

# First hole at Auld Creek intersects 20.8m @ 12.0g/t AuEq

Siren Gold Limited (ASX: **SNG**) (Siren or the Company) is pleased to provide an exploration update following assay results from its first drillhole at the **Auld Prospect**.



## Highlights

- Siren's first drillhole **ACDDH004** at the Auld Creek prospect intersected both the **Fraternal** and **Bonanza Shoots**.
  - The Fraternal Shoot intersected **20.8m** at **5.9g/t Au, 2.6% Sb** for **12.0g/t AuEq** from 116.2m, including **4.6m @ 10.7g/t Au, 3.9% Sb** for **19.9g/t AuEq**.
  - The **Bonanza Shoot** intersected **3.5m @ 4.3g/t Au** from 53.3m.
- Results confirm historic drillholes that include;
  - 35m @ 4.1g/t Au, 2.9% Sb or **35m @ 11.0g/t AuEq**,
  - 6m @ 4.1g/t Au, 4.1% Sb or **6m @ 13.8g/t AuEq**, and
  - 7m @ 3.0g/t Au, 3.2% Sb or **7m @ 10.6g/t AuEq**.
- Assay results for the second hole ACDDH005 are still pending.
- The thickness and consistency of the first hole at Auld Creek is very encouraging and consistent with recent trench results and historical drillholes.

## Executive Chairman Brian Rodan commented:

"As previously reported, Siren was particularly excited about the type of mineralisation evident in the first drillhole at Auld Creek. We are very pleased to report that the assays confirm the presence of consistent high-grade gold and antimony mineralisation across the entire Fraternal intercept. ACDDH005 also intersected a broad zone of mineralisation, with assays pending. Drilling is continuing, with updated results to be provided to the market over the coming weeks".

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### Corporate

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*Managing Director*  
**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



**Figure 1. Stibnite (black) cemented host rock breccia from ACDDH004 at 131.4 to 131.8m that assayed 6.7g/t Au, 20.9% Sb for 56.0g/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 @ 16.3g/t Au**. 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**.

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. Siren has recently acquired the Cumberland exploration permit that was part of the Globe Progress mining permit. Siren now holds the ground immediately to the north (Auld Creek) and south of the Globe Progress mine.

The gold-antimony mineralisation extends from Auld Creek south through Globe Progress and the Cumberland prospects and on to Big River, a strike length of 12kms with 9kms in Siren's permits and the remaining 3kms in the Globe Progress reserve area.

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 has been correlated to 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. For example, diamond drillhole RDD0087 intersected a true thickness of 12m @ 4.1g/t Au and 2.9% Sb and trench FFTR001 intersected 8.4m @ 19.7g/t Au and 5.3%Sb.

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 downhole intercepts include:

- 35m @ 4.1g/t Au, 2.9% Sb or **35m @ 11.0g/t AuEq**,
- 6m @ 4.1g/t Au, 4.1%Sb or **6m @13.8g/t AuEq**, and
- 7m @ 3.0g/t Au, 3.2% Sb or **7m @ 10.6g/t AuEq**

Significant intersections are shown in Figure 2 and Table 1.

Siren's recently commenced diamond drilling program is focused on depth extensions of the interpreted south plunging shoots, with initial holes drilled from Pads 16, 18 and 19 to the south of current drilling (Figure 2). The first drillhole, **ACDDH004**, was targeted at the Fraternal Shoot, approximately 50m down plunge from trench FTTR001 (**8.4m @ 19.7g/t Au, 5.3% Sb for 32g/t AuEq**) as shown in Figure 3.

**ACDDH004** intersected the top of the **Bonanza Shoot** between **53.3m to 55.9m (2.6m)** and then continued to intersect the **Fraternal Shoot** between **116.2m to 136.8m (20.6m)** with a true thickness of estimated to be approximately 13m as shown in Figure 4.

The Fraternal Shoot intersected **20.6m** that averaged **5.9g/t Au, 2.6% Sb for 12.0g/t AuEq** (Table 2), with the first **4.6m averaging 10.7g/t Au, 3.9% Sb for 19.9g/t AuEq**.

The **Fraternal Shoot** intersection comprised stibnite cemented breccia (Figures 1 and 5) on the hangingwall, followed by disseminated acicular arsenopyrite mineralisation with 1-5cm thick massive stibnite veins. The full width of the intersection is consistently mineralised (Table 2), and the estimated true width is thicker than existing drillhole and trench results, which is encouraging.

**ACDDH005**, was drilled 50m to the south of ACDDH004 and 50m down plunge from FTTR005 and FTTR018 (Figure 3). This hole was targeted near the projected top of the Fraternal Shoot, to help confirm the plunge (shown as 25° on Figure 3), which was not well constrained. The Fraternal shoot was intersected between 60-80m, based on visual inspection of the core and pXRF spot analysis.

Table 1. 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	0.1	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

<sup>1</sup> Based on gold equivalent formula of AuEq = Au g/t + 2.36 x Sb%.

<sup>2</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.

Table 2. ACDDH004 Au, Sb and AuEq assays.

From	To	Interval	Au g/t	Sb %	Au Eq
116.2	116.4	0.2	4.7	6.1	19.2
116.4	116.9	0.5	26.2	2.1	31.2
116.9	117.6	0.7	4.2	6.7	19.9
117.6	118.2	0.6	4.5	3.3	12.3
118.2	118.6	0.4	9.6	3.0	16.7
118.6	119.4	0.8	17.3	7.1	34.1
119.4	120.1	0.7	11.1	0.4	12.1
120.1	120.8	0.7	7.2	2.7	13.6
120.8	121.4	0.5	1.6	0.1	1.8
121.4	122.2	0.8	3.6	1.0	5.9
122.2	122.6	0.4	5.1	2.1	10.0
122.6	123.4	0.8	4.6	0.0	4.6
123.4	124.0	0.6	4.6	0.0	4.6
124.0	124.5	0.5	5.6	7.1	22.4
124.5	125.1	0.6	1.1	0.0	1.2
125.1	125.8	0.7	1.9	0.1	2.2
125.8	126.4	0.5	11.5	0.2	12.0
126.4	127.0	0.7	4.1	19.2	49.5
127.0	127.7	0.7	7.1	4.8	18.4
127.7	128.7	1.0	6.1	0.0	6.1
128.7	129.5	0.8	3.3	0.1	3.5
129.5	130.1	0.6	7.0	0.0	7.1
130.1	130.6	0.5	4.1	0.1	4.3
130.6	131.1	0.5	9.4	4.8	20.7
131.1	131.4	0.3	9.9	1.2	12.6
131.4	131.8	0.4	6.7	20.9	56.0
131.8	132.6	0.8	2.2	0.1	2.3
132.6	133.2	0.6	5.5	0.2	6.1
133.2	133.6	0.5	8.2	4.1	18.0
133.6	134.5	0.8	2.0	0.0	2.0
134.5	135.0	0.5	4.3	0.6	5.7
135.0	135.9	0.9	0.8	0.0	0.9
135.9	136.8	0.9	2.8	0.0	2.8
<b>116.2</b>	<b>136.8</b>	<b>20.7</b>	<b>5.9</b>	<b>2.6</b>	<b>12.0</b>

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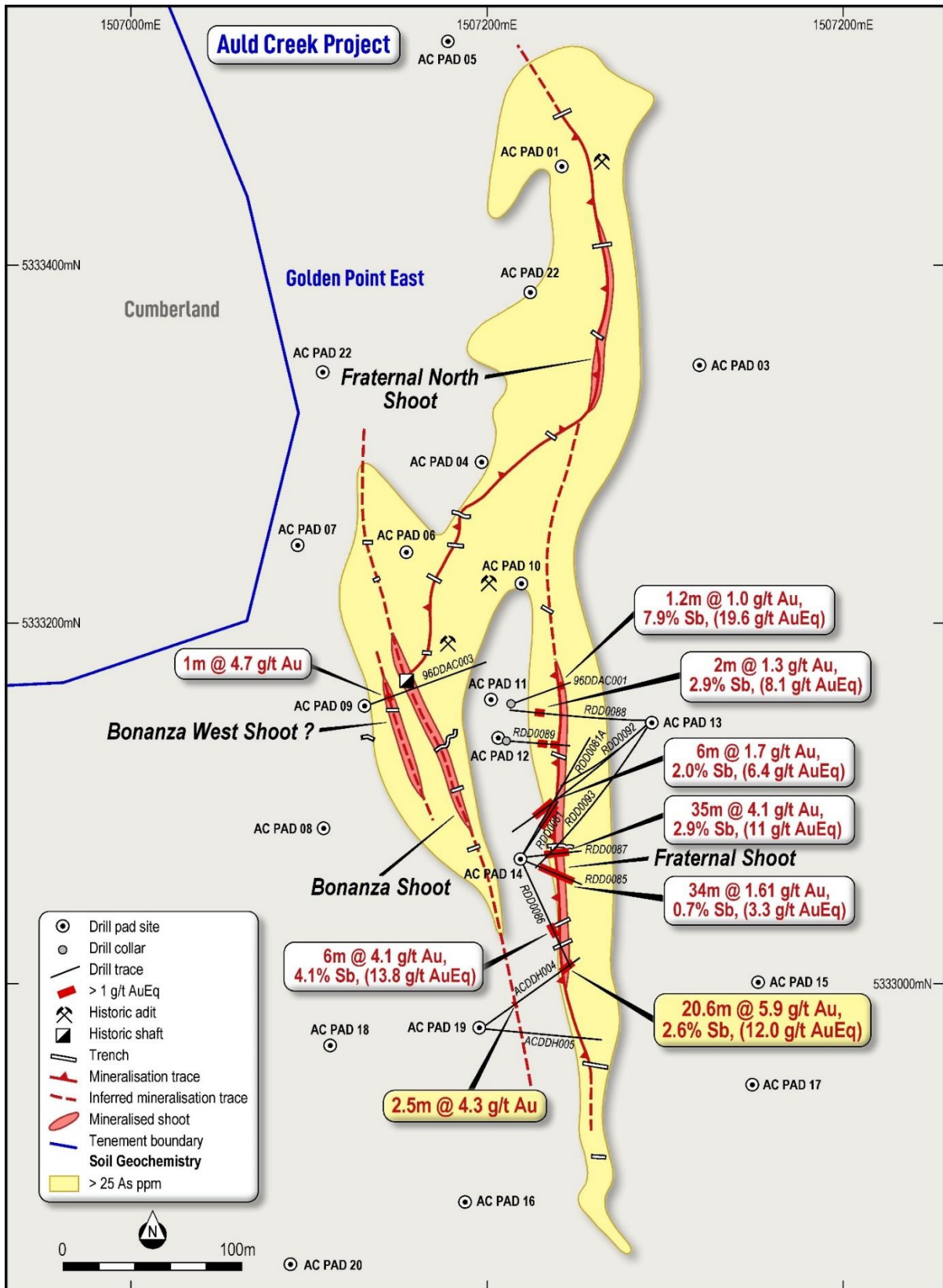


Figure 2. Auld Creek drillhole plan.

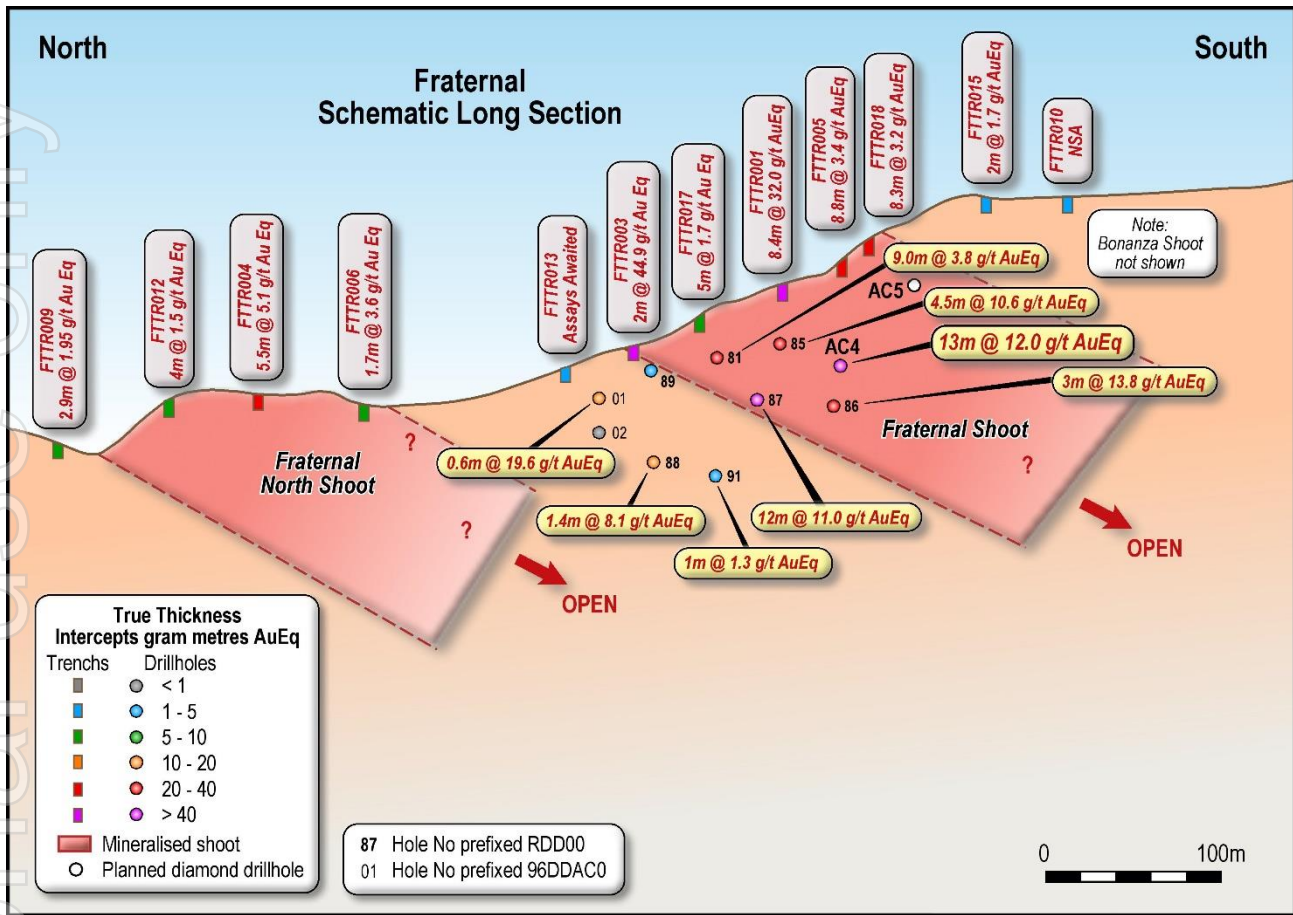


Figure 3. Fraternal N-S schematic long section.

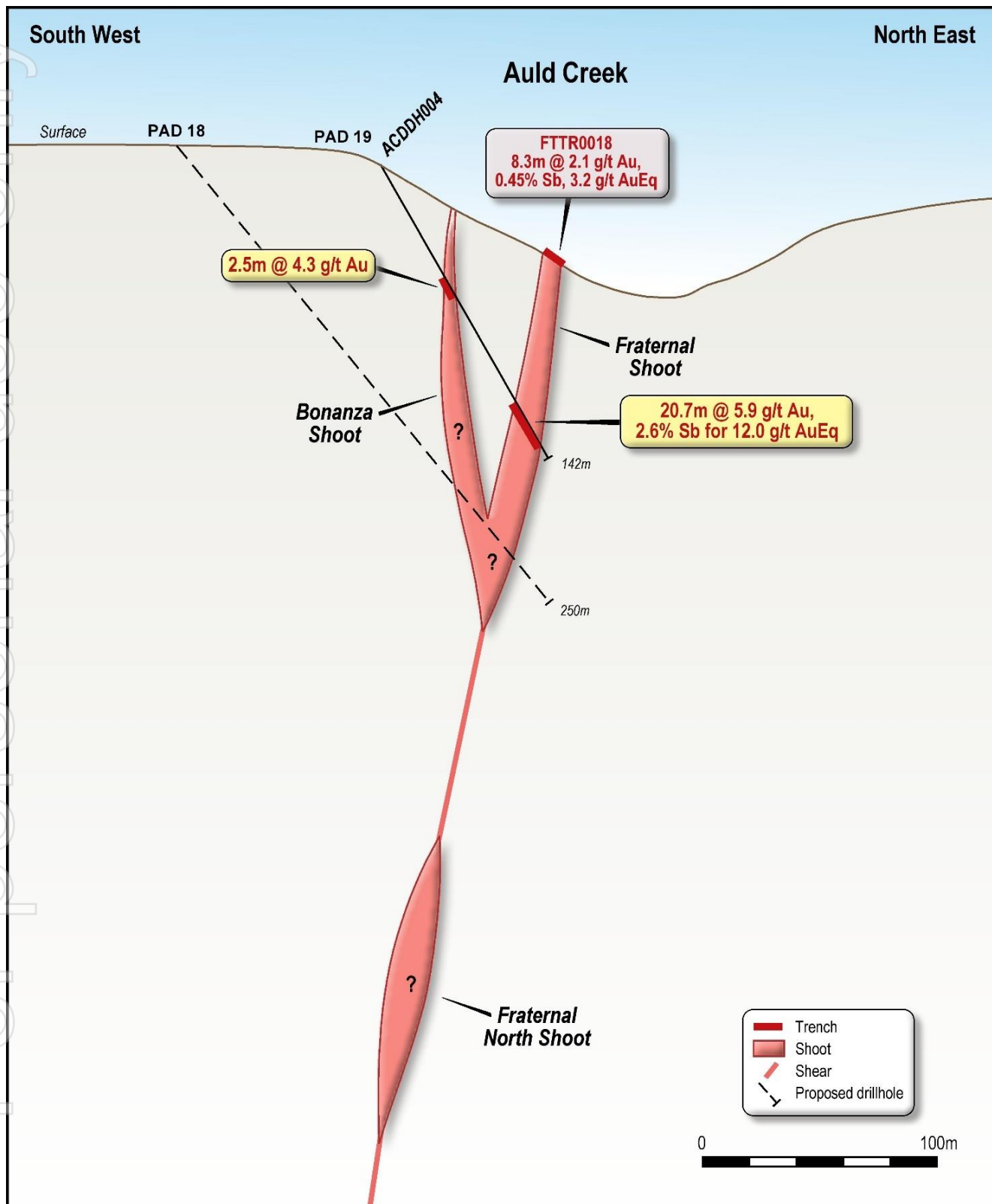


Figure 4. Auld Creek schematic cross section ACDDH004.





Figure 5a. Fraternal Shoot intersected in AXDDH004 116.2m – 118.4m. (SBX - stibnite cemented breccia, QBX – quartz breccia, HBX – host rock breccia, MGK – silicified disseminated arsenopyrite mineralised greywacke, MAR - silicified disseminated arsenopyrite mineralised argillite).



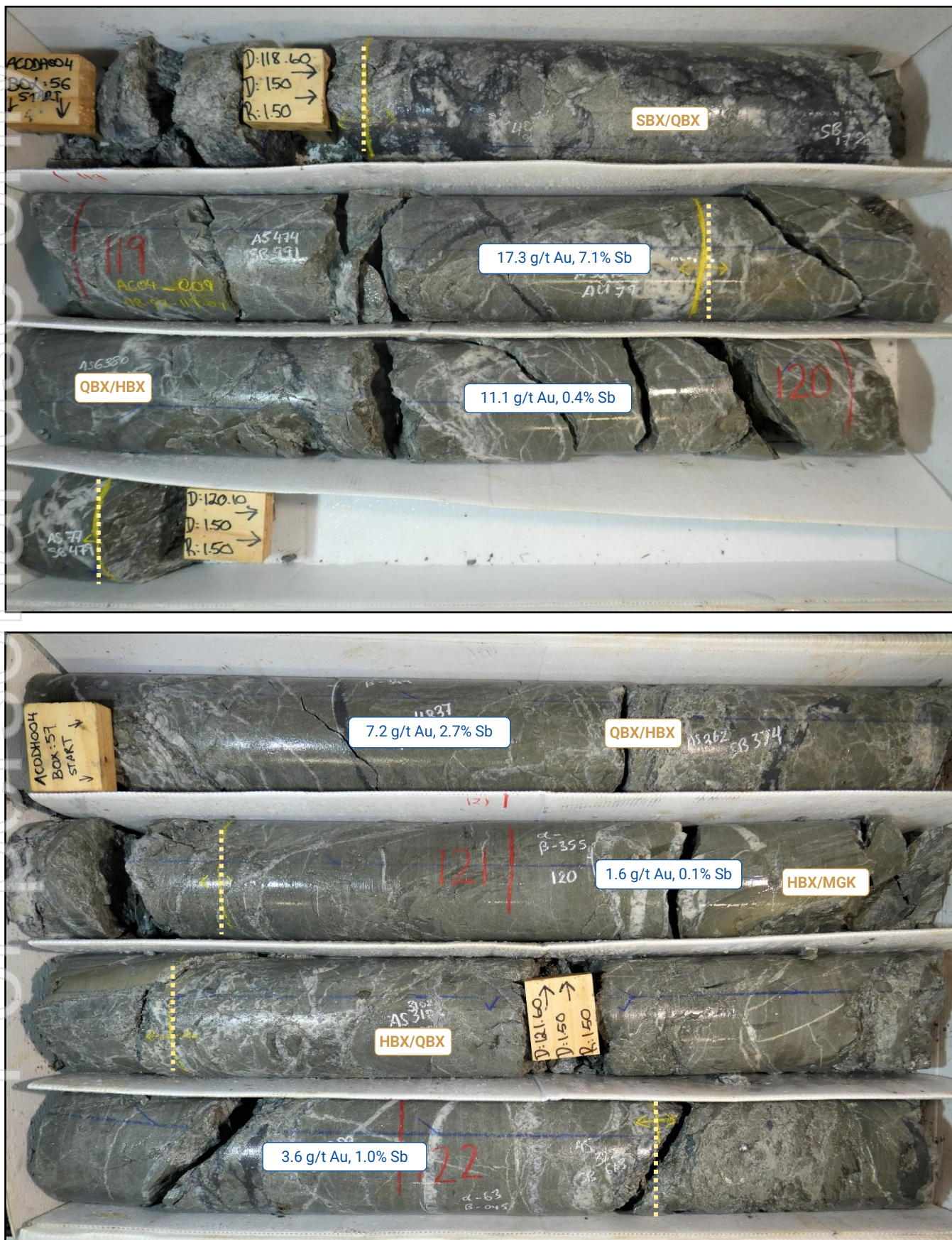


Figure 5b. Fraternal Shoot intersected in AXDDH004 118.4m – 122.3m.





Figure 5c. Fraternal Shoot intersected in AXDDH004 122.3m – 126.5m.



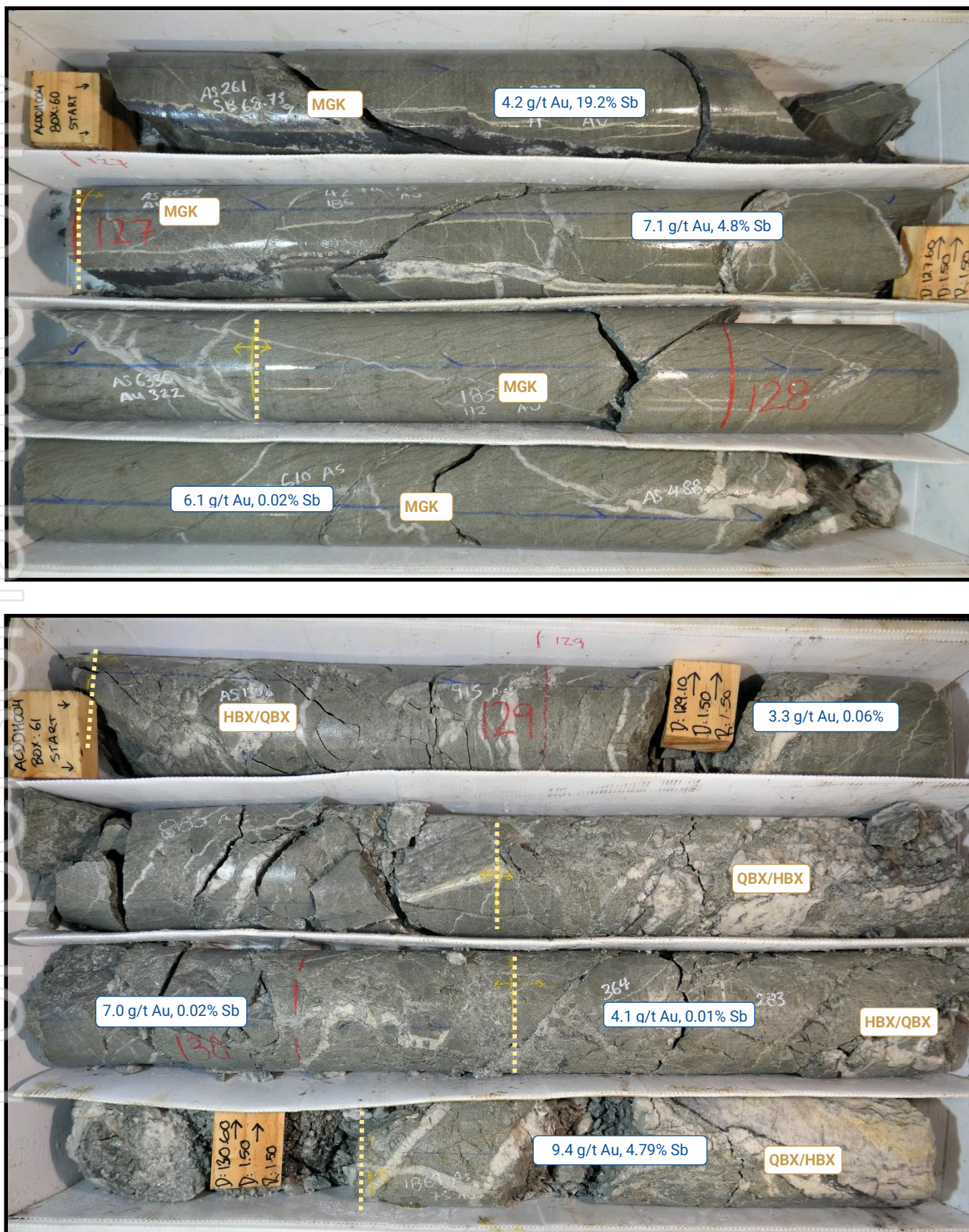


Figure 5d. Fraternal Shoot intersected in AXDDH004 126.5m – 130.9m.





Figure 5e. Fraternal Shoot intersected in AXDDH004 130.9m – 135.0m.



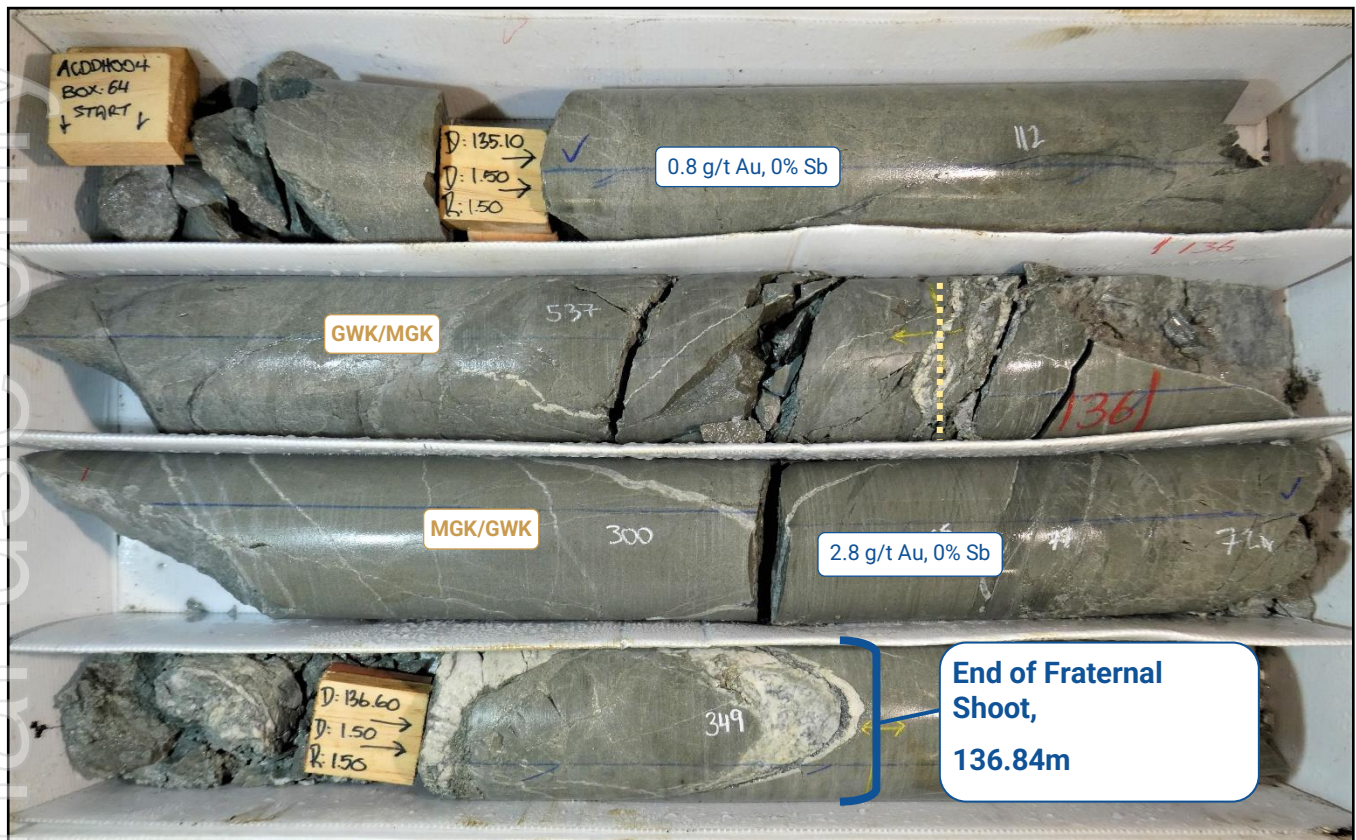


Figure 5f. Fraternal Shoot intersected in AXDDH004 135.0m – 136.8m.

## Bonanza Shoot

Soil geochemistry and trenching indicates that the Bonanza Shoot extends for around 125m along strike but is not well constrained. A 2.4m wide quartz reef was mined from a 30m shaft and was reported to return an average grade of 23.3 g/t Au. In 1914, a drive beneath the Bonanza Shaft was revitalised and extended, returning grades up to 21.7 g/t Au. Mining ceased due to the threat of litigation from the Reefton township, as at the time the Auld Creek catchment collected Reefton's water supply.

Diamond drillhole **ACDDH004** intersected the interpreted top of the Bonanza Shoot (Figure 6). The shoot was intersected between 53.3m and 55.9m that averaged **2.5m @ 4.3g/t Au** (Figures 7a and 7b), with an estimated true width of around 2m. The intersection comprised mainly of host rock and quartz breccias, with up to 1% of disseminated arsenopyrite mineralisation. No stibnite was observed.

**ACDDH005** intersected the interpreted Bonanza reef track between 37-39m (host rock breccia with acicular arsenopyrite) and the Fraternal shoot between 60-80m based on visual inspection of the core and pXRF spot analysis. The core has been submitted to the laboratory for analysis.

The intersections in ACDDH004 and ACDDH005 indicate that the Bonanza Shoot plunges shallowly (20°) to the south (Figure 6).

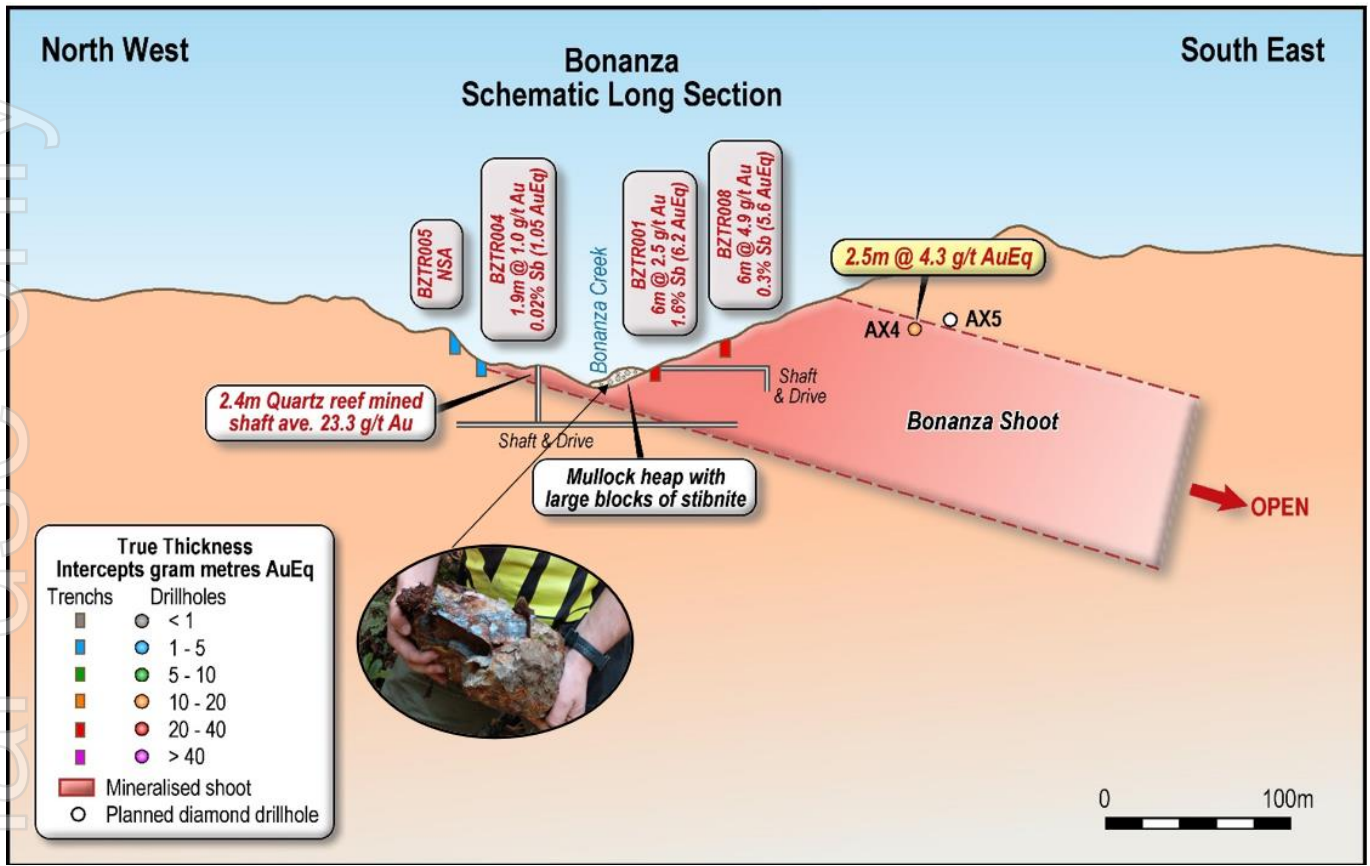


Figure 6. Bonanza N-S schematic long section.



Figure 7a. Bonanza Shoot intersected in AXDDH004 53.3m – 54.2m (SBX - stibnite cemented breccia, QBX – quartz breccia, HBX – host rock breccia, MGK – silicified disseminated arsenopyrite mineralised greywacke, MAR - silicified disseminated arsenopyrite mineralised argillite).



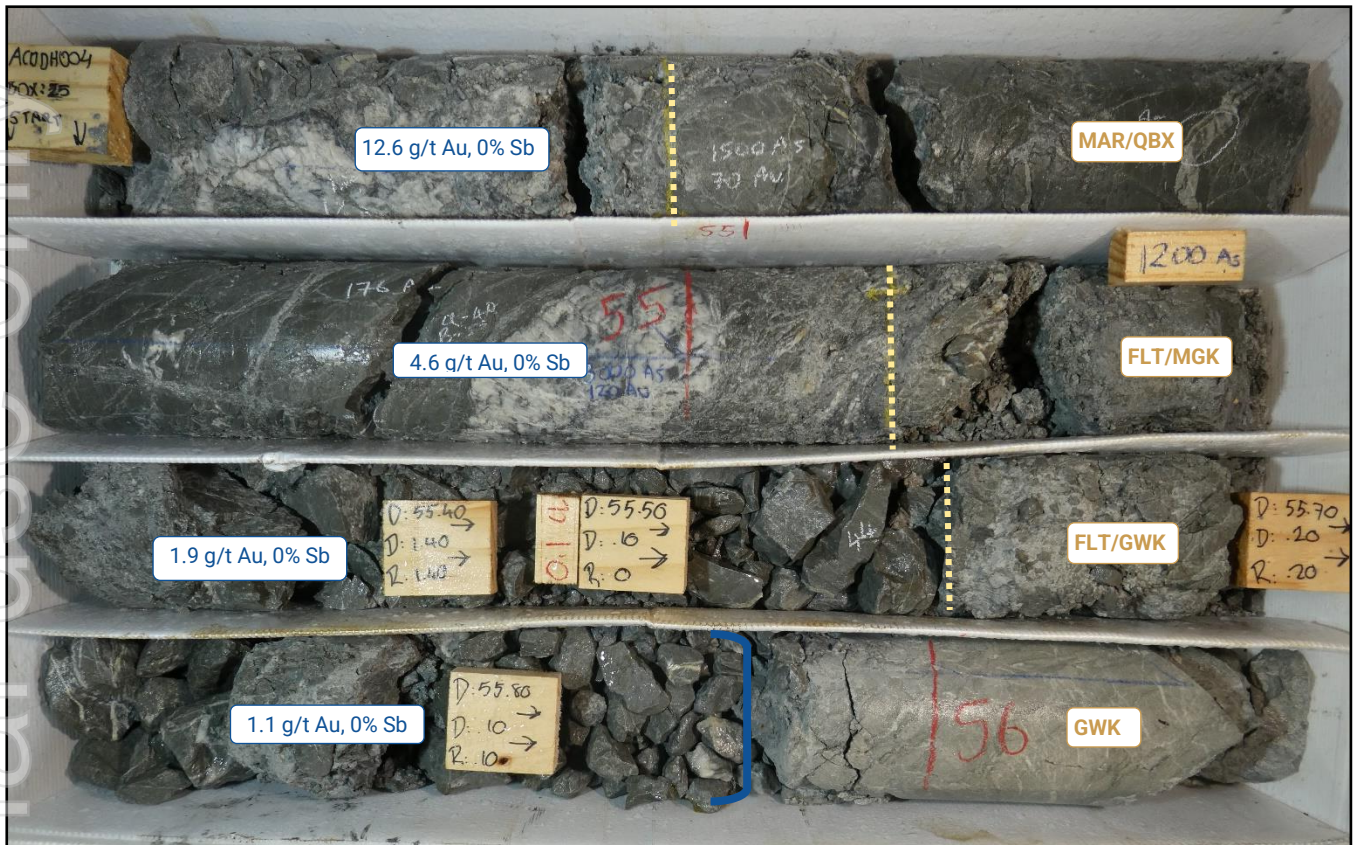


Figure 7b. Bonanza Shoot intersected in AXDDH004 54.2m – 55.9m.

## West Coast Mining Zone

The **West Coast Mining District** in **New Zealand** extends from Westport in the north to Hokitika in the south with Reefton in the centre (Figure 8). This area contains **over 100 mining permits**, 53 exploration and 11 prospecting permits and applications. The majority of the mining permits are for coal and alluvial gold but include the recently granted underground gold mine at Snowy River in December 2018 and Westland Mineral Sands heavy mineral sand mine granted in December 2021.

The Local Government and the West Coast community are very supportive of mining which forms a large proportion of the local economy. In New Zealand there is a clear permitting pathway, with numerous mining projects permitted within the last 5-years

Within **20kms** of the **Auld Creek Project** at Reefton there are **18 mines** (Table 3). Figure 9 shows that in the area around the Auld Creek project, there are 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.

Figures 10-12 show oblique aerial views looking north and south from the Auld Creek Project showing mining, forestry and farming surrounding the project. Auld Creek could be easily accessed from existing roads with a short decline.



**Table 3. Mines within 20kms of Auld Crefek Project.**

Mine Name	Mining Method	Operator	Permit No	Commodity	Distance from Auld Creek	Status
Globe Progress	Opencast	OceanaGold Limited	MP 41164	Gold	2km	Closed being rehabilitated
Terrace	Underground	Moore Mining Limited	MP 41720	Coal	5km	Closed in 2015
Reddale	Opencast	Moore Mining Limited	MP 41721	Coal	5km	Operating
Burkes	Opencast	Moore Mining Limited	MP 41722	Coal	7km	Operating
Island Block	Opencast	Birchfield Coal Mines Limited	ML 37160	Coal	7km	Care and Maintenance
Echo	Opencast	Francis Mining Company limited	MP 41269	Coal	8km	Operating
Waitahu	Opencast	Privately Owned	MP 60763	Gold	10km	Granted December 2021
Boatmans Creek	Opencast	4Y Mining Limited	MP 55627	Gold	12km	Operating
Workshop	Opencast	Privately Owned	MP 60782	Gold	12km	Granted August 2022
Mawheraiti	Opencast	Privately Owned	MP 60759	Gold	12km	Granted October 2022
Giles Creek	Opencast	Birchfield Coal Mines Limited	MP 52610	Coal	14km	Operating
Italian Creek	Opencast	Privately Owned	MP 54317	Coal / Gold	15km	Operating
Furmister Creek	Opencast	Privately Owned	MP 52495	Gold	16km	Operating
Larry River	Opencast	Privately Owned	MP 60584	Gold	16km	Granted October 2020
Blackwater Creek	Opencast	P & R Mining Limited	MP 51486	Gold	17km	Operating
Snowy River	Underground	Federation Mining Limited	MP 60473	Gold	20km	Granted 2018 In Development
Mill Flat Mining	Opencast	Silco Farms Limited	MP 60296	Gold	20km	Operating
Waimaunga	Opencast	Privately Owned	MP 52343	Gold	20km	Operating

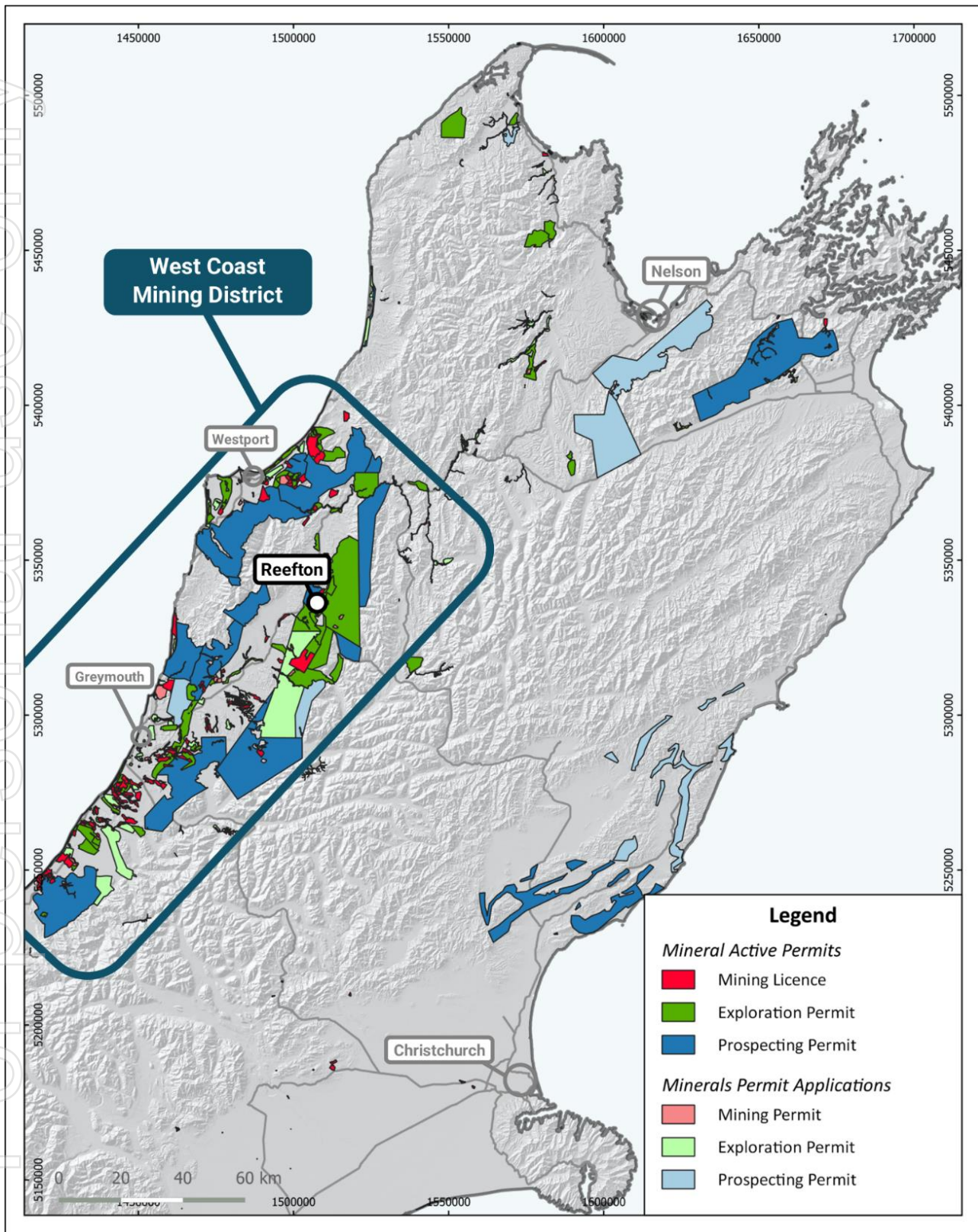


Figure 8. West Coast Mining District, New Zealand.



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**Figure 9. Aerial photo of the Reefton area showing coal and gold mines that surround the Auld Creek Project.**





Figure 10. Oblique aerial view looking south showing Auld Creek in the foreground and the Globe Progress gold and Echo coal mines in the background.

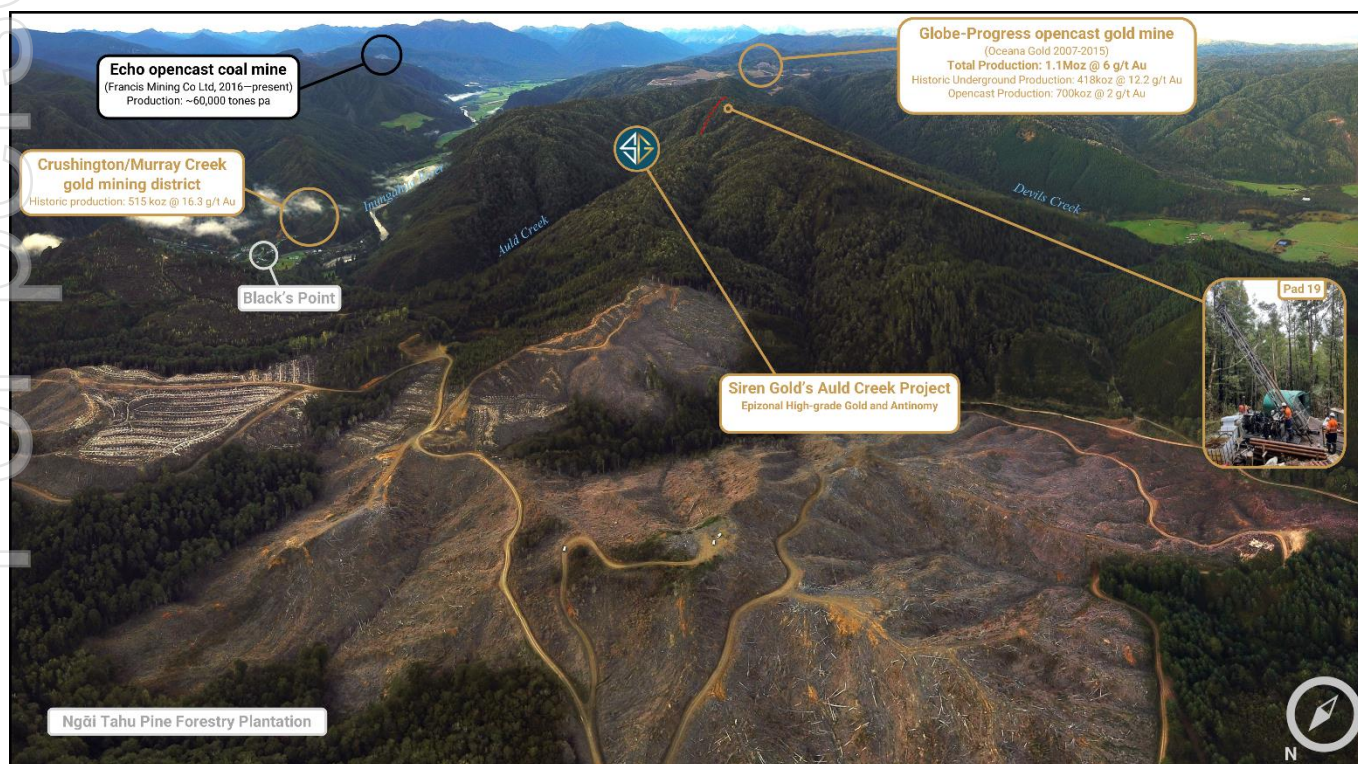


Figure 11. Oblique aerial view looking south showing recently felled pine forest in the foreground and the Globe Progress gold mine in the background. The Auld Creek project lies between the two showing ACDDH004 on Pad 19.



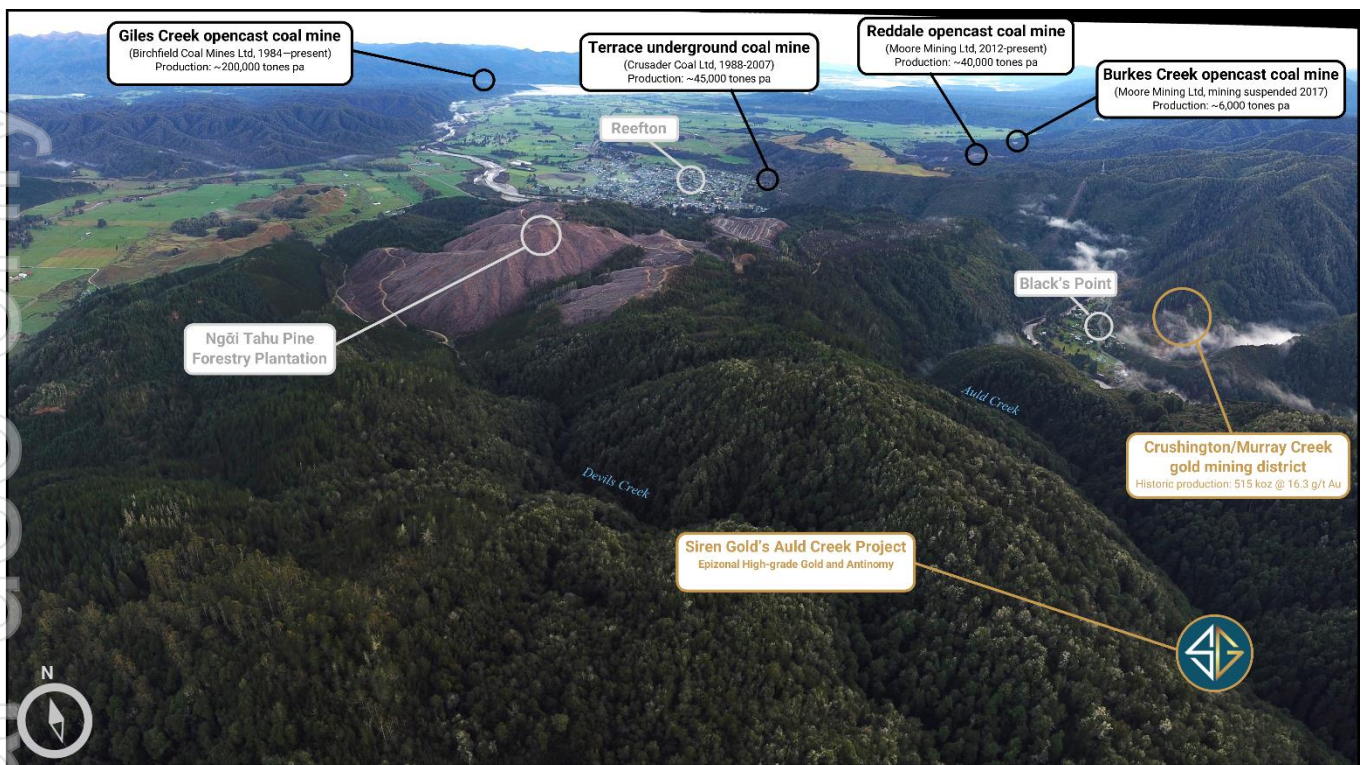


Figure 12. Oblique aerial view looking north with Auld Creek project in the foreground and forestry block, Reefton town and several coal mine in the background.

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

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### Competent Person Statement

The information in this announcement that relates to 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>Macraes Mining Co Ltd (MMCL), Oceana Gold Limited (OGL) &amp; Reefion Resources PTY Limited (RRL) diamond core (DC) was used to obtain samples for geological logging and sampling.</li> <li>MMCL, OGL and RRL 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>OGL completed 5m composited grind samples through barren host rock and assayed only for Au.</li> <li>CRAE, MMCL and RRL channel and trench samples were based on 1m sample lengths with sample size and collection method unknown.</li> <li>MMCL and OGL DC samples were pulverised to &gt;95% passing 75µm to produce a 50g charge for fire assay for Au.</li> <li>RRL to date have only drilled 2 diamond holes cored with PQ. The PQ core was cut in half with a diamond saw and half the sample submitted to SGS in Westport for analysis.</li> <li>Soil sampling was completed by hand auger or spade by CRAE. MMCL used both hand auger &amp; wacker drill for soil sampling. OGL 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>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). All OGL and RRL drilling used triple tube 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>Drilling was 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</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 RRL.</li> </ul>

recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.

#### Logging

- Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.
- Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.
- The total length and percentage of the relevant intersections logged.
- All OGL DC was 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 OGL exploration programs. The logging method is quantitative.
- RRL used similar logging codes as OGL for consistency.
- OGL Logging entered into an acQuire database.
- OGL reported all core trays were photographed prior to core being sampled.
- MMCL logging was completed on paper which was entered into OGL acquire database. Hard copies of these logs are complete.
- RRL logging was completed on laptops and entered into an Excel spreadsheet.
- RRL trench logging is based on RRL core logging templates with similar quantitative data captured as OGL. Photos are taken of the trench and of each sample.

#### Sub-sampling techniques and sample preparation

- If core, whether cut or sawn and whether quarter, half or all core taken.
- If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.
- For all sample types, the nature, quality and appropriateness of the sample preparation technique.
- Quality control procedures adopted for all sub-sampling stages to maximise representativity of samples.
- Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.
- Whether sample sizes are appropriate to the grain size of the material being sampled.

#### DC sampling:

- 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 the remaining core was archived.
- DC sampling was based on 1m lengths as well as allowing for geology. ACDDH004 drilled by RRL with PQ. The larger sample meant that a smaller sample interval was averaging around 0.7m but ranging from 0.3m to 1m based on geology.
- Laboratory duplicates and laboratory repeats were collected and assayed.
- The DC (2-3kg) and channel (1-2kg) sample sizes are considered appropriate to the grain and particle size for representative sampling.
- 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.
- MMCL sampling SOP for DC is not recorded but DC sample lengths varied from 2m in barren rock to 1m lengths in mineralised core.
- RRL trench sample length is based on 1m with field duplicates taken on 1:20 samples.

#### Quality of assay data and

- The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.
- CRAE tested their soils for Au (ppb) As, Cu, Pb and Zn by Fire assay. CRAE tested their trench samples for Au, As & Sb.
- MMCL stream sediment samples were analysed for Au (>1 ppb Au detection limit),

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laboratory tests

- *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*
  - *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*
- Ag, As, Ba, Bi, Cd, Co, Cu, Mo, Pb, Sb, and Zn.
  - 1996 MMCL DC were tested for Au, As, Sb, Cu, Pb & Zn. Their trenching & soil samples were processed by ALS for a suite that included Au (>1 ppb Au), As, Bi, Ca, Cu, Fe, Mn, Mo, Pb, Sb, and Zn.
  - OGL 2007 DC samples were set to Amdel Laboratories in Macraes Flat, NZ for Au, As & Sb.
  - 2011 OGL 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.
  - 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.
  - 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 <75µm pulps received from SGS were then analysed by an Olympus Vanta pXRF which includes Sb which has a lower detection limit of 5ppm.
  - RRL 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.
  - 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.
  - 2023 RRL 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 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.
- Discuss any adjustment to assay data.

- 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.
- RRL data is stored in excel, Dropbox and Leapfrog. The data storage system is basic but robust.
- All SGS assay results received by RRL are signed PDF lab certificates hard copies that are stored.
- The data and future work will be stored and managed on a commercial database with inbuilt validation protocols in the future.
- OGL completed RDD0081 and RDD0081A which are 3m a part.
- Sb results have also been adjusted for AuEq using  $(AuEq = Au\ g/t + 2.36 \times Sb\ \%)$ . See Section 2 - Data aggregation methods

Location of data points

- 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.
- Specification of the grid system used.
- Quality and adequacy of topographic control.

- 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.
- OGL & MMCL used New Zealand Map Grid (NZMG).
- RRL used handheld Garmin 64s to pick up trenches, check old pad sites and mapping.
- The data has translated into Transverse Mercator 2000 (NZTM).
- Downhole surveys were taken every 50m in 2007 and 30m in 2011 & 2103 OGL drill programs.
- 1996 drilling by Macraes Limited completed a downhole survey at the end of the hole.
- Relative level (RL) is calculated as above Sea Level
- RRL trenches are surveyed at the collar and azimuth and dip are taken at any changes along the trench length.
- RRL drillholes have been surveyed by handheld GPS and LiDar but will be picked up by a registered surveyor in due course.

Data spacing and distribution

- Data spacing for reporting of Exploration Results.
- Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s)

- 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.
- Some pads had multiple drilling fanning from them.

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and classifications applied.

- Whether sample compositing has been applied.

Orientation of data in relation to geological structure

- Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.
- If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.

- 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.

Sample security

- The measures taken to ensure sample security.

- 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.
- MMCL and CRAE did not record their sample security processes.
- RRL samples are stored in a locked core shed until despatch. Samples are transported to SGS, Westport by RRL.

Audits or reviews

- The results of any audits or reviews of sampling techniques and data.

- No review of sampling techniques and data of recent sampling has been undertaken yet.
- Successful field checks by RRL have been completed to find OGL, MMCL & CRAE drill pad and trenching locations.

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## 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 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>
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 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>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</li> </ul>

and structures extending from Globe Progress.

- From 2008 to 2010 OGL completed mapping and wacker soil sampling program into Auld Creek North extending CRAE's soil grid another 400m.
- In 2010 OGL completed another wacker program into the Fraternal & Bonanza zones overlapping previous work.
- 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.
- 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.
- 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.
- 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.

#### Geology

- *Deposit type, geological setting and style of mineralisation.*

- Gold mineralisation in the Reefion 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.
- In general, two end members of mineralisation styles exist, the "Blackwater Style" is comprised of relatively undeformed quartz lodes; whilst the "Globe-Progress Style" comprises highly deformed quartz - pug breccia material with a halo of disseminated sulphide mineralisation.
- Three main structural deposit types appear to occur in the Reefion 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.



- 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.

**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
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
RDD0086	1507216	5333070	559	141.5	-60	150
RDD0087	1507216	5333070	559	132.5	-75	75
RDD0088	1507290	5333147	539	159.5	-60	270

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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	1507193	5332975	601	142.6	-60	045
<b>TOTAL</b>				<b>2158.7</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	19.6
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
RDD0044	?			nsa				
RDD0045	?			nsa				
RDD0059	?			nsa				
RDD0081	Fraternal	45.0	51.0	6.0	3.2	1.73	1.96	6.4
	Fraternal	57.0	67.0	11.0	6.0	2.24	0.11	2.5
RDD0081a	Fraternal	57.0	67.0	10.0	5.5	1.71	0.06	1.90
RDD0084	?	77.0	78.0	1.0	0.7	2.54	<0.01	2.54
RDD0085	Fraternal	30.0	64.0	34.0	18.0	1.61	0.70	3.3
Incl		30.0	37.0	7.0	4.5	3.02	3.20	10.6
Incl		43.0	51.0	8.0	5.1	2.62	0.17	3.0



Incl		59.0	64.0	5.0	3.3	1.58	0.03	1.7
RDD0086	Fraternal	90.0	96.0	6.0	3.0	4.14	4.10	13.8
RDD0087	Fraternal	63.0	98.0	35.0	12.0	4.11	2.90	11.0
Incl		63.0	81.0	18.0	6.0	5.74	4.80	17.1
RDD0088	Fraternal	125.0	127.0	2.0	1.4	1.28	2.90	8.1
RDD0089		34.0	35.0	1.0	0.7	1.43	0.87	3.48
		45.0	47.0	2.0	1.4	1.02	0.17	1.42
RDD0091	Fraternal	137.0	138.0	1.0	0.7	1.28	<0.01	1.28
RDD0092				nsa				
RDD0093				nsa				
ACDDH04	Bonanza	53.3	55.9	2.6	2.0	4.3	0.0	4.3
	Fraternal	116.2	136.8	20.6	13.0	5.9	2.6	12.0

- RRL Trench locations:

Trench ID	Prospect	NZTM E	NZTM N	Elev	Length	Dip	Azimuth
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
FTTR004	Fraternal Nth	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
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	119	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 North	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	1507179	5333140	538	17.5	0	226
BZTR002	Bonanza West	1507147	5333152	504	5.2	17	273
BZTR003	Bonanza	1507165	5333226	520	6.6	-23	116
BZTR004	Bonanza West	1507136	5333225	545	1.9	0	249
BZTR005	Bonanza West	1507133	5333245	556	4	0	277
BZTR006	Bonanza	1507161	5333183	513	3.4	-38	95
BZTR007	Bonanza West	1507132	5333135	539	6	-5	278
BZTR008	Bonanza	1507188	5333260	583	9.2	5	275
BZTR009	Bonanza	1507238	5333483	438	10	-19	67

*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 Au 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 Au) was included and only intercepts greater than 1.0g/t Au 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 Website). The formula is based on a gold price of US\$1,700 per ounce, antimony price of US\$13,000 per tonne and metal recoveries of 93% for gold and 95% for antimony.

*Relationship between mineralisation*

- These relationships are particularly important in the reporting of Exploration Results.
- If the geometry of the mineralisation with respect to

- 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.

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<p><i>widths and intercept lengths</i></p>	<p><i>the drillhole angle is known, its nature should be 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>	
<p><i>Diagrams</i></p>	<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 trench locations is presented in Announcement.</li> </ul>
<p><i>Balanced reporting</i></p>	<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>
<p><i>Other substantive exploration data</i></p>	<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>
<p><i>Further work</i></p>	<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 north</li> <li>Trenching along strike.</li> <li>Independent Lab re analysis of trench and drill core samples.</li> </ul>

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