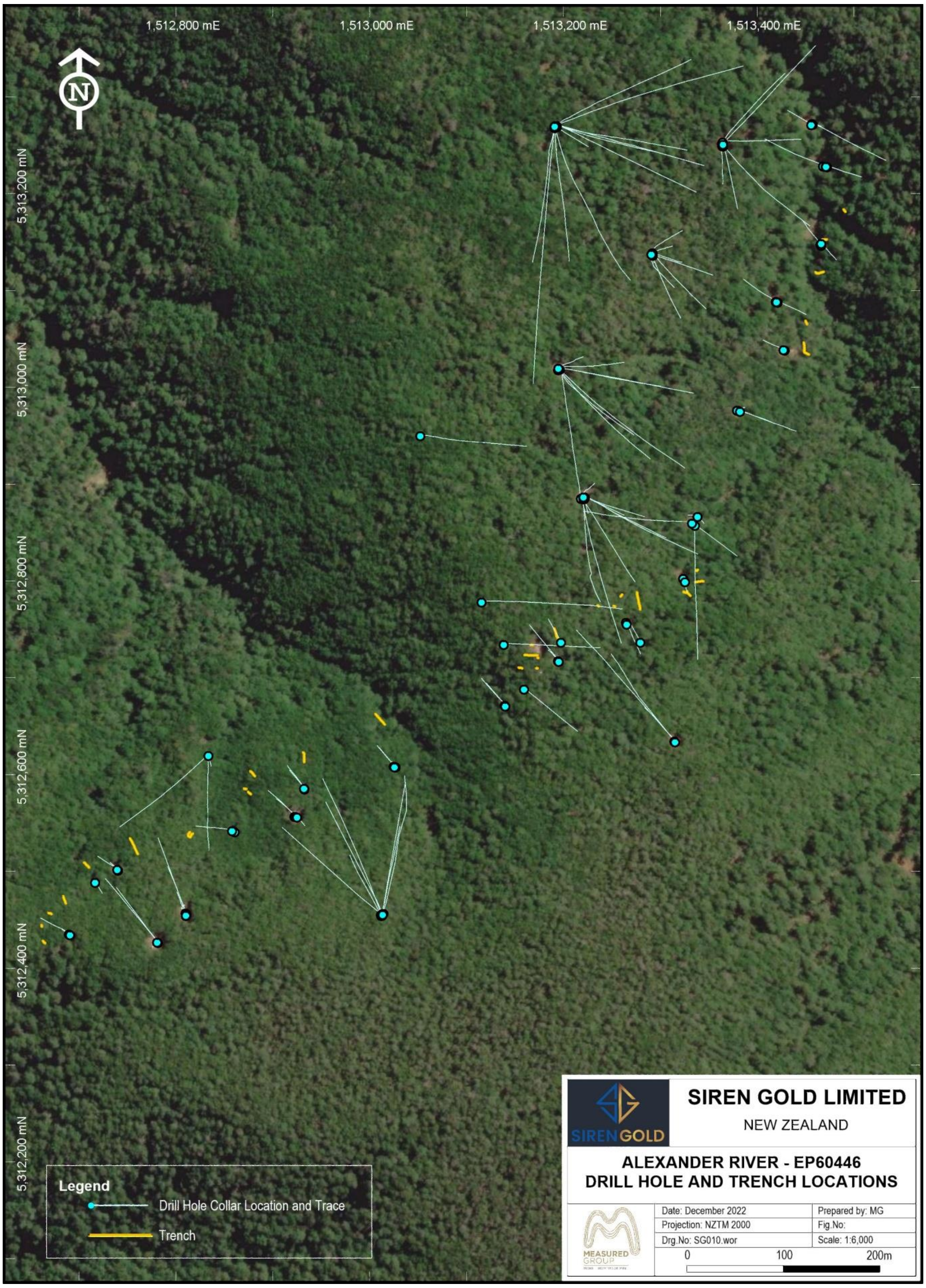


Figure 5. Alexander River Drillhole Traces and Trench Locations.

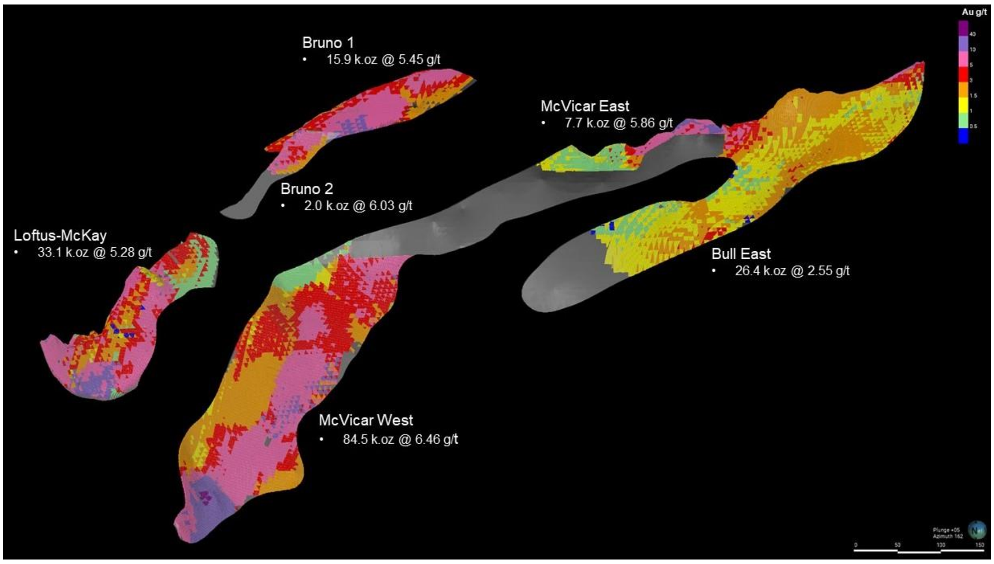


Figure 6. Oblique View Looking SSE – Inferred contained gold by domain (at 1.5 g/t cut-off).

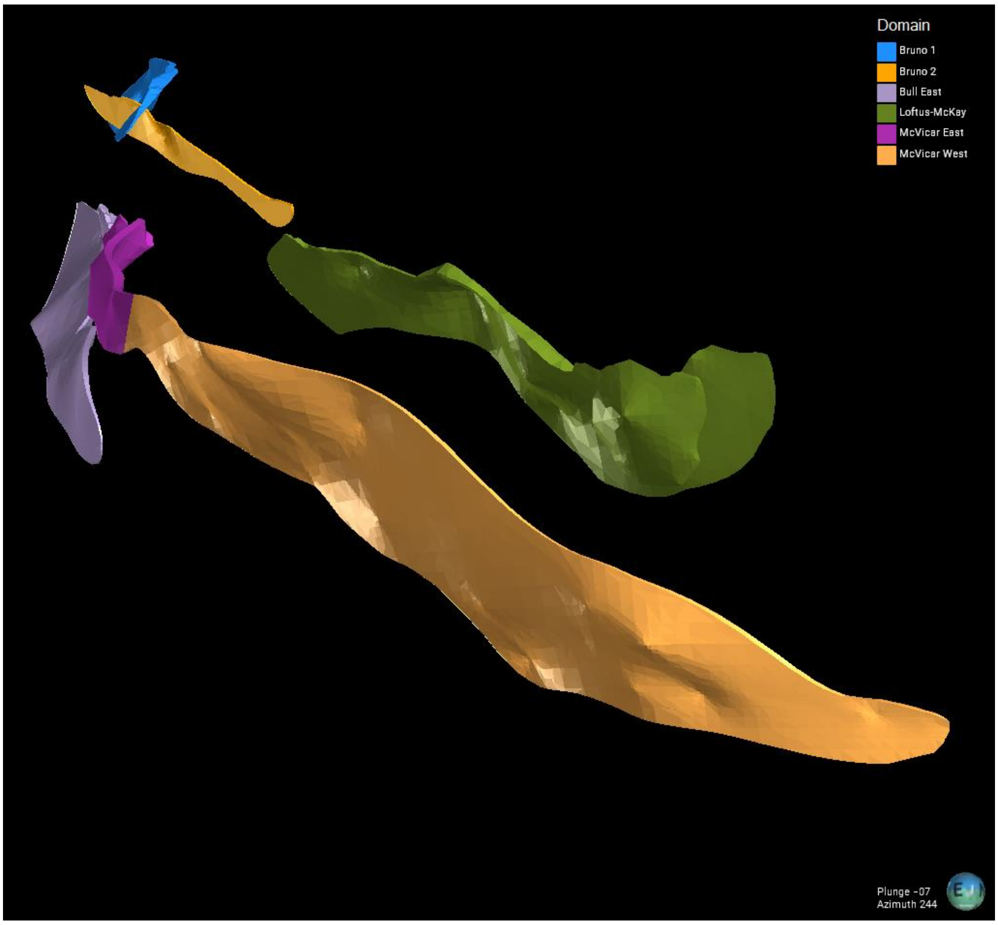


Figure 7. Alexander River Mineralised Domains Oblique View Looking WSW

The MRE finalised in January 2023, which is in accordance with the JORC 2012 Code, has utilised geological and assay data from 22,044 metres of diamond core drilling from 121 holes and 232 metres of surface trench data from 31 trenches, and is presented in Tables 6-8.

Table 6. Alexander River MRE Summary at different cut-off grades.

Cut-off Grade	Status	Tonnes (kt)	Grade (g/t Au)	Ounces (koz)
1.0	Inferred	1,249	4.4	177
1.5	Inferred	1,066	5.0	170
2.0	Inferred	869	5.7	159
2.5	Inferred	723	6.4	148

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

Table 7: Inferred Resource by Material Type – 1.5 g/t Au Cut-off

Material Type	Status	Tonnes (kt)	Grade (g/t Au)	Ounces (koz)	% MRE
Transition	Inferred	437	4.0	55.6	32.8
Fresh	Inferred	629	5.6	114.0	67.2
Total		**1,066**	**5.0**	**169.6**	**100.0**

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

Table 8: Inferred Resource by Geological domain at a 1.5 g/t Au Cut-off

Shoot	Status	Tonnes (kt)	Grade (g/t Au)	Ounces (koz)	% MRE
McVicar East	Inferred	40.7	5.9	7.6	4.5
Bull East	Inferred	322.2	2.6	26.4	15.6
Bruno	Inferred	101.3	5.5	17.9	10.6
Loftus-McKay	Inferred	194.8	5.3	33.1	19.5
McVicar West	Inferred	407.1	6.5	84.5	49.8
Total	Inferred	**1,066**	**5.0**	**169.6**	**100.0**

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

Sams Creek

The Sams Creek model was extended to include the Bobby Dazzler prospect that lies between Main Zone and Carapace (Figure 8).

Geology

Sams Creek mineralisation is contained within a hydrothermally altered peralkaline granite porphyry dyke that intrudes Early Palaeozoic metasediments. The dyke is up to 60m thick and can be traced east-west along strike for over 7 kms. The dyke generally dips steeply to the north (-60°), with gold mineralisation extending down dip for at least 1 km and it is open at depth. The geological and geochemical characteristics of the Sams Creek granite dyke (SCD) indicate it is a member of the intrusion-related gold deposits (IRGD).

Gold mineralisation is largely contained within thin (1-15 mm) sheeted quartz-sulphide veins that crosscut the dyke, which strike to the NE and dip predominantly to the SE at around 50°.

Geological interpretation based on available field mapping data, structural mapping, drillhole lithology and grade data. Modelling was completed using Leapfrog Geo modelling software. Wireframing and geological modelling were carried out by MG and reviewed by Siren.

The Bobby Dazzler prospect is the along-strike, western continuation of the SCD from the Main Zone deposit area, with Bobby Dazzler interpreted as being upthrown across the Bobby Dazzler Fault from the Main Zone. The Bobby Dazzler Fault, therefore, marks the eastern extent of the Bobby Dazzler deposit. The SCD is also thought to be less steeply dipping within Bobby Dazzler, inferred to be generally dipping at ~26˚ to the north. The Bobby Dazzler deposit is open at depth and to the west and outcrops at surface along its south-eastern extent. The SCD dip shallows towards the southwestern extent of Bobby Dazzler, where it transitions into the contiguous Carapace deposit.

Composite intervals of 0.75 g/t Au were used as a guide for the interval selection modelling process, however, in places, the modelling Geologists' discretion was applied in excluding or including certain intervals in the wireframe, based on geological understanding and ore body continuity.

Sampling and Analysis

Selective sampling of drill core was completed where gold intercepts were geologically logged in the core. The intervals selected for sampling were photographed, cut into half (along the axis of the core) at 1m intervals and sampled, ensuring all orientation marks were retained. This methodology of sampling drill core is industry standard and deemed appropriate.

Estimation Methodology

For this resource estimate, MG has completed the following:

- Geological interpretation and wireframing in Leapfrog Geo;
- Hard boundary compositing in Leapfrog – Edge Module (Leapfrog Edge);
- Variography and Ordinary Kriging in Leapfrog Edge; and
- Block Model Estimation in Leapfrog.

Composites were based on 1m composites. Outlier grades were assessed by reviewing composite histograms of gold grade for each wireframe. Extreme outlier grades weren't identified, and it was determined that no top cut was required.

A modelled estimation domain was created for the Bobby Dazzler deposit area. The Bobby Dazzler domain was set to have a soft boundary with the contiguous Carapace deposit with a 20 m range but a hard boundary for contact with the host rock.

Domain search distances, number of passes, and minimum and maximum sample numbers are outlined in the Sams Creek Mineral Estimate Report.

Previous mineral resource estimates have been conducted on the Sams Creek project, including 2013 and 2021 estimates completed by Golder Associates. These block models were made available to MG during the resource estimate work. Previous resource estimates have used ordinary kriging estimation. To confirm the appropriateness of this technique both inverse distance and nearest neighbour were estimated as a comparison. Comparing these through Leapfrog's Swath Plots function it was determined that the Ordinary Kriging showed the most representative estimator for the underlying composited data. Swath plots for each area are shown in the final Mineral Estimate Report. Block model validation included block statistics review, swath plots, and visual inspection of grade distribution against composites. Sensitivities to block size and estimation variable changes were also undertaken.

Cut-Off Grades

The MRE has been reported at cut-off grades ranging from 1.0 g/t Au to 2.0 g/t Au, which Siren considers appropriate for an underground mining operation.

Mining Factors

The MRE has been completed with the assumption that it will be mined using underground mining methods. No other detailed assumptions have been made to date.

Metallurgical test work completed to date indicates that recoveries from 80 to 90% are achievable from Sams Creek material. The work completed at this stage is preliminary.

Mineral Resource Estimate (MRE)

The Bobby Dazzler prospect mineral resource was classified by the independent Competent Person as 'Inferred' based on the current understanding of geological and grade continuity. The classification reflects the Competent Person's confidence in the location, quantity, grade, geological characteristics and continuity of the Mineral Resources. The Mineral Resource Estimate (MRE) has been classified as Indicated and Inferred based on the following relevant factors:

- Drillhole density;
- Style of mineralisation and geological continuity;
- Data quality and associated QA/QC and grade continuity; and
- The consistency of the thickness and grade results from drillholes.

The resource classification accounts for all relevant factors. Two methods were used to determine the optimal drill spacing between boreholes for resource classification at the Sams Creek Project. These were:

- Variogram methodology which analyses the different proportions of the sill; and
- An estimation variance methodology.

The data spacing and distribution are sufficient to establish geological and grade continuity appropriate for Mineral Resource estimation and classification and the results appropriately reflect the Competent Person's view of the deposit.

The MRE at a 2.0 g/t Au, 1.5g/t Au and 1.0g/t Au cut-offs are shown in Table 9 and visually represented in Figure 8.

Table 9. Bobby Dazzler MRE at various cut-offs (100% basis)

Cut-off Grade	Status	Tonnes (kt)	Grade (g/t Au)	Ounces (koz)
1.0	Inferred	264.9	2.27	19.3
1.5	Inferred	200.0	2.59	16.7
2.0	Inferred	160.1	2.80	14.4

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

Table 10. Bobby Dazzler MRE at 1.5g/t cut-off (100% basis)

Material Type	Status	Tonnes (kt)	Grade (g/t Au)	Ounces (koz)
Transition	Inferred	178.9	2.60	14.9
Fresh	Inferred	21.1	2.57	1.7
Total		**200.0**	**2.59**	**16.7**

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

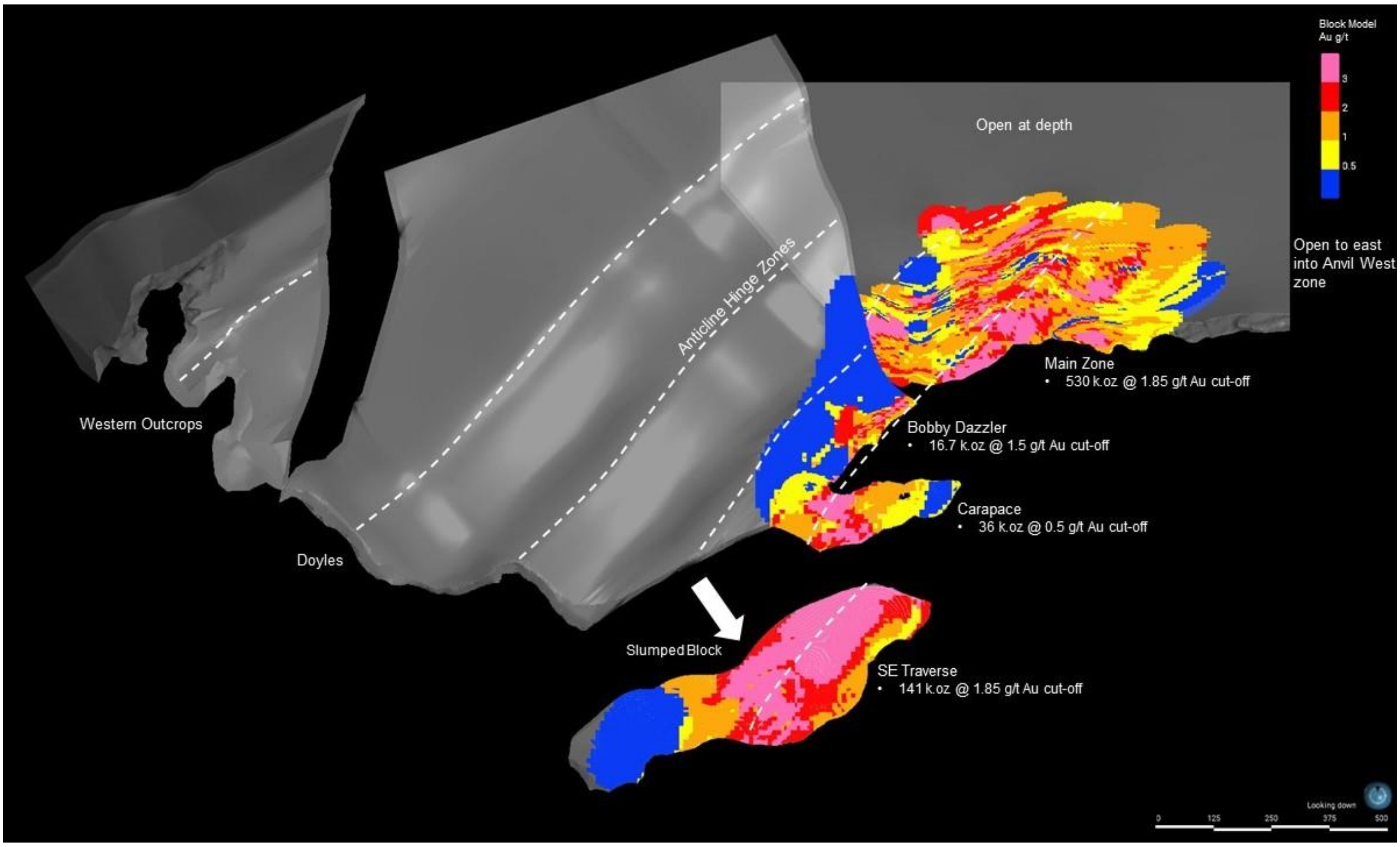


Figure 8. Plan view of undrilled SCD (grey) and new MRE block model

The Sams Creek MRE now stands at 9.1Mt @ 2.8g/t Au for 824koz at a 1.5g/t Au cut-off.

Global Resources Estimate

Global MRE at a 1.0g/t Au cut-off and 1.5g/t Au cut-off is set out in Table 11 and Table 13 respectively. The MRE that is depleted to reflect Sirens 81.9% interest in EP40338 at a 1.0g/t Au cut-off and 1.5g/t Au cut-off is set out in Table 12 and Table 14 respectively. OceanaGold Limited (OGL) holds the remaining 18.1% interest in EP40338 under a joint-venture agreement with SCGL, a wholly owned subsidiary of Siren.

Table 11: Global MRE at a 1.0g/t Au cut-off (100% basis).

Project	Status	Tonnes (kt)	Grade (g/t Au)	Ounces (koz)
Sams Creek	Indicated	4,070	2.50	327.1
Total	**Indicated**	**4,070**	**2.50**	**327.1**
Sams Creek	Inferred	8,230	2.36	626.0
Alexander River	Inferred	1,249	4.38	177.1
Total	**Inferred**	**9,479**	**2.63**	**803.1**
Total	**Indicated + Inferred**	**13,549**	**2.59**	**1,130.2**

Table 12: Siren's Global MRE at a 1.0g/t Au cut-off including 81.9% of Sams Creek.

Project	Status	Tonnes (kt)	Grade (g/t Au)	Ounces (koz)
Sams Creek	Indicated	3,333	2.50	267.9
Total	**Indicated**	**3,333**	**2.50**	**267.9**
Sams Creek	Inferred	6,736	2.36	512.7
Alexander River	Inferred	1,249	4.38	177.1
Total	**Inferred**	**7,985**	**2.63**	**689.8**
Total	**Indicated + Inferred**	**11,318**	**2.59**	**957.7**

Table 13: Global MRE at a 1.5g/t Au cut-off (100% basis).

Project	Status	Tonnes (kt)	Grade (g/t Au)	Ounces (koz)
Sams Creek	Indicated	3,290	2.80	295.6
Total	**Indicated**	**3,290**	**2.80**	**295.6**
Sams Creek	Inferred	5,810	2.83	528.8
Alexander River	Inferred	1,066	4.95	169.6
Total	**Inferred**	**6,876**	**3.16**	**698.4**
Total	**Indicated + Inferred**	**10,166**	**3.04**	**994.0**

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

Table 14: Siren's Global MRE at a 1.5g/t Au cut-off including 81.9% of Sams Creek.

Project	Status	Tonnes (kt)	Grade (g/t Au)	Ounces (koz)
Sams Creek*	Indicated	2,695	2.80	242.1
Total	**Indicated**	**2,695**	**2.80**	**242.1**
Sams Creek*	Inferred	4,758	2.83	433.1
Alexander River	Inferred	1,066	4.95	169.9
Total	**Inferred**	**5,824**	**3.22**	**603.0**
Total	**Indicated + Inferred**	**8,519**	**3.09**	**845.1**

***Depleted to reflect Sirens 81.9% Interest**

Enquiries

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

Competent Person Statement

Statements contained in this announcement relating to the Alexander River and Sams Creek Project Mineral Resource Estimation, are based on, and fairly represent, information and supporting documentation prepared by Mr Chris Grove, who is a member of the Australian Institute of Mining & Metallurgy (AusIMM), Member No 310106. Mr Grove is a full-time employee of the mineral resource consulting company “Measured Group”, who were contracted by Siren Gold Limited to prepare an estimate of the Mineral Resources at Alexander River and Sams Creek. Mr Grove has sufficient relevant experience in relation to the mineralisation styles being reported on to qualify as a Competent Person as defined in the Australian Code for Reporting of Identified Mineral Resources and Ore Reserves (JORC) Code 2012. Mr Grove consents to the use of this information in this announcement in the form and context in which it appears.

Forward Looking Statements

Forward-looking statements are statements that are not historical facts. Words such as “expect(s)”, “feel(s)”, “believe(s)”, “will”, “may”, “anticipate(s)” and similar expressions are intended to identify forward-looking statements. These statements include, but are not limited to statements regarding future production, resources or reserves and exploration results. All of such statements are subject to certain risks and uncertainties, many of which are difficult to predict and generally beyond the control of the Company, that could cause actual results to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements. These risks and uncertainties include, but are not limited to: (i) those relating to the interpretation of drill results, the geology, grade and continuity of mineral deposits and conclusions of economic evaluations, (ii) risks relating to possible variations in reserves, grade, planned mining dilution and ore loss, or recovery rates and changes in project parameters as plans continue to be refined, (iii) the potential for delays in exploration or development activities or the completion of feasibility studies, (iv) risks related to commodity price and foreign exchange rate fluctuations, (v) risks related to failure to obtain adequate financing on a timely basis and on acceptable terms or delays in obtaining governmental approvals or in the completion of development or construction activities, and (vi) other risks and uncertainties related to the Company’s prospects, properties and business strategy. Our audience is cautioned not to place undue reliance on these forward-looking statements that speak only as of the date hereof, and we do not undertake any obligation to revise and disseminate forward-looking statements to reflect events or circumstances after the date hereof, or to reflect the occurrence of or non- occurrence of any events.

APPENDIX A: JORC TABLE 1 - Alexander River

Section 1 - Sampling Techniques and Data

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

Criteria	Explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	- Diamond Drilling (DD) was used by all operators to obtain samples for geological logging and sampling. - DD core samples were split in half using a core saw at 1 m intervals unless determined by lithological observations i.e. quartz vein contacts. - The results of the quarter core taken as field duplicates for DD are combined to have the same weight as half-core samples. - Siren Gold Ltd (SNG) DD and trench/channel (CH) samples were pulverised to > 95 % passing 75 µm to produce a 30 g charge for fire assay for Au. - Screen fire analysis is allocated to any samples with observed free gold. - All SNG core is rolled into plastic splits from the triple tube spilt at the drill rig and then placed into the core trays. This provides a far better quality core with the preservation of structures and broken core with less handling of the core. - CH samples were generally collected at 1 m intervals across the structure to get a true thickness unless determined by lithology. Samples were collected with a geological hammer with a 1-2 kg sample size and stored in calico bags.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	- SNG diamond drilling core diameters included PQ (96mm), HQ (63mm) and NQ (47.6mm) and are tripled tubed. - Surface drilling is helicopter supported. Three holes were drilled from underground in 1994 by MMCL using HQ/NQ diameter sizes. - SNG HQ and PQ core are orientated using Reflex orientation gear.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may*	- Full run and geotechnical logging with total core recoveries, RQD and core loss is recorded for each drill run by all operators. - Core loss occurs around old workings where there are voids. - Core recoveries for the program are between 91 to 98 %. Highly shattered rock around puggy fault gouge zones are the areas where core loss can occur. No noticeable bias has been observed in the mineralisation outside of historical mining areas.

Criteria	Explanation	Commentary
	have occurred due to preferential loss/gain of fine/coarse material.	
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	- All DD and CH observations are logged for lithology, weathering, bedding, structure, alteration, mineralisation, jointing, colour and grain size using a standard set of inhouse logging codes and logging templates that are similar to previous logging by OceanaGold Limited (OGL) exploration in the Reefton Goldfields. The logging method is quantitative. - All core trays were photographed wet before the core was sampled. - All diamond drill core trays are stored for future reference at the SNG core shed/logging facility in Reefton. - CH samples were logged on the same lithological categories as DD core with photos taken of the trenches as well as for each sample. - Geotechnical logging has commenced with data collected by SNG geologists.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	- DD 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 the remaining core was archived in the core box. - CH samples are chipped along the sample length into a sample bag. - Field duplicates (quarter core in DD), laboratory duplicates and laboratory repeats were routinely collected and assayed for both DD and CH. - The field duplicates are DD quarter cuts taken every 25 samples. A field duplicate is taken in every CH. - The DD (2-3 kg) and CH (1-2 kg) sample sizes are considered appropriate to the grain and particle size for representative sampling. - Sample preparation of DD and CH samples by SGS Laboratories in Westport comprises; drying, crushing, splitting (if required) and pulverising to obtain an analytical sample of 250 g with >95 % passing 75 µm where Au is assayed by 30 g fire assay by SGS Waihi. Forty-eight element suite completed by SGS Australia is undertaken using ICP-MS up to drillholes AXDDH023. For later drillholes and channel/trench samples, the pulps returned from the lab were analysed by SNG with a portable XRF (pXRF) for a 42-element suite. - A total of 31 historical and recent trenches have been completed at the project. Re-sampling of CRAE trenches by both MMCL and Kent show similar grades and lengths. Trench and channel data were used for surface confirmation of geology (shoot plunge and dip). Recent SNG CH results as well as retrenching to extend selected historical trenches to transect the whole mineralisation zone at high angles to the strike were used in the resource model.

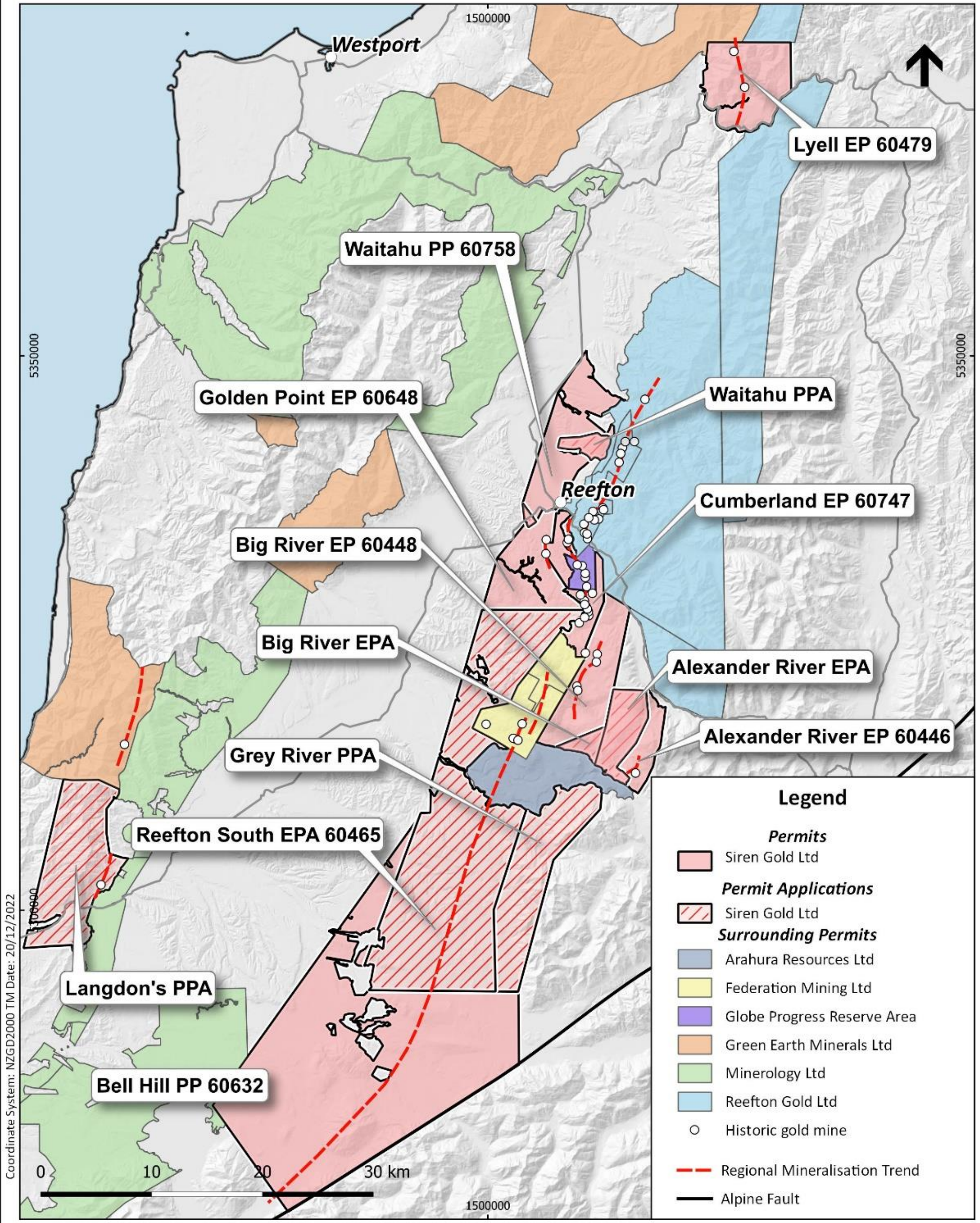
Criteria	Explanation	Commentary
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	- Soil samples were sent to SGS in Westport to be analysed by low-detection (ppb) gold - DD and CH samples are sent to SGS Westport and Waihi, New Zealand. SGS laboratories carry a full QAQC program and are ISO 19011 certified. - Samples required for multielement analysis are sent to SGS Townsville, Australia for IMS40Q which is ICP-MS analysis after DIG40Q four acid digest. Holes drilled after AXDDH023 were analysed by pXRF by SNG geologists. - For each DD and CH submission, the sampling includes: *- At least two Au-certified Rocklab standards.* *- Two blanks.* *- At least one field duplicate and laboratory duplicate per drill hole or taken every 25 samples.* *- Lab repeats are recorded.* *- Screen fire assays are requested if free gold has been seen.* *- Quartz Flushes weren't requested at the start of the SNG project but are now routinely requested around visual gold samples.* - Standards, duplicates and blanks are checked after receiving the results. Any submissions that fail to meet SNG QAQC thresholds are not accepted and are repeated. The QAQC results observed have been acceptable and within industry standards. - SNG has a full working pXRF protocol and QAQC procedures for the operation of the pXRF for analysis of pulps and samples. PXRF standards and blanks are used as well as duplicate and repeat data being taken every 25 samples. - Independent testing of DD pulps and screen fire rejects by ALS Brisbane has been undertaken with similar results.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data*	- All laboratory assay results were received by SNG and stored in both CSV and laboratory-signed PDF lab certificates. - Data is stored in excel, GIS, Dropbox and Leapfrog Geo. The data storage system is basic but robust. - SNG have written logging, sampling, trenching and QAQC SOPs in place. - No adjustments have occurred to the assay data.
Location of data points	• *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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	- A registered surveyor has been used to pick up drillholes collars and 5 SNG trench collars in New Zealand Transverse Mercator 2000 (NZTM). - Handheld GPS is used for placing drillhole collars as well as picking historic channel sampling locations. - A LiDAR survey has been flown and the resultant topographic surface used in the Mineral Resource estimate. 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

Criteria	Explanation	Commentary
		- Downhole surveys were completed using either an EZ-TRAC or a Precision Gyro taken every 15 m. - 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 dimensions of mine workings were created after mining in 1943, thus accurate locations and extent of voids were largely limited to digitisation from level plans.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	- Drill spacing is 80-100 m along strike × 50 m down dip. Drilling directions and distances are constrained by access and topography considerations. - 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. - Measured Group (MG) 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. - Channel and trench sample is along strike on average 50m spacing with some (<25 m) clustering in the Bruno 1 area.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	- Channel and trenching were taken across the mineralisation to sample as true thickness as much as topography will allow. - Drilling design is planned to intercept the mineralisation at high angles but steeper angled drilling with drilling multiple holes from a single heli-drill pad does intercept the mineralisation at a lower angle. - Oriented core, structural mapping of CH and intact DD around mineralisation assists in understanding contacts, thickness and mineralisation orientation.
Sample security	• *The measures taken to ensure sample security.*	- DC and CH samples taken for laboratory analysis were securely packaged on-site and transported to SGS, Westport by SNG staff. - Samples were stored in a locked core shed until despatch.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	- 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 in 2022. The assessment of field duplicates, standards and blanks did not identify material precision or accuracy bias in the drill hole data underpinning the Mineral Resource. Entech did suggest some QAQC improvements which have been included in the current SNG QAQC procedures.

Section 2 - Reporting of Exploration Results

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

Criteria	Explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	- The Companies' Reefton tenements both granted (7), and applications (3) are shown in the map below. All SNG tenements or applications are 100% owned by SNG. Al the tenements are within the Department of Conservation (DoC) estate. Minimum Impact Activity (MIA) Access Agreements have been issued by DoC for Alexander River, Big River, Golden Point and Lyell. DoC Access Agreements (AA) that allow drilling, have been granted for Alexander River (47 drill pads), Big River (40 drill pads) and Golden Point (22 pads). Applications have been lodged for Auld Creek and Lyell. Variations to the AA's are required for additional drill sites. - The Company has two granted tenements (Sams Creek EP 40338 and Barrons Flat EP 54454) at Sams Creek. The company has MIA's for both permits and an AA for EP40338 that included 100 drill sites.



Westport
Reefton
Lyell EP 60479
Waitahu PP 60758
Waitahu PPA
Golden Point EP 60648
Cumberland EP 60747
Big River EP 60448
Big River EPA
Alexander River EPA
Alexander River EP 60446
Grey River PPA
Reefton South EPA 60465
Langdon's PPA
Bell Hill PP 60632
1500000
5350000
0
10
20
30 km
Coordinate System: NZGD2000 TM Date: 20/12/2022
Legend
Permits
Siren Gold Ltd
Permit Applications
Siren Gold Ltd
Surrounding Permits
Arahura Resources Ltd
Federation Mining Ltd
Globe Progress Reserve Area
Green Earth Minerals Ltd
Minerology Ltd
Reefton Gold Ltd
Historic gold mine
Regional Mineralisation Trend
Alpine Fault

Criteria	Explanation	Commentary
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	- Quartz float was discovered at Alexander River in 1920. Mining activity continued until 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. - 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. - In 1992 MMCL recovered and re-entered the Level 6 adit, undertaking mapping/sampling and 328 m of underground diamond drilling from Level 6 in 1993. Four shallow diamond drill holes were drilled from the surface intersecting the Bruno Shoot. - Kent Exploration NZ Ltd undertook exploration activities from 2009 to 2013, involving nine diamond drill holes from the 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. - SNG secured an Exploration Permit in 2018 for 5 years.
Geology	• *Deposit type, geological setting and style of mineralisation.*	- Gold mineralisation in the Reefton Goldfield is structurally controlled; the formation of the different deposit types is interpreted to be due to the focussing of the same hydrothermal fluid into different structural settings during a single gold mineralisation event, however, some of the deposits (e.g. Globe-Progress, Big River) appear to have been re-worked, with gold and sulphide mineral remobilisation having occurred during a later phase of brittle deformation. - In general, two end members of mineralisation styles exist, the "Blackwater Style" is comprised of relatively undeformed quartz lodes; whilst the "Globe-Progress Style" comprises highly deformed quartz-pug breccia material with a halo of disseminated sulphide mineralisation. - Three main structural deposit types appear to occur in the Reefton Goldfield. The Globe-Progress deposit occupies a distinct structural setting, where there is a clear break in the continuity and tightness of early folding. This break defines the east-west striking Globe-Progress shear zone. The fault splays off the Oriental-General Gordon shear zone. The geometry of the fault structure has allowed dilation and quartz vein deposition more or less contemporaneously with shearing, hydrothermal alteration, and low-grade mineralisation of the wall rocks. The broadly disseminated mineralisation that now surrounds the Globe-Progress ore body is thought to have been formed by later movement on fault planes, in the presence of fluids, which led to some mobilisation and recrystallisation of metals and formed the halo of mineralised country rock. The Big River deposit shows similar paragenesis to Globe-Progress, except for the fact that the disseminated sulphide halo is not as extensive. - The second structural deposit type hosts most gold deposits i.e., Big River South, Scotia, Gallant and Crushington, however, these are typically small, narrow, steeply plunging and consequently generally sub-economic. These deposits have formed in reverse shear zones that are parallel or sub-parallel to cleavage and bedding. The attitude of these deposits has not allowed the formation of significant shear zones, dilatant zones or fluid channel ways and consequently the deposits formed tend to be small. Most mineralised zones occur as small-scale versions of the other two deposit types, formed in small, localised transgressive structural settings that are conducive to those deposit types. - The third deposit type occurs as steeply dipping transgressive dilatant structures, which are typically northeast-trending (Blackwater). Gold mineralisation is interpreted to have formed when an earlier, favourably orientated shear zone became a zone of weakness under strike-slip

Criteria	Explanation	Commentary
		movement. This dextral strike-slip movement created a locus for dilation and fluid channelling caused by periodic fluid pumping and over-pressuring during the hydrothermal mineralising event.
Drill hole Information	• *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:* • *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* • *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*	See drill hole table below.

Hole ID	TD	mE NZTM	mN NZTM	RL	Collar Dip	Collar Azimuth
KAX001	18.6	1513338.4	5312867.8	673.51	-55	140
KAX002	226.0	1513334.4	5312859.8	680.00	-75	130
KAX003	262.0	1513335.8	5312858.7	679.69	-55	180
KAX004	15.0	1513338.4	5312867.8	673.51	-50	270
KAX005	274.0	1513332.4	5312861.1	680.30	-64	272
KAX006	20.0	1512833.5	5312621	686.98	-50	166
KAX007	13.0	1512833.5	5312621	686.98	-65	166
KAX008	253.0	1512833.5	5312621	686.98	-65	180
KAX009	240.0	1512833.5	5312621	686.98	-55	225
AX4	52.5	1513205.0	5312723.0	777.19	-60	330
AX5	34.1	1513279.4	5312737.8	742.62	-50	330
AX6	37.1	1513323.4	5312803.8	711.19	-65	165
AX7	29.7	1512716.5	5312490	768.14	-60	150
A6/1	74.2	1513159.3	5312689.5	575.00	-15	129
A6/2	104.7	1513138.3	5312735.5	575.00	-16	093
A6/3	149.0	1513115.3	5312779.5	575.00	-9	091
AXDDH008	96.7	1513194.4	5312718.7	779.43	-60	320
AXDDH009	110.0	1513194.9	5312718.1	779.13	-82	320
AXDDH010	61.2	1512932.6	5312586.5	737.56	-60	320
AXDDH011	70.3	1512932.6	5312586.3	737.71	-80	320
AXDDH012	35.5	1512932	5312587.1	737.58	-50	320
AXDDH013	52.8	1513024.6	5312610	732.24	-60	320
AXDDH014	84.4	1513026.7	5312609	733.09	-85	320

Criteria	Explanation	Commentary

AXDDH015	94.0	1513025.5	5312609	732.59	-75	320
AXDDH016	76.5	1512857.9	5312543.3	742.76	-60	275
AXDDH017	122.5	1512860.4	5312542.1	744.31	-90	038
AXDDH018	69.6	1512739.9	5312502.5	763.28	-82	310
AXDDH019	47.1	1512739.1	5312503.2	762.69	-60	300
AXDDH020	64.2	1512689.2	5312436.6	794.60	-60	300
AXDDH021	85.6	1512690.3	5312435.8	794.71	-85	296
AXDDH022	74.2	1513139.2	5312672.8	769.25	-60	320
AXDDH023	112.8	1513139.8	5312672.1	769.77	-75	320
AXDDH024	43.5	1513264.3	5312758.4	754.44	-90	155
AXDDH025	70.3	1513265.2	5312756.6	753.90	-60	155
AXDDH026	51.2	1513325.5	5312800.5	711.09	-90	130
AXDDH027	89.4	1513381.2	5312976.8	623.33	-65	110
AXDDH028	117.6	1513379.6	5312977.4	624.43	-85	110
AXDDH029	157.9	1513379.2	5312977.6	624.66	-90	110
AXDDH030	96.5	1513382	5312976.5	622.81	-52	110
AXDDH031	49.0	1513427.1	5313040.2	586.63	-90	110
AXDDH032	156.1	1512781	5312427.7	809.46	-63	320
AXDDH033	130.0	1512780.5	5312428.2	809.35	-50	320
AXDDH034	88.0	1513428.3	5313039.6	586.59	-74	290
AXDDH035	68.0	1513419.2	5313090.1	553.73	-60	115
AXDDH036	82.6	1513421	5313089.2	552.47	-90	115
AXDDH037	156.3	1513420	5313089.5	553.20	-74	295
AXDDH038	33.9	1513472.1	5313229.1	481.27	-70	110
AXDDH039	165.1	1513468	5313230	480.69	-70	290
AXDDH040	120.5	1513314.5	5312635.4	804.29	-66	320
AXDDH041	239.5	1513314.2	5312635.9	804.02	-50	320
AXDDH042	85.7	1513470.5	5313229.5	481.02	-90	290
AXDDH043	72.3	1513471	5313229.3	481.11	-60	110
AXDDH044	343.2	1513314.9	5312634.9	804.60	-70	320
AXDDH045	42.4	1513466	5313148	496.25	-90	320
AXDDH046	235.0	1513220	5312886.5	710.66	-64	154
AXDDH047	94.8	1513465	5313149	496.26	-75	320

Criteria	Explanation	Commentary

AXDDH048	355.1	1513219.9	5312886.3	710.82	-74	177
AXDDH049	280.8	1513219.3	5312886.8	710.85	-54	170
AXDDH050	40.6	1513465.8	5313149.9	496.25	-55	110
AXDDH051	137.6	1513457	5313273	477.84	-55	110
AXDDH052	282.1	1513217.9	5312886.7	711.61	-50	185
AXDDH053	86.1	1513456.5	5313273.5	477.95	-85	110
AXDDH054	37.8	1513221.2	5312886.3	710.39	-63	167
AXDDH054a	12.0	1513221.1	5312886.4	710.39	-63	167
AXDDH054b	248.5	1513220.6	5312886.5	710.39	-63	177
AXDDH055	271.5	1513221.9	5312887.5	709.47	-72	115
AXDDH056	144.6	1513455.6	5313272.6	479.04	-80	290
AXDDH057	142.5	1512809.6	5312458.1	801.57	-55	340
AXDDH058	92.6	1513221	5312887.5	709.79	-60	115
AXDDH058A	243.0	1513221.2	5312887.8	709.60	-60	115
AXDDH059	141.6	1512810.5	5312456.7	803.80	-71	340
AXDDH060	253.0	1513221.6	5312887.9	709.50	-81	110
AXDDH061	311.8	1513220.5	5312888.2	709.68	-90	110
AXDDH062	225.9	1512810.3	5312455.6	802.41	-90	340
AXDDH063	291.4	1513194.8	5313019.4	676.38	-63	140
AXDDH064	173.0	1512810.1	5312455.8	803.80	-82	340
AXDDH065	265.9	1513194.8	5313019.8	676.50	-53	135
AXDDH066	74.1	1512922	5312558.2	761.76	-82	340
AXDDH067	128.3	1512922.9	5312557.9	761.76	-83	320
AXDDH068	30.0	1513195	5313020	675.76	-90	135
AXDDH068A	414.2	1513194.5	5313019.9	675.76	-90	135
AXDDH069	124.5	1512923.4	5312557.6	761.76	-79	320
AXDDH070	52.3	1512924.7	5312557.3	761.76	-75	140
AXDDH071	217.6	1513364.7	5313250.3	547.00	-56	140
AXDDH072	344.6	1513194.2	5313019.6	675.76	-76	145
AXDDH073	226.7	1513364	5313250.9	547.00	-71	150
AXDDH074	350.9	1513195.6	5313019.8	675.76	-74	095
AXDDH075	311.8	1513196.3	5313019.8	675.76	-66	095
AXDDH076	313.6	1513363.8	5313253.5	547.00	-78	040

Criteria	Explanation	Commentary

AXDDH077	376.6	1513194.7	5313020.9	675.76	-82	085
AXDDH078	251.2	1513363.3	5313253.2	547.00	-80	185
AXDDH079	278.9	1513012.8	5312457.6	825.00	-65	335
AXDDH080	272.8	1513291.1	5313138.5	597.00	-72	160
AXDDH081	269.9	1513011.4	5312456.3	825.00	-60	310
AXDDH082	247.2	1513292.3	5313140	597.00	-72	145
AXDDH083	359.6	1513012.8	5312456.1	825.00	-66	010
AXDDH084	291.1	1513291.8	5313140.4	597.00	-85	025
AXDDH085	296.3	1513292	5313137.5	597.00	-86	310
AXDDH086	271.9	1513011.7	5312456.4	825.00	-55	340
AXDDH087	284.3	1513290.9	5313139	597.00	-82	120
AXDDH088	217.0	1513011.6	5312455.6	825.00	-71	330
AXDDH089	328.3	1513193.2	5313270.5	575.60	-69	100
AXDDH090	311.9	1513014.1	5312457.7	825.00	-61	015
AXDDH091	403.6	1513192.3	5313271.3	575.60	-61	060
AXDDH092a	161.8	1513013.1	5312456.7	825.00	-55	010
AXDDH093	16.0	1513191.1	5313269.7	575.60	-68	165
AXDDH093a	402.2	1513190.9	5313270.4	575.60	-68	165
AXDDH094	339.3	1513192.9	5313271.8	575.60	-64	115
AXDDH095	287.2	1513290.9	5313139.7	597.00	-84	115
AXDDH096	174.4	1513364.2	5313254.5	547.00	-60	090
AXDDH097	220.2	1513364.6	5313252.2	547.00	-50	045
AXDDH098	79.0	1513290.5	5313138.6	597.00	-82	175
AXDDH098A	290.9	1513290.8	5313138.6	597.00	-82	180
AXDDH099	325.6	1513192.7	5313271.4	575.60	-62	100
AXDDH100	337.7	1513191.5	5313271.9	575.60	-75	110
AXDDH101	391.5	1513192.9	5313271.3	575.60	-63	070
AXDDH102	438.3	1513190.9	5313269.5	575.60	-57	187
AXDDH103	383.2	1513191	5313270.6	575.60	-69	180
AXDDH104	431.0	1513191.4	5313270.2	575.60	-70	195
AXDDH105	392.2	1513191	5313270.9	575.60	-85	140
AXDDH106	437.4	1513052.1	5312951.4	710.00	-77	100

Criteria	Explanation	Commentary
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated*	- No Exploration Results are being reported as part of this Mineral Resource.
Relationship between mineralisation widths and intercept length	• *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 (e.g. 'down hole length, true width not known').*	- The general strike and dip of the Alexander River mineralisation are considered to be consistent with 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	• *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.*	- Updated plans, long sections and cross sections are included in the body of the Alexander River MRE report.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	- N/A
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	- The Alexander River project has a long history of geological investigation. Datasets that represent other meaningful and material information include: *- 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.* *- Structural Mapping – Structural mapping datasets across the project.*
Further work	• *The nature and scale of planned further work (e.g. 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*	- Further drilling is planned to target discrete zones of high-grade gold mineralisation as well as test down plunge continuity of the ore shoots.

Criteria	Explanation	Commentary
	interpretations and future drilling areas, provided this information is not commercially sensitive.	

Section 3 - Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	Explanation	Commentary
Database integrity	• *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.*	- The SNG Alexander River database is stored in Microsoft Excel which has been validated by Measured Group using software (Leapfrog Geo). Random spot checks were completed between the database and hard copies. - Where database validation identified erroneous data, MG endeavoured to rectify the issues via consultation with SNG Senior Geologist or verification using raw logs and core photography which were supplied to MG. Where errors couldn't be rectified via these means, the relevant data was ignored for wireframing and resource estimation, although these occurrences were very rare. - The drillhole database was considered suitable for the purpose of this Mineral Resource Estimate for an Inferred resource.
Site visits	• *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 case.*	- The Competent Person visited the site in December 2022. The site visit included reviewing the SNG core that was available at the core facility in Reefton as well as the ground over the mineral resource area and historical workings which involved spot checks on collar survey details and observations of mineralisation in the field. The Competent Person inspected the core from known ore grade intercepts to confirm mineralisation style as well as inspected host rock material.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	- Geological interpretation based on available field mapping data, structural mapping, drillhole lithology and grade data. Modelling was completed using Leapfrog Geo modelling software. Wireframing and geological modelling were carried out by Measured Group and reviewed by SNG. - Mineralisation is contained within structurally controlled reef shoots within the quartz reef track as well as disseminated mineralisation within the host Greenland Group greywacke. The geometry of the modelled wireframes' mineralised shoots and associated disseminated mineralisation has been guided by drilling, surface trenching and field mapping data. - The six mineralised wireframes are defined using the 121 drillholes in the database of which 55 intercept the modelled mineralised domains. In addition, 23 surface trenches were used in wireframing and helped guide the surface trace of the mineralised shoots. - Detailed structural surface mapping (Jongens, 2020) was also used to guide the geological interpretation of the mineralised shoots as well as discussion with the SNG Senior Geologist who has extensive field experience in the mineral deposit area. - A nominal cut-off grade of 0.75 g/t Au was used to guide the continuity of the mineralised wireframes however, at the modelling geologist's discretion, intervals of <0.75 g/t Au were occasionally included within the wireframes (e.g. if low-grade intercept was encompassed by higher grade material) and >0.75 g/t Au omitted from wireframes (e.g. on the periphery of mineralisation). - Mineralisation domain wireframes were modelled using the Leapfrog Geo vein modelling technique. - Oxidised and Fresh domain wireframes were modelled in Leapfrog Geo using the geological logging data available. Due to the drillhole spacing and steep topographic relief, to avoid

Criteria	Explanation	Commentary
		outcropping of 'Fresh' material, the fresh-oxidised surface used the topography as a guide surface whilst also honouring the drilling data. - Depletion volumes for historical mine workings were also created based on the data available. Historical maps and plans have been digitised by SNG geologists to produce 3D shapefiles of known mine workings. The spatial accuracy of the shapefiles cannot be fully verified without a detailed survey of the underground workings, which is not currently practical or safe, but validations based on surface shaft and adit locations and drilling intercepts of voids suggest a reasonable degree of accuracy. Areas known to have been stoped (e.g. McVicar working) have been fully depleted but in areas where mining comprised of single drives and adits, a distance of 2 m radius from the digitised centre line has been depleted.
	• *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.*	- The mineral resource is split into 6 mineralised domains: Bull East, McVicar East, McVicar West, Bruno 1, Bruno 2 and Loftus-McKay. These domains occur along a strike length of 1.25 km striking SW-NE in the south and SSW-NNE in the north and generally plunging to the NE/NNE at ~30˚. Five of the domains occur at the surface and extend to the deepest point of 250 m below the surface in the northernmost extent of the McVicar West domain. The relative wireframe dimensions and variability in terms of continuity of each deposit are characterised in the table below:

Prospect	Dimensions (LxWxD expressed in metres)	Comments
Bull East	540 x 120 x 10	Outcrops at surface. Open at depth and to north.
McVicar East	400 x 75 x 9	Outcrops at surface. Resource depleted by historical McVicar mine workings.
McVicar West	640 x 120 x 5	
Loftus-McKay	350 x 65 x 15	Outcrops at surface
Bruno 1	250 x 60 x 5	Outcrops at surface
Bruno 2	230 x 30 x 2	Outcrops at surface

- The Alexander River block model parameters are outlined in the table below:

Resource Area	Block Model Parameter	X	Y	Z
Alexander River	Base Point	1512648.5	5312414.4	918.6
	Boundary Size (m)	935	915	720

<table>
<tr><th>Criteria</th><th>Explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td></td><td>Maximum Block Size (m)</td><td>5</td><td>5</td><td>5</td></tr>
<tr><td></td><td>Minimum Block Size (m)</td><td>0.625</td><td>0.625</td><td>0.625</td></tr>
<tr><td></td><td>Azimuth</td><td colspan="3">0˚</td></tr>
<tr><td></td><td>Dip</td><td colspan="3">0˚</td></tr>
</table>
</td></tr>
<tr><td>Estimation and modelling techniques</td><td>

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 control the resource estimates.
Discussion of basis for using or not using grade cutting or capping.
The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.

</td><td>
- For this resource estimate, MG has completed the following:
- Geological interpretation and wireframing in Leapfrog Geo;
- Hard boundary compositing in Leapfrog - Edge Module (Leapfrog Edge);
- Variography and Ordinary Kriging in Leapfrog Edge; and
- Block Model Estimation in Leapfrog Edge.
- Composites were based on 1 m composites.
- Outlier grades were assessed by reviewing composite histograms of gold grade for each individual wireframe. Extreme outlier grades were identified in one domain McVicar West. During estimation, the outlier grades were restricted by either clamping at a specified search distance (Pass 1 and Pass 2) or discarding at a specified search distance (Pass 3 and Pass 4). No extreme outlier grades were identified in the other domains and no top cuts were applied.
- Estimation wireframes were created for each mineralised domain area. In total six domains make up the MRE. For domains which were contiguous with other domains (McVicar East/West and Bull East), soft boundaries with a 30m buffer were applied between the bordering domains and a hard boundary for contact with the host rock. All other domains were treated as hard boundary domains.
- Individual domain search distances, number of passes, a minimum and maximum sample numbers are outlined in the Alexander River Mineral Estimate Report.
- To confirm the appropriateness of the Ordinary Kriging technique for resource estimation both inverse distance and nearest neighbour were estimated as a comparison. Comparing these through the Leapfrog Swath Plots function it was determined that the Ordinary Kriging showed the most representative estimator for the underlying composited data. Swath plots for each area are shown in the final Mineral Estimate Report. Block model validation included block statistics review, swath plots, visual inspection of grade distribution against composites, as well as sensitivities to block size and estimation variable changes undertaken.
- Block sizes for the block model are:
- 5 m x 5 m x 5 m with a subblock down to 0.625 m x 0.625 m x 0.625 m
- The block model has no rotation or dip applied. Each of the estimation parameters for each wireframe within the deposits was applied to the parent block of that block model. A detailed summary of block model variables and dimensions is outlined in the Alexander River Mineral Estimate Report.
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</table>

Criteria	Explanation	Commentary
		- As only gold is estimated in this mineral resource, no variables are correlatable. - The geological modelling of the mineralised and oxidised/fresh rock domains was used as sub-block triggers within the block model to ensure that the block model estimation was representing the 3D wireframes.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	- All tonnages are based on dry bulk density measures. The mean values of the bulk density measures were assigned to the block by weathering domains.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	- No cut-offs were used in the resource estimation.
Mining factors or assumptions	• *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.*	- The resource has been estimated based on an assumption of mechanised underground mining for the Alexander River deposit (sub-level open stoping).
Metallurgical factors or assumptions	• *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.*	- Independent metallurgical test work 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. - No metallurgical recovery factors were applied to the Mineral Resources Estimate.
Environmental factors or assumptions	• *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 for a greenfields project, may not always be well advanced, the status of early consideration of these potential*	- The Alexander River project lies predominantly within the Victoria Forest Park administered by the Department of Conservation (DoC). The Globe Progress open-cut gold mine near Reefton, which has been successfully operated by OGC between 2007 and 2016, is also located within Victoria Forest Park. The current plan is to mine by underground methods at Alexander River.

Criteria	Explanation	Commentary
	environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	
Bulk density	• *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.*	- The dry bulk density values used in the resource model were assigned using the mean values of the available data. These density values were then divided into oxide and fresh zones modelled in Leapfrog Geo using geological logging data from drilling. A mean value of 2.75 t/m^3 and 2.65 t/m^3 was used for fresh and oxide zones respectively. - Alexander River density assignment is based on a density assessment conducted on core drilling between 2020-2022. Density samples are routinely collected during the logging of the diamond drill core. In total, 498 density samples with a median core length of 0.13 m were used in the determination of the bulk density. Specific Gravity (SG) is calculated using the following formula: Weight in Air (Weight in Air – Weight in water) = SG.

Classification	• *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.*
		- The resource classification accounts for all relevant factors. Two methods were used to determine the optimal drill spacing between boreholes for resource classification at the Alexander River Project. These were:
		    - Variogram methodology which analyses the different proportions of the sill;
		    - An estimation variance methodology.
		- The data spacing and distribution is sufficient to establish geological and grade continuity appropriate for Mineral Resource estimation and classification and the results appropriately reflect the Competent Person's view of the deposit.
		-

Audits or reviews.	• *The results of any audits or reviews of Mineral Resource estimates.*	- Internal audits by MG and company audits were completed.
Discussion of relative accuracy/ confidence	• *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*	- The estimates made in this report are global estimates. - Local block model estimates, or grade control estimates, whose block grades are to be relied upon for the selection of ore from waste at the time of mining will require additional drilling and sampling of blast holes. - Confidence in the relative accuracy of the estimates is reflected in the classification of estimates as Inferred. - Variography was completed for Gold and used to influence the resource classification. The variogram models were interpreted as being isotropic along the plane of vein mineralisation, with shorter ranges perpendicular to this plane of maximum continuity. - Validation checks have been completed on raw data, composited data, model data and Resource estimates.

Criteria	Explanation	Commentary
	should include assumptions made and the procedures used. • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	- The model validations checked to ensure data honouring. The validated data consists of no obvious anomalies which are not geologically sound. - The mineralised zones are based on actual intersections. These intersections are checked against the drill hole data. Field geologist selections, and the Competent Person has independently checked laboratory sample data. The selections are sound and suitable to be used in the modelling and estimation process. - Where the drill hole data showed that no Gold existed, the mineralised zone was not created in these areas. - Further drilling needs to be completed to improve Resource classification of the Inferred Resource.

APPENDIX 1 - JORC Table 1, Sams Creek

The following Table and Sections are provided to ensure compliance with the JORC Code (2012 Edition)

Section 1 - Sampling Techniques and Data

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

Criteria	Explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	- CRA Exploration (CRAE), OceanaGold Corporation (OGC), MOD Resources (MOD) and Sandfire Resources (SFR) have all used similar sampling techniques. - Diamond drilling core (DD) drilling was logged to obtain for geological and geotechnical data and samples for assaying and rock strength (unconfined compressive strength – UCS) and density. - Downhole geophysical logging wasn't undertaken. - DD drilling was used to obtain core samples. Mineralised core was cut in half with diamond saw at 1 m intervals unless determined by lithology e.g. dyke contact areas. Sample length ranged from 0.2 m to 2.9 m. The core sampling included at least 5 m into the hanging wall and footwall waste. - CRAE, OGC, MOD and SFR core samples were pulverised to >95% passing 75 µm to produce a 30 g charge for fire assay for Au. Various multi-element analyses were also undertaken from the DD with at least As, Ag and S analysed. - SFR rolled DD into plastic splits from the triple tube spilt at the drill rig and then placed into the core trays. This provided a far better quality core presentation with the preservation of structures and broken core with less handling of the core. - Field and core duplicates, pulp, and repeat analysis were completed by OGC, MOD & SFR as well as checks on older CRAE data to test and ensure sample representativity. - CRAE completed trenching and channel sampling of exposed dyke outcrops.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	- All DD drilling was helicopter supported. - DD diameters included PQ (96mm) and HQ (63mm), using a triple tube. NQ was a mixture of NQ (47.6mm) and NQ3 (45.1mm). Most of the drilling was HQ with PQ collars generally limited to depths less than 50m. - Earlier CRAE drilling was completed HQ and NQ sizes. - MOD used man-portable rig with drillhole ID's SCMDH**** which were drilled using NQ size core. - A 15-hole RC drilling program at Barrons Flat was using an 80mm (3.5 inch) face sampling hammer with 1m samples collected. - OGC has limited success with orientation spear system. MOD oriented their core using Coretell Ori Shot CNH100 – a digital core orientation system. SFR used Longyear True Core tool.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.*	- OGC, MOD & SFR sample recovery was recorded by measuring the length of recovered core and comparing this with the drilled interval.

Criteria	Explanation	Commentary
	• *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.*	- OGC re-logged all the CRAE core and recorded recoveries. - The core recovery for the Main Zone and Bobby Dazzler, historically, is approximately 96.6%. - The Carapace had higher rates of core loss with the average of 76% recovered. These appears to have no material impact on the results. - Increased core loss is observed in the weathered mineralised dyke. - SE Traverse recoveries are 83 % in the dyke.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	- All drilling has been logged for lithology, weathering, bedding, structure, alteration, mineralisation, and colour using a standard set of in-house logging codes. The logging method is quantitative. - MOD and SFR DD was oriented. Structural measurements were recorded during logging. - OGC relogged all the CRAE core. - Deeper interval has been logged for magnetic susceptibility (MS) using hand-held MS meters. - Logging intervals are based on geological boundaries or assigned a nominal length of one metre. - Mineralised zones were logged for type, alteration intensity, vein thickness, frequency, angle to long core axis, and mineralogy. - Summary geotechnical information was recorded. - All core trays were photographed prior to core being sampled. - All core is stored in core shed and containers on site in Takaka or in OGC core shed in Reefton, NZ.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	- OGC, MOD & SFR DD sample intervals were physically marked on the core, which was sawn in half lengthways with a diamond core-cutting saw. The core cutting plane was randomly selected, not based on core orientation line or other factors. Where core was too broken to be cut, the broken core was split longways into two equal amounts from the core tray. The resulting half core was taken for the laboratory sample and the remaining core was archived. - OGC and MOD completed 5 m grind samples into the hanging wall and footwall to test for mineralisation and waste rock characterisation. - The field duplicates, laboratory duplicates and laboratory repeats were collected and assayed with laboratory duplicates. Repeats were found acceptable in comparison with regular laboratory samples. No major issues identified. - MOD & SFR took field duplicates and are routinely submitted as half core. Field duplicates were originally DD quarter cuts. This practice caused an issue with repeatability due to the smaller sample size and vein orientation. To address this issue, the remaining quarter core was sampled and the results for the two quarter cuts were average for comparison with the routine sample. - The DD (2-3 kg) and channel (1-2 kg) sample sizes are considered appropriate to the grain and particle size for representative sampling.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining*	- CRAE - DD samples were sent to Service Laboratories in Nelson and AAS analysis was carried out. OGC completed fire assay re-checks on drillholes DDH82SC09 and DDH82SC11 resulting in an average of 10% upgrade in the Au grades. No adjustment was undertaken for CRAE results. For CRAE drilling, the laboratories and methods used are insufficiently recorded in the logs, assay

Criteria	Explanation	Commentary
	the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	results and reporting. It is unknown if any assay or sampling quality control procedures were consistently undertaken by CRAE. No evidence of standards or blanks is available. - OGC DD samples were fire assayed and analysed by Aqua Regia digest for Au and LECO digest for sulphur by Amdel Ltd (Amdel) at their Macraes Flat Laboratory, New Zealand. A multielement suite comprising of Ag, As, Bi, Cu, Pb, Zn & Mo was subsequently assayed by ICP-MS and AAS by Amdel in Adelaide, Australia. Grind samples were prepared and assayed at Amdel Macraes Flat. These were assayed for Au & As only. OGC used standards, blanks, laboratory repeats which were recorded in their last drilling programme. - MOD & SFR DD samples were sent to SGS Waihi, New Zealand, where they were assayed by 30g fire assay with AAS finish. MOD DD multielement analysis was completed by SGS up to SCDDH078. After SCDDH078, multi-element analysis was undertaken by ALS Townsville where a 48-element suite was determined via ICP-MS. ALS has a full QAQC program. SGS laboratories carry a full QAQC program and are ISO 19011 certified. Sample preparation of geological samples by SGS comprises of drying, crushing, splitting (if required) and pulverising to obtain an analytical sample of 250 g with >95% passing 75 µm. Any over limit arsenic samples (>5000ppm) were then tested by XRF method. Drill holes SCDDH056 and SCDDH057 weren't tested for over limited As and recorded as 5000ppm. - No independent laboratory inspections were carried out during these phases of drilling, sampling and analysis. - For each MOD and SFR drill hole QA/QC included: • *At least 2 Au certified Rocklab standards (CRM).* • *Two blanks.* • *At least one core duplicate (quarter core) and laboratory duplicate per drill hole or every 25 samples.* • *Lab repeats are recorded.* - Standards, duplicates and blanks are checked after receiving the results. The QA/QC results have been deemed acceptable. - The same process for MOD channel and rock chip samples was used.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data*	- CRAE drillhole SCDDH017 was twinned by MOD. The results for the two holes were similar suggesting that the CRAE Au results are acceptable. - During MOD and SFR drill programs mineralisation intersection data was inspected and verified independently by the project manager or senior project geologist. The project manager and visited the deposit on average weekly in support of the exploration program. - All laboratory assay results were received and stored in both CSV and laboratory signed PDF formats. - Data is stored in Microsoft Excel, Leapfrog and Vulcan. - Data storage system protocols are basic but robust. - All data is stored in a Data room as well as back up on Drop box. - The data and future work should be stored and managed on a commercial relational database with inbuilt validation protocols in the future. - Quarter core cuts are added together to get the same sample weights per sample interval.

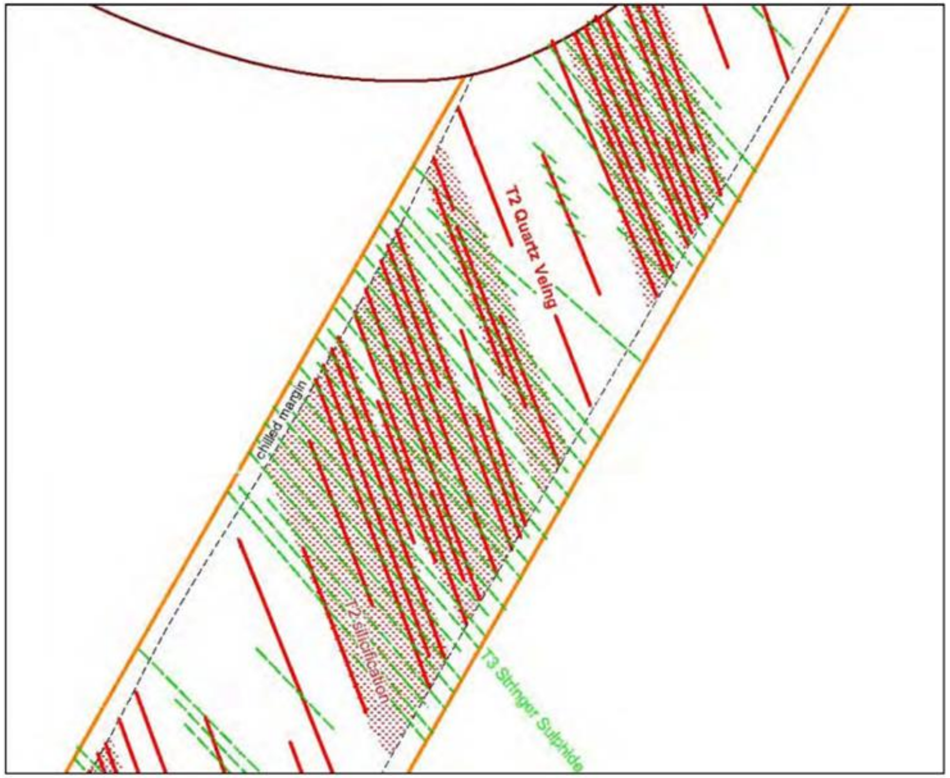
Criteria	Explanation	Commentary
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	- The drillhole collar coordinate (X, Y, Z) are referenced to New Zealand Transverse Mercator 2000 (NZTM). All holes up to SCDDH096 have been picked up by GPS methods and post processed by Golden Bay Surveyors to 0.1m accuracy. - SFR drilling from SCDDH097 to SCDDH103 have been picked by handheld GPS Garmin 64. SFR drillholes in the Main Zone are collared within 1m of previous drilling from the same drill pad. - A digital terrain model (DTM) was constructed based on LiDAR that was flown by NZ Aerial Surveys in 2011. All drill collars elevations were reconciled with the LiDAR. - Downhole surveys are not available for 19 out of 50 CRAE holes and one abandoned OGC hole SCDDH046. Except for one drillhole (DDH84SC16), all the unsurveyed drillholes are less than 120m deep. Hellman report (2007) noted that no significant deviation in azimuth and dip takes place in the first 120m of the surveyed holes. It was therefore considered reasonable to assume that these unsurveyed holes follow the collar Azimuth and dip orientation. - The correction used between magnetic north and true north (magnetic declination) was 22° East. - MOD and SFR surveyed on average every 30m using a digital downhole tool. SFR used Longyear true shot camera for down hole surveys.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	- Drilling in the Main Zone has generally been completed on a 75m spacing with ranges between 50m to 150m. - The drill spacing was suggested by drill hole density analysis (Golder, 2012) down to the 50mRL in the Main Zone. - Drilling in Bobby Dazzler has spacing with ranging from very closely spaced (5-10 m) where holes are collared in the outcropping dyke up to spacings of between 75-125 m. - Drilling directions and distances in the Main Zone and Bobby Dazzler are variable because of the terrain, orientation of the target dyke and the orientation of the mineralisation within the dyke. Multiple drilling orientations have been fanned off single drill pads to make most of pad sites due to access agreement restrictions and the steep and challenging terrain. - The Carapace, with a much flatter terrain was drilled on 50m spacing with vertical holes. - SE Traverse spacing is approximately 100m. - Sample compositing was to 1m which is the dominant sample length.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	- Many drill holes are collared in the hanging wall to the dyke and are drilled at high angles to the north dipping dyke. These drill holes are better for assessing the Sams Creek porphyry contact and true thickness, however, the holes are often drilled at low angle or sub-parallel to the mineralised suphide veins that dip to the SE. Therefore, these intersections are sub-optimal for resource grade estimation. These drill holes provide more precise estimates of tonnage but do appear to introduce a grade bias due to the angle intersection with the mineralisation zones. - Most drill holes intercept at a low angle to the host porphyry and therefore drill down the porphyry but at a higher angle to the general orientation of the mineralisation. These holes appear to be more optimal to delineate grade and possible grade domains. However, with often poorly intact porphyry contacts recovered in the core. These holes are sub-optimal for delineating the geometry of the porphyry. These holes are drilled from both hanging wall footwall of the dyke.

Criteria	Explanation	Commentary
		- This relationship between drillhole orientation and expected benefits has been taken into consideration during drill hole design and implementation.
Sample security	• *The measures taken to ensure sample security.*	- Drill samples were securely packaged on site and transported by a courier with "chain of custody" documentation, to SGS laboratory in Westport, New Zealand for crushing and sample preparation. Samples were stored in a locked coreshed until despatch.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	- Golder completed an audit as part of the 2013 Mineral Resource Estimation (MRE). Hellman Scofield previously carried out an independent review of the sampling techniques and data. The results were satisfactory.

Section 2 - Reporting of Exploration Results

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

Criteria	Explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	- Sams Creek project is situated mostly in the Northwest Nelson Conservation Park which lies on the eastern edge of the Kahurangi National Park in northwest Nelson area. - The Exploration Permit EP 40338 expires on the 26 March 2025 and is subject to a joint venture with OGC with Siren Gold Ltd (SNG) owning 82%. - The eastern neighbouring permit EP 54454 expired on the 25 September 2022. This covers the eastern areas of the Sams Creek Dyke over Barron's Flat into the Waitui catchment. SGL is the sole permit holder of EP 54454. A four-year Appraisal Extension has been applied for. - A 1% Crown royalty would apply to EP 40338 and 2% Crown royalty to EP 54454. applicable for any gold or silver production once the Sams Creek permits are converted to mining permits. - The Sams Creek permit EP 40338 is also subject to an agreement between Royalco Resources Limited (Royalco) and OGC. Under this agreement, a royalty of 1% of gold produced is deliverable by OGC to Royalco.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	- All exploration results in drill holes up to SCDDH103 were produced by: CRAE (1980-1987), OGC (1996-2005), MOD (2010- 2017) and SFR (2019 to 2021). - CRAE completed trenching and soil sampling programs where MOD resources completed the CRAE soil sample pattern over Sams Creek and Barrons Flat. - MOD completed structural mapping program over Main Zone, Carapace, SE Traverse and Doyles as well channel sampling. - MOD completed an aerial magnetic geophysics program.
Geology	• *Deposit type, geological setting and style of mineralisation.*	- Sams Creek mineralisation is contained within a hydrothermally altered peralkaline granite porphyry dyke that intrudes Early Palaeozoic metasediments. The dyke is up to 60m thick and can be traced east-west along strike for over 7km. The dyke generally dips steeply to the north (-60°), including within the Main Zone and Bobby Dazzler, with gold mineralisation extending down dip for at least 1 km and is open at depth. The geological and geochemical characteristics of the Sams Creek granite dyke indicate it is a member of the intrusion-related gold deposits (IRGD). Within the Carapace and SE Traverse areas the dyke is flat or only gently dipping. The relative positive and geometry of the SE Traverse deposit is thought to have been affected by movement along landslip planes which has displace the dyke to the south-east by ~250m. - Gold mineralisation is largely contained within thin (1-15 mm) sheeted quartz-sulphide (T3) veins that crosscut the dyke which strike to the NE and dip predominantly to the SE at around 50°.

Criteria	Explanation	Commentary
		 **NW-SE section of the Main Zone of Sams Creek Porphyry Dyke showing T2 quartz veining, T3 sulphide veins (GOD 2010). The majority of the gold mineralisation is contained in the T3 veins.** - The Sams Creek dyke was deformed by a D3 event which resulted in gentle upright F3 folds plunging to the NE-ENE. A model is proposed whereby gold-bearing sulphide veins formed along F3 fold hinges and parallel boudin necks of extending fold limbs, perpendicular to the maximum shortening direction. The higher concentrations of veining in these two areas, results in NE plunging mineralised shoots up to 35 m wide and 100 m high separated by zones of lower grade gold mineralisation.

Drill hole Information	Criteria	Commentary
Drill hole Information	• *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:* • *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* • *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*	See table below

Hole ID	Prospect	TD	mE NZTM	mN NZTM	RL	Collar Dip	Collar Azimuth
DDH82SC01	Carapace	84.10	1579751.76	5454047.29	561.80	-45	121
DDH82SC02	Carapace	117.25	1579745.88	5454046.20	562.99	-45	301
DDH82SC04	Carapace	19.50	1579805.43	5454054.39	555.60	-45	066
DDH82SC05	Carapace	8.35	1579803.67	5454053.63	555.90	-45	261
SCDDH086	Carapace	15.40	1579983.75	5454350.66	329.18	-90	000
SCMDH001	Carapace	8.80	1580030.78	5454375.62	289.54	-90	022
SCMDH002	Carapace	9.70	1580062.49	5454313.14	336.10	-90	022
SCMDH003	Carapace	20.10	1580142.15	5454430.99	244.39	-90	022
SCMDH004	Carapace	20.20	1580142.15	5454430.99	244.39	-90	022
SCMDH005	Carapace	21.14	1580142.15	5454430.99	244.39	-90	022
SCMDH007	Carapace	20.00	1580142.15	5454430.99	244.39	-90	022
SCMDH008	Carapace	57.40	1580066.92	5454350.72	311.20	-90	022
SCMDH010	Carapace	12.50	1580120.96	5454360.59	287.89	-90	022
SCMDH011	Carapace	22.90	1579861.26	5454417.15	398.50	-90	022
SCMDH012	Carapace	25.00	1579947.31	5454269.16	399.11	-90	022
SCMDH013	Carapace	25.90	1579947.56	5454268.69	399.10	-90	022
SCMDH014	Carapace	19.80	1580102.56	5454509.75	231.69	-90	022
SCMDH015	Carapace	15.00	1579492.30	5453580.20	495.70	-90	022
SCMDH016	Carapace	17.70	1579702.20	5453605.20	461.00	-90	022
SCMDH017	Carapace	14.10	1580144.52	5454430.15	244.05	-90	022
SCMDH018	Carapace	18.40	1580144.52	5454430.15	244.05	-90	022
SCMDH019	Carapace	14.00	1580328.24	5454452.07	326.99	-90	022
SCMDH020	Carapace	23.00	1580333.01	5454451.76	326.86	-90	022
SCMDH021	Carapace	26.00	1580548.95	5454370.76	226.23	-90	022
SCMDH022	Carapace	28.10	1580103.91	5454507.11	232.01	-90	022
SCMDH025	Carapace	22.60	1580102.81	5454510.59	231.08	-90	022
SCMDH026	Carapace	25.00	1580331.48	5454451.19	327.58	-90	022
SCMDH027	Carapace	30.30	1580145.59	5454649.07	244.64	-90	022
DDH82SC11	Main Zone	98.30	1580145.24	5454649.52	244.40	-50	121
DDH83SC12	Main Zone	42.00	1580145.07	5454649.86	244.34	-50	151
DDH83SC13	Main Zone	119.60	1579981.74	5454350.20	330.92	-53	331

DDH84SC16	Main Zone	211.70	1580413.69	5454471.91	279.00	-55	331
DDH84SC16A	Main Zone	32.90	1580411.80	5454472.91	279.00	-45	311
DDH84SC17	Main Zone	26.70	1580411.68	5454473.38	279.00	-90	061
DDH84SC17A	Main Zone	28.90	1580212.74	5454526.24	293.65	-70	331
DDH84SC18	Main Zone	62.40	1580212.60	5454525.94	293.65	-60	321
DDH84SC19	Main Zone	239.10	1579992.18	5454407.17	321.67	-45	331
DDH84SC21	Main Zone	200.40	1579992.05	5454407.57	321.93	-65	151
DDH84SC23	Main Zone	166.50	1579861.26	5454417.15	398.50	-60	331
DDH84SC25	Main Zone	250.15	1579992.00	5454408.00	322.13	-47.5	331
DDH85SC26	Main Zone	200.20	1579991.00	5454407.00	322.75	-90	061
DDH86SC35	Main Zone	16.80	1580304.83	5454606.87	394.88	-45	151
DDH86SC36	Main Zone	203.00	1580305.81	5454607.14	394.71	-45	151
DDH87SC40	Main Zone	195.80	1580411.65	5454473.39	281.12	-65	242
DDH87SC41	Main Zone	206.00	1580412.41	5454472.57	280.17	-67	152
DDH87SC42	Main Zone	288.00	1580327.38	5454517.53	360.77	-50	332
SCDDH044	Main Zone	329.30	1580216.03	5454526.78	292.77	-73	331
SCDDH045	Main Zone	148.85	1580324.51	5454519.41	361.02	-60	091
SCDDH048	Main Zone	248.70	1580413.06	5454473.04	279.80	-75	312
SCDDH049	Main Zone	352.65	1580411.29	5454472.18	281.18	-60	151
SCDDH050	Main Zone	316.70	1580449.57	5454445.29	239.09	-65	111
SCDDH054	Main Zone	410.85	1580411.28	5454471.66	281.06	-90	022
SCDDH056	Main Zone	173.75	1580258.40	5454468.30	289.25	-63	321
SCDDH057	Main Zone	155.70	1580331.90	5454453.30	328.05	-66	171
SCDDH058	Main Zone	274.30	1580142.40	5454432.20	244.00	-80	330
SCDDH059	Main Zone	344.00	1580331.70	5454450.70	327.50	-65	337
SCDDH060	Main Zone	289.60	1580105.80	5454507.40	230.55	-75	010
SCDDH061	Main Zone	203.00	1580204.10	5454416.20	211.50	-90	010
SCDDH062	Main Zone	155.00	1579815.10	5453977.90	537.10	-85	333
SCDDH063	Main Zone	338.30	1580103.80	5454505.30	232.30	-70	343
SCDDH064	Main Zone	305.00	1579863.00	5454418.00	398.35	-80	351
SCDDH065	Main Zone	315.30	1580106.00	5454503.00	230.50	-70	005
SCDDH066	Main Zone	110.50	1580105.50	5454502.50	231.50	-65	126
SCDDH068	Main Zone	596.00	1579859.00	5453759.00	462.90	-84	344

SCDDH069	Main Zone	542.15	1579799.00	5453635.00	430.38	-79	046
SCDDH070	Main Zone	385.50	1579574.00	5453562.00	481.85	-68	020
SCDDH071	Main Zone	241.45	1579384.00	5453560.00	487.00	-90	000
SCDDH072	Main Zone	353.10	1579837.00	5453799.00	494.00	-84	020
SCDDH073	Main Zone	238.00	1580105.50	5454502.50	231.50	-78	079
SCDDH074	Main Zone	328.30	1580105.50	5454502.50	231.50	-83	300
SCDDH075	Main Zone	280.00	1580105.50	5454502.50	231.50	-77	027
SCDDH076	Main Zone	287.40	1579782.00	5453730.00	483.00	-73	322
SCDDH077	Main Zone	253.10	1579715.00	5453665.00	481.00	-67	000
SCDDH078	Main Zone	203.20	1579620.00	5453630.00	493.00	-68	263
SCDDH079	Main Zone	170.60	1579520.00	5453625.00	506.00	-83	309
SCDDH080	Main Zone	299.20	1579766.67	5454045.66	559.24	-78	000
SCDDH081	Main Zone	49.40	1579854.36	5454071.29	543.58	-90	089
SCDDH082	Main Zone	126.40	1579965.34	5454056.71	509.17	-55	200
SCDDH083	Main Zone	308.00	1579864.92	5454005.83	536.78	-75	015
SCDDH084	Main Zone	21.00	1579748.53	5453972.24	551.46	-75	050
SCDDH088	Main Zone	278.30	1579724.23	5454045.42	567.53	-66	285
SCDDH089	Main Zone	326.00	1579704.12	5454080.48	579.09	-77	042
SCDDH090	Main Zone	391.70	1579762.60	5454015.29	559.03	-69	335
SCDDH091	Main Zone	734.40	1579718.72	5454012.05	566.97	-63	325
SCDDH097	Main Zone	171.30	1579814.31	5453979.10	537.50	-72	070
SCDDH098	Main Zone	165.80	1579898.58	5454029.57	533.86	-75	050
SCDDH099	Main Zone	201.70	1579816.30	5454069.46	551.60	-76	033
SCMDH028	Main Zone	53.80	1579882.48	5454067.22	530.23	-90	022
SCMDH029	Main Zone	93.60	1579719.86	5453957.02	554.00	-65	045
SCMDH030	Main Zone	45.20	1579774.60	5453980.71	547.66	-65	045
SCMDH031	Main Zone	91.00	1579821.33	5454028.89	544.74	-90	022
DDH86SC32	SE Traverse	91.20	1579922.45	5454037.28	525.88	-45	151
DDH86SC33	SE Traverse	118.20	1579730.39	5454066.94	567.04	-70	151
SCDDH092	SE Traverse	35.00	1579692.10	5454028.36	575.46	-80	150
SCDDH093	SE Traverse	19.00	1579705.06	5453989.10	566.42	-80	150
SCDDH094	SE Traverse	35.00	1579870.32	5454025.44	540.59	-80	150
SCDDH095	SE Traverse	40.10	1579684.70	5454050.00	579.20	-80	150

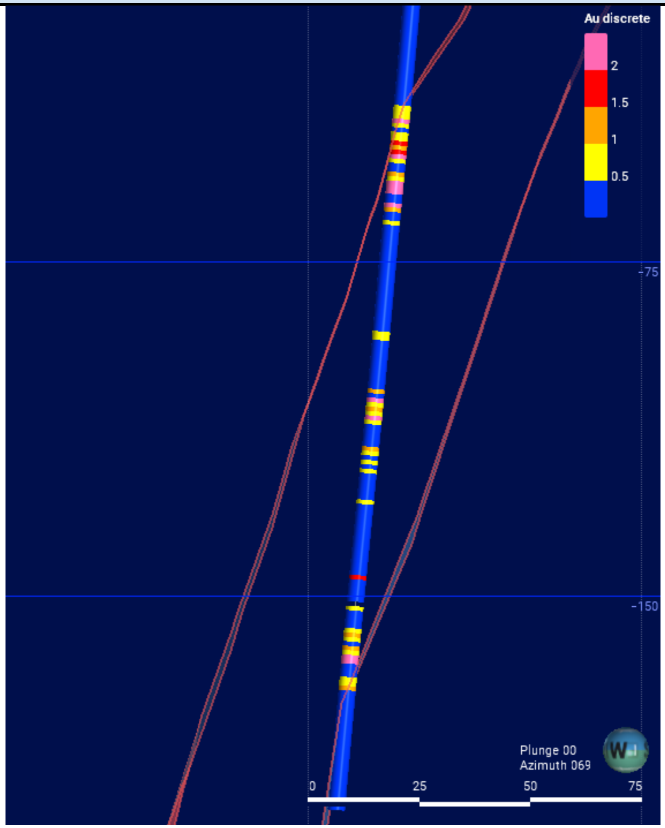
Criteria	Explanation	Commentary							
		SCDDH096	SE Traverse	55.20	1579684.10	5454012.00	576.00	-80	150
		SCDDH100	SE Traverse	63.60	1580153.30	5454474.40	220.75	-90	000
		SCDDH101	SE Traverse	54.70	1580154.90	5454474.70	220.30	-90	000
		SCDDH102	SE Traverse	32.50	1580178.80	5454436.60	219.85	-90	000
		SCDDH103	SE Traverse	82.90	1579943.30	5454313.80	374.65	-90	000
		DDH82SC06	Bobby Dazzler	93.00	1579839.27	5454190.35	486.33	-90	000
		DDH82SC07	Bobby Dazzler	29.70	1579845.94	5454194.86	486.33	-45	036
		DDH82SC08	Bobby Dazzler	48.60	1579845.05	5454194.30	486.54	-55	036
		DDH82SC09	Bobby Dazzler	80.20	1579844.51	5454193.56	486.71	-50	015
		DDH83SC14	Bobby Dazzler	65.15	1579822.99	5454280.06	430.47	-45	151
		DDH83SC15	Bobby Dazzler	27.40	1579882.77	5454224.60	460.88	-45	331
		DDH83SC15A	Bobby Dazzler	37.20	1579882.82	5454224.34	460.89	-45	321
		DDH83SC15B	Bobby Dazzler	108.60	1579883.24	5454224.10	460.43	-55	321
		DDH84SC20	Bobby Dazzler	250.45	1579646.48	5454144.66	562.40	-55	151
		DDH84SC24	Bobby Dazzler	250.00	1579710.29	5454236.03	510.66	-45	151
		SCDDH043	Bobby Dazzler	129.40	1579884.46	5454222.81	459.55	-57	344
		SCDDH051	Bobby Dazzler	250.85	1579781.35	5454326.46	420.21	-70	201
		SCDDH052	Bobby Dazzler	156.00	1579791.65	5454476.70	462.07	-80	151
		SCDDH053	Bobby Dazzler	186.70	1579791.65	5454476.70	462.07	-80	151
		SCDDH085	Bobby Dazzler	55.00	1579869.20	5454300.40	400.10	-80	315
		SCDDH087	Bobby Dazzler	64.00	1579785.30	5454211.80	477.20	-75	145
		SCMDH009	Bobby Dazzler	51.70	1579755.25	5454129.90	533.44	-90	000
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated*	- Drilling results presented have used a weighted average when presenting drilling intercepts, hence, any potential sample length bias has been accounted for. - Grades are not cut in the database or presenting results.							

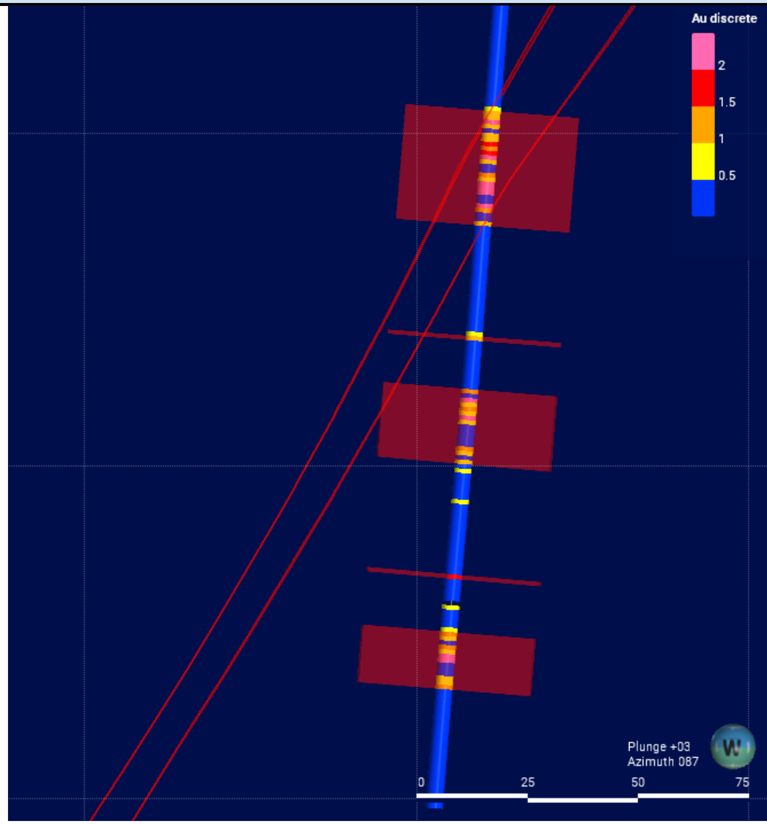
Criteria	Explanation	Commentary
Relationship between mineralisation widths and intercept length	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* *• If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	- All drill hole results are report as downhole intercepts. - In the Main Zone and Bobby Dazzler with steep dipping dyke and drilling in steep terrain the drilling was designed to either intercept mineralisation at higher angle which mean some holes intercepted the dyke's contacts at a low angle or intercept the dyke at high angle and potential mineralisation at low angle. - Drilling into the flatter lying Carapace and SE Traverse with vertical holes appeared to intercept both the dyke contacts at high angles and the mineralisation to both delineate dyke's geometry and mineralisation. - True thicknesses have estimated from Leapfrog or Vulcan geology model which was updated as drilling progresses during MOD and SFR programmes.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	- Relevant diagrams have been included within the main body of the announcement.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	- N/A
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	- N/A
Further work	• *The nature and scale of planned further work (e.g. 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.*	- Recommendations for further work are included in the Sams Creek Mineral Estimate Resource report.

Section 3 - Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	Explanation	Commentary
Database integrity	• *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.*	- Database is stored Microsoft Excel which has been validated by Measured Group using software (Leapfrog Geo). Random spot checks were completed between database and hard copies.
Site visits	• *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 case.*	- Due to complications resulting from the Covid pandemic, the Competent Person was unable to visit the site in person. However, two MG geologists, including the lead technical director, visited the site in October 2022. The site visit included reviewing SNG core that was available on site as well as the ground over the mineral resource area which, involved spot checks on collar survey details and observations of mineralisation in the field. Core from known ore grade intercepts was inspected to confirm mineralisation style as well as inspected host rock material. Extensive notes were prepared
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	- Geological interpretation based on available field mapping data, structural mapping, drillhole lithology and grade data. Modelling was completed using Leapfrog Geo modelling software. Wireframing and geological modelling was carried out by Measured Group and reviewed by SNG. - Mineralisation is contained exclusively within the porphyry dyke, however there are extensive zones, particularly in the steeply dipping fold limbs of Main Zone, where extensive very low grade material is present within some drillholes that has previously been included within the modelled wireframe due to the modelling process employed (hanging wall and footwall snapped to first occurrence of an assay sample >0.1 g/t Au).

Criteria	Explanation	Commentary
		 **Golder 2021 MRE Main Zone wireframe showing extensive low grade Au intervals included** - Due to a focus on optimisation for potential underground mining in the Main Zone, the wireframe modelling process worked on excluding some of the large zones of low grade Au compared to the 2021 MRE wireframe with the intention of increasing the overall grade of the resource estimate. Composite intervals of 0.75 g/t Au were used as a guide for the interval selection process, however in some areas where mineralisation was particularly patchy within drillholes, the modelling geologists discretion was applied in excluding or including certain intervals in the wireframe based on geological understanding and ore body continuity.

Criteria	Explanation	Commentary
		 **MG 2022 MRE Main Zone wireframe. Red intervals are 0.75 g/t Au composites** - The Main Zone deposit was separated into 2 geological domains prior to estimation, East and West, cut by a pseudo-fault surface, - The western extent of the Main Zone wireframe is controlled by the Bobby Dazzler fault which was modelled and provided to MG by SNG. The deposit is open at depth and along strike to the east. - Within the Carapace and SE Traverse areas, the mineralised intervals with the dyke are generally thinner than Main Zone and include much less internal waste, so interval selection for wireframing was reasonably simple. For Carapace, due to it being an open-cut target, composite intervals of 0.25 g/t and in SE Traverse composite intervals of 0.75 g/t were used to guide interval selection, however the modelling geologists discretion was again applied in excluding or including certain intervals in based on geological understanding and ore body continuity. - The Carapace deposit is truncated to the north, east and south by topography. The dyke is thought to continue along strike to the west leading into the Bobby Dazzler and Doyles prospect areas.

<table>
<tr><th>Criteria</th><th>Explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>- SE Traverse wireframe outcrops against topography to the south and is otherwise truncated by the SE Traverse slip plane on all other sides, This has been modelled based on drillhole intercepts and field mapping data.
- Bobby Dazzler is located west of the Bobby Dazzler fault from the Main Zone and has a similar geometry in that it is dipping to the north although less steeply that Main Zone. The deposit is open at depth and along strike to the west leading into the Doyles and Western Outcrops areas. The modelled mineralised wireframe is contiguous with the Carapace to the south where the dyke enters a fold anticline. A dummy fault surface was used to define the boundary between the Bobby Dazzler and Carapace deposit areas.
- The drill spacing provided confidence in the interpretation and continuity of grade and geology.</td></tr>
<tr><td>Dimensions</td><td>• 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.</td><td>- The mineral resource is split into 3 areas; Main Zone, Carapace and SE Traverse. The relative wireframe dimensions and variability in terms of continuity of each deposit is characterised in the table below:
<table>
<tr><th>Prospect</th><th>Dimensions (LxWxD expressed in metres)</th><th>Comments on variability</th></tr>
<tr><td>Main Zone</td><td>950x590x80 striking 089° and dipping 55° to 359°</td><td>Open at depth and to the east</td></tr>
<tr><td>Carapace</td><td>425x100x10 striking 012° and dipping 14° to 102°</td><td>Outcrops at surface. Deposit truncated by topography to north, east and south. Continues at depth to west.</td></tr>
<tr><td>SE Traverse</td><td>830x240x10 striking 070° and dipping 5° to 340°</td><td>Displaced slumped landslip block. Dyke truncated by slip plane and topography.</td></tr>
<tr><td>Bobby Dazzler</td><td>450x200x10 striking 095˚ and dipping 35˚ to 005˚</td><td>Open at depth and to the west</td></tr>
</table></td></tr>
<tr><td>Estimation and modelling techniques</td><td>• 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.</td><td>- For this resource estimate, MG has completed the following:
• Geological interpretation and wireframing in Leapfrog Geo
• Hard boundary compositing in Leapfrog – Edge Module (Leapfrog Edge);
• Variography and Ordinary Kriging in Leapfrog Edge; and
• Block Model Estimation in Leapfrog.
- Composites were based on 1 m composites.
- Outlier grades were assessed by reviewing composite histograms of gold grade for each individual wireframe. Extreme outlier grades weren't identified, and it was determined that no top-cut was required
- Estimation domains were created for each deposit area. The Main Zone deposit was split into two domain areas, East and West. The two Main Zone domains were set to have a soft boundary</td></tr>
</table>

Criteria	Explanation	Commentary
	• *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 control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	between the dyke in the two domains but hard boundary for the contact with the host rock. Carapace and SE Traverse were treated as hard boundary domains as they were picked from drilling assays. The Bobby Dazzler domain was set to have a soft boundary with the contiguous Carapace deposit with a 20 m range but a hard boundary for the contact with the host rock. - Individual domain search distances, number of passes, minimum and maximum sample numbers are outlined in the Sams Creek Mineral Estimate Report. - Previous mineral resource estimates have been conducted on the Sams Creek project including 2013 and 2021 estimates carried out by Golder Associates. These block models have been made available to MG during the resource estimate work. Previous resource estimates have used ordinary kriging estimation. To confirm the appropriateness of this technique both inverse distance and nearest neighbour were estimated as comparison. Comparing these through Leapfrog's Swath Plots function it was determined that the Ordinary Kriging showed the most representative estimator for the underlying composited data. Swath plots for each area are shown in the final Mineral Estimate Report. Block model validation included block statistics review, swath plots, visual inspection of grade distribution against composites, as well as sensitivities to block size and estimation variable changes were undertaken. - Test work completed to date indicates that recoveries from 80 to 90% are achievable from Sams Creek material. The work completed at this stage is preliminary. Further test work is required. - Arsenic is shown to be weakly to moderately positively correlated with gold grades and typical of refractory gold-pyrite-arsenopyrite mineralisation. No considerations were made for the estimation of deleterious elements at this stage until SNG has completed its recovery test work. - Block sizes for each of the model areas are: *10m x 10m x 5m with a subblock down to 1.25m x 1.25m x 0.625m* - Each block model has no rotation or dip applied. Each of the estimation parameters for each wireframe within the deposits was applied to the parent block of that block model. A detailed summary of block model variables and dimensions is outlined in the Sams Creek Mineral Estimate Report. - As only gold is estimated in this mineral resource, no variables are correlatable. - The geological modelling of the dyke for each deposit were used as sub-block triggers within the block model to ensure the block model estimation was representing the 3D wireframes.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	- All tonnages are based on dry bulk density measures. The median of the bulk density measures was assigned to the block by mineralisation and weathering domains.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	- The resource model is constrained by assumptions about economic cut-off grades. - The Main Zone, SE Traverse resources are based on a 1.85 g/t Au cut-off grade. - Bobby Dazzler resources are reported at cut-off grades between 1.0 and 2.0 g/t Au - Carapace resource is based on a 0.5 g/t cut-off grade.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always*	- The resource has been estimated based on an assumption of underground mining for the Main Zone, Bobby Dazzler (sub-level open stoping or cut and fill) and SE Traverse (room and pillar) prospect areas.

Criteria	Explanation	Commentary
	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.	- Carapace is thought to potentially be a target for small scale open-cut extraction and resource estimation has been conducted based on that assumption.
Metallurgical factors or assumptions	• *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.*	- Cyanidation testwork completed on six oxide bulk samples by CRAE resulted in Au recoveries of 85-95%. - Testwork was completed on fresh sulphide mineralisation at the start of 2004 by OGC to characterise the metallurgical behaviour of Sams Creek sulphide mineralisation. - The recoveries from this testwork are summarised as: • *Direct Leach: 79-87% gold recovery* • *Float and then leach: 73-86% gold recovery* • *Float and acid leach: 83-91% gold recovery.* - Testwork completed to date indicates that recoveries from 80 to 90% are achievable from Sams Creek material. The work completed at this stage is preliminary. Further test work is required.
Environmental factors or assumptions	• *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 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.*	- The Sams Creek project predominantly lies within the NW Nelson Forest Park administered by the Department of Conservation (DoC). The Reefton open cut gold mine 100 km to the SW, which has been successfully operated by OGC between 2007 and 2016 is also contained within a Forest Park administered by DoC. The area is generally covered with beech forest with native scrub and sub-alpine grasslands. Some of the beech forest has been logged, with other areas burned and grazed. The current plan is to mine by underground methods with decline access from private land at Barrons Flat. Disturbance to the DoC estate would be limited to a small open pit at Carapace and vent raises which require a cleared area similar to a drill pad (10mx10m). - SNG has an Access Agreement with DoC which allows for 100 drill pads and several camps and helicopter landing sites.
Bulk density	• *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.*	- The dry bulk density values used in the resource model were assigned using the median values of the available data. The bulk density data was separated into the porphyry that hosts the mineralisation and other waste rock. These density values were then divided by oxide and fresh rock. A median of 2.70 t/m^3 and 2.59 t/m^3 were used for fresh and oxide porphyry respectively. - Sams Creek density assignment is based on a density assessment completed in 2011-2013. Density samples are routinely collected during logging of diamond drill core. Specific Gravity (SG) is calculated using the following formula: Weight in Air (Weight in Air – Weight in water) = SG.

Criteria	Explanation	Commentary
	• *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	

Classification	• *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.*
		- The resource classification accounts for all relevant factors. Two methods were used to determine the optimal drill spacing between boreholes for resource classification at the Sams Creek Project. These were:
		  - Variogram methodology which analyses the different proportions of the sill;
		  - An estimation variance methodology.
		- The data spacing and distribution is sufficient to establish geological and grade continuity appropriate for Mineral Resource estimation and classification and the results appropriately reflect the Competent Person's view of the deposit.
		-

Audits or reviews.	• *The results of any audits or reviews of Mineral Resource estimates.*	- Internal audits by MG and company audits were completed
Discussion of relative accuracy/ confidence	• *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 estimate should be compared with production data, where available.*	- The estimates made in this report are global estimates. - Local block model estimates, or grade control estimates, whose block grades are to be relied upon for selection of ore from waste at the time of mining will require additional drilling and sampling of blast holes. - Confidence in the relative accuracy of the estimates is reflected in the classification of estimates as Indicated and Inferred. - Variography was completed for Gold and used to influence the resource classification. The variogram models were interpreted as being isotropic along the plane of vein mineralisation, with shorter ranges perpendicular to this plane of maximum continuity. - Validation checks have been completed on raw data, composited data, model data and Resource estimates. - The model validations checked to ensure data honouring. The validated data consists of no obvious anomalies which are not geologically sound. - The mineralised zones are based on actual intersections. These intersections are checked against the drill hole data. Field geologist selections, and the Competent Person has independently checked laboratory sample data. The selections are sound and suitable to be used in the modelling and estimation process. - Where the drill hole data showed that no Gold existed, the mineralised zone was not created in these areas. - Further drilling needs to be completed to improve Resource classification of the Inferred Resource.