

**ASX RELEASE**

4 October 2022

**COMPANY**

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

**CAPITAL STRUCTURE**

**Shares:** 115,687,380  
**Options:** 14,293,262

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**PROJECTS**



## Exceptional high-grade Gold and Stibnite intersected at Auld Creek

Siren Gold Limited (ASX: SNG) (Siren or the Company) is pleased to provide an update of the untapped potential on its Auld Creek Prospect.

### Highlights

- Sirens **Auld Creek epizonal** deposit at Reefton New Zealand, contains high grade gold and massive stibnite veins similar to Costerfield and Fosterville mines in Victoria, Eastern Australia.
- The Auld Creek mineralisation lies between the Crushington (515koz @ 16.3g/t Au) and Globe Progress (418koz @ 12.2g/t Au) historic mines.
- Siren is pleased to confirm that exceptional high-grade gold-antimony mineralisation has been intersected in trenches and historical drillholes in the Fraternal zone at Auld Creek.
- Trench intersections include; **6m @ 8.9g/t Au, 4.4% Sb (15.8g/t AuEq), 4.0m @ 4.4g/t Au, 0.36% Sb (4.6g/t AuEq)** and **1.5m @ 17.1g/t Au, 9%Sb (31.1g/t AuEq)**
- Diamond drill hole intersections include; **12m @ 4.1g/t, 2.9% Sb (8.7g/t AuEq) and 4.5m @ 3.0g/t Au, 3.2% Sb (8.1 g/t AuEq).**

### 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 @ 16.3 g/t Au (Figure 1). More recently OceanaGold Limited (OGL) mined an open pit and extracted an additional 600koz from lower grade remnant mineralisation around the historic Globe Progress mine.

The Auld Creek mineralisation extends for over 2kms and appears to represent a block that was potentially offset to the west, along NE-SE trending faults between Globe Progress and Crushington (Figure 1). Arsenic and gold soil geochemistry from Big River to Crushington, shown in Figure 1, confirms this interpretation.

### Exploration and Mining History

Gold in Auld Creek was first discovered in the early 1870s. Two claims, Fraternal and Bonanza, were worked intermittently from the 1880s. A 2.4m wide quartz reef was mined from a shallow shaft at Bonanza and was reported to return an average grade of 23.3g/t Au. In 1914, a drive beneath the Bonanza Shaft was revitalised and extended, returning grades up to 21.7g/t Au. The Fraternal claim was mined in a series of shallow adits situated along a 400m north-south oriented strike length. There is no recorded of gold production at Auld Creek due to the threat of litigation from the Reefton township, as the Auld Creek catchment collected Reefton's water supply.

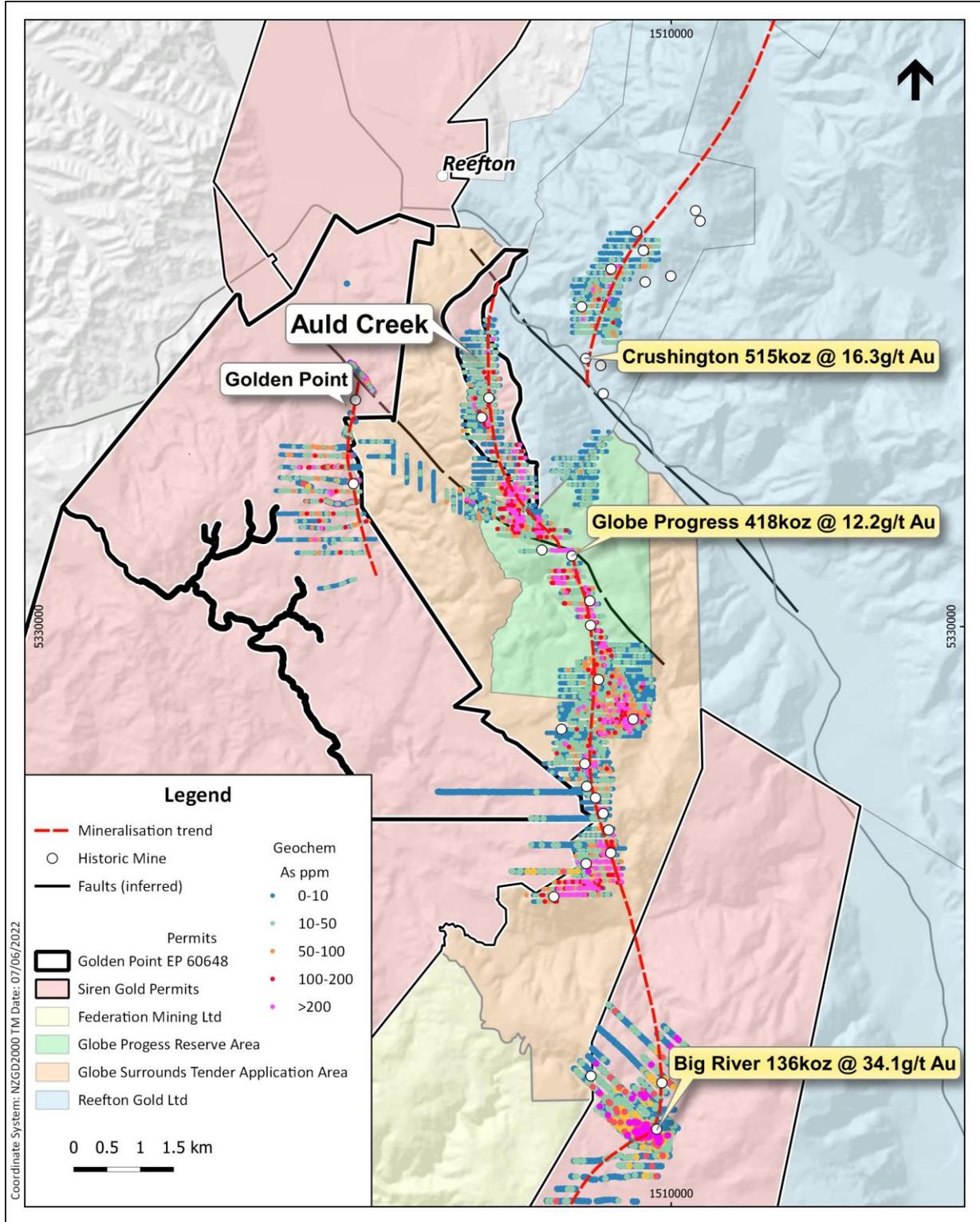


Figure 1. Regional arsenic soil geochemistry and historic gold production.



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The Auld Creek Prospect has been sporadically explored since the 1980s. CRA Exploration (CRAE) and OGL completed several soil and rock chip sampling and trenching programs between 1984-2000, with most of the work focused around the historic mining areas. Two north-south trending gold and arsenic soil anomalies were defined along the strike of the Bonanza and Fraternal reefs for around 700m<sup>1</sup>. Trenching across these anomalies encountered strongly brecciated gold and stibnite mineralisation,

Between 1996 and 2013, OGL drilled 17 diamond holes for 2,016m, defining a mineralised zone up to 13m true width. The Fraternal mineralisation was intersected in several holes including RDD0087, which intercepted a true width of **12m @ 4.1g/t Au and 2.9% stibnite from 63m**. The highest grades in the deposit are generally associated with strong stibnite mineralisation. The deepest drillhole intersected gold mineralisation less than 100m below surface, and mineralisation remains open at depth and along strike.

### Auld Creek Epizonal Gold-Antimony Deposit

The Reefton Goldfield has been correlated to the Lachlan Fold Belt (*refer press release dated 25 March 2022*) that contains epizonal gold-antimony deposits like Fosterville and Costerfield. Sirens Auld Creek epizonal deposit contains high grade gold and massive stibnite veins. For example, diamond drillhole RDD0087 intersected a true thickness of **12m @ 4.1g/t Au and 2.9%Sb** and trench **FFTR001** intersected **6m @ 8.9g/t Au and 4.4%Sb**.

Siren has used the same gold equivalent formula ( $AuEq = Au\text{ g/t} + 1.58 \times Sb\%$ ) 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\$1,700 per ounce, antimony price of US\$8,500 per tonne and metal recoveries of 93% for gold and 95% for antimony.

Using this formula, the RDD087 drillhole intersection would equate to **12m @ 8.7g/t AuEq**, and trench FFTR001 intersection to **6m @ 15.8g/t AuEq**.

Antimony is a critical metal of which China and Russia combined produce approximately 82% of the antimony raw material supply. Antimony features highly on the critical minerals lists of many countries, including Australia, the USA, Canada, Japan and the European Union. Antimony alloys with lead and tin which results in improved properties for solders, munitions, bearings and batteries. Antimony is a prominent additive for halogen-containing flame retardants. Adequate supplies of antimony are critical to the world's energy transition, and to the high-tech industry, especially the semi-conductor and defence sectors. For example, antimony is a critical element in the manufacture of lithium-ion batteries and to the next generation of liquid metal batteries that lead to scalable energy storage for wind and solar power.

### Recent Exploration by Siren

Siren has completed infill soil sampling to better define the soil anomalies. The arsenic soil anomaly now extends for over 700m along strike and clearly defines the Fraternal and Bonanza mineralisation (Figure 2). The Fraternal zone has been subdivided into the Fraternal and Fraternal North zones.

Siren has excavated five trenches across the Fraternal mineralised zone (FTTR001, FTTT002, FTTR003, FTTR005 and FTTR006) and 2 trenches across two Bonanza mineralisation zones (BZTR001 and BZTR002), as shown in Figure 2. All trenches intersected silicified sandstone with disseminated arsenopyrite, with up to 20cm thick massive stibnite veins (Figure 3). Results to date have been received for the Fraternal trenches FTTR001, FTTR002 and FTTR004.

**FTTR001** exposed an 8m thick mineralized zone (Figure 4). The outcrop was sampled at 1m intervals, with the rock description and assay results shown in Table 1. The Au and Sb grades in Table 1 indicate that the mineralisation may be wider than exposed. The intersection averages **8.9g/t Au and 4.4% Sb for AuEq of 15.8g/t over 8m**.

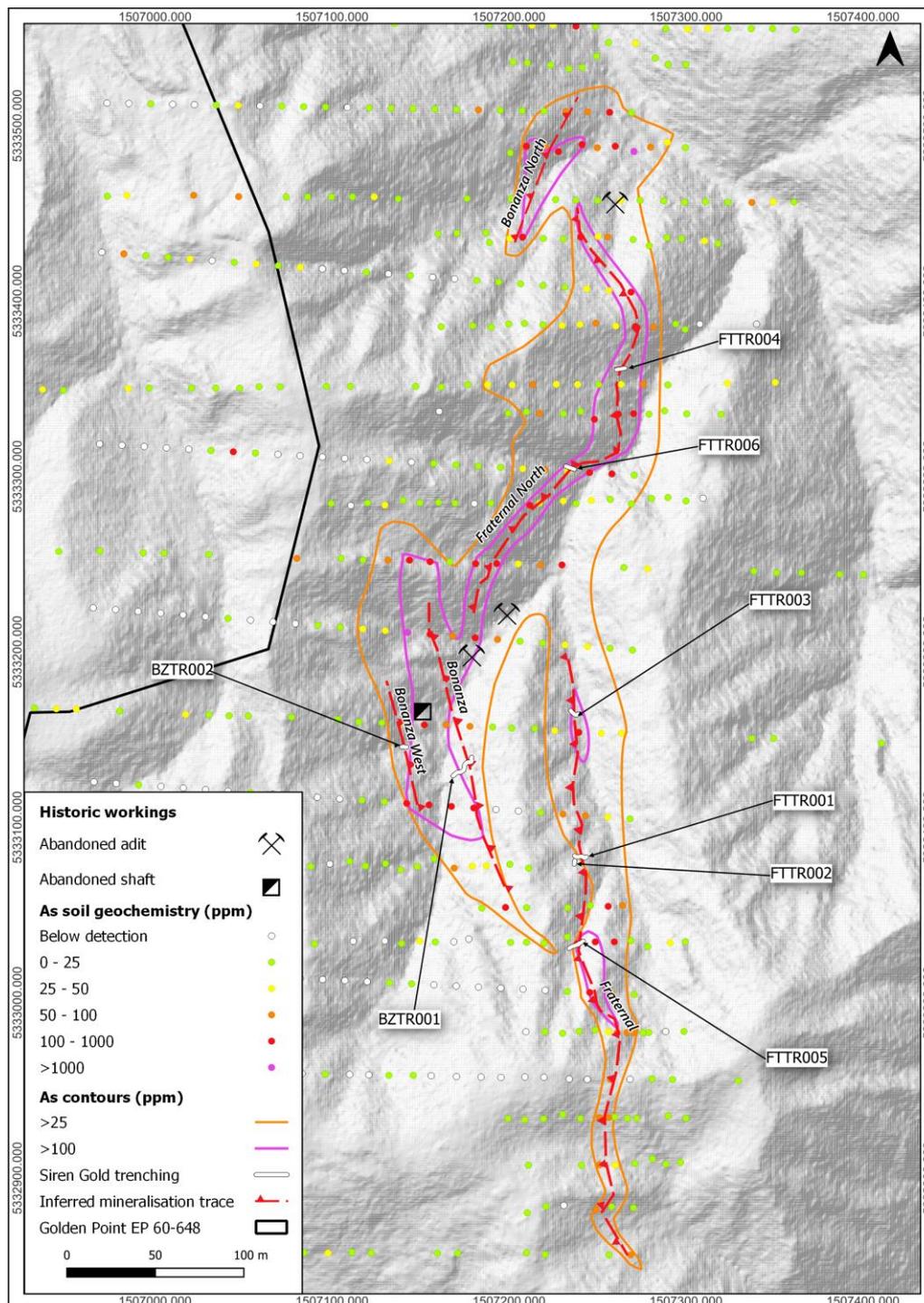
<sup>1</sup> True widths are based on a sectional interpretation of the Fraternal mineralised zone dipping steeply (~85°) to the west. This dip may vary as more data becomes available and the true widths may change.



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**FTTT002** was a resampled small historic trench perpendicular to the SW end of FTTR001 (Figure 4). This trench intersected **1.5m @ 17.1g/t Au and 9% Sb for 31.3g/t AuEq.**

**FTTR004** sampled the Fraternal North mineralised zone (Figure 2) and intersected at least a 4m wide zone, with the strongest mineralisation at the western end by the bank (Figure 5) and the mineralisation potentially extends further west. The trench intersected **4m @ 4.0g/t Au, 0.36% Sb for 4.6g/t AuEq.**



**Figure 2. Arsenic soil geochemistry, trenches, drillholes and interpreted mineralised zones.**

The trenches indicate that the Fraternal and Fraternal North mineralised zones dip to the west and the Bonanza and Bonanza West mineralised zones dip to the east (Figure 7). The Fraternal zone has been intersected several diamond drillholes (*refer to press release dated 9 June 2022*) with one hole interpreted to have intersected the Bonanza West zone (Table 4 and Figure 7). Significant drillholes include **RDD087**, which intersected a true width<sup>1</sup> of approximately **12m @ 4.1g/t Au, 2.9% Sb for 8.7g/t AuEq** and **RDD085**, which intersected a true width of 18m @ 2.7g/t AuEq including **4.5 @ 3.0 g/t Au, 3.2% Sb for 8.1g/t AuEq**. RDD087 and RDD081 were not assayed for Sb but the core photos do contain stibnite veins. Siren quarter cut and assayed RDD087 with an average intersection of 2.9% Sb, with the highest 1m interval returning 23.9% Sb (37.8 g/t AuEq). RDD081 core or pulps couldn't be found at this stage.

The Bonanza zone is interpreted to be an east dipping splay from the Fraternal zone (Figure 7). The hangingwall of the Fraternal zone has higher grade gold and stibnite mineralisation as shown by the darker red zone. Trench FTTR001 sampled the high-grade zone ending in 25 g/t AuEq and needs to be extended to find the hangingwall and footwall contacts.

The N-S long section indicates that the Fraternal shoot is moderately south plunging, and drill tested for approximately 100m (Figure 8). This shoot orientation is similar to the Globe Progress shoots 1km to the south. The height of the shoot is unknown at this stage. Trench FTTR005 excavated at the top of the Fraternal Shoot intersected a 9m thick zone of silicified sandstone and disseminated arsenopyrite but lacked any significant stibnite mineralisation.



**Figure 3. Massive stibnite vein from the Fraternal Reef near FTTR001.**

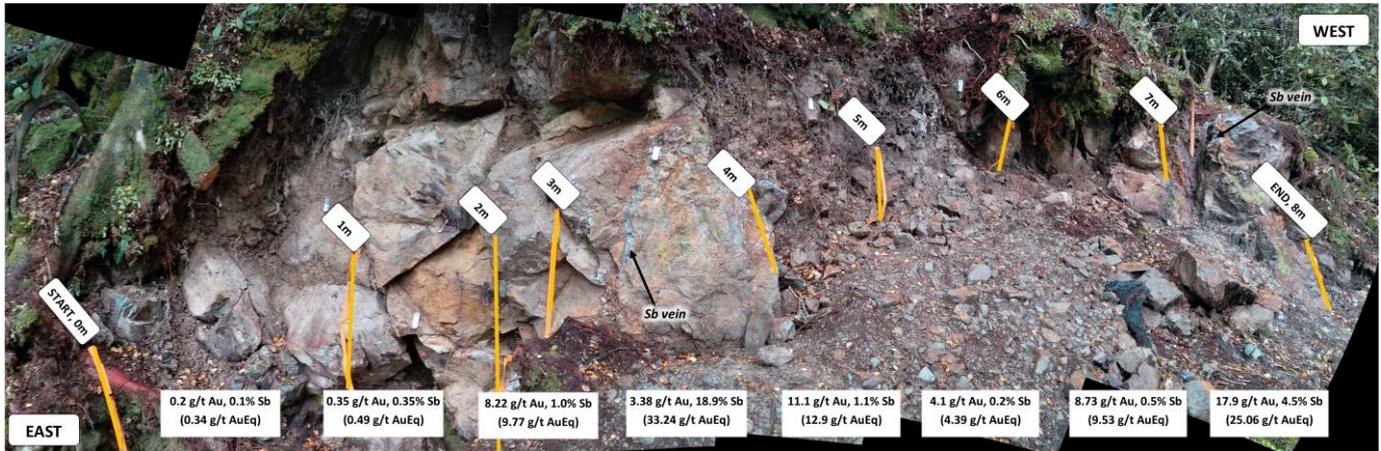


Figure 4. Fraternal Reef exposed in Trench FTTR001.

Table 1. Fraternal Trench No.1 (FTTR001) assay results.

From	To	Geological Description	Au g/t	Sb %	AuEq g/t
0	1	Silicified sandstone with rare arsenopyrite (AP). No visible stibnite (Sb).	0.2	0.1	0.3
1	2	Silicified sandstone, full of disseminated AP, very small Sb crystals.	0.4	0.35	0.5
2	3	Silicified sandstone with disseminated AP and a 5-10cm thick massive Sb vein. Sb vein runs parallel to outcrop orientation into the next sample.	8.2	1.0	9.8
3	4	Silicified sandstone with abundant AP and 5-10cm Sb vein. Gossanous textures adjacent to 10-20mm thick quartz veins.	3.4	18.9	33.2
4	5	Silicified sandstone with ~5% disseminated acicular AP.	11.1	1.1	12.9
5	6	Silicified sandstone with ~5% disseminated acicular AP.	4.1	0.2	4.4
6	7	Silicified sandstone with ~5% disseminated acicular AP	8.7	0.5	9.5
7	8	Silicified sandstone with ~5% disseminated acicular AP and a 10-20cm Sb vein.	17.9	4.5	25.0
		<b>Weighted Average</b>	<b>8.9</b>	<b>4.4</b>	<b>15.8</b>

Table 2. Fraternal Trench No.2 (FTTR002) assay results.

From	To	Geological Description	Au g/t	Sb %	AuEq g/t
0.0	0.75	Silicified sandstone with ~5% disseminated acicular AP.	5.6	0.9	7.1
0.75	1.5	Shear zone with massive stibnite pods.	28.6	17.1	55.6
		<b>Weighted Average</b>	<b>17.1</b>	<b>9.0</b>	<b>31.3</b>

Table 3. Fraternal Trench No.4 (FTTR004) assay results.

From	To	Geological Description	Au g/t	Sb %	AuEq g/t
0	1	Silicified sandstone with rare arsenopyrite (AP). No visible stibnite (Sb).	6.9	0.2	7.2
1	2	Silicified sandstone, full of disseminated AP, very small Sb crystals.	2.4	0.05	2.4
2	3	Silicified sandstone with disseminated AP and a 5-10cm thick massive Sb vein. Sb vein runs parallel to outcrop orientation into the next sample.	4.5	0.1	4.6
3	4	Silicified sandstone with abundant AP and 5-10cm Sb vein. Gossanous textures adjacent to 10-20mm thick quartz veins.	2.3	1.1	4.0
4	5	Silicified sandstone with ~5% disseminated acicular AP.	0.7	0.04	0.8
		<b>Weighted Average</b>	<b>4.0</b>	<b>0.36</b>	<b>4.6</b>



Figure 5. Fraternal North mineralisation exposed in Trench FTTR004.

Table 4. Significant Auld Creek drillhole intercepts.

Hole ID	Mineralised Zone	From	To	Interval (m)	True Width (m)	Au g/t	Sb %	AuEq g/t
96DDAC001	Fraternal	51.9	53.1	1.2	0.6	1.0	<b>7.90</b>	<b>13.4</b>
96DDAC003	Bonanza West	34.0	35.0	1.0	0.6	<b>4.65</b>	<0.01	4.7
RDD0081	Fraternal	45.0	51.0	6.0	3.0	1.73	n/a	
	Fraternal	57.0	67.0	11.0	6.0	2.24	n/a	
RDD0081a	Fraternal	57.0	67.0	10.0	5.5	1.71	0.06	1.8
RDD0085	Fraternal	30.0	64.0	34.0	20.5	1.61	0.70	2.7
Incl		30.0	37.0	7.0	4.5	<b>3.02</b>	<b>3.20</b>	<b>8.1</b>
Incl		43.0	51.0	8.0	5.2	2.62	0.17	2.9
Incl		59.0	64.0	5.0	3.4	1.58	0.03	1.6
RDD0086	Fraternal	90.0	96.0	6.0	3.0	<b>4.14</b>	<b>4.10</b>	<b>10.6</b>
RDD0087	Fraternal	63.0	98.0	35.0	12.0	<b>4.11</b>	<b>2.90</b>	<b>8.7</b>
Incl		63.0	81.0	18.0	5.5	<b>5.74</b>	<b>4.80</b>	<b>13.3</b>
RDD0088	Fraternal	125.0	127.0	2.0	1.4	1.28	<b>2.90</b>	<b>5.9</b>

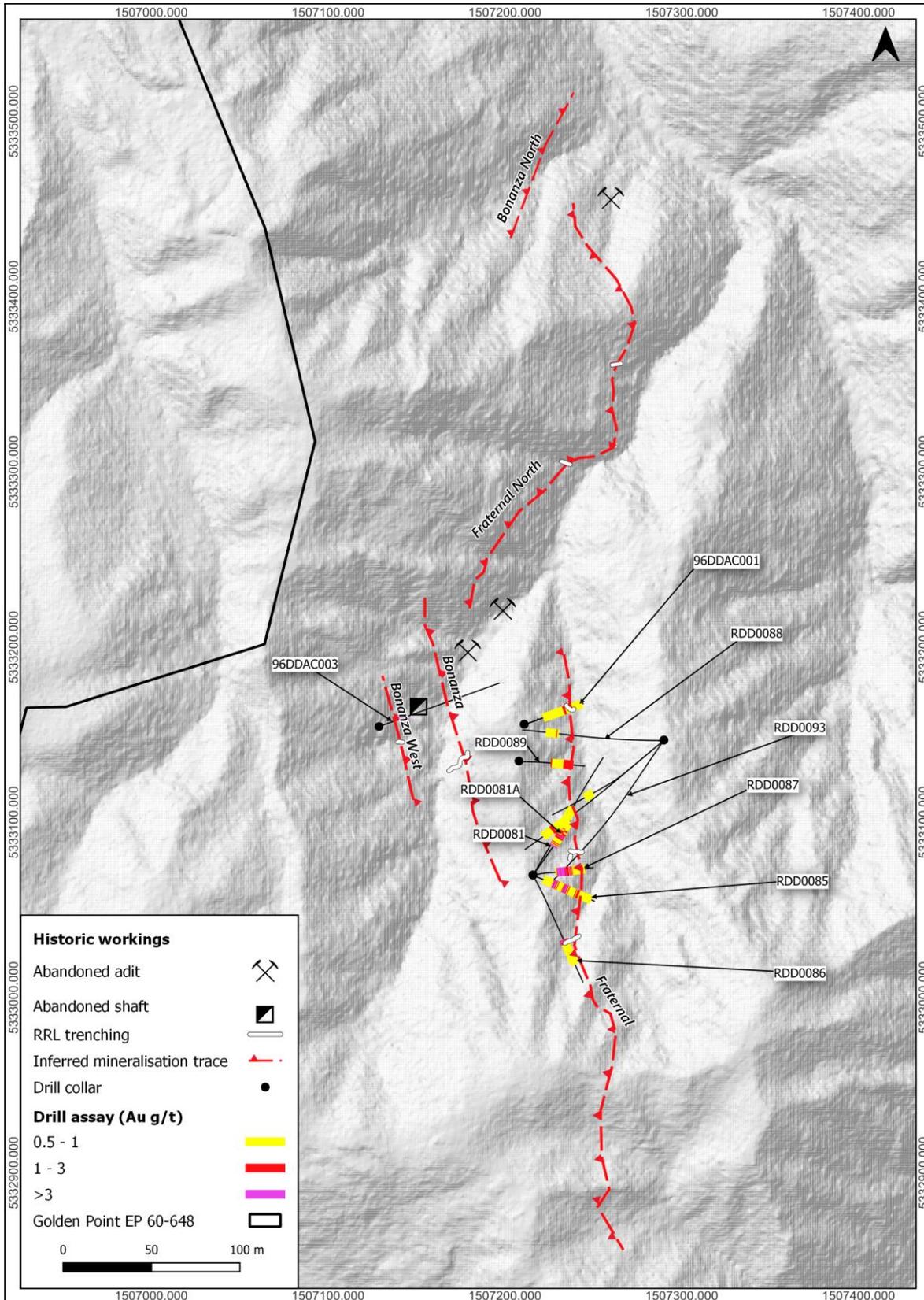


Figure 6. Drillhole location plan.



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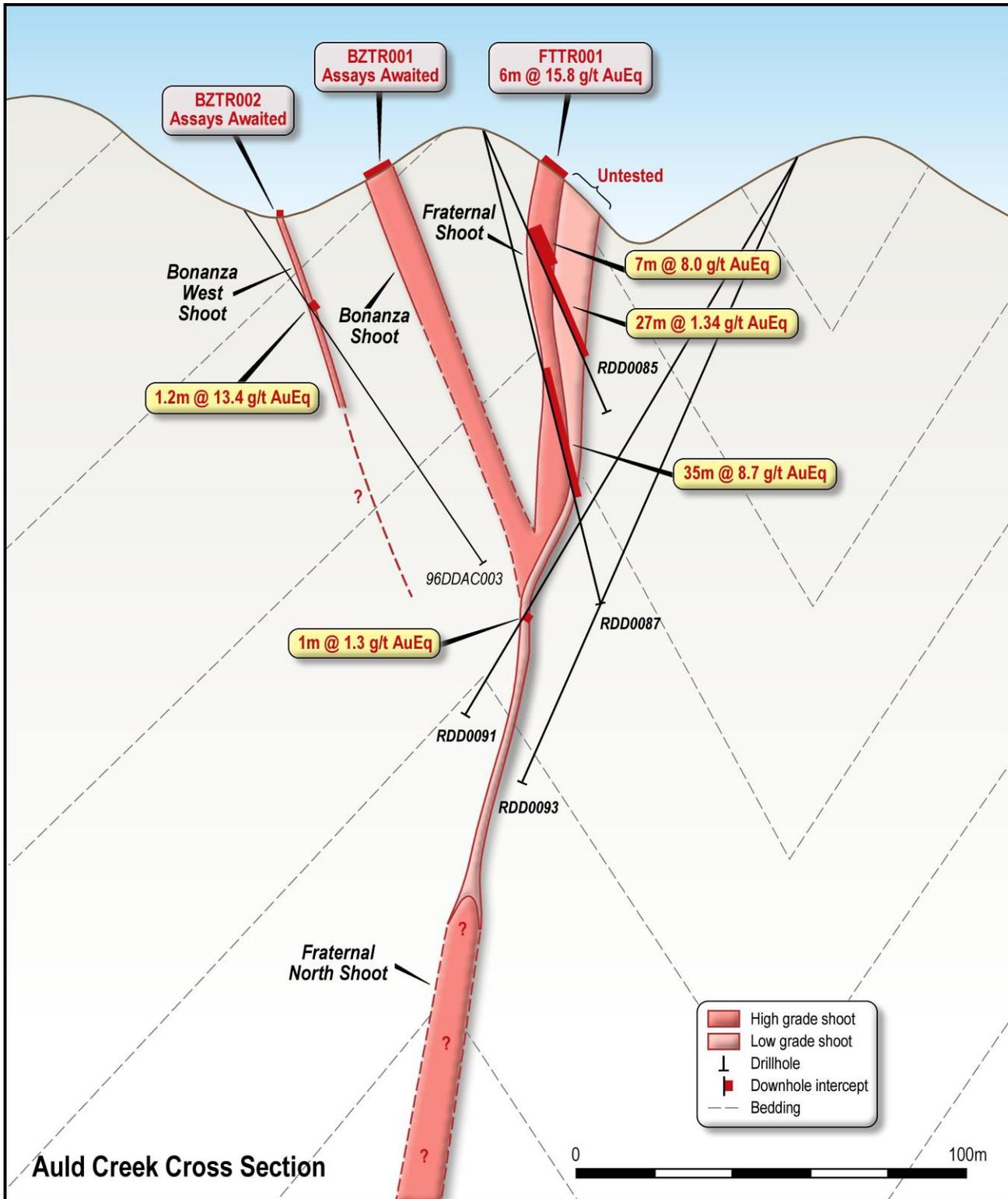


Figure 7. Auld Creek E-W schematic cross section.



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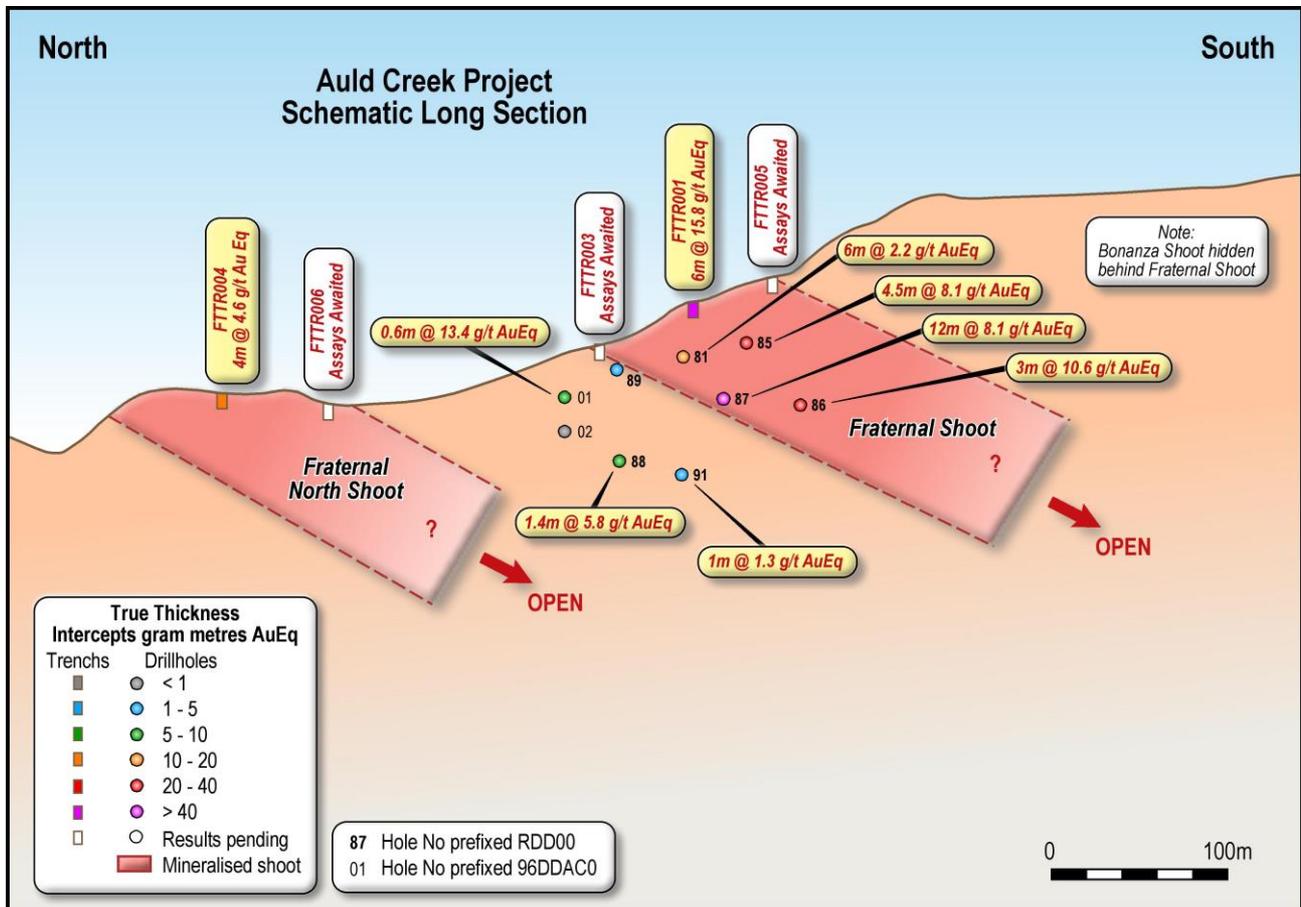


Figure 8. Auld Creek N-S schematic long section.

## Exploration – Next Steps

Field exploration will continue over the next quarter with additional mapping soil sampling and trenching followed by diamond drilling in Q1 2023 subject to Department of Conservation access.

### Soil Sampling

Infill soil sampling will be extended to the north and south of the Fraternal – Bonanza area.

### Trenching

Trenching will continue, targeting 100m spacing along the Fraternal, Fraternal North and Bonanza mineralised zones.

### Diamond drilling

A DoC Access agreement is being prepared which will allow drilling of the Fraternal, Fraternal North and Bonanza Shoots initially down to around 300m. The Energetic mine to the north was mined to around 600m below surface and the Globe Progress mine to the south was mined to 420m, where the mineralisation was offset by the Chemist Shop Fault. The mineralisation on the other side of the fault has not been found.

Subject to additional trench results the initial drilling will focus on defining the extent (height) and plunge of the Fraternal, Fraternal North and Bonanza Shoots.

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For further information, please visit [www.sirengold.com.au](http://www.sirengold.com.au) or contact:

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

### Competent Person Statement

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

# JORC Code, 2012 Edition – Table 1

## Section 1 Sampling Techniques and Data

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

Criteria	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 (OGC) &amp; Macraes Mining Co Ltd (MMCL) diamond core (DC) was used to obtain samples for geological logging and sampling.</li> <li>• OGC DC core samples were split in half using a core saw at 1m intervals unless determined by lithology i.e. Quartz vein contacts.</li> <li>• OGC 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 unknown</li> <li>• OGC DC samples were pulverised to &gt;95% passing 75µm to produce a 50g charge for fire assay for Au.</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. OGC collected soil samples by wacker drill collecting around 300-500g sample. RRL used a hand auger to collect 300-400g sample of B-C horizon.</li> <li>• Reefton Resources Limited (RRL) trench samples were taken based on 1m samples unless determined by lithology or mineralisation. The trench samples were collected by geology hammer with average sample size of 2 kg.</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 OGC drilling was reported as triple tubed using CS1000 or LF70 heli-rigs.</li> <li>• 2013 OGC drilling trailed open holing with a Strata-Pac collar for 50.6m in RDD0091.</li> <li>• Drilling was helicopter supported.</li> </ul>

Criteria	JORC Code Explanation	Commentary
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>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.</i></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 OGC 2007 &amp; 2011 drilling.</li> <li>• Core recoveries for OGC were good. Highly shattered rock around puggy fault gouge zones are the areas the core loss can occur. No noticeable losses were observed by OGC</li> </ul>
<i>Logging</i>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All DC for OGC 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 (OGC) exploration programs. The logging method is quantitative.</li> <li>• Logging entered into an acQuire database.</li> <li>• OGC reported all core trays were photographed prior to core being sampled.</li> <li>• MMCL logging was completed on paper which was entered into OGC acquire database. Hard copies of these logs are complete.</li> <li>• RRL trench logging is based on RRL core logging templates with similar quantitative data captured as OGC. Photos are taken of the trench and of each sample.</li> </ul>
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representativity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<p><b>OGC DC sampling:</b></p> <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>• OGC 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> </ul>

Criteria	JORC Code Explanation	Commentary
<p>Quality of assay data and laboratory tests</p>	<ul style="list-style-type: none"> <li><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li><i>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.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>RRL trench sample length is based on 1m with field duplicates taken on 1:20 samples.</li> <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 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>OGC 2007 DC samples were set to Amdel Laboratories in Macraes Flat, NZ for Au, As &amp; Sb.</li> <li>2011 OGC 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 50g fire assay.</li> <li>OGC DC &amp; wacker submissions included at least 2 Au Rocklab standards, 1 blank, laboratory duplicates and lab repeats were recorded.</li> <li>2011 wacker soil samples were sent to ALS Brisbane for 8 elements suite while rock chip samples were sent to SGS for Au, As &amp; Sb.</li> <li>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.</li> <li>Sample preparation of OGC's DC at SGS comprised of drying, crushing, splitting (if required) and pulverising to obtain analytical sample of 250g with &gt;95% passing 75 µm.</li> <li>2013 OGC included at least 1 certified standard and 2 blanks as well as at least 2 duplicates and were tested at SGS Reefton &amp; Westport for Au, As &amp; Sb. Sb was analysed by XRF pressed powder pellet.</li> <li>OGC 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.</li> <li>RRL re-assayed of RRD087 diamond core and trenches were assayed by SGS, New Zealand using FAM303 with 30g fire assay and AAS finish for Au. The &lt;75µm pulps received from SGS were then analysed by RRL with an Olympus Vanta pXRF, which includes Sb which has a lower detection limit of 5ppm.</li> <li>RRL samples are submitted with blanks, duplicates, lab repeats and CRM for Au analysis as well as full QAQC program of blanks, standards, repeats &amp; duplicates</li> </ul>

Criteria	JORC Code Explanation	Commentary
		<p>during pXRF multielement analysis of the pulps.</p> <ul style="list-style-type: none"> <li>RRL 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 with the Olympus Vanta pXRF with full QAQC.</li> </ul>
<p>Verification of sampling and assaying</p>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Hard copies of the results for 1996 exploration by MMCL were entered into acQuire database by OGC.</li> <li>All laboratory assay results were received by OGC were stored in an acQuire database and laboratory signed PDF lab certificates for 2013 have been submitted to NZPAM.</li> <li>RRL data is stored in excel, Dropbox and Leapfrog. The data storage system is basic but robust.</li> <li>All SGS assay results received by RRL 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>OGC 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 + 1.58 \times Sb\ \%</math>).</li> </ul> <p>See Section 2 - Data aggregation methods</p>
<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 OGC 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>OGC &amp; MMCL used New Zealand Map Grid (NZMG).</li> <li>RRL 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 OGC drill programs.</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>RRL trenches are surveyed at the collar and azimuth and dip are taken at any changes along the trench length.</li> </ul>

Criteria	JORC Code Explanation	Commentary
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></li> <li>• <i>Whether sample compositing has been applied.</i></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 50m spacing at the Fraternal zone</li> <li>• Some pads had multiple drilling fanning from them.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></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>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• OGC DC, soil and trench samples taken for the purposes of laboratory analysis were securely packaged on site and transported to the relevant laboratories by OGC.</li> <li>• MMCL and CRAE did not record their sample security processes.</li> <li>• RRL samples are stored in a locked core shed until despatch. Samples are transported to SGS, Westport by RRL.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No review of sampling techniques and data of recent sampling has been undertaken yet.</li> <li>• Successful field checks by RRL have been completed to find OGC, 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
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>• <i>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</i></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> </ul>

	<p><i>park and environmental settings.</i></p> <ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <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 Crushington Gold Mining District historically produced 515koz @ 16.3 g/t Au.</li> <li>• ACP is situated within Department of Conservation administrated land.</li> </ul>
<p><i>Exploration done by other parties</i></p>	<ul style="list-style-type: none"> <li>• <i>Acknowledgment and appraisal of exploration by other parties.</i></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> <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>• OGC 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 OGC completed mapping and wacker soil sampling program into Auld Creek North extending CRAE's soil grid another 400m.</li> <li>• In 2010 OGC completed another wacker program into the Fraternal &amp; Bonanza zones overlapping previous work.</li> <li>• OGC then completed 7 diamond holes in 2010-11 to test southern extents of</li> </ul>

		<p>Fraternal zone completing 801.7m into a mineralised, steep westerly dipping zone ranging from 1m to 15m thick.</p> <ul style="list-style-type: none"> <li>• OGC 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>• OGC completed a regional exploration drill hole (RDD0084) which was drilled into the southeast of the project area testing a Au+ As wacker anomaly. It returned a 1m @ 2.54 g/t Au which has not been followed up.</li> <li>• In 2013 OGC 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 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.</li> <li>• 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</li> </ul>

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 to be like the second structural type as listed above and associated with a major shear zone.

**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 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.

• Collar details for Auld Creek drillholes:

Hole ID	NZTM mE	NZTM_mN	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
RDD0081	1507216	5333070	559	75.9	-60	35
RDD0081A	1507216	5333070	559	151.5	-60	35
RDD0085	1507216	5333070	559	79.0	-60	110
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
<b>Total</b>				<b>2016.1</b>	<b>m</b>	

- Down hole intercepts for Auld Creek Project:

Hole ID	Zone	From	To	Interval (m)	True Width (m)	Au g/t	Sb %	AuEq g/t
96DDAC001	Fraternal	51.9	53.1	1.2	0.6	1.0	7.90	13.48
96DDAC002	Fraternal	72.0	74.0	2.0	1.0	0.41	<0.01	0.41
96DDAC003	Bonanza West	34.0	35.0	1.0	0.6	4.65	<0.01	4.65
RDD0081	Fraternal	45.0	51.0	6.0	3.0	1.73	n/a	
	Fraternal	56.0	67.0	11.0	6.0	2.24	n/a	
RDD0081a	Fraternal	57.0	67.0	10.0	5.5	1.71	0.06	1.80
RDD0085	Fraternal	30.0	64.0	34.0	20.5	1.61	0.70	2.72
Incl		30.0	37.0	7.0	4.5	3.02	3.20	8.08
Incl		43.0	51.0	8.0	5.2	2.62	0.17	2.89
Incl		59.0	64.0	5.0	3.4	1.58	0.03	1.63
RDD0086	Fraternal	90.0	96.0	6.0	3.0	4.14	4.10	10.62
RDD0087	Fraternal	63.0	98.0	35.0	12.0	4.11	2.90	8.69
Incl		63.0	81.0	18.0	5.5	5.74	4.80	13.32
RDD0088	Fraternal	125.0	127.0	2.0	1.4	1.28	2.90	5.86
RDD0089		34.0	35.0	1.0	0.7	1.43	0.87	2.80
		45.0	47.0	2.0	1.4	1.02	0.17	1.67
RDD0091	Fraternal	137.0	138.0	1.0	0.7	1.28	<0.01	1.28
RDD0092	Fraternal			nsa				
RDD0093	Fraternal			nsa				

- RRL Trench locations:

Trench ID	Prospect	NZTM E	NZTM N	Elev	Length	Dip	Azimuth
BZTR001	Bonanza	1507179	5333140	538	17.5	0	226
BZTR002	Bonanza	1507142	5333146	542	2.7	0	273
FTTR001	Fraternal	1507244	5333083	541	8.0	0	281
FTTR002	Fraternal	1507237	5333081	543	1.5	0	189
FTTR003	Fraternal	1507235	5333167	519	7.0	0	273

		<table border="1"> <tr> <td>FTTR004</td> <td>Fraternal</td> <td>1507261</td> <td>5333361</td> <td>467</td> <td>5.0</td> <td>0</td> <td>80</td> </tr> <tr> <td>FTTR005</td> <td>Fraternal</td> <td>1507234</td> <td>5333031</td> <td>573</td> <td>9.8</td> <td>0</td> <td>60</td> </tr> <tr> <td>FTTR006</td> <td>Fraternal</td> <td>1507232</td> <td>5333306</td> <td>479</td> <td>5.6</td> <td>-40</td> <td>110</td> </tr> </table> <ul style="list-style-type: none"> <li>RRL Trench results:</li> </ul> <table border="1"> <thead> <tr> <th>Trench ID</th> <th>Length</th> <th>Au g/t</th> <th>Sb %</th> <th>AuEq g/t</th> </tr> </thead> <tbody> <tr> <td>FTTR001</td> <td>6.0</td> <td>8.9</td> <td>4.4</td> <td>15.8</td> </tr> <tr> <td>FTTR002</td> <td>1.5</td> <td>17.1</td> <td>9.0</td> <td>31.3</td> </tr> <tr> <td>FTTR004</td> <td>4</td> <td>4.0</td> <td>0.36</td> <td>4.6</td> </tr> <tr> <td>BZTR001</td> <td colspan="4">Results are pending</td> </tr> <tr> <td>BZTR002</td> <td colspan="4">Results are pending</td> </tr> <tr> <td>FTTR003</td> <td colspan="4">Results are pending</td> </tr> <tr> <td>FTTR005</td> <td colspan="4">Results are pending</td> </tr> <tr> <td>FTTR006</td> <td colspan="4">Results are pending</td> </tr> </tbody> </table>	FTTR004	Fraternal	1507261	5333361	467	5.0	0	80	FTTR005	Fraternal	1507234	5333031	573	9.8	0	60	FTTR006	Fraternal	1507232	5333306	479	5.6	-40	110	Trench ID	Length	Au g/t	Sb %	AuEq g/t	FTTR001	6.0	8.9	4.4	15.8	FTTR002	1.5	17.1	9.0	31.3	FTTR004	4	4.0	0.36	4.6	BZTR001	Results are pending				BZTR002	Results are pending				FTTR003	Results are pending				FTTR005	Results are pending				FTTR006	Results are pending			
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<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>Weighted average estimates are used based on a 0.5 g/t Au cut-off. No top cuts are applied.</li> <li>In the calculation of significant intervals, no more than two metres of internal consecutive dilution (&lt;0.5g/t Au) was included and only intercepts greater than 1.0g/t Au reported.</li> <li>Grades are compiled using length weighting.</li> <li>Siren has used the same gold equivalent formula (<math>AuEq = Au\ g/t + 1.58 \times Sb\ \%</math>) 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\$1,700 per ounce, antimony price of US\$8,500 per tonne and metal recoveries of 93% for gold and 95% for antimony. Metallurgical on diamond core from Alexander River and Big River by Independent metallurgist indicated gold recoveries of 92-94% similar to Mandalay Resources 93% recovery. No metallurgical testwork on Reef ton stibnite recovery has been completed to date, but the stibnite occurs in massive stibnite veins and should be recoverable by flotation or ore sorting technologies.</li> </ul>																																																																					
<i>Relationship between mineralisation widths and</i>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> </ul>																																																																					

<i>intercept lengths</i>	<p><i>reported.</i></p> <ul style="list-style-type: none"> <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 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 presented were completed by previous operators and data 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>Structural mapping</li> <li>Ongoing soil sampling to the north</li> <li>Trenching along strike.</li> <li>Independent Lab re-analysis of trench and drill core samples.</li> <li>Drilling</li> </ul>