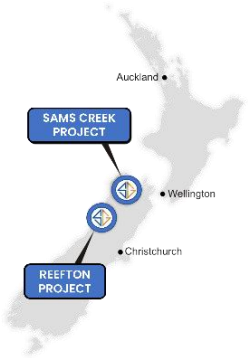
ASX Announcement

20 April 2023

Big River Maiden Mineral Resource increases Siren to 1.1Moz



Siren Gold Limited (ASX: **SNG**) (Siren or the Company) is pleased to announce a Maiden JORC (2012) Mineral Resource Estimate (MRE) for the Big River Gold Project in New Zealand.

Highlights

- The Big River gold project consists of 6 identified **gold mineralised shoots** across more than 500m of strike, with potential to discover additional high-grade shoots.
- Maiden **105koz Resource at 3.94g/t Au** defined from 2 of these 6 shoots (A2 Shoot and Shoot 4)
- Big River deposit **remains open in all directions** with significant potential for increased gold resources from additional exploration drilling.
- Gold soil geochemistry shows **large untested anomalies** at Big River mine and an **untested 3km long anomaly** from the Golden Hill prospect to St George in the south.
- Siren's Global Mineral Resource now stands at **1.1Moz at 3.1g/t Au** (100% basis).

Table 1 Updated Big River Mineral Resource Estimate

Big River Project *in situ* Mineral Resources April 2023					
Total Mineral Resources					
Zone	**Status**	**Cut-Off**	**Mt**	**Au g/t**	**Au koz**
Shoot 4 Upper	Inferred	1.5	0.238	3.99	30.5
Shoot 4 Lower	Inferred	1.5	0.423	4.34	59.0
A2 Shoot	Inferred	1.5	0.173	2.87	16.0
Total	**Inferred**	**1.5**	**0.834**	**3.94**	**105.5**

Registered Address

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Corporate

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Keith Murray
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Sebastian Andre
Company Secretary

Project

Sams Creek Project
Reefton Project

Capital Structure

Shares: 116,925,475
Options:14,293,262

Table 2 Global Resource Estimate at a 1.5g/t Au cut-off (100% basis)

Project	Status	Cut-off (g/t)	Tonnes (Mt)	Au (g/t)	Ounces (koz)
Sams Creek*	Indicated	1.5	3.29	2.80	295.6
Total	**Indicated**	**1.5**	**3.29**	**2.80**	**295.6**
Sams Creek*	Inferred	1.5	5.81	2.83	528.8
Alexander River*	Inferred	1.5	1.07	4.95	169.6
Big River	Inferred	1.5	0.83	3.94	105.5
Total	**Inferred**	**1.5**	**7.71**	**3.24**	**803.9**
Total	**Indicated + Inferred**	**1.5**	**11.00**	**3.11**	**1,099.5**

Tonnages are dry metric tonnes and minor discrepancies may occur due to rounding.
*Refer to ASX Announcement dated 30 January 2023.

Background

The Big River project (comprised of Exploration Permit 60448) is located ~15 kms SE of Reefton. The project overlays the areas of the historic Big River Mine which produced ~136,000 oz of gold at an average recovered grade of 34g/t between 1880 and 1942 (Figure 1).

The historic underground mine workings have been modelled in 3D and this, coupled with historic mine reports, shows that four main ore shoots were mined around the Sunderland anticline (Figure 2). Shoot 1 was mined to Level 4, Shoot 2 to Level 6, Shoot 3 to Level 12 and Shoot 4 to Level 7, when the mine closed in 1942. Two new potential shoots, the A2 and Prima Donna, are located east and west of the Big River mine. The A2 shoot, Big River Mine and Prima Donna shoot combined cover a strike length of around 500m, which is overlaid by anomalous gold and arsenic soil geochemistry.

Diamond drilling commenced at the Big River project in 2011 when OceanaGold Limited (OGL) drilled 26 holes for a total of 5,032.6m. Siren commenced drilling in October 2020 and initially drilled 16 holes for a total of 2,743m.

Drilling was focused on Shoots 4 and A2. Previous drillhole results that intersected Shoot 4 include BR03 (2m @ 12.1g/t Au), BR04 (4m @ 4.4g/t Au from 128m and 6.6m @ 21.4g/t Au from 136m), BR09 (3m @ 18.5g/t Au from 147m and 4m @ 7.8g/t Au from 158m), BR12 (3m @ 5.4g/t Au from 170m and 3m @ 2.0g/t Au from 205m), BR27 (6m @ 5.1g/t Au), BR34 (5.9m @ 4.1g/t Au) and BR35 (6.3m @ 3.4g/t Au from 374.8m).

The A2 shoot is in a second anticline 200m to the west of the Sunderland anticline that hosts the Big River mine. Mapping and channel sampling identified outcropping quartz reef up to 1m thick surrounded by sulphide-rich sediments containing lenses of massive sulphide in the footwall. Channel sampling indicates that the quartz reef is relatively low grade, but the footwall mineralisation assayed up to 11g/t Au. Seven shallow diamond holes drilled into the A2 Shoot tested 100m along strike to a depth of around 25-50m. Drillhole BR20 intersected 5.0m @ 4.2g/t Au from 24m and BR31 intersected 3.4m @ 2.5g/t Au from 41m. BR22 - BR24 were drilled on a second structure 30m to the west. These holes intersected a 10m wide zone with lower grade gold mineralisation but with the same high arsenic and sulphur mineralisation. BRDDH023 has very high sulphur, averaging 10.9% over 8m, with a high of 36% over 1m. These results are encouraging and indicate a strongly mineralised system near surface.

The deeper drilling in the A2 Shoot indicates that the shoot has a slightly shallower plunge than previously interpreted and that drillholes BR40 and BR41 intersected the footwall. Drillholes BR37 (5.2m @ 6.3g/t Au from 213m), BR41 (6m @ 1.5g/t Au from 252m) and BR39 (10m @ 1.2g/t Au from 271m, including 3m @ 2.5g/t Au) have extended the A2 Shoot to around 250m below the surface.

A summary of significant drilling results is shown in Table 3.

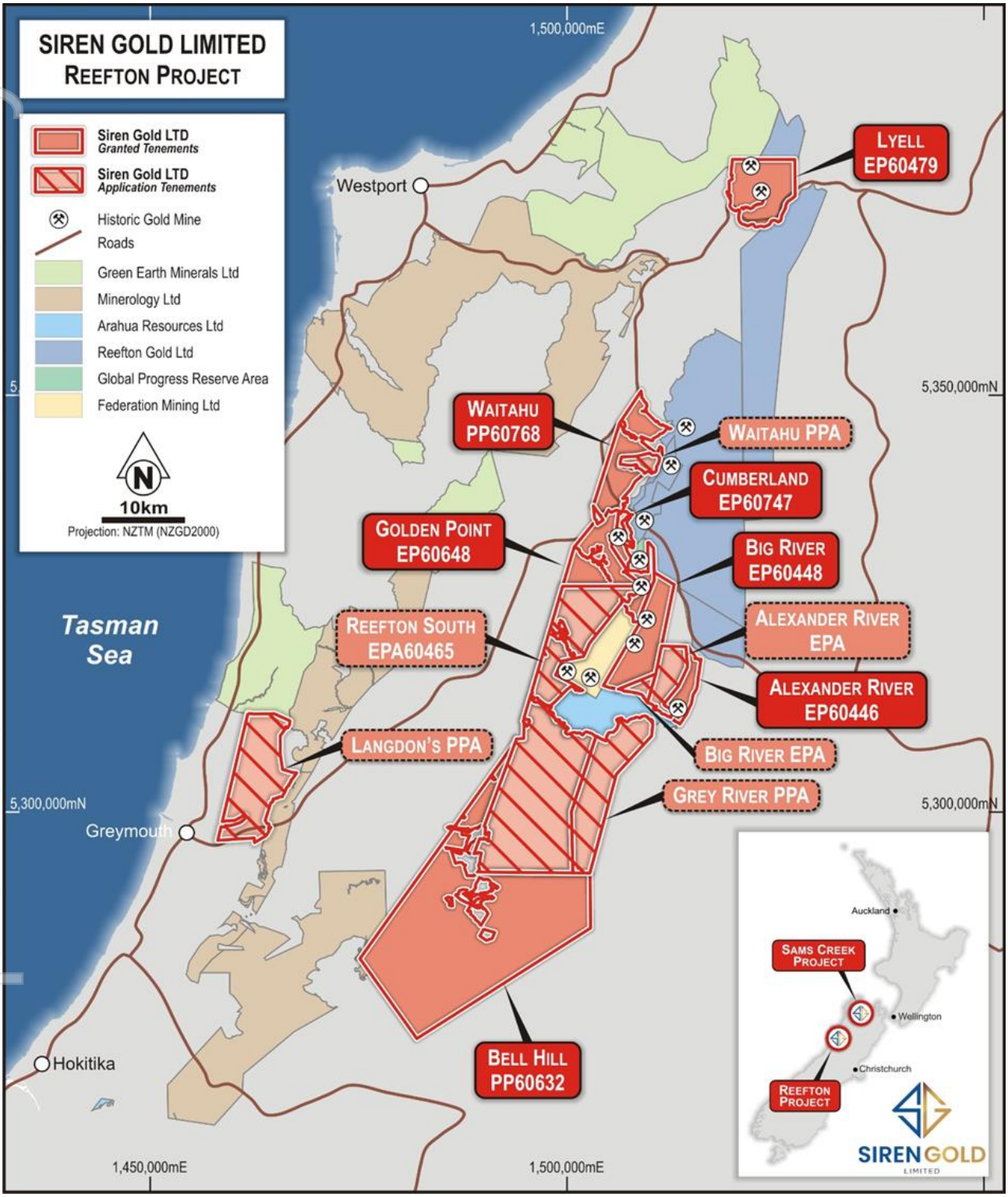

Figure 1. Reefton Tenement Map

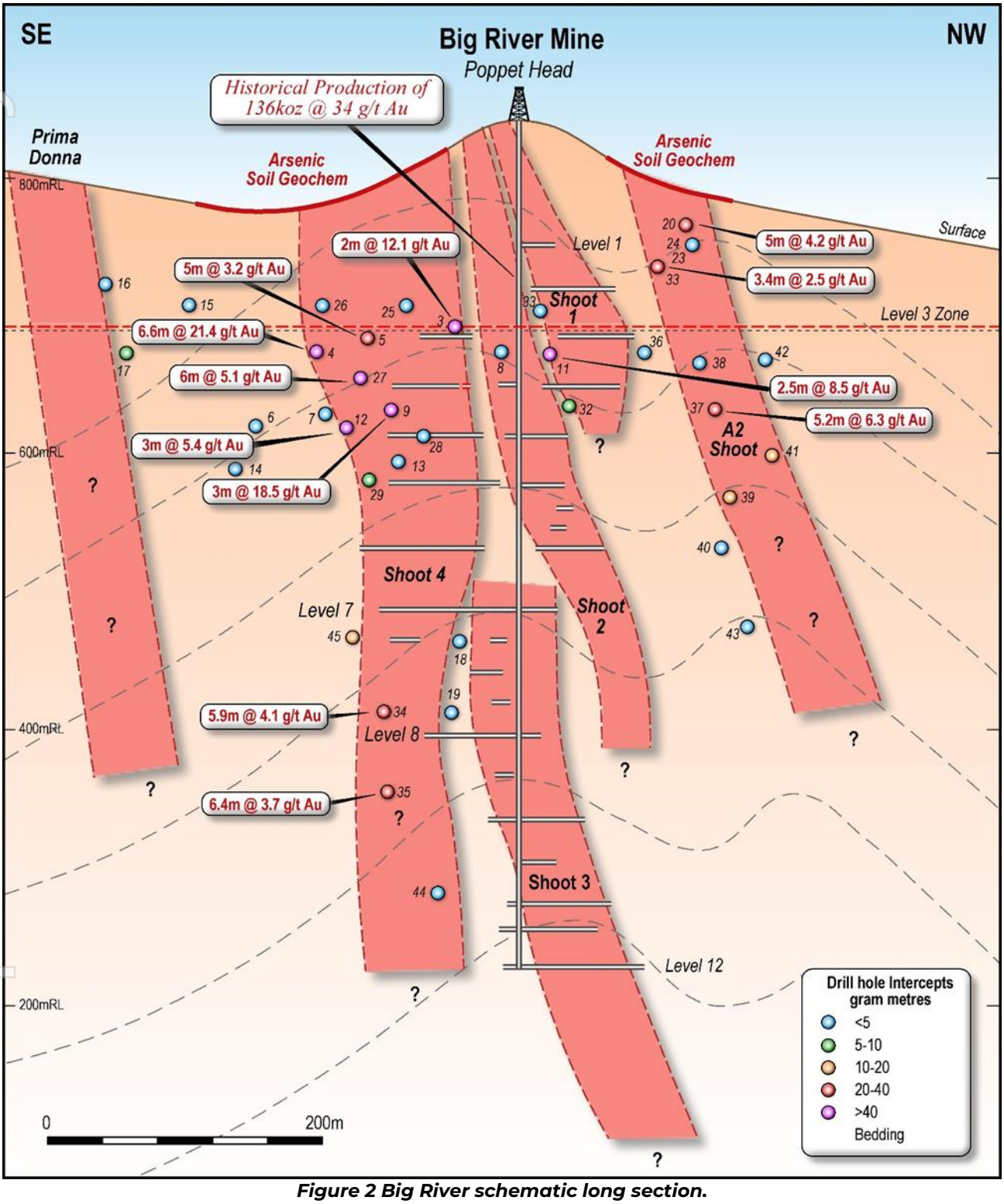

Figure 2 Big River schematic long section.

Table 3. Significant drillhole intersections at Big River

Hole ID	Shoot	From (m)	To (m)	Interval (m)	Au (g/t)
BRDDH003	4	99.0	101.0	2.0	12.1
BRDDH004	4a	128.0	131.0	3.0	5.6
	4b	136.4	143.0	6.6	21.4
BRDDH005	4	112.1	117.1	5.0	3.2
BRDDH009	4a	147.0	150.0	3.0	18.5
	4b	159.0	162.0	3.0	10.0
BRDDH011	1	139.0	141.5	2.5	8.5
BRDDH012	4	170.0	173.0	3.0	5.4
BRDDH020	A2	24.0	29.0	5.0	4.2
BRDDH027	4a	142.2	148.2	6.0	5.1
	4b	153.8	155.0	1.2	3.1
BRDDH031	A2	25.9	36.5	10.6	1.3
		41.5	44.9	3.4	2.5
BRDDH034	4	361.7	367.6	5.9	4.1
BRDDH035	4	374.8	381.2	6.4	3.7
BRDDH037	A2	213.2	218.4	5.2	6.3
BRDDH039	A2	271.0	281.0	10.0	1.2
	A2	278.0	281.0	3.0	2.5
BRDDH045	4	337.0	346.0	9.0	1.8

Maiden Mineral Resource Estimate

Siren has completed a Maiden Big River mineral resource estimate (MRE) that includes Shoot 4 and A2 based on an underground mining scenario. The MRE, which is in accordance with the JORC 2012 Code, has utilised geological and assay data from 10,104 metres of diamond core drilling from 46 holes.

Details regarding the estimation of the Mineral Resources for the Big 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, geological modelling and estimation were carried out by Siren geological staff. Three mineralised domains were used – Shoot 4 Upper, Shoot 4 Lower and A2.

Three mineralized wireframes are defined using 46 drillholes in the database, with 36 intercepting the modelled mineralised domains. Geological mapping and trenching assisted in defining the surface trace of the structures, but the grade information was not used for the estimation. Detailed structural surface mapping (Jongens, 2020) and drillhole cross sections by Siren geologists were also used to guide the geological interpretation of the mineralised shoots.

A nominal cut-off grade of 0.50g/t Au was used to guide the continuity of the mineralised wireframes, however, at the modelling geologist's discretion, intervals of 0.50 g/t Au were omitted from wireframes (e.g. on the periphery of mineralisation).

Mineralisation domain wireframes were modelled using the Leapfrog Geo vein modelling technique. An oxide wireframe was not used for Shoot 4 as the domains start under Level 1 (50-70m below the surface) whereas the oxide in the drilling suggests fresh rock from 20-30m down hole. A2 Shoot also has a shallow weather profile of 5 to 15m deep. The mineralisation in the upper zones of A2 contains massive sulphide therefore the density of the mineralised rock is high, compensating for any loss of density due to weathering.

Depletion volumes for historical mine workings were also created based on the data available. Historical maps, production numbers and plans were used to understand the 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, but validations based on the surface shaft, adit locations and drilling intercepts of voids suggest a reasonable degree of accuracy. Areas known to have been stoped have been fully depleted but in areas where mining comprised of single drives and adits have been left intact. The stoping depletion only affects Shoot 4 Upper, while old reports and plans suggested they only stoped certain levels targeting the high-grade quartz lode, the depletion shell extends all the way from Level 2 down to Level 7 as a buffer. Shoot 4 Lower is interpreted to be behind the workings and therefore not worked, and A2 Shoot is west of any known workings apart from exploration adits from surface.

Sampling and Analysis

Selective sampling of drill core was completed where mineralisation was geologically logged and scanned with a pXRF. The intervals selected for sampling were photographed and cut into half (along the axis of the core). Generally, 1m intervals were 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, Siren 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 individual wireframe. Extreme outlier grades were not identified, and it was determined that no top-cut was required. Leapfrog's Clamping tool was used for Level 4 Lower domain.

Estimation domains were created for each zone. The Shoot 4 zone was split into two domains, Upper and Lower. All domains were hard boundary domains based on a 0.5g/t Au cut-off.

Individual domain search distances, number of passes, and minimum and maximum sample numbers, block size, variography and EDA are outlined in the Big River Mineral Resource Estimate Report.

Block model validation included block statistics review, declustering means, swath plots and visual inspection of grade distribution against composites, as well as sensitivities to block size, domain boundary and estimation variable changes undertaken.

Cut-off Grades

The MRE has been reported at cut-off grades of 1.0g/t Au and 1.5g/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.

Classification of Mineral Resource Confidence

The Big River Project MRE has been 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 MRE. The 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;
- The consistency of the thickness and grade results from drillholes.

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 1.0g/t and 1.5g/t Au cut-offs are shown in Tables 4 and 5 and visually represented in Figure 4.

Table 4. The Big River MRE at a 1.0g/t cut-off.

Big River Project *in situ* Mineral Resources April 2023					
Total Mineral Resources					
Zone	**Status**	**Cut-Off**	**Mt**	**Au g/t**	**Au koz**
Shoot 4 Upper	Inferred	1.0	0.291	3.49	32.8
Shoot 4 Lower	Inferred	1.0	0.587	3.46	65.8
A2 Shoot	Inferred	1.0	0.293	2.20	20.7
Total	**Inferred**	**1.0**	**1.171**	**3.15**	**119.3**

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

Table 5. The Big River MRE at a 1.5g/t cut-off.

Big River Project *in situ* Mineral Resources April 2023					
Total Mineral Resources					
Zone	**Status**	**Cut-Off**	**Mt**	**Au g/t**	**Au koz**
Shoot 4 Upper	Inferred	1.5	0.238	3.99	30.5
Shoot 4 Lower	Inferred	1.5	0.423	4.34	59.0
A2 Shoot	Inferred	1.5	0.173	2.87	16.0
Total			**0.834**	**3.94**	**105.5**

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

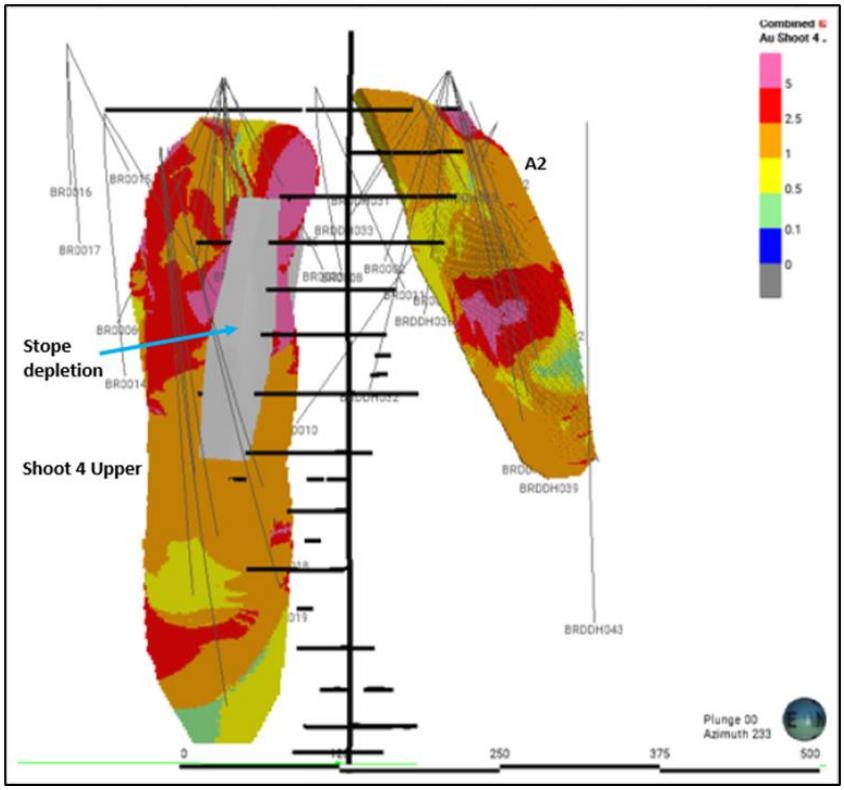

Figure 3. Big River MRE block model long section (magenta high grade, blue low grade) looking west with the historic workings and stoping depletion shell from level 2 to level 7 in Shoot 4 Upper domain.

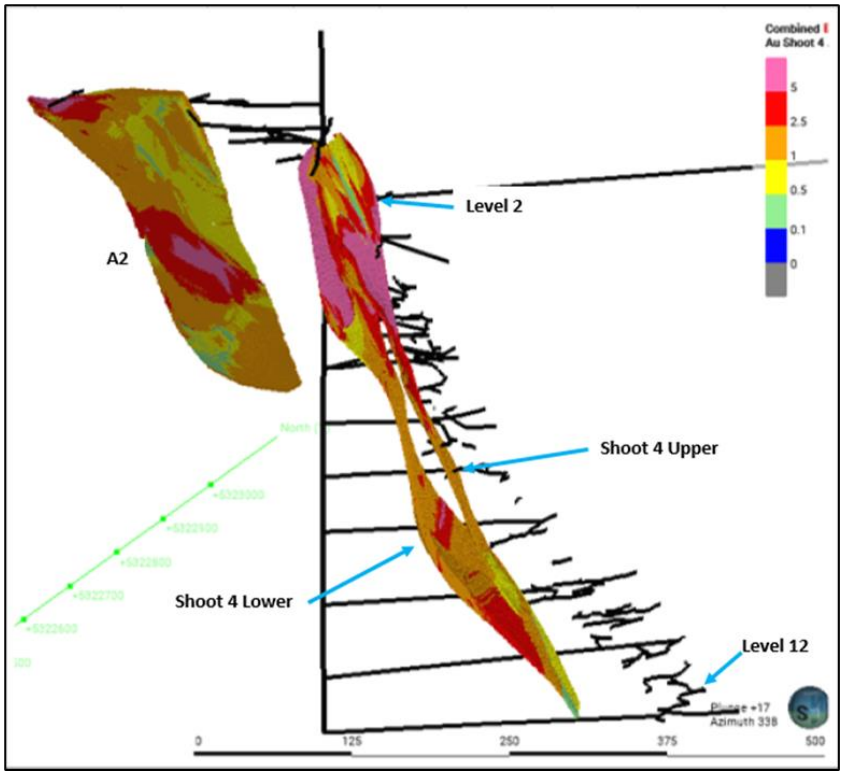

Figure 4. Big River MRE block model long section (magenta high grade, blue low grade) looking west with the historic workings and stoping depletion shell from level 2 to level 7 in Shoot 4 Upper domain.

Global Resources

Siren's global resource on a 100% basis is shown in Table 7 and depleted for Siren's 81.9% share of Sams Creek is shown in Table 8.

Table 7. Siren's Global Mineral Resource estimate on a 100% basis

Project	Status	Cut-off (g/t)	Tonnes (Mt)	Au (g/t)	Ounces (koz)
Sams Creek*	Indicated	1.5	3.29	2.80	295.6
Total	**Indicated**	**1.5**	**3.29**	**2.80**	**295.6**
Sams Creek*	Inferred	1.5	5.81	2.83	528.8
Alexander River*	Inferred	1.5	1.07	4.95	169.6
Big River	Inferred	1.5	0.83	3.94	105.5
Total	**Inferred**	**1.5**	**7.71**	**3.24**	**803.9**
Total	**Indicated + Inferred**	**1.5**	**11.00**	**3.11**	**1,099.5**

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

*Refer to ASX Announcement dated 30 January 2023.

Table 8. Siren's Global Mineral Resource estimate including 81.9% of Sams Creek.

Project	Status	Cut-off (g/t)	Tonnes (Mt)	Au (g/t)	Ounces (koz)
Sams Creek*	Indicated	1.5	2.69	2.80	242.1
Total	**Indicated**	**1.5**	**2.69**	**2.80**	**242.1**
Sams Creek*	Inferred	1.5	4.76	2.83	433.1
Alexander River	Inferred	1.5	1.07	4.95	169.6
Big River	Inferred	1.5	0.83	3.94	105.5
Total	**Inferred**	**1.5**	**6.66**	**3.31**	**708.2**
Total	**Indicated+ Inferred**		**9.35**	**3.16**	**950.3**

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

*Depleted to reflect Siren's 81.9% interest.

Regional Exploration

Soil geochemistry has now been completed for over 6kms from Big River North to around 2kms south of St George. The gold soil geochemistry shows large anomalies at Big River mine and a 3km long anomaly from Golden Hill to south of St George (Figure 5). The results clearly show that the gold anomaly continues strongly to the south until it is cut off by younger granite and extends into a broad zone south of St George into an area that has not been historically mined. Anomalous arsenic also extends for 1.5kms NE of Big River to the contact with overlying Eocene coal measures. The gold soil geochemistry (Figure 6) shows a similar trend, with the results for the two southernmost lines still awaited.

Detailed mapping and trenching at Big River South, similar to that recently completed at Auld Creek and Lyell, has commenced with the St George area initially targeted.

The St George No. 1 level tunnel was driven in on a 1m wide quartz reef that produced 70oz gold from 30 tonnes (72g/t Au) in the first crushing in late 1892 (Wright 1993[1]). The Level 1 adit is open from the entrance to a crosscut at 65m. The quartz reef is visible in the tunnel roof and wall from 25m, and Siren sampled the exposed vein for a further 36m from this point (Figure 6 and Table 9). The quartz vein is generally dipping steeply to the east and west. Quartz in the roof and wall of the adit is variable, showing bucky white stockwork veining zones of 200mm – 400mm, areas of limonitic stained fractures, quartz-carbonate, single veins up to 200mm, areas of abundant acicular arsenopyrite, and fine visible gold in at least four samples. Total sampling length in the adit was 36m as 1m rock chips along the exposed quartz vein; 13 rock chip samples are still pending results.

The St George No.2 level tunnel, driven in at creek level, followed the same strike as the No.1 level adit and has collapsed (Figure 9). The crushing and gold recovery figures for this drive are unknown, however, the second crushing in the St George claim overall produced 37oz gold from 16 tonnes (72g/t Au).

Previous drilling in January 2012 by OGL showed no intercept of the St George mineralisation in BRS001. Two 1m samples with grades of 1.3g/t and 2.9g/t in the top 10m of BRS001 would suggest that the drillhole was just outside the boundary of the high-grade gold shoot shown in the adit rock chip sampling, or the veining and mineralisation has reduced to a reef track closer to the surface where the drillhole intercepts.

The St George quartz reef has a similar grade and thickness to the historic Blackwater mine located 4kms to the SW (Figure 5). The Blackwater Reef has an average thickness of 0.7m at an estimated in situ grade of 23g/t Au[2]. The Blackwater Reef was mined along strike for over 800m and down to 700m (Level 16) below surface, producing 740koz at a recovered grade of 14.2g/t Au. Drilling by OGL shows, that the reef extends for another 750m below the last mined level. Federation Mining Limited are planning to extract an additional 700koz of gold from the reef with development well advanced[3].

1. Les Wright 1993. Big River Quartz Mine 1882 -1942.

2 Oceana Gold Limited. Preliminary Economic Assessment of the Blackwater Gold Project Reefton, Westland Province, New Zealand.

3. Federation Mining limited. Developing High Grade Snowy River Gold Mine in New Zealand March 2023. Ord Minnett East Coast Mining Conference.

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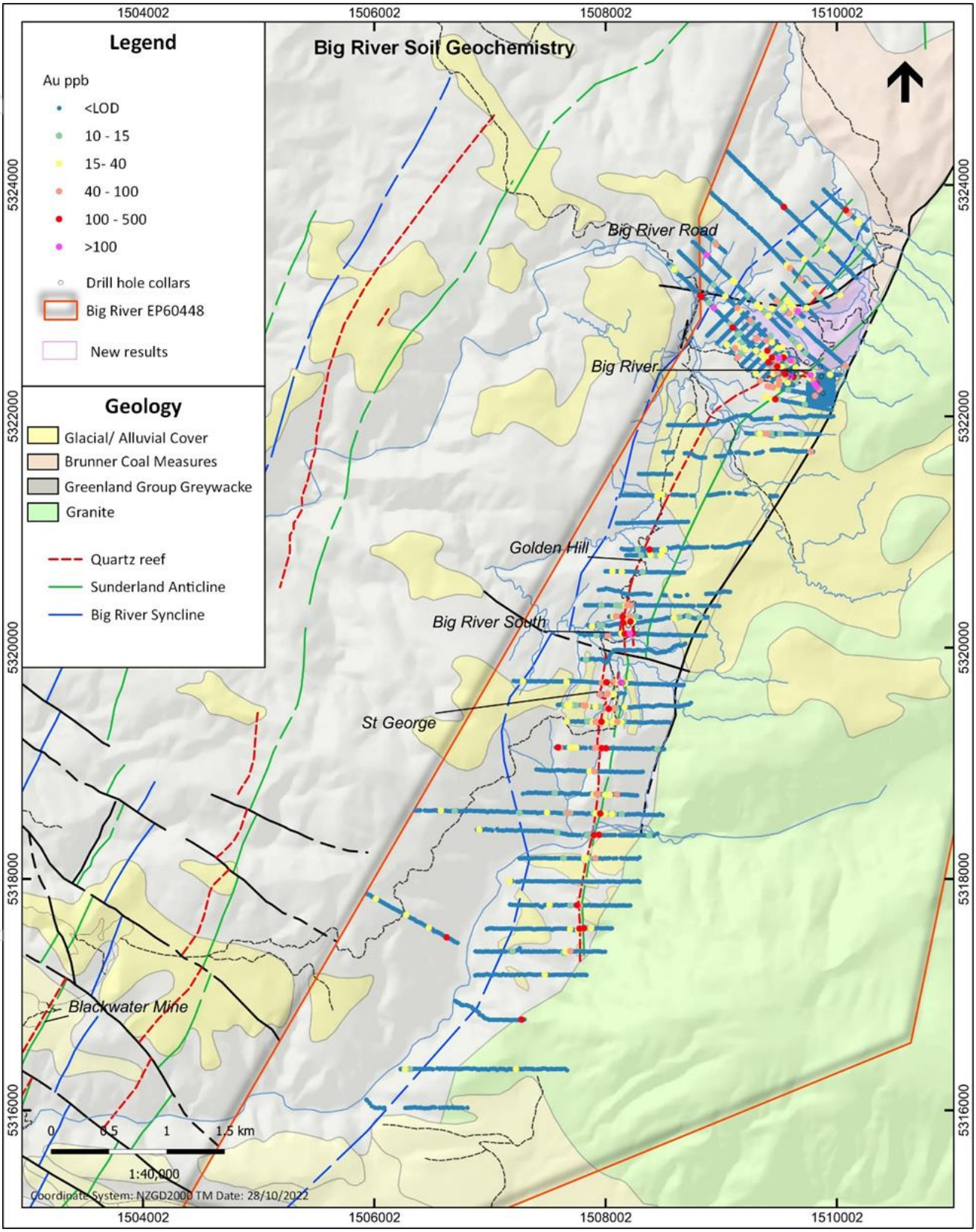

Figure 5. Big River gold soil geochemistry

Figure 6. Sampling the quartz reef in St George Level 1 adit

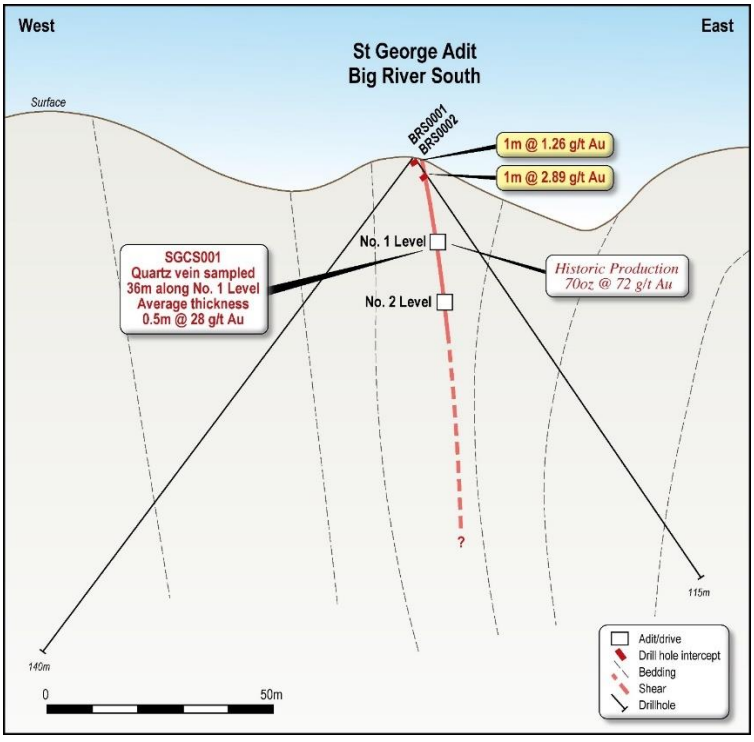

Figure 7. Sampling the quartz reef in St George Level 1 adit.

Table 9. St George Level 1 sample results

From	To	Geological Description	Au g/t	As ppm
0.0	1.0	Silicious sandstone. Minor QZ in tension gashes. Sulphur staining.	0.12	649
1.0	2.0	Puggy siltstone, QZ carbonate stockwork, abundant sulphides on margins.	0.16	845
2.0	3.0	Host and QZ breccia, QZ veins. Abundant pyrite (PY) with minor acicular arsenopyrite (AP).	**144.0**	**3,719**
3.0	4.0	Soft grey breccia, 20% QZ-carbonate clasts. Weathered sulphides within breccia/host rock.	6.14	2,374
4.0	5.0	Bucky QZ with limonitic fractures and styolites. Soft fault sandstone, highly weathered wall rock.	**74.1**	**5,193**
5.0	6.0	Bucky stockwork QZ veins and patchy AP. Trace sulphides within QZ.	3.74	4,366
6.0	7.0	Bucky stockwork QZ veins and patchy AP. Trace sulphides within QZ.	**67.30**	**4,578**
7.0	8.0	Puggy siltstone. QZ with limonitic staining, tabular/acicular AP, trace stibnite.	**21.90**	**2,687**
8.0	9.0	Altered pale grey silica flooded siltstone with banded translucent white QZ.	**24.20**	**2,629**
9.0	10.0	Siliceous sandstone with disseminated AP and PY. Bucky to vitreous stockwork QZ veins.	**11.00**	**5,491**
10.0	11.0	VISIBLE GOLD. 70% QZ. Silicified sandstone with acicular and tabular AP.	**55.00**	**4,523**
11.0	12.0	VISIBLE GOLD. 70% QZ. Silicified sandstone with acicular and tabular stained AP.	**25.50**	**4,825**
12.0	13.0	Soft/friable dark grey siltstone-sandstone. 10% Stringer QZ <10mm with limonitic staining.	**59.90**	**7,257**
13.0	14.0	Hard grey siltstone to sandstone. 10mm cream QZ vein with some limonitic staining. Tabular AP.	Results Pending	
14.0	15.0	95% QZ, buck white-translucent, minor limonitic staining.	Results Pending	
15.0	16.0	95% QZ, buck white-translucent, minor limonitic staining.	Results Pending	
16.0	17.0	Grey siltstone/sandstone. 5-15mm bucky QZ, minor limonitic staining.	Results Pending	
17.0	18.0	Siltstone/sandstone with fine tabular AP. Cream and limonitic stained QZ.	Results Pending	
18.0	19.0	Soft siltstone/sandstone. Very fine trace AP. Cream QZ, limonitic staining.	Results Pending	
19.0	20.0	5% buck-white translucent QZ, minor limonitic staining. Soft friable siltstone wall rock.	Results Pending	
20.0	21.0	Silicified sandstone with minor AP. 5% QZ buck white-translucent, minor limonitic staining.	Results Pending	
21.0	22.0	5% buck white-translucent QZ with minor limonitic staining. Soft friable siltstone wall rock.	Results Pending	
22.0	23.0	VISIBLE GOLD. 90% QZ with fine dark styolites. Silicified sandstone with minor sulphides.	Results Pending	
23.0	24.0	White-translucent QZ, limonitic staining. Acicular AP in host rock.	**46.70**	**3,515**
24.0	25.0	70% white-translucent QZ, limonitic staining, thin stylolites. Abundant AP in sandstone.	**11.90**	**7,493**

25.0	26.0	60% white-translucent QZ, limonitic staining, thin styolites. Abundant AP in sandstone.	0.73	2,555
26.0	27.0	80% white-translucent QZ, limonitic staining, thin styolites. Abundant AP in sandstone.	1.29	5,064
27.0	28.0	Buck white QZ, limonitic fractures. Abundant AP on host rock margin, trace AP in styolites.	**20.60**	**5,433**
28.0	29.0	Vitreous-bucky QZ, abundant styolites, acicular AP.	**18.20**	**4,121**
29.0	30.0	QZ stockwork veining <10mm with abundant stained acicular AP and cubic PY.	**37.40**	**5,905**
30.0	31.0	Medium grey puggy fault breccia, very soft.	0.55	666
31.0	32.0	Pale grey silicious sandstone and siltstone, altered. Minor fine sulphides.	4.03	604
32.0	33.0	Fine sandstone with lesser fault gouge fine breccia.	0.10	149
33.0	34.0	Fine sandstone with lesser fault gouge fine breccia.	Results Pending	
34.0	35.0	Buck white QZ vein 5-15mm, minor limonitic staining. No sulphides observed.	Results Pending	
35.0	36.0	Siliceous fine sandstone. No sulphides observed.	Results Pending	

Next Steps

The Big River deposit is open in all directions. The mineralisation extends for at least 500m along strike and has significant potential for increased gold resources from additional exploration drilling. The high-grade pods that were historically mined at an average 36g/t Au lie within two main parallel shear envelopes. Drilling density has defined the low-grade host shear envelopes, but there is great potential in these numerous but often small high-grade pods to be discovered and defined. Closer space drilling around known high grade interceptions would delineate these better. Drilling from pad 4 into the higher zones in Shoot 4 would test this.

There are two main shear systems with the upper shear the target of the historic mining. The lower shear appears to be unmined and only explored lightly. This lower shear curves around the Anticline hinge and behind the workings to the A2 shoot. Potential of high-grade mineralisation in this system behind the workings should be tested.

The A2 structure has developed where the Big River shear system intercepts a north-south trending mineralisation trend and is poorly understood. This interception zone appears to contain an increase in mineralisation. While the north – south trend extends from Snowy River to Big River North, more work is needed to help identify the possibility of another Big River shear system around Big River North where the geology is similar. This area is untested.

Additional drilling focussing on defining these high-grade pods within the shear envelopes may help increase the grade and ounces in the Big River MRE.

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

Enquiries

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Competent Person Statement

The information in this announcement that relates to the Big River MRE is based on, and fairly represents, information and supporting documentation prepared by Mr Mark McCulloch, a Competent Person of the Australasian Institute of Mining and Metallurgy. Mr McCulloch has a significant relevant experience in relation to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a competent person as defined in the 2012 Edition of the Joint Ore Reserves Committee Australasian Code for Reporting of Exploration Results. Mr McCulloch has consented to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

The information contained in this report relating to Mineral Resources other than the Big River MRE (Initial Resources), exploration results, and exploration targets have been previously reported by the Company (Announcements). The Company confirms that it is not aware of any new information or data that would materially affects the information included in the Announcements and, in the case of estimates in respect to the Initial Resources, released on 30 January 2023, that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.

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.*	- Soil samples were collected with a spade or auger. The C-zone was targeted with around 300gms collected. Samples were stored in waxed paper bags. - Ultrafine soil samples are collected by scraping off the A soil horizon and taking a 500gm sample of B-horizon. These samples are bagged in a paper bag and dried at 1000c for 12 hrs. The samples are then sent to LabWest in Perth for Ultrafine analysis. LabWest has developed the UltraFine+™ analysis process in conjunction with CSIRO since 2017.Analysis of the reactive 2-micron clay fraction, with microwave digestion and using the latest low detection level ICPMS technology. Ultrafine includes gold and 48 other elements. - Outcrop channel samples were generally collected at 1m intervals across the structure to get a true thickness. Samples were collected with a geological hammer and stored in calico bags. - Diamond core (DC) was used to obtain samples for geological logging and sampling. - DC core samples were split in half using a core saw at 1m intervals unless determined by lithology i.e. Quartz vein contacts. - Channel samples were taken on 1m sample lengths with 1-2 kg sample size using a geological hammer. - Core and channel samples were pulverised to >95% passing 75µm to produce a 30g charge for fire assay for Au. - Multi-element is now undertaken by pXRF on the returned Au pulps from SGS - All 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 of core with preservation of structures and broken core with less handling of the core.
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 except for BRDDH020 to 24 & BRDDH030 -31 were drilling by a Marooka mounted CS1000 rig. - 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 OGL drilling was completed PQ and HQ sizes. Both OGL and SGL's HQ and PQ core were orientated using Reflex orientation tools.
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.*	- OGL and SGC sample recovery recorded full run and geotechnical logging with total core recoveries, RQD and core loss is recorded for each drill run. - Core occurs around old workings where there are voids. - Core recoveries for the program so far around 91 to 99%. Highly shattered rock around puggy fault gouge zones are the areas where core loss can occur. No noticeable basis has been observed thus far in the mineralisation.

Criteria	Explanation	Commentary
	• *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.*	
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 that are similar to OGL. The logging method is quantitative. - OGL and SGL DD was oriented. Structural measurements were recorded during logging. - OGL relogged all the CRAE core. - SGL logging intervals are based on geological boundaries. OGL often logged on a metre-by-metre basis. - 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 the core shed in Reefton, NZ. - Channel samples were logged on the same lithological categories as DC.
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.*	- OGL & SGL 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 selected to be around 30° away from the orientation line unless dictated by the geologist. 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. - Channel samples are chipping along 1m length into the sample bag. - 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. - SGC took field duplicates and are routinely submitted as half core. Field duplicates were originally DD quarter cuts. To ensure equal weight the results for the two quarter cuts were average for comparison with the routine sample. - Field duplicates of the channel samples have been taken in some mineralised sections. - The DD (2-3 kg) and channel (1-2 kg) sample sizes are considered appropriate to the grain and particle size for representative sampling. - Sample preparation of DC and Channel samples by SGS Laboratories in Westport comprises; drying, crushing, splitting (if required) and pulverising to obtain analytical sample of 250g with >95% passing 75 µm where Au is assayed by 30g fire assay by SGS Waihi or Macraes.

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 Waihi to be analysed by low detection gold. - DC and Channel samples are sent to SGS Macraes and Waihi, New Zealand. SGS laboratories carry a full QAQC program and are ISO 19011 certified. - OGL analysed Au by 30g or 50g fire assay by SGS Westport and Reefton or ALS Brisbane. - SGL analysed Au by 30g fire assay by SGS Waihi or Macraes. - SGL DC multielement are sent to SGS Townsville, Australia for IMS40Q which is ICP-MS analysis after DIG40Q four acid digest for a 48-element suite. Holes drilled after BR24 were analysed by pXRF for multielement. - OGL DC multielement were completed by ALS, Australia using ICP (ME-ICP61) for 33 elements. As and Sb was analysed by SGS, Westport using XRF. - For each DC drillhole the sampling includes: - At least two Au certified Rocklab standards - Two blanks. - At least one field duplicate and laboratory duplicate per drill holes or taken every 25 samples. - Lab repeats are recorded. - Standards, duplicates and blanks are checked after receiving the results. The QAQC results so far has been acceptable. - SGL has a full working pXRF protocol and QAQC procedures for operation of the pXRF for analysis of pulps and samples. PXRF standards and blanks for used as well duplicate data being taken every 25 samples. - OGL DC submitted first 2 samples were blanks, >3 CRM's and >3 lab duplicated per drillhole. - OGL and SGL Screenfire included at least one coarse blank and 1kg quartz flushes were requested after samples with visible gold.
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 SGL stored in both CSV and laboratory signed PDF lab certificates. • Data is stored in excel, GIS, Dropbox and Leapfrog. The data storage system is basic but robust. • A logging, sampling and pXRF and QAQC standard operating procedures ae inplaced and working. • 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*	- The drillhole collar coordinate (X, Y, Z) are referenced to New Zealand Transverse Mercator 2000 (NZTM). All holes up to BRDDH045 have been picked up registered surveyor – Chris J Coll Surveying Ltd to 0.1m accuracy.

Criteria	Explanation	Commentary
	workings and other locations used in Mineral Resource estimation. • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	- A digital terrain model (DTM) was constructed based on LiDAR that was flown by NZ Aerial. All drill collars elevations were reconciled with the LiDAR. - Downhole surveys are available for all drill holes and one abandoned hole BRDDH041. - The correction used between magnetic north and true north (magnetic declination) was 23° East. - OGL surveyed on average every 30m using a digital downhole tool unless asked by geologist. - SGL surveyed on average of 15m until past 150-200m downhole where the surveys were increased to 30m. Surveys were taken using a Reflex tool.
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 Big River has generally been completed on a 100 x 50m spacing with ranges between 30m to 150m. - Drilling directions and distances in the Big River are variable because of the terrain, orientation of the target shears and shoots. 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. - 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.*	- Channel samples were taken across the mineralisation to sample as true thickness. - 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 and intact DC around mineralisation assists in understanding contacts, thickness and mineralisation orientation. - 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 SGL staff 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.*	- Entech and Measured Group have completed an audit as part of the 2022 Mineral Resource Estimation (MRE) of Alexander project. The results were satisfactory and any recommendations by the audits have been implemented.

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 Goldfield tenements both granted (7), and applications (6) are shown in the map in Figure 1. All SGL tenements or applications are 100% owned by SGL All the tenements are largely within the Department of Conservation (DoC) estate. Minimum Impact Activity (MIA) Access Agreements have been issued by DoC for Alexander River, Big River, Lyell, Golden Point, Auld Creek, and Cumberland. DoC Access Agreements (AA) that allow drilling, have been granted for Alexander River, Big River, Auld Creek, and Golden Point. SGL has lodged an AA for Lyell.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	- All exploration results in drill holes up to BRDDH019 are produced by OGL - (2011-2012) and BRDD020 – BRDD045 by SGL (2020 to 2022). - Before OGL, CRAE in the 1980's completed trenching and soil sampling programs. - OGL completed wacker geochemistry sampling, structural mapping and drilling. Diamond drilling commenced at the Big River project in 2011 when OGL drilled 19 holes for a total of 5,032.6m -
Geology	• *Deposit type, geological setting and style Of mineralisation.*	- Big River area is mainly underlain by a basement sequence of monotonous, inter-bedded quartzose sandstone (greywacke) and shale (argillite) of the Ordovician Greenland Group (**Error! Reference source not found.**) These rocks are weakly metamorphosed and variably deformed and are the primary host rock for gold mineralisation. Two-fold hinges have been mapped with a reasonable degree of confidence throughout the tenement and are thought to play a critical role in the distribution of mineralisation. In the southeast corner of the tenement, granitic igneous rocks correlated with the Cretaceous Separation Point Suite are juxtaposed against the Greenland Group rocks along a major northeast trending fault. In the north of the tenement, fault-bounded units of the Late-Cretaceous Hawks Crag Breccia lie to the east. Sandstone, quartzite mudstone and limestone sedimentary units of the Devonian Reefton Group are both faulted over, and lie unconformably over, Greenland rocks. The coal measures of the Tertiary Brunner Coal Measures, locally occur within the tenement area, overlying the Greenland Group basement. Younger (Quaternary) glacial and fluvio-glacial deposits are also locally preserved.

Criteria	Explanation	Commentary
		- The Ordovician Greenland Group hosts the Reefton Goldfield, which historically produced 2.1 Moz of gold. The largest producer, Blackwater Mine, extracted 730,000 oz gold and is located approximately 4 km east of the centre of the PP area. The Greenland Group also hosts the Globe Progress gold mine, which produced 610,000 oz before being placed into rehabilitation in 2016. Deformation due to east-west compression resulted in the formation of close to tight, upright, north-south trending fold axes with a single pervasive and penetrative steeply dipping, axial-planar cleavage (Rattenbury and Stewart, 1996). As deformation progressed, fold hinges were commonly sheared out by high angle reverse faults and bedding concordant quartz veins formed between discrete bedding planes. These discordant shear zones now host the bulk of the gold mineralisation in the Reefton Goldfield and are thought to have formed as a late stage, partially strike-slip, event at the culmination of the deformation. The mines in the Reefton Goldfield are in a zone known as the Reefton "mineralised corridor" (**Error! Reference source not found.**) which comprises several NNE-SSW trending anticlines and synclines. For example, the Birthday Reef in the Blackwater Mine is an axial planar structure to a syncline. Historic mining extended a short distance south of Snowy River, where the Greenland Group outcropped, but stopped at the contact with overlying gravel. The Reefton "mineralised corridor" structures are mapped southwards to the contact of the Greenland Group with overlying gravel on the south side of the Snowy River. - In general, two end members of mineralisation styles exist, which are possibly related to the structural setting outlined above. The Blackwater style is comprised of relatively undeformed quartz lodes; while the Globe-Progress style comprises highly deformed quartz and pug-breccia material. - Big River deposit is located in a hinge of upright gently northeast plunging anticline with mineralisation hosted on both limbs along mineralised shear zones in a Globe Progress style of mineralisation. Individual Quartz and PBX shoots are hosted within these mineralisation shears which consist of weaker mineralised brecciated & shattered host rock & fault and shear material. The hosting shears curve around the anticline and at least 2-3 main shear systems have been identified. The shoots on each side of the anticline limb plunge in different directions with respect to limb orientation. Shoot 4, on the eastern limb plunges steeply to the NE while A2 shear on the western limb plunges north. A2 also lies at interception of north-south mineralisation trend that's extends from St George (~3km to the south) to northeast of Big River North (~1km). This interception zone is poorly understood. Big River deposit northern margin is overlain by the Devonian Reefton Group, to the east lies and area has been affected by later stage dykes and Granite emplacement.

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*

HOLE_ID	NZTM_mE	NZTM_mN	RL	TD	Collar Dip	Collar Azimuth
BR0001	1509590.85	5322401.87	742.5	160.9	-57	199
BR0002	1509742.68	5322469.47	786.7	188.9	-52	207
BR0003	1509868.90	5322344.71	783.9	172.5	-61	301
BR0004	1509868.90	5322344.71	783.9	200.5	-55	215
BR0005	1509868.90	5322344.71	783.9	187	-59	246
BR0006	1509868.90	5322344.71	783.9	235.2	-55	194
BR0007	1509868.90	5322344.71	783.9	201	-70	209
BR0008	1509858.92	5322428.33	773.1	175	-56	245
BR0009	1509868.90	5322344.71	783.9	180	-77	250
BR0010	1509590.85	5322401.87	742.5	291.5	-54	167
BR0011	1509858.92	5322428.33	773.1	205.4	-50	265
BR0012	1509868.90	5322344.71	783.9	230.5	-80	201
BR0013	1510002.38	5322330.31	757.4	255	-50	281
BR0014	1510002.38	5322330.31	757.4	257.2	-54	240
BR0015	1509880.94	5322200.38	808.1	117	-60	289
BR0016	1509880.94	5322200.38	808.1	136.3	-55	235
BR0017	1509880.94	5322200.38	808.1	165	-72	244
BR0018	1510022.04	5322407.50	742.0	363	-63	268
BR0019	1510022.04	5322407.50	742.0	384.5	-71	281
BRDDH020	1509579.33	5322344.04	757.7	50.5	-60	290
BRDDH021	1509605.25	5322326.69	754.8	122.5	-60	280
BRDDH022	1509587.41	5322373.24	759.7	68.3	-60	275
BRDDH023	1509628.50	5322370.54	762.8	82.5	-60	275
BRDDH024	1509657.80	5322376.20	764.5	113.2	-60	275
BRDDH025	1509867.00	5322345.45	785.3	148.5	-55	270
BRDDH026	1509868.20	5322344.88	785.4	135.1	-45	225
BRDDH027	1509868.89	5322345.16	784.8	163	-69	235
BRDDH028	1509868.08	5322343.78	785.3	151.4	-82	285
BRDDH029	1509867.23	5322345.46	785.4	281.2	-90	285
BRDDH030	1509658.30	5322376.60	764.6	83	-60	340
BRDDH031	1509659.10	5322375.10	764.5	87.9	-60	160
BRDDH032	1509743.15	5322470.64	787.3	257.3	-76	135

BRDDH033	1509743.60	5322469.41	787.4	146.3	-55	160	
BRDDH034	1510031.36	5322407.91	730.0	407.4	-69	254	
BRDDH035	1510032.46	5322407.97	730.0	444.6	-74	249	
BRDDH036	1509739.82	5322468.95	787.5	230.5	-55	235	
BRDDH037	1509740.35	5322469.64	787.5	302.7	-60	265	
BRDDH038	1509740.10	5322469.72	787.6	248.2	-50	255	
BRDDH039	1509740.06	5322469.50	787.5	338.5	-72	280	
BRDDH040	1509740.47	5322470.56	787.3	314.7	-77	300	
BRDDH041	1509740.00	5322469.69	787.5	15	-65	275	
BRDDH041A	1509740.12	5322469.63	787.4	326.6	-65	275	
BRDDH042	1509739.74	5322469.41	787.4	269.1	-51	260	
BRDDH043	1509747.27	5322610.39	746.9	398.05	-79	230	
BRDDH044	1510032.46	5322407.97	730.0	452.8	-83	270	
BRDDH045	1510031.38	5322408.47	730.2	359.1	-61	242	

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.
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 true drillhole intercept thickness has estimated from sectional interpretation of the mineralised zone.

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*	- N/A

Criteria	Explanation	Commentary
	practiced to avoid misleading reporting of Exploration Results.	
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 Big River 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 SGL using software (Leapfrog Geo). Random spot checks were completed between database and hard copies. Prior to using the drilling data in the Mineral Resource estimate, SGL undertook a database audit. SGL database checks included the following: • Checking for duplicate drill hole names and duplicate coordinates in the collar table. • Checking for missing drill holes in the collar, survey, assay, and geology tables based on drill hole names. • Checking for survey inconsistencies including dips and azimuths 90˚, azimuths >360˚, and negative depth values. • Checking for inconsistencies in the 'From' and 'To' fields of the assay and geology tables. • The inconsistency checks included the identification of negative values, overlapping intervals, duplicate intervals, gaps and intervals where the 'From' value is greater than the 'To' value in assay and geology tables. • Checking density data. The drill hole data were considered suitable for underpinning Mineral Resource estimation of Inferred global gold ounces and incorporated drilling results available up to and including 05 April 2023.
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 has visited the site in person several times. The site visits included reviewing and supervision SGL core and core logging that was available on site as well as the ground over the mineral resource area which, drill supervision, involved spot checks on collar survey details. QAQC, geology modelling, and observations of mineralisation in the field and core.
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 SGL. - Mineralisation in hosts in 2 shears that curve around the anticline to A2 structure where the two shears merge in to one system. Within these mineralised shears are several shoots (Shoots 1 – 4 and A2) based on historic mining and drilling. The high-grade shoots contain mostly broken quartz reefs, quartz breccias, pug breccia within the hosting shear zones which are mostly and shattered disseminated mineralisation host rock, shear zones and host rock breccias. Disseminated mineralisation comprises silicified acicular arsenopyrite mineralised shattered siltstone and sandstone also occurs as a halo around mineralised shear zones. Mineralisation plunges to the east in the eastern portion of the deposit in Shoot 4 zone and to the north of the Anticline in A2 zone, it plunges to the north.

		- The shears and shoots within them are structurally controlled. The interception of the shears with the fold hinge appears to be on one of the important controls of the shoot orientation. The mineralised shears are continuous and can be traced across all the drilling. The high-grade zones within these shear envelopes appears to be though various in size and continuity. - A cut-off grade of 0.5g/t Au was used to guide the geological continuity of the interpreted shear mineralisation. The cut-off grade was selected based on the reef shoot contact correlating with mineralisation greater than 0.5 g/t Au. Within the mineralised wireframe, if an intercept fell below the nominal cut-off but continuity was supported by host lithologies, the intercept was retained for continuity purposes due to the commodity and the style of deposit. - Shears were modelled prior to the mineralisation domain interpretation commencing. Mineralisation domains were guided by shear models, and plunge orientations were determined using lithology, mineralogy and both arsenic as well as gold mineralisation. - The A2 was modelled to the surface were shallow drilling and channel sampling restrained it. The Shoot 4 domains were stopped under Level 1 workings. - The drill spacing provided confidence in the interpretation and continuity of grade and geology.

Criteria	Explanation	Commentary
Dimensions	• *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 2 areas; Shoot 4 and A2. Shoot 4 is spilt into 2 domains, Upper and Lower zones. The relative wireframe dimensions and variability in terms of continuity of each deposit is characterised in the table below. - The edge of the domains was set by grade, shape, spacing and continuity of geology and drilling. - A2 extended 350m down plunge, around 125 wide and varies from 1m to 20m thick. - The Upper and Lower Shoot 4 extend 400-500m down plunge, average 100m wide and 1-10m thick. Between BR34 & BR35 Upper Shoot 4 pinches out or merges with Lower Shoot 4.
Estimation and modelling techniques	• *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.*	- For this resource estimate, SGL 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. Leapfrog Edge Clamping was used Shoot 4 Lower first 2 estimation passes. - Individual domain variography, search distances, number of passes, minimum and maximum sample numbers are outlined in the Big River 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, domain boundary and estimation variable changes were undertaken.

Criteria	Explanation	Commentary
	• *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.*	- Arsenic is shown to be 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 SGL has completed its recovery test work. - Block sizes for each of the model areas are: Shoot 4 - 10m x 5m x 5m with a subblock down to 2 x 0.5m x 1m, A2 – 15m x 5m x 5m with a subblock down to 1.5m x 1m x 1m - Shoot 4 block model was rotated to 060° and the A2 rotated to 009°. 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 Big River Mineral Estimate Report. - As only gold is estimated in this mineral resource, no variables are correlatable. - The geological modelling each zone 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 mean of the bulk density measures was assigned to the block by mineralisation 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 Big River resources are based on a 1.0 and 1.5 g/t Au cut-off grade. This was based on consideration of potential underground mining method, and benchmarking against comparable-sized deposits of similar mineralisation style and tenor. - Mineral Resources are reported excluding all historical mining stope areas found in Upper Shoot 4.
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.*	- Underground mechanised mining methods are assumed. No mining dilution or minimum mining widths were assumed or applied within the Mineral Resource. - The Mineral Resource estimate extends nominally 500m below the topographic surface. SGL considers material at this depth would fall under the definition of 'reasonable prospects for eventual economic extraction' (RPEEE) in an underground mining framework. - Historical underground mining was undertaken at the project in the for 50 years from 1890's to 1942. The bulk of mining focused from levels 9 to 11 where 96k oz of Au was recovered from a total of 136k oz Au. However other levels were explored, developed and mined to varying extents with far smaller stoping zones taken. - No surveyed as-builts of mine workings was created at completion of mining in 1942, thus locations and extents of stoping voids were limited to digitisation from level plans, sourced by OGL and old mining plans. - Mined volumes have been derived though mine plans and generation of 3D wireframes for use within the block model. These void volumes contain potential errors in spatial position and may

		not account for all mining historically completed. - Depletion zone of Shoot 4 Upper takes an area from Level 2 down to Level 7 that covers the historically mined with small discontinuous 10-20m wide stopes taken on various levels in that domain. Shoot 4 lower and A2 appears to have exploration drives in it but no mining appears to have taken placed.
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 one composite sample derived from fresh Big River core. The metallurgical results indicates that the sample comprise refractory material that responds to flotation with a gold recovery of 97% by processing through a gravity circuit followed by flotation to a concentrate product. - No metallurgical recovery factors were applied to the Mineral Resources Estimate

Criteria	Explanation	Commentary
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 Big River Project lies within the Victoria Forest Park administered by the Department of Conservation (DoC). The Globe Progress open cut gold mine 13km to the north, which was successfully operated by OGL between 2007 and 2016 is also contained within Victoria 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 for timber for mining. - SGL has an Access Agreement with DoC which allows for 100 drill pads and several camps and helicopter landing sites. - No environmental factors were applied to the Mineral Resources or resource tabulations. The deposit is located on an existing exploration permit.
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 by massive sulphide and host rock. A mean of 2.75 t/m^3 were used for fresh host rock which is the same used for Alexander MRE. - Massive sulphide occurs in the upper zones of the A2 zone. The rock density here averages 3.8 t/m^3. The rock density of 2.75 t/m^3 was used in this zone as a level of conservatism. Shoot 4 domains started under Level 1 where the rock is fresh. - Big River density assignment is based on a density assessment completed in 2020-2022. 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.

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).*	- Mineral Resources were classified as Inferred to appropriately represent confidence and risk with respect to data quality, drill hole spacing, geological and grade continuity and mineralisation volumes. - Additional considerations were the stage of project assessment, amount of diamond drilling undertaken, current understanding of mineralisation controls and selectivity within an underground mining environment. - In SGL opinion, the drilling, surveying and sampling undertaken, and analytical methods and quality controls used, are appropriate for the style of deposit under consideration. Inferred Mineral Resources were defined where a low to moderate level of geological confidence in geometry, continuity and grade was demonstrated. The reported Mineral Resource was depleted for historical mining and constrained at depth by the available drill hole spacing outlined for Inferred classification,
	• *Whether the result appropriately reflects the Competent Person's view of the deposit.*	- 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 of the MRE by SGL 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.*	- Variances to the tonnage, grade, and metal tonnes of the Mineral Resource estimate are expected with further definition drilling. - It is the opinion of the Competent Person that the classification criteria for Inferred Mineral Resources appropriately capture and communicate these variances and risks. - The Mineral Resource estimate is considered fit for the purpose of drill targeting. - The Mineral Resource Statement relates to global tonnage and grade estimates. No formal confidence intervals nor recoverable resources were undertaken or derived. - Variography was completed for Gold and used to influence the resource classification. The variogram models were interpreted as being isotropic along the plane of shoot 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.