

# Siren's Global Resource increases to >1.3 Moz AuEq

Siren Gold Limited (ASX: SNG) (Siren or the Company) is pleased to provide a maiden Mineral Resource Estimate for the Auld Creek Prospect.



## Highlights

- A maiden **Mineral Resource Estimate (MRE)** of **132koz @ 7.1g/t AuEq** containing **66koz @ 3.5g/t Au** & **8,700t of antimony @ 1.5% Sb**.
- **The MRE** comprises the **Fraternal Shoot only** and is based on existing surface trenches and drillholes and extends to approximately 170m below the surface.
- The Fraternal Shoot remains open at depth and there are three other shoots identified at Auld Creek (Fraternal North, Bonanza and Bonanza East Shoots).
- The MRE includes the following significant intersections;
  - 35.0m @ 4.1g/t Au, 2.9% Sb or **35.0m @ 11.0g/t AuEq**,
  - 6.0m @ 4.1g/t Au, 4.1% Sb or **6.0m @ 13.8g/t AuEq**,
  - 34.0m @ 1.6g/t Au, 0.7% Sb or **34.0.0m @ 3.3g/t AuEq**, and
  - 20.7m @ 5.9g/t Au, 2.6% Sb or **20.7m @ 12.0g/t AuEq**.
- Siren's Reefton Mineral Resource estimate now stands at 444koz of gold and 8.7kt of Sb for **511koz @ 4.4 g/t AuEq**.
- Siren's Global Mineral Resource estimate now stands at 1.27Moz of gold and 8.7kt of Sb for **1.33Moz @ 3.3 g/t AuEq** (100% basis).

## Executive Chairman Brian Rodan commented:

"The Auld Creek Resource is the fourth high grade Resource defined at Reefton with all Resources remaining open along strike and at depth. The Auld Creek deposit is the first with high grade antimony which is a critical mineral in the global transition to clean energy. Siren's vision is to be a multiple million-ounce high grade gold and antimony producer and with a global MRE now above 1.3Moz, we are well on track with this vision."

### Registered Address

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### Corporate

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**Paul Angus**  
Technical Director

**Keith Murray**  
Non-Executive Director  
**Sebastian Andre**  
Company Secretary

### Projects

Sams Creek Project  
Reefton Project

### Capital Structure

Shares: 134,258,807  
Options: 9,293,262

**Table 1. Siren's Reefton Mineral Resource Estimate.**

Project	Status	Cut-off g/t	Tonnes Mt	Au g/t	Sb %	Ounces koz	Sb kt	AuEq g/t	AuEq koz
Alexander River	Inferred	1.5	1.07	4.95		169.6		4.95	169.6
Big River	Inferred	1.5	0.83	3.94		105.5		3.94	105.5
Supreme	Inferred	1.5	1.05	2.71		103.3		2.71	103.3
Auld Creek	Inferred	1.5*	0.58	3.53	1.5	65.8	8.7	7.10	132.4
<b>Total</b>	<b>Inferred</b>	<b>1.5</b>	<b>3.53</b>	<b>3.81</b>		<b>444.2</b>	<b>8.7</b>	<b>4.40</b>	<b>510.8</b>

\*Based on gold equivalent formula of  $AuEq = Au\ g/t + 2.36 \times Sb\%$  using a gold price of US\$1,750/oz & antimony price of US\$13,000 per tonne.

**Table 2. Siren's Global Mineral Resource Estimate.**

Project	Status	Cut-off g/t	Tonnes Mt	Au g/t	Sb %	Ounces koz	Sb kt	AuEq g/t	AuEq koz
Sams Creek <sup>1</sup>	Indicated	1.5	3.29	2.80		295.6		2.80	295.6
<b>Total</b>	<b>Indicated</b>	<b>1.5</b>	<b>3.29</b>	<b>2.80</b>		<b>295.6</b>		<b>2.80</b>	<b>295.6</b>
Sams Creek <sup>1</sup>	Inferred	1.5	5.81	2.83		528.8		2.83	528.8
Alexander River	Inferred	1.5	1.07	4.95		169.6		4.95	169.6
Big River	Inferred	1.5	0.83	3.94		105.5		3.94	105.5
Supreme	Inferred	1.5	1.05	2.71		103.3		2.71	103.3
Auld Creek	Inferred	1.5*	0.58	3.53	1.5	65.8	8.7	7.10	132.4
<b>Total</b>	<b>Inferred</b>	<b>1.5</b>	<b>9.34</b>	<b>3.20</b>		<b>973</b>	<b>8.7</b>	<b>3.42</b>	<b>1039.6</b>
<b>Total</b>	<b>Indicated + Inferred</b>	<b>1.5</b>	<b>12.63</b>	<b>3.10</b>		<b>1,268.6</b>	<b>8.7</b>	<b>3.26</b>	<b>1,335.2</b>

\*Based on gold equivalent formula of  $AuEq = Au\ g/t + 2.36 \times Sb\%$  using a gold price of US\$1,750/oz & antimony price of US\$13,000 per tonne.

<sup>1</sup>Siren owns 81.2% of the Sams Creek Project.

## Background

The Auld Creek Prospect is contained within Siren's Golden Point exploration permit and is situated between the highly productive Globe Progress mine, which historically produced **418koz @ 12.2g/t Au**, and the Crushington group of mines that produced **515koz @ 16.3g/t Au** (Figure 1). More recently OceanaGold (OGL) mined an open pit and extracted an additional 600koz of gold from lower grade remnant mineralisation around the historic Globe Progress mine. Collectively these mines produced **1.6Moz at 10g/t Au**.

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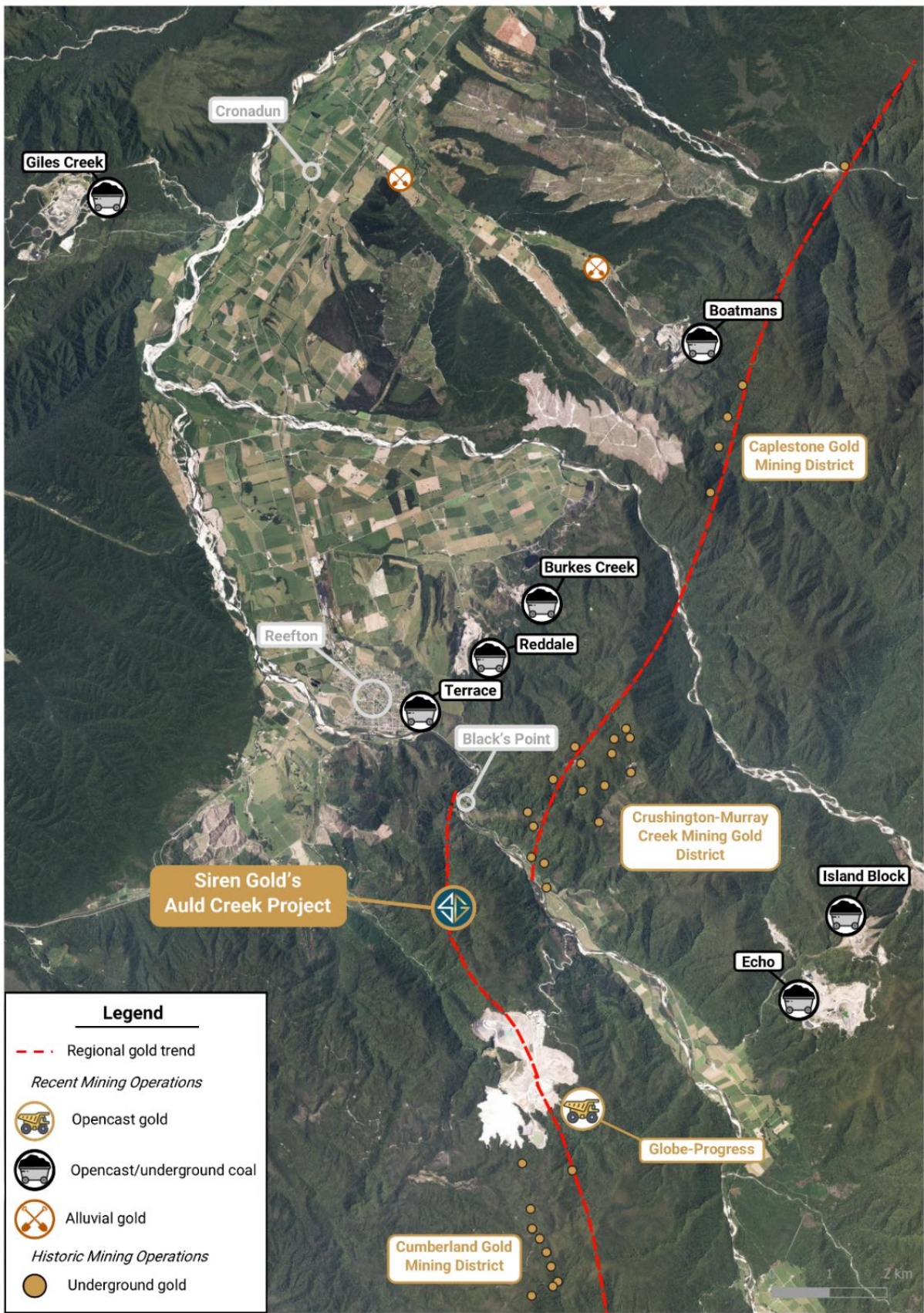


Figure 1. Reefton area showing Auld Creek Project, and surrounding gold and coal mines.



Within **20kms** of the **Auld Creek Project** at Reefton there are **18 mines**, including seven coal mines and the Globe Progress gold mine. A coal handling facility and train loadout are located at the northern end of Reefton town.

The Auld Creek Prospect represents high-grade **gold-antimony (Sb)** mineralisation that was potentially offset to the west, along NE-SE trending faults between Globe Progress and Crushington.

The Auld Creek arsenic soil anomaly now extends for over 700m along strike. Trenching along the soil anomaly has clearly defined the high-grade Au-Sb mineralisation in the **Fraternal, Fraternal North, Bonanza** and **Bonanza West Shoots** (Figure 2).

The Reefton Goldfield can be correlated with the Lachlan Fold that contains epizonal gold-antimony deposits like Fosterville and Costerfield. Siren's Auld Creek epizonal deposit contains high grade gold and massive stibnite veins.

Siren has used the same gold equivalent formula ( $AuEq = Au \text{ g/t} + 2.36 \times Sb \%$ ) used by Mandalay Resources Ltd for the Costerfield mine (refer Mandalay Website: Mandalay have adopted CY2022 metal prices of US\$1,750 / ounce gold and US\$13,000 / tonne antimony).

## Fraternal Shoot

Previously reported **Fraternal** diamond drilling downhole intercepts include:

- 35.0m @ 4.1g/t Au, 2.9% Sb or **35.0m @ 11.0g/t AuEq** (RDD087),
- 6.0m @ 4.1g/t Au, 4.1% Sb or **6.0m @13.8g/t AuEq** (RDD086),
- 34.0m @ 1.6/t Au, 0.7% Sb or **34.0m @ 3.3g/t AuEq** (RDD085),
- 20.7m @ 5.9g/t Au, 2.6% Sb or **20.7m @ 12.0g/t AuEq** (ACDDH004), and
- 17.9m @ 2.3g/t Au, 0.1% Sb or **17.9m @ 2.6g/t AuEq** (ACDDH005).

Significant drillhole intersections are shown in Figure 2 and Table 3. The plunge of the Fraternal and Fraternal North shoots has been increased in Figure 3 from around 25° to 45° based on the AuEq model (see Figure 6) and the lower grade intersections in AZDDH008 and ACDDH009.

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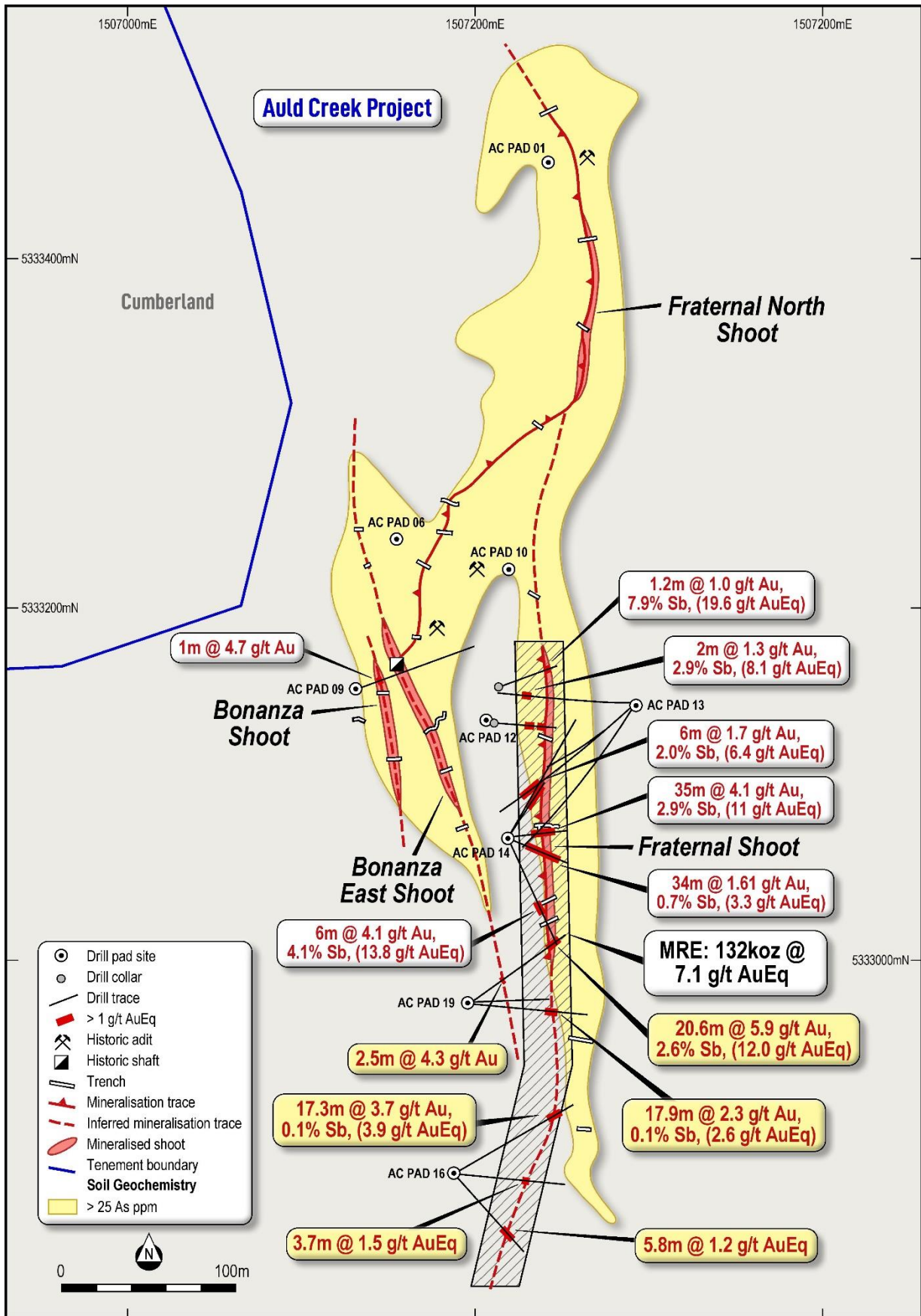


Figure 2. Auld Creek drillhole plan and MRE limits

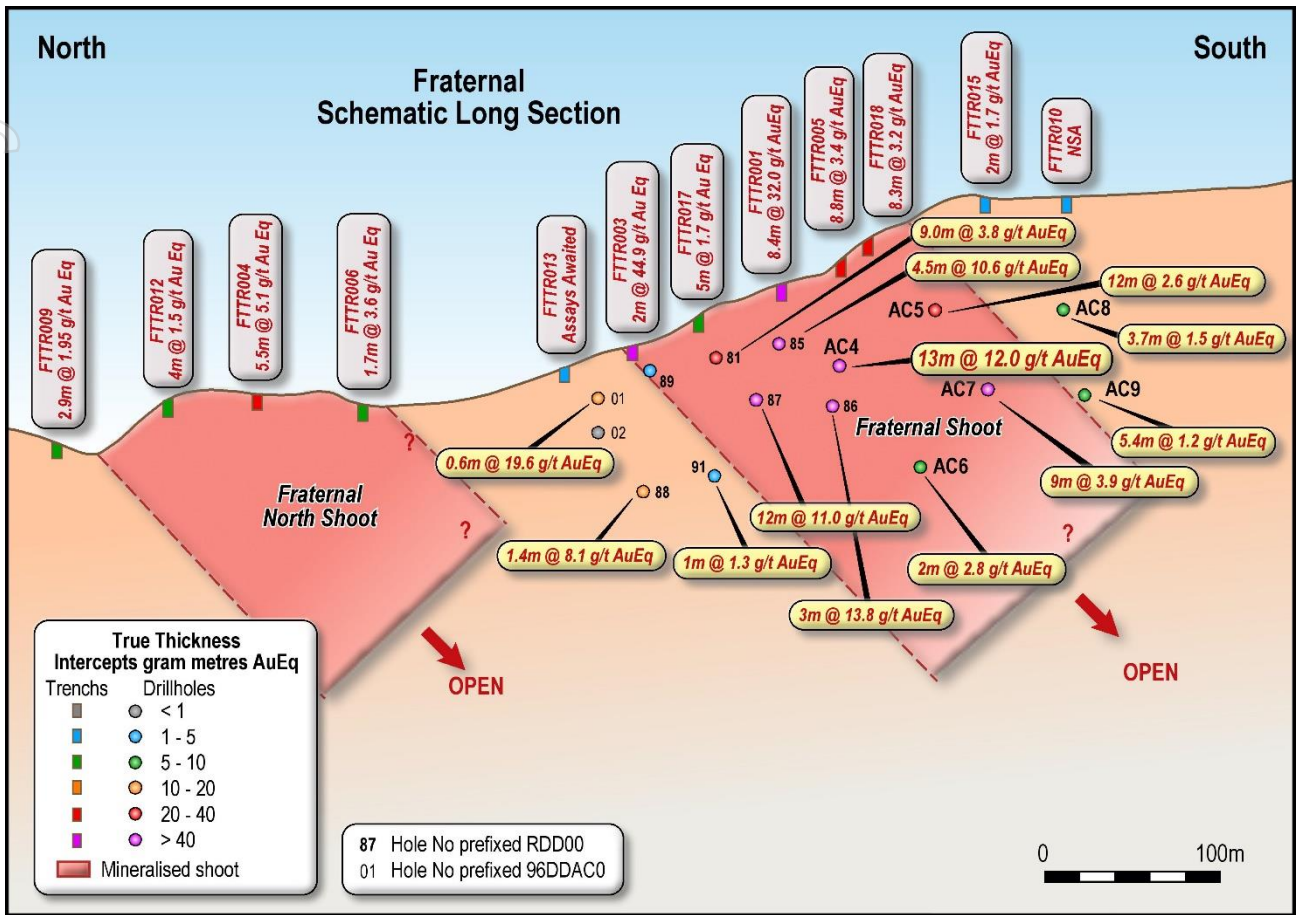


Figure 3. Schematic long section through the Fraternal Zone.

Table 3. Significant drillhole intercepts.

Hole ID	Mineralised Zone	From	To	Interval (m)	True Width (m) <sup>1</sup>	Au g/t	Sb %	AuEq g/t <sup>2</sup>
96DDAC001	Fraternal	51.9	53.1	1.2	0.6	1.0	7.9	19.6
RDD0081	Fraternal	45.0	51.0	6.0	3.0	1.7	2.0	6.4
	Fraternal	57.0	67.0	11.0	6.0	2.2	0.1	2.5
RDD0081a	Fraternal	57.0	67.0	10.0	5.5	1.7	0.1	1.9
RDD0085	Fraternal	30.0	64.0	34.0	20.5	1.6	0.7	3.3
Incl		30.0	37.0	7.0	4.5	3.0	3.2	10.6
Incl		43.0	51.0	8.0	5.2	2.6	0.2	3.0
Incl		59.0	64.0	5.0	3.4	1.6	0.0	1.7
RDD0086	Fraternal	90.0	96.0	6.0	3.0	4.1	4.1	13.8

Hole ID	Mineralised Zone	From	To	Interval (m)	True Width (m) <sup>1</sup>	Au g/t	Sb %	AuEq g/t <sup>2</sup>
RDD0087	Fraternal	63.0	98.0	35.0	<b>12.0</b>	<b>4.1</b>	<b>2.9</b>	<b>11.0</b>
Incl		63.0	81.0	18.0	5.5	<b>5.7</b>	<b>4.8</b>	<b>17.1</b>
RDD0088	Fraternal	125.0	127.0	2.0	1.4	1.3	<b>2.9</b>	<b>8.1</b>
ACDDH004	Bonanza	53.3	55.9	2.6	2.0	<b>4.3</b>	0.0	<b>4.3</b>
ACDDH004	Fraternal	116.2	136.8	20.6	<b>13.0</b>	<b>5.9</b>	<b>2.6</b>	<b>12.0</b>
Incl		116.2	120.8	4.6	3.0	<b>10.7</b>	<b>3.9</b>	<b>19.9</b>
ACDDH005	Fraternal	59.4	77.3	17.9	<b>12.0</b>	2.3	0.1	2.6
Incl		59.4	63.3	3.9	2.6	3.3	0.1	3.6
Incl		67.3	77.3	10.0	6.7	2.8	0.1	3.1
ACDDH006	Fraternal	147.5	156.1	8.6	4.0	1.3	0.2	1.7
Incl		147.5	150.4	3.1	2.0	1.7	0.5	2.8
ACDDH007	Fraternal	124.0	150.5	26.5	<b>15.0</b>	2.7	0.07	2.9
Incl		133.0	150.5	17.5	<b>9.0</b>	<b>3.7</b>	0.1	<b>3.9</b>
Incl		142.0	148.5	8.5	4.5	<b>6.7</b>	0.0	<b>6.7</b>
Incl		142.0	148.5	6.5	3.7	<b>8.5</b>	0.0	<b>8.5</b>
ACDDH008		72.1	76.3	4.2	4.0	<b>1.5</b>	0.0	<b>1.5</b>
ACDDH009		118.7	124.2	5.5	2.7	<b>1.1</b>	0.0	<b>1.1</b>

<sup>1</sup> True widths are based on a sectional interpretation of the Fraternal mineralised zone dipping steeply (~85°) to the west. This dip may vary as more data becomes available and the true widths may change.

<sup>2</sup> Based on gold equivalent formula of AuEq = Au g/t + 2.36 x Sb%.

## Auld Creek Maiden Mineral Resource Estimate

Siren has completed the maiden Auld Creek mineral resource estimate (MRE) based on an underground mining scenario. The MRE, which is in accordance with the JORC 2012 Code, has utilised geological and assay data from 2,929.3m of diamond core drilling from 23 drillholes and 7 trenches, totaling 62.8m.

Details regarding the estimation of the Mineral Resources for the Auld Creek 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 Mark McCulloch. A single mineralised grade domain was used, based on the Fraternal Shear Zone.

The mineralised domain was defined using the 23 drillholes in the database, intersecting the modelled mineralised domain. Geological mapping and trenching completed by SNG defined the surface trace of the mineralisation. Drillhole cross sections by Siren geologists were also used to guide the geological interpretation of the mineralised zone.

A nominal cut-off grade of 0.50g/t AuEq was used to guide the continuity of the mineralised wireframe, however, at the modelling geologist's discretion, intervals of 0.50 g/t AuEq were omitted from wireframes (e.g. on the periphery of mineralisation). An east dipping Bonanza mineralised structure intersects the Fraternal Shear but was not included in the model.

Mineralisation domain wireframe was modelled using the Leapfrog Geo vein modelling technique. An oxide wireframe was designed from the weathering logged in the drillholes. Density data for waste and mineralisation has been collected during Siren's drilling program. No densities were taken in weathered rock at Auld Creek. The geology is very similar to Siren's Big River and Alexander River Reef ton projects, and oxide densities from these projects were used.

No historical mine workings are found in the Fraternal Shear zone.

## Sampling and Analysis

Selective sampling of drill core was completed where mineralisation was geologically logged, with intervals selected for sampling 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 based AuEq data;
- Hard boundary compositing in Leapfrog – Edge Module (Leapfrog Edge);
- Variography and Ordinary Kriging in Leapfrog Edge; and
- Block Model Estimation in Leapfrog.

Au and Sb were estimated individually, with the AuEq being calculated from these results. Composites for each element were based on 1m composites. Outlier grades were assessed by reviewing composite histograms of gold grade. Extreme outlier grades were not identified, and it was determined that no top-cut was required.

An estimation domain was created for the Fraternal mineralisation shear zone. The domain was hard boundary domain based on a 0.5g/t AuEq cut-off.

Individual domain search distances, number of passes, minimum and maximum sample numbers, block size, variography and Exploration Data Analysis (EDA) are outlined in the Auld Creek Mineral Resource Estimate Report and summarised in JORC Table 1.

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 boundaries and estimation parameters were undertaken.

## Cut-off Grades

The MRE has been reported at 1.5g/t Au cut-off grade, which Siren considers appropriate for an underground mining operation.

Siren has used the same gold equivalent formula ( $AuEq = Au_{g/t} + 2.36 \times Sb \%$ ) used by Mandalay Resources Ltd for the Costerfield mine (refer Mandalay Website: Mandalay have adopted CY2022 metal prices of US\$1,750 / ounce gold and US\$13,000 / tonne antimony).



### 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 Auld Creek MRE has been classified by the independent Competent Person as 'Inferred' based on the current understanding of geological and grade continuity and drill density. 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:

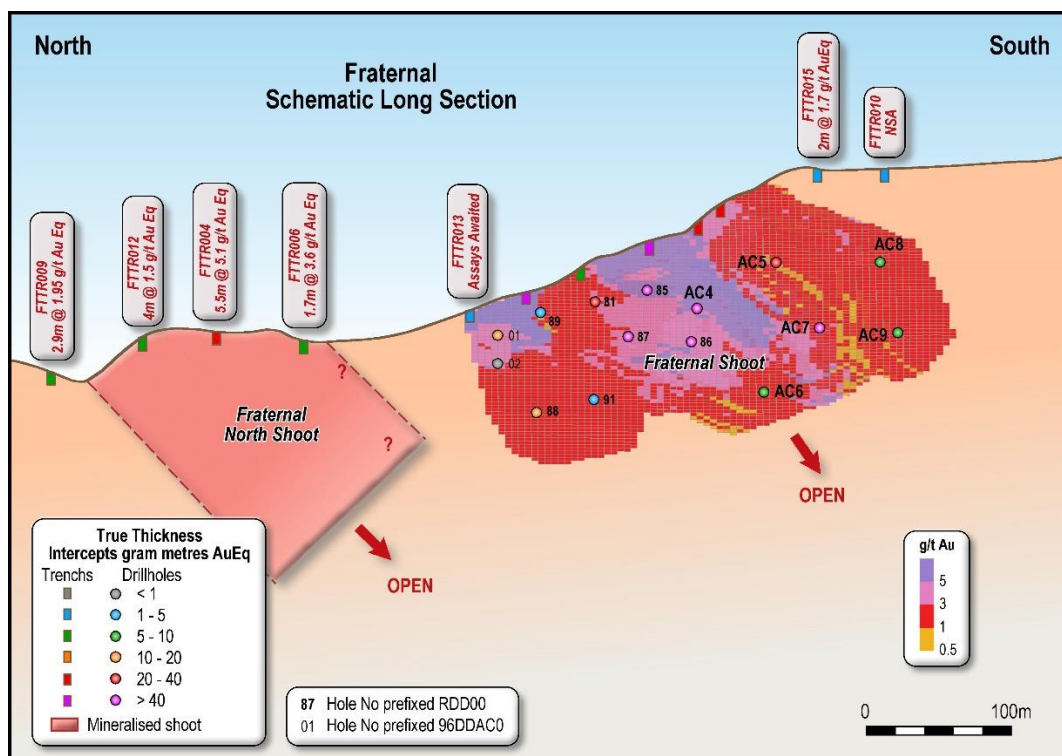
- Drillhole density, and
- Structural controls and geological continuity

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 with Au g/t, Sb % and AuEq g/t at a 0.0 g/t, 1.0g/t and 1.5g/t AuEq cut-offs are shown in Table 4. Images of the block model for Au, Sb and AuEq are shown in Figures 4-6.

**Table 4. Auld Creek Mineral Resource Estimate at various cut-offs.**

AuEq Cut-off (g/t)	Status	Tonnes (kt)	Au (g/t)	Ounces (koz)	Sb%	Kt	AuEq g/t	AuEq (koz)
0.0	Inferred	645	3.29	68.2	1.36	8.8	6.51	135.0
1.0	Inferred	636	3.32	67.9	1.38	8.8	6.58	134.7
1.5	Inferred	580	3.53	65.8	1.51	8.7	7.10	132.4



**Figure 4. Long section showing gold block model for the Fraternal Shoot.**

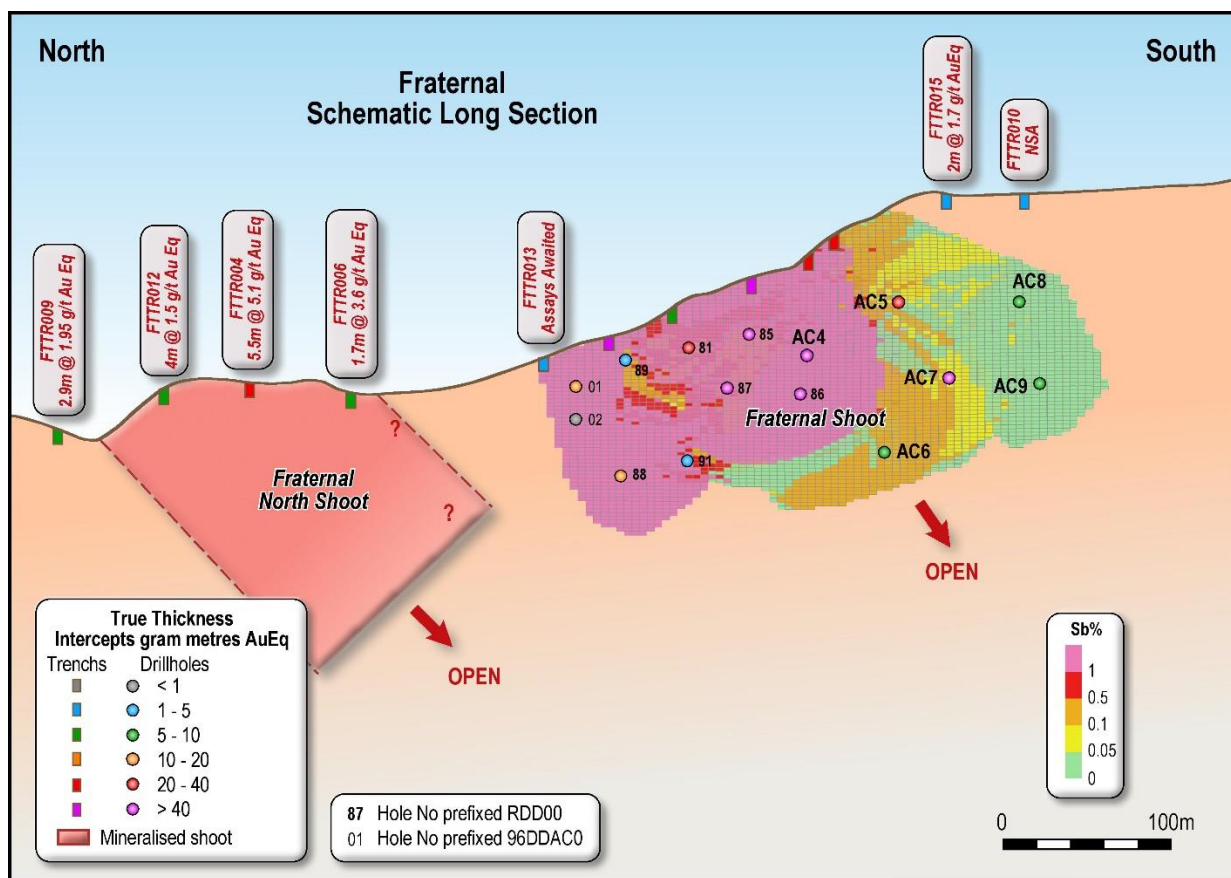


Figure 5. Long section showing antimony block model for the Fraternal Shoot.

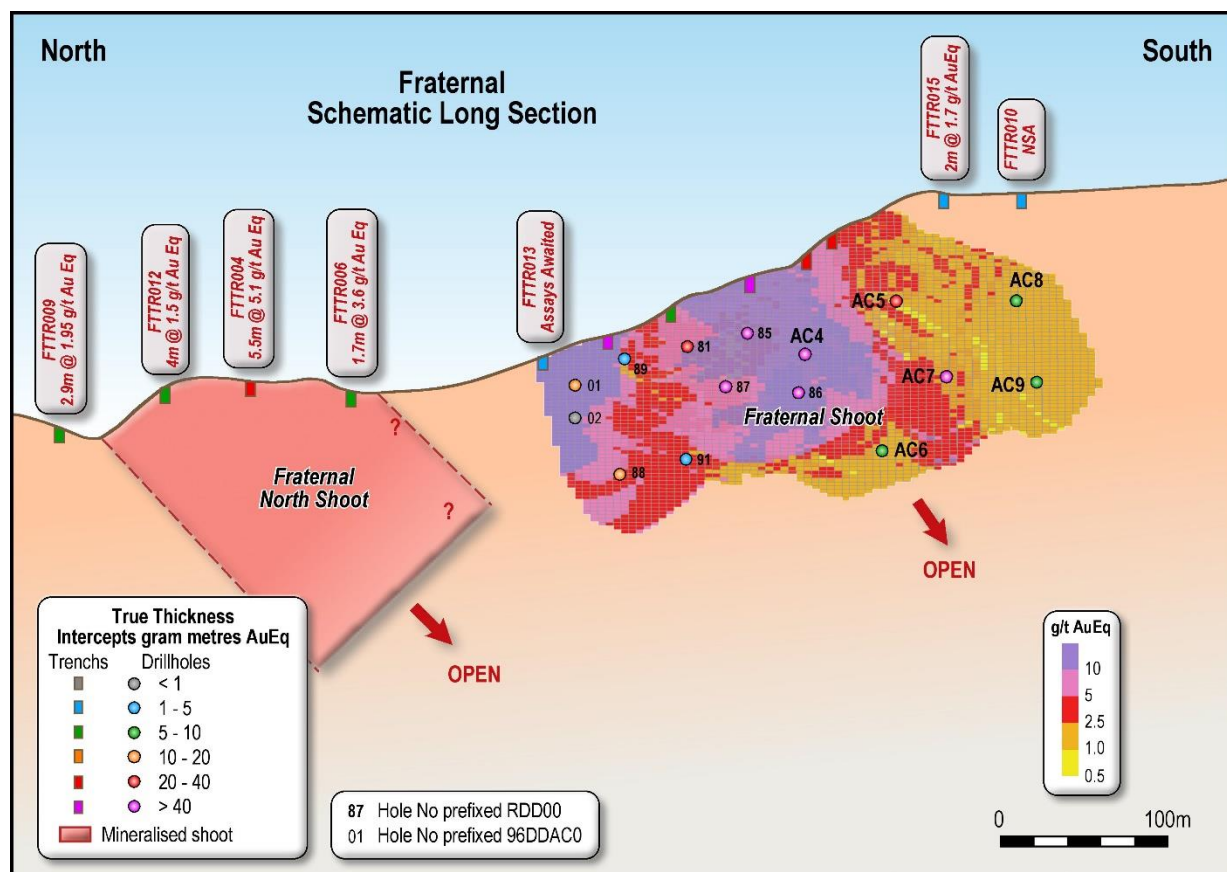


Figure 6. Long section with gold equivalent block model for the Fraternal Shoot.

## Next Steps

The next stage of drilling will target down plunge extensions of the Fraternal Shoot, along with initial drilling to target the Fraternal North, Bonanza and Bonanza East Shoots (see Figure 2).

The MRE will be updated once the next phase of drilling is completed.

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 Surpeme 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 affect 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.

# JORC Code, 2012 Edition – Table 1

## Section 1 Sampling Techniques and Data

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

	JORC Code Explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Oceana Gold Corporation (OGL) &amp; Macraes Mining Co Ltd (MMCL) diamond core (DC) was used to obtain samples for geological logging and sampling.</li> <li>OGL DC core samples were spilt in half using a core saw at 1m intervals unless determined by lithology i.e. Quartz vein contacts.</li> <li>OGL completed 5m composited grind samples through barren host rock and assayed only for Au.</li> <li>CRAE and MMCL channel and trench samples were based on 1m sample lengths with sample size and collection method is unknown.</li> <li>OGL DC samples were pulverised to &gt;95% passing 75µm to produce a 50g charge for fire assay for Au.</li> <li>Siren Gold Limited (SGL) trench sampling was taken based on 1m samples unless determined by lithology or mineralisation. <i>In situ</i> rock samples collected by geology hammer with average sample size of 2 kg.</li> <li>Soil sampling was completed by hand auger or spade by CRAE. Macraes Mining Co Ltd (MMCL) used both hand auger &amp; wacker drill for soil sampling. OGL collected soil samples by wacker drill collecting around 300-500g sample. SGL used a hand auger to collect 300-400g sample of B-C horizon.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>Diamond drilling with DC diameters included PQ (96mm), HQ (63mm and NQ (47.6mm) and OGL &amp; SGL drilling is triple tubed using CS1000 or LF70 heli-rigs.</li> <li>2013 OGL drilling trailed open holing with a Strata-Pac collar for 50.6m in RDD0091.</li> <li>All drilling has been helicopter supported.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Full run and geotechnical logging with total core recoveries, RQD and core lost has been recorded by 1m for OGL 2007 &amp; 2011 drilling.</li> <li>Core recoveries for OGL were good. Highly shattered rock around puggy fault gouge zones are the areas the core loss can occur. No noticeable losses were observed by OGL or by SGL.</li> </ul>



	JORC Code Explanation	Commentary
Logging	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>• The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>• All DC for OGL were logged for lithology, weathering, bedding, structure, alteration, mineralisation, jointing, colour and grain size using a standard set of inhouse logging codes and a template that was very similar to previous logging by OceanaGold (OGL) exploration programs. The logging method is quantitative.</li> <li>• Logging entered into an acQuire database.</li> <li>• OGL reported all core trays were photographed prior to core being sampled.</li> <li>• MMCL logging was completed on paper which was entered into OGL acquire database. Hard copies of these logs are complete.</li> <li>• SGL trench and DC logging is based on RRL core logging templates with similar quantitative data captured as OGL.</li> <li>• Photos are taken of the trench and of each sample.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>• If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>• For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>• Quality control procedures adopted for all sub-sampling stages to maximise representativity of samples.</li> <li>• 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.</li> <li>• Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>• DC sample intervals were marked on the core, which was sawn in half length ways with a diamond cutting saw. The resulting core was taken for the laboratory sample and remaining core was archived.</li> <li>• DC sampling was based on 1m lengths as well as allowing for geology.</li> <li>• Laboratory duplicates and laboratory repeats were collected and assayed.</li> <li>• The DC (2-3kg) and channel (1-2kg) sample sizes are considered appropriate to the grain and particle size for representative sampling.</li> <li>• OGL completed 5m composited grind samples in barren host rock. Any grind samples that returned anomalous mineralisation (equivalent to at least 1m at 0.5 g/t Au), then had the equivalent core intervals cut in half and submitted to the laboratory as one metre half core samples.</li> <li>• MMCL sampling SOP for DC is not recorded but DC sample lengths varied from 2m in barren rock to 1m lengths in mineralised core.</li> <li>• SGL trench sample length is based on 1m with field duplicates taken on 1:20 samples.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>• 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.</li> <li>• Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory</li> </ul>	<ul style="list-style-type: none"> <li>• CRAE tested their soils for Au (ppb) As, Cu, Pb and Zn by Fire assay. CRAE tested their trench samples for Au, As &amp; Sb.</li> <li>• MMCL stream sediment samples were analysed for for Au (&gt;1 ppb Au detection limit), Ag, As, Ba, Bi, Cd, Co, Cu, Mo, Pb, Sb, and Zn.</li> <li>• 1996 MMCL DC were tested for Au, As, Sb, Cu, Pb &amp; Zn. Their trenching &amp; soil samples were processed by ALS for a suite that included Au (&gt;1 ppb Au), As, Bi, Ca, Cu, Fe, Mn, Mo, Pb, Sb, and Zn.</li> <li>• OGL 2007 DC samples were set to Amdel Laboratories in Macraes Flat, NZ for Au, As &amp; Sb.</li> <li>• 2011 OGL DC and Channel samples are sent to SGS New Zealand. SGS</li> </ul>

**JORC Code Explanation**

**Commentary**

*checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*

- laboratories carry a full QAQC program and are ISO 19011 certified where they were assayed by 50g fire assay.
- OGL DC & wacker submissions included at least 2 Au Rocklab standards, 1 blank, laboratory duplicates and lab repeats were recorded.
  - 2011 Au results were completed at Reefton SGS mine lab while As and Sb were analysed at SGS Westport. Sb was analysed by XRF pressed powder pellet. Over limit method for Sb is unknown.
  - Sample preparation of OGL's DC at SGS comprised of drying, crushing, splitting (if required) and pulverising to obtain analytical sample of 250g with >95% passing 75 µm.
  - 2013 OGL included at least 1 certified standard and 2 blanks as well as at least 2 duplicates and were tested at SGS Reefton & Westport for Au, As & Sb. Sb was analysed by XRF pressed powder pellet.
  - OGL reviewed their results based on the performance of their certified standards results. If both standard assays from the same batch returned assay values outside two standard deviations of the actual value, the laboratory was requested to re-assay the job.
  - SGL re-assayed RRD087 and SGL trenches have been assayed using SGS, New Zealand using FAM303 with 30g fire assay and AAS finish for Au. 42 multielement suite are then analysed by an Olympus Vanta pXRF on the <75µm pulps received from SGS. Sb is included which has a lower detection limit of 5ppm.
  - SGL samples are submitted with blanks, duplicates, lab repeats and CRM for Au analysis as well as full QAQC program of blanks, standards, repeats & duplicates during pXRF multielement analysis of the pulps.
  - 2011 wacker soil samples were sent to ALS Brisbane for 8 elements suite while rock chip samples were sent to SGS for Au, As & Sb.
  - SGL soil samples are sent to SGS New Zealand for Au 30g fire assay analysis for ppb detection limits. The pulp is returned for a full analysis completed by Olympus Vanta pXRF with full QAQC. Preliminary soil sample analysis after the sample is dried in the oven for >6 hours at 100°C before the samples are sent to SGS.
  - 2023 SGL DC and Channel samples are sent to SGS New Zealand. SGS laboratories carry a full QAQC program and are ISO 19011 certified where they were assayed by 30g fire assay. Screen Fire Assays are undertaken if there is visible gold. Pulps from the laboratory are analysed by RRL with a pXRF.
  - Antimony is analysed by pXRF with round robin check samples sent to ALS Brisbane where they are analysed by XRF.

*Verification of sampling and assaying*

- *The verification of significant intersections by either independent or alternative company personnel.*
- *The use of twinned holes.*
- *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*

- Hard copies of the results for 1996 exploration by MMCL were entered into acquire database by OGL.
- All laboratory assay results were received by OGL were stored in an acquire database and laboratory signed PDF lab certificates for 2013 have been submitted to NZPAM.

personal use only

	JORC Code Explanation	Commentary
	<ul style="list-style-type: none"> <li>• Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>• SGL data is stored in excel, Dropbox and Leapfrog. The data storage system is basic but robust.</li> <li>• All SGS assay results received by SGL are signed PDF lab certificates hard copies that are stored.</li> <li>• The data and future work will be stored and managed on a commercial database with inbuilt validation protocols in the future.</li> <li>• OGL completed RDD0081 and RDD0081A which are 3m a part.</li> <li>• Sb results have also been adjusted for AuEq using (<math>AuEq = Au\ g/t + 2.36 \times Sb\ \%</math>). See Section 2 - Data aggregation methods</li> </ul>
<p>Location of data points</p>	<ul style="list-style-type: none"> <li>• Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>• Specification of the grid system used.</li> <li>• Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>• Handheld GPS were used by OGL for placing and picking up the drillhole collars with series RDD00* while MMCL drillholes with the prefix of 96DDA* were picked up by Chris Coll, a registered surveyor.</li> <li>• OGL &amp; MMCL used New Zealand Map Grid (NZMG).</li> <li>• SGL used handheld Garmin 64s to pick up trenches, check old pad sites and mapping.</li> <li>• The data has translated into Transverse Mercator 2000 (NZTM).</li> <li>• Downhole surveys were taken every 50m in 2007 and 30m in 2011 &amp; 2103 OGL drill programs.</li> <li>• SGL used a Precision downhole gyro for 15m surveys.</li> <li>• 1996 drilling by Macraes Limited completed a downhole survey at the end of the hole.</li> <li>• Relative level (RL) is calculated as above Sea Level</li> <li>• SGL trenches are surveyed at the collar and azimuth and dip are taken at any changes along the trench length.</li> </ul>
<p>Data spacing and distribution</p>	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> <li>• 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.</li> <li>• Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>• Drilling directions and distances were variable because of the terrain and orientation of the target reef system but were within 25 to 75m spacing at the Fraternal zone.</li> <li>• Some pads had multiple drilling fanning from them.</li> </ul>
<p>Orientation of data in relation to geological structure</p>	<ul style="list-style-type: none"> <li>• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>• If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this</li> </ul>	<ul style="list-style-type: none"> <li>• Drilling design was planned to intercept the mineralisation at high angles but with drilling multiple holes from a single heli-drill pad into a very steep dipping reef zone mineralisation was intercepted at a lower angle when drilling down dip.</li> </ul>

	JORC Code Explanation	Commentary
	<i>should be assessed and reported if material.</i>	
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>OGL DC, soil and trench samples taken for the purposes of laboratory analysis were securely packaged on site and transported to the relevant laboratories by OGL.</li> <li>MMCL and CRAE did not record their sample security processes.</li> <li>SGL samples are stored in a locked core shed until despatch. Samples are transported to SGS, Westport by SGL.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No review of sampling techniques and data of recent sampling has been undertaken yet at the Auld Creek project. Big River and Alexander Projects have been independently reviewed by Measured Group.</li> <li>Successful field checks by SGL have been completed to find OGL, MMCL &amp; CRAE drill pad and trenching locations.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The Auld Creek Project (ACP) is within the permit EP 60-648 is a total of 4622 hectares in size and was granted to Reefton Resources Pty Limited (RRL) (a wholly owned subsidiary of Siren Gold Ltd (SNG)) for a period of 5 years, expiring in March 2026.</li> <li>The ACP is located 4km south of the township of Reefton on the West Coast of New Zealand. The boundary of the Prospect is delineated by the catchment of Auld Creek which drains northwest into the Inangahua River. The ACP is immediately north of the rehabilitated Globe Progress Mine, which produced 418koz @ 12.2 g/t Au historically. 1km to the northeast, across the Inangahua River, the Crusington Gold Mining District historically produced 515koz @ 16.3 g/t Au.</li> <li>ACP is situated within Department of Conservation administrated land.</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Auld Creek mineralisation was found in 1870 where a drive was place, with further exploration by a drive and a shaft was driven in 1908 as well in 1914.</li> <li>In 1930's DSIR conducted an early IP survey over the area.</li> <li>In 1970-71, Lime and Marble explored primarily for Sb with a soil sample program over the old workings which delineated two zones of anomalous Sb.</li> <li>CRAE explored the greater Reefton Goldfield including the Auld Creek project. In the 1980's they completed an extensive soil grid followed up by collection of 118 rock chip, float, and trench samples in Auld Creek.</li> <li>CRAE completed two ground magnetic surveys over the area attempting to locate a magnetic response from the shear zone and concluded that drilling was needed.</li> </ul>



		<ul style="list-style-type: none"> <li>• CRAE focus and budget at the time moved more and more into drilling the Globe Progress deposit just to the south.</li> <li>• MMCL explored the project from 1994 to 2000 and undertook stream sediment sampling, infilled the central section of CRAE soil grid with several anomalous zones highlighted. MMCL completed wacker sampling in the southern portion where there is a thin glacial cover on the ridges.</li> <li>• MMCL completed 109m of trenching to help generate drilling targets in the Bonanza and Fraternal zones.</li> <li>• MMCL drilled 3 diamond holes with 96DDAC001 and 96DDAC002 targeting Fraternal and 96DDAC003 drilling into the Bonanza zone with a total of 324.6m</li> <li>• OGL begun work in the project area in 2007 with a 3 diamond drillhole program (RDD0044, 045 &amp; 59) to test the southern areas of the permit based on soil anomalies and structures extending from Globe Progress.</li> <li>• From 2008 to 2010 OGL completed mapping and wacker soil sampling program into Auld Creek North extending CRAE's soil grid another 400m.</li> <li>• In 2010 OGL completed another wacker program into the Fraternal &amp; Bonanza zones overlapping previous work.</li> <li>• OGL then completed 7 diamond holes in 2010-11 to test southern extents of Fraternal zone completing 801.7m into a mineralised, steep westerly dipping zone ranging from 1m to 15m thick.</li> <li>• OGL completed an in house inferred resource of 0.17 Mt @ 2.60 g/t Au for 14,300 oz Au using 5 drillholes at the Fraternal deposit.</li> <li>• OGL completed a regional exploration drill hole (RDD0084) which was drilled into the southeast of the project area testing an Au+ As wacker anomaly. It returned a 1m @ 2.54 g/t Au which has not been followed up.</li> <li>• In 2013 OGL completed 3 more diamond holes into the Fraternal prospect for a total of 513.1m testing the down dip extents of the northern and central zones.</li> </ul>
<p><i>Geology</i></p>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Gold mineralisation in the Reefton Goldfield is structurally controlled; the formation of the different deposit types is interpreted to be due to focussing of the same hydrothermal fluid into different structural settings during a single gold mineralisation event, however, some of the deposits (e.g. Globe-Progress, Big River) appear to have been re-worked, with gold and sulphide mineral remobilisation having occurred during a later phase of brittle deformation.</li> <li>• 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.</li> <li>• 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</li> </ul>

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 broad 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 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.
- Auld Creek mineralisation found at Bonanza and Fraternal is interpreted as like the second structural type as listed above and associated with a major shear zone hosted close or within an anticline.

**Drillhole Information**

- A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:
  - easting and northing of the drillhole collar
  - elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar
  - dip and azimuth of the hole
  - down hole length and interception depth
  - hole length.
- If the exclusion of this information is

- Collar details for ACP:

Hole ID	NZTM E	NZTM N	RL	Total Depth (m)	Dip	Azimuth (true)
96DDAC001	1507211	5333156	528	70.1	-70	60
96DDAC002	1507211	5333156	528	84.0	-75	70
96DDAC003	1507129	5333155	532	170.5	-65	70
RDD0044	1507830	5331978	612	60.6	-60	90
RDD0045	1507687	5332133	608	67.7	-60	90
RDD0059	1507705	5332243	568	100.3	-60	90
RDD0081	1507216	5333070	559	75.9	-60	35
RDD0081A	1507216	5333070	559	151.5	-60	35
RDD0084	1507782	5332707	577	148.1	-60	270
RDD0085	1507216	5333070	559	79.0	-60	110

*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.*

RDD0086	1507216	5333070	559	141.5	-60	150
RDD0087	1507216	5333070	559	132.5	-75	75
RDD0088	1507290	5333147	539	159.5	-60	270
RDD0089	1507208	5333135	535	61.8	-52	90
RDD0091	1507290	5333147	539	166.5	-52	230
RDD0092	1507290	5333147	539	161.1	-62	230
RDD0093	1507290	5333147	539	185.5	-55	215
ACDDH004	1507198	5332970	605	142.6	-60	045
ACDDH005	1507198	5332970	605	147.4	-60	100
ACDDH006	1507198	5332970	605	177.4	-75	090
ACDDH007	1507185	5332877	604	154.3	-58	040
ACDDH008	1507185	5332877	604	110.0	-58	100
ACDDH009	1507185	5332877	604	181.5	-74	135
<b>TOTAL</b>				<b>2929.3</b>	<b>m</b>	

- Down hole intercepts for ACP:

Hole ID	Mineralised Zone	From	To	Interval (m)	True Width (m) <sup>1</sup>	Au g/t	Sb %	AuEq g/t <sup>2</sup>
96DDAC001	Fraternal	51.9	53.1	1.2	0.6	1.0	7.9	19.6
RDD0081	Fraternal	45.0	51.0	6.0	3.0	1.7	2.0	6.4
	Fraternal	57.0	67.0	11.0	6.0	2.2	0.1	2.5
RDD0081a	Fraternal	57.0	67.0	10.0	5.5	1.7	0.1	1.9
RDD0085	Fraternal	30.0	64.0	34.0	20.5	1.6	0.7	3.3
Incl		30.0	37.0	7.0	4.5	3.0	3.2	10.6
Incl		43.0	51.0	8.0	5.2	2.6	0.2	3.0
Incl		59.0	64.0	5.0	3.4	1.6	0.0	1.7
RDD0086	Fraternal	90.0	96.0	6.0	3.0	4.1	4.1	13.8
RDD0087	Fraternal	63.0	98.0	35.0	12.0	4.1	2.9	11.0
Incl		63.0	81.0	18.0	5.5	5.7	4.8	17.1
RDD0088	Fraternal	125.0	127.0	2.0	1.4	1.3	2.9	8.1

ACDDH004	Bonanza	53.3	55.9	2.6	2.0	4.3	0.0	4.3
ACDDH004	Fraternal	116.2	136.8	20.6	13.0	5.9	2.6	12.0
Incl		116.2	120.8	4.6	3.0	10.7	3.9	19.9
ACDDH005	Fraternal	59.4	77.3	17.9	12.0	2.3	0.1	2.6
Incl		59.4	63.3	3.9	2.6	3.3	0.1	3.6
Incl		67.3	77.3	10.0	6.7	2.8	0.1	3.1
ACDDH006	Fraternal	147.5	156.1	8.6	4.0	1.3	0.2	1.7
Incl		147.5	150.4	3.1	2.0	1.7	0.5	2.8
ACDDH007	Fraternal	124.0	150.5	26.5	15.0	2.7	0.07	2.9
Incl		133.0	150.5	17.5	9.0	3.7	0.1	3.9
Incl		142.0	148.5	8.5	4.5	6.7	0.0	6.7
Incl		142.0	148.5	6.5	3.7	8.5	0.0	8.5
ACDDH008	Fraternal	72.14	76.35	3.71	3.5	1.50	0.0	1.54
ACDDH009	Fraternal	118.74	124.18	5.44	2.5	1.12	0.0	1.16

• Trench details for ACP:

Trench	Zone	NZTM_E	NZTM_N	Elev	Length	Dip	Azimuth
FTTR001	Fraternal	1507244	5333083	541	8	0	281
FTTR002	Fraternal	1507237	5333081	543	1.5	0	189
FTTR003	Fraternal	1507235	5333167	519	7	0	273
FTTR004	Fraternal Nth	1507261	5333361	467	5	0	80
FTTR005	Fraternal	1507234	5333031	573	9.8	0	60
FTTR006	Fraternal	1507232	5333306	479	5.6	-40	110
FTTR007	Fraternal Nth	1507177	5333243	577	7.7	-20	95
FTTR008	Fraternal Nth	1507188	5333260	583	9.2	2	284
FTTR009	Fraternal Nth	1507238	5333483	438	10	0	67
FTTR010	Fraternal	1507260	5332902	607	5.7	0	274
FTTR011	Fraternal	1507259	5332953	608	4	-5	109



FTTR012	Fraternal	1507267	5333411	468	7	0	265
FTTR013	Fraternal Nth	1507229	5333208	517	4.8	0	117
FTTR014	Fraternal Nth	1507228	5333509	442	2.7	0	70
FTTR015	Fraternal	1507250	5332956	621	11	5	108
FTTR016	Fraternal	1507258	5332985	597	10.5	-2	277
FTTR017	Fraternal	1507240	5333131	542	8	0	290
FTTR018	Fraternal	1507245	5333028	563	12.5	3	239
BZTR001	Bonanza East	1507179	5333140	538	17.5	0	226
BZTR002	Bonanza	1507147	5333152	504	5.2	17	273
BZTR003	Bonanza	1507165	5333226	520	6.6	-23	116
BZTR004	Bonanza	1507136	5333225	545	1.9	0	249
BZTR005	Bonanza	1507133	5333245	556	4	0	277
BZTR006	Bonanza	1507161	5333183	513	3.4	-38	95
BZTR007	Bonanza	1507132	5333135	539	6	-5	278
BZTR008	Bonanza East	1507188	5333260	583	9.2	5	275
BZTR009	Bonanza	1507238	5333483	438	10	-19	67
BZTR010	Bonanza East	1507135	5333133	531	3.7	-11	108
BZTR011	Bonanza East	1507140	5333104	540	5	27	272

*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.*

- The core is generally samples at 1 metre intervals, but slightly shorter or longer samples may be taken around geological contacts. For reporting of drill hole intercepts weighted average estimates are used based on a 0.5 g/t AuEq cut-off. No top cuts are applied.
- In the calculation of significant intervals, no more than two metres of internal consecutive dilution (<0.5g/t AuEq) was included and only intercepts greater than 1.0g/t AuEq reported.
- Grades are compiled using length weighting.
- Siren has used the same gold equivalent formula ( $AuEq = Au \text{ g/t} + 2.36 \times Sb \%$ ) used by Mandalay Resources Ltd for the Costerfield mine (refer Mandalay Technical Report, 2022 dated 25 March 2022). The formula is based on a gold price of US\$1,750 per ounce, antimony price of US\$13,000 per tonne and metal recoveries of 93% for gold and 95% for antimony.

*Relationship between mineralisation widths and*

- *These relationships are particularly important in the reporting of Exploration Results.*

- Drillholes are reported as true widths if the geometry of the mineralisation is known or been constrained otherwise the results are reported as downhole lengths.

<i>intercept lengths</i>	<ul style="list-style-type: none"> <li>• <i>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</i></li> <li>• <i>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').</i></li> </ul>	
<i>Diagrams</i>	<ul style="list-style-type: none"> <li>• <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.</i></li> </ul>	<ul style="list-style-type: none"> <li>• A map and long section of drillhole locations is presented in press releases.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The exploration results include significant drilling results from OGL and SGL. OGL data was compiled from NZPAM exploration database.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No other exploration data reported.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drilling</li> <li>• Structural mapping</li> <li>• Ongoing soil sampling to the south towards Globe Progress</li> <li>• Ongoing Independent Lab re analysis of trench and drill core samples.</li> <li>• Testing Bonanza structures</li> </ul>

### **Section 3 - Estimation and Reporting of Mineral Resource**

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

Criteria	Explanation	Commentary
<p><i>Database integrity</i></p>	<p><i>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.</i></p> <p><i>Data validation procedures used.</i></p>	<ul style="list-style-type: none"> <li>• The 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.</li> <li>• Prior to using the drilling data in the Mineral Resource Estimate (MRE), SGL undertook a database audit. SGL database checks included the following: <ul style="list-style-type: none"> <li>- Checking for duplicate drill hole names and duplicate coordinates in the collar table.</li> <li>- Checking for missing drill holes in the collar, survey, assay, and geology tables based on drill hole names.</li> <li>- Checking for survey inconsistencies including dips and azimuths 90°, azimuths &gt;360°, and negative depth values.</li> <li>- Checking for inconsistencies in the 'From' and 'To' fields of the assay and geology tables.</li> <li>- 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.</li> <li>- Checking density data.</li> </ul> </li> <li>• The drill hole data was considered suitable for underpinning the MRE of Inferred global Au, Sb and AuEq resources as of 10 August 2023.</li> </ul>
<p><i>Site visits</i></p>	<p><i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></p> <p><i>If no site visits have been undertaken indicate why this is the case.</i></p>	<ul style="list-style-type: none"> <li>• The Competent Person has visited the site. 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.</li> </ul>
<p><i>Geological interpretation</i></p>	<p><i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i></p> <p><i>Nature of the data used and of any assumptions made.</i></p> <p><i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></p> <p><i>The use of geology in guiding and controlling Mineral Resource estimation.</i></p> <p><i>The factors affecting continuity both of grade and geology.</i></p>	<ul style="list-style-type: none"> <li>• Geological interpretation based on available field mapping data, structural mapping, trench &amp; drillhole lithology and grade data. Modelling was completed using Leapfrog Geo modelling software. Wireframing and geological modelling was carried out by SGL.</li> <li>• The Fraternal Shear is a steep west dipping hosting shear zone that appears structurally controlled with relation to a shearing, anticline hinge zone and local bedding. The controls on both Sb and Au plunge have yet to be determined. The variography suggests that the Sb grade plunges moderately to the north parallel to the interception of east dipping Bonanza East mineralised shear and the Fraternal. Au appears to plunge moderately to the south.</li> <li>• A cut-off grade of 0.5g/t AuEq was used to guide the geological continuity of the</li> </ul>

		<p>interpreted shear mineralisation. The cut-off grade was selected based on the reef shoot contact correlating with mineralisation greater than 0.5 g/t AuEq. Within the mineralised wireframe, if an intercept fell below the nominal cut-off but continuity was supported by host lithologies, the intercept was retained for continuity purposes due to the commodity and the style of deposit.</p>
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Criteria	Explanation	Commentary
Dimensions	<p><i>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.</i></p>	<ul style="list-style-type: none"> <li>• Fraternal MRE domain edges are set by grade, shape, spacing and continuity of geology, trenching and drilling. The domain extends half the average drill spacing along strike and down plunge.</li> <li>• Fraternal extends 250m along strike, averages 200 m down dip below the surface and varies from 0.5m-15m thick.</li> </ul>
Estimation and modelling techniques	<p><i>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.</i></p> <p><i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></p> <p><i>The assumptions made regarding recovery of by-products.</i></p> <p><i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</i></p> <p><i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></p> <p><i>Any assumptions behind modelling of selective mining units.</i></p>	<ul style="list-style-type: none"> <li>• For this MRE, SGL has completed the following: <ul style="list-style-type: none"> <li>- Geological interpretation and wireframing in Leapfrog Geo</li> <li>- Hard boundary compositing in Leapfrog – Edge Module (Leapfrog Edge);</li> <li>- Variography and Ordinary Kriging in Leapfrog Edge; and</li> <li>- Block Model Estimation in Leapfrog.</li> <li>- Block Model Validation in Leapfrog</li> </ul> </li> <li>• Composites were based on 1 m composites for Au and Sb.</li> <li>• Outlier grades were assessed by reviewing composite histograms of Au &amp; Sb grade for each individual wireframe. Extreme outlier grades weren't identified, and it was determined that no top-cut was required.</li> <li>• The search distances, number of passes, minimum and maximum sample numbers were based on the variography model and Major and Semi-Major directions were around 75%-100% of the range of variogram models. 3 estimation passes were used for Au, and Sb. First pass search was around 75 x 45 x 8 m. Each pass after that was extended by ~10-15%.</li> <li>• Sub block model parent size was 10 x 10 x 5m based on domain geometry and drillhole spacing with sub-blocking to 0.5 x 5 x 2.5m.</li> <li>• The first pass used a minimum of 5 samples and maximum of 28 samples and a maximum of 4 samples per drill hole. The second pass used a minimum of 4 samples and maximum of 3 samples per drillhole. The third pass used a minimum of 2 samples.</li> <li>• Cell discretization of 5 x 5 x 1 (X, Y, Z) was employed.</li> <li>• Block model validation included block statistics review, visual inspection of grade distribution against composites, domain boundary and estimation variable changes were undertaken.</li> </ul>



Criteria	Explanation	Commentary
	<p><i>Any assumptions about correlation between variables.</i></p> <p><i>Description of how the geological interpretation was used to control the resource estimates.</i></p> <p><i>Discussion of basis for using or not using grade cutting or capping.</i></p> <p><i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></p>	<ul style="list-style-type: none"> <li>• Arsenic is shown to be moderately positively correlated with gold grades and typical of refractory gold-pyrite-arsenopyrite mineralisation.</li> <li>• Au and Sb were estimated in this mineral resource and are correlatable. Sb appears to occur as a late-stage mineralisation phase which is hosted in brittle fractures and veinlets within the Au hosting shear envelope.</li> <li>• Au and Sb were estimated and the AuEq were calculated for each block from these results. An estimation was also completed estimating AuEq from the drillhole database as a variable to help reconcile and test the calculated AuEq results. The formula used is (<math>AuEq = Au \text{ g/t} + 2.36 \times Sb \%</math>) used by Mandalay Resources Ltd for the Costerfield mine (<i>refer Mandalay Website: Mandalay have adopted CY2022 metal prices</i>). The formula is based on a gold price of US\$1,750 per ounce, antimony price of US\$13,000 per tonne and metal recoveries of 93% for gold and 95% for antimony.</li> </ul>
Moisture	<i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i>	<ul style="list-style-type: none"> <li>• All tonnages are based on dry bulk density measures. The mean of the bulk density measures was assigned to the block by mineralisation domains.</li> </ul>
Cut-off parameters	<i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i>	<ul style="list-style-type: none"> <li>• The grade envelope was used for domining using a lower cut-off of 0.5 g/t AuEq. This number was subjectively selected based on previous resource estimations completed by SNG in the Reef ton Goldfield.</li> </ul>
Mining factors or assumptions	<i>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</i>	<ul style="list-style-type: none"> <li>• No assumptions have been made regarding future mining methods.</li> </ul>

	<i>an explanation of the basis of the mining assumptions made.</i>	
<i>Metallurgical factors or assumptions</i>	<i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</i>	<ul style="list-style-type: none"> <li>• No metallurgical studies have been carried out for Auld Creek Project, but metallurgical test work at Alexander River and Big River indicated gold recoveries of over 90% with flotation and pressure oxidation. The Costerfield mine on Victoria Australia has very similar geology and metallurgy of of 93% for gold and 95% for antimony.</li> <li>• No metallurgical recovery factors were applied to the MRE.</li> </ul>
<i>Environmental factors or assumptions</i>	<i>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</i>	<ul style="list-style-type: none"> <li>• Auld Creek Project lies within land that is administered by the Department of Conservation (DoC). The Globe Progress open cut gold mine 2km to the south, which was successfully operated by OGL between 2007 and 2016 is also contained within the 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 historic mining.</li> <li>• SGL has an Access Agreement with DoC which allows for 21 drill pads and a field camps and helicopter landing sites.</li> <li>• No environmental factors were applied to the MRE. The deposit is located on an existing exploration permit.</li> </ul>

Bulk density	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> </ul> <p><i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></p>	<ul style="list-style-type: none"> <li>• The dry bulk density value used in the MRE were assigned based on average values of the available density data from ACP as well as other SGL Reefion projects. A mean of 2.65 t/m<sup>3</sup> were used for oxide at the top of the model and 2.75 t/m<sup>3</sup> for fresh rock. 35 density samples have been collected in the Auld Creek mineralisation and 35 samples in the host rocks.</li> <li>• SGL collects density samples routinely 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.</li> </ul>
Classification	<ul style="list-style-type: none"> <li>• <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></li> <li>• <i>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).</i></li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Additional considerations were the stage of project assessment, amount of diamond drilling and trenching undertaken, current understanding of mineralisation controls and selectivity within an underground mining environment.</li> <li>• 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 constrained at depth by the available drill hole spacing outlined for Inferred classification,</li> </ul>
	<ul style="list-style-type: none"> <li>• <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The data spacing, and distribution is sufficient to establish geological and grade continuity appropriate for MRE and the results appropriately reflect the Competent Person's view of the deposit.</li> </ul>
Audits or Reviews	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Internal reviews of the MRE by SGL were completed.</li> </ul>
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> <li>• <i>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</i></li> </ul>	<ul style="list-style-type: none"> <li>• Variances to the tonnage, grade, and metal tonnes of the Mineral Resource estimate are expected with further definition drilling.</li> <li>• It is the opinion of the Competent Person that the classification criteria for Inferred Mineral Resources appropriately capture and communicate these variances and</li> </ul>

	<p><i>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.</i></p> <ul style="list-style-type: none"><li><i>• 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.</i></li><li><i>• These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li></ul>	<p>risks.</p> <ul style="list-style-type: none"><li>• The Mineral Resource estimate is considered fit for the purpose of drill targeting.</li><li>• The Mineral Resource Statement relates to global tonnage and grade estimates. No formal confidence intervals nor recoverable resources were undertaken or derived.</li><li>• Variography was completed for Au and Sb 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.</li><li>• Validation checks have been completed on raw data, composited data, model data and Resource estimates.</li><li>• The model validations checked to ensure data honouring. The validated data consists of no obvious anomalies which are not geologically sound.</li><li>• The mineralised zone is 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.</li><li>• Where the drill hole data showed that no Au existed, the mineralised zone was not created in these areas.</li><li>• Further drilling and structural analysis need to be completed to improve Resource classification of the Inferred Resource.</li></ul>
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