

# QUARTERLY ACTIVITIES REPORT

QUARTER ENDED 31 MARCH 2023

Siren Gold Limited (ASX: **SNG**) (Siren or the Company) is pleased to provide the following summary of its activities for the three months ended 31 March 2023

## Highlights

- Global Resource increased to **1.1Moz at 3.1g/t Au** (100% basis).
- Maiden Inferred resource at Big River of **105koz at 3.94g/t Au** at a 1.5g/t cut-off.
- Big River gold project consists of 6 identified **gold mineralised shoots** across more than 500m of strike, with potential to discover additional high-grade shoots. Maiden Resource defined from 2 of these 6 shoots (A2 Shoot and Shoot 4). The deposit remains open in all directions.
- Drilling commenced at Auld Creek with Siren's first drillhole (ACDDH004) intersecting broad zones of the type of mineralisation targeted. Assay results are currently pending.
- Three trenches at Auld Creek that ended in mineralisation were extended. **FTTR001** intersection increased to **8.4m @ 19.7g/t Au, 5.3% Sb for 32.0g/t AuEq**, **FTTR004** increased to **5.5m @ 4.5g/t Au, 0.3% Sb for 5.1g/t AuEq**, and **BZTR002** increased to **3.4m @ 4.1g/t Au, 0.26% Sb for 4.8g/t AuEq**.
- Two new Auld Creek trenches; **BZTR008** intersected **6m @ 4.5g/t Au, 0.26% Sb for 5.1g/t AuEq** and **FTTR018** intersected **8.3m @ 2.1g/t Au, 0.45% Sb for 3.2g/t AuEq**.
- The **Mt Lyell North** 1km long Au Zone has been identified as a significant new discovery with visible gold discovered at the United Reed located at the NW end of the Au anomaly.
- A United Victory Reef channel sample returned **3.0m @ 19.1g/t Au**, comprising a 0.4m quartz reef with visible gold that assayed **39.0g/t Au**, surrounded by disseminated arsenopyrite mineralisation assaying up to **42.0g/t Au**.

## Projects and Activities

During the quarter Siren **increased its Global Mineral Resource Estimate (MRE) to 1.1Moz @ 3.1g/t Au** at a 1.5g/t Au cut-off. This included a Maiden Big River MRE of 105koz @ 3.94g/t Au at a 1.5g/t cut-off.

Mapping and trenching continued at **Lyell North** with a 1km long Au Zone identified. The reef is surrounded by disseminated acicular arsenopyrite for a total thickness of approximately 2m-5m along the 1 km gold zone. Channel samples of the United Victory Reef at the NW end of the zone returned **3.0m @ 19.1g/t Au**, comprising a 0.4m quartz reef with visible gold that assayed 39.0g/t Au, surrounded by disseminated arsenopyrite mineralisation assaying **up to 42.0g/t Au**.

Three trenches at Auld Creek that had ended in mineralisation were extended. The **FTTR001** intersection increased to **8.4m @ 19.7g/t Au, 5.3% Sb for 32.0g/t AuEq**, **FTTR004** increased to **5.5m @ 4.5g/t Au, 0.3% Sb for 5.1g/t AuEq**, and **BZTR002** increased to **3.4m @ 4.1g/t Au, 0.26% Sb for 4.8g/t AuEq**.

### Registered Address

Siren Gold Limited  
Level 2  
41 Ord Street  
West Perth WA 6005  
ASX: **SNG**  
ACN: **619 211 826**

t: +61 8 6458 4200  
e: admin@sirengold.com.au  
w: sirengold.com.au

### Corporate

**Brian Rodan**  
*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

A new Bonanza trench **BZTR008** was excavated 40m to the south of BZTR001 (6m @ 2.5g/t Au, 1.6% Sb% for 6.2g/t AuEq) and intersected **6m @ 4.5g/t Au, 0.26% Sb for 5.1g/t AuEq**, extending the Bonanza Shoot to an estimated 125m.

Drilling recommenced on 27 March at Auld Creek, with ACDDH004 completed to 142.6m on 6 April.

This hole intersected both the **Fraternal** and **Bonanza Shoots**, based on core logging and spot pXRF analysis, with a **20m thick** Fraternal mineralised zone that contained **stibnite cemented breccia** on the hanging wall, with silicified disseminated acicular arsenopyrite mineralisation containing **numerous sheeted 1-5cm stibnite veins** in the footwall.<sup>1</sup>

The top of the **Bonanza Shoot** was also intersected, with a **3.7m thick brecciated zone containing disseminated arsenopyrite**.<sup>1</sup>

The thickness and consistency of the Fraternal mineralisation is encouraging and consistent with recent trench intersections.

Drilling is continuing, with initial assay results expected in May.

## Auld Creek

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-stibnite mineralisation extends from Auld Creek south through Globe Progress and the Cumberland prospects (Figure 1) 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 Globe progress mineralisation extends for over 200m vertically below the bottom of the open pit before it was offset by the Chemist Shop Fault (CSF).

The offset mineralisation of the other side of the CSF has not been found.

<sup>1</sup> *In relation to the disclosure of visual mineralisation, the Company cautions that visual estimates of sulphide and oxide material abundance should never be considered a proxy or substitute for laboratory analysis. Laboratory assay results are required to determine the widths and grade of the visible mineralisation reported in preliminary geological logging. The Company will update the market when laboratory results become available.*

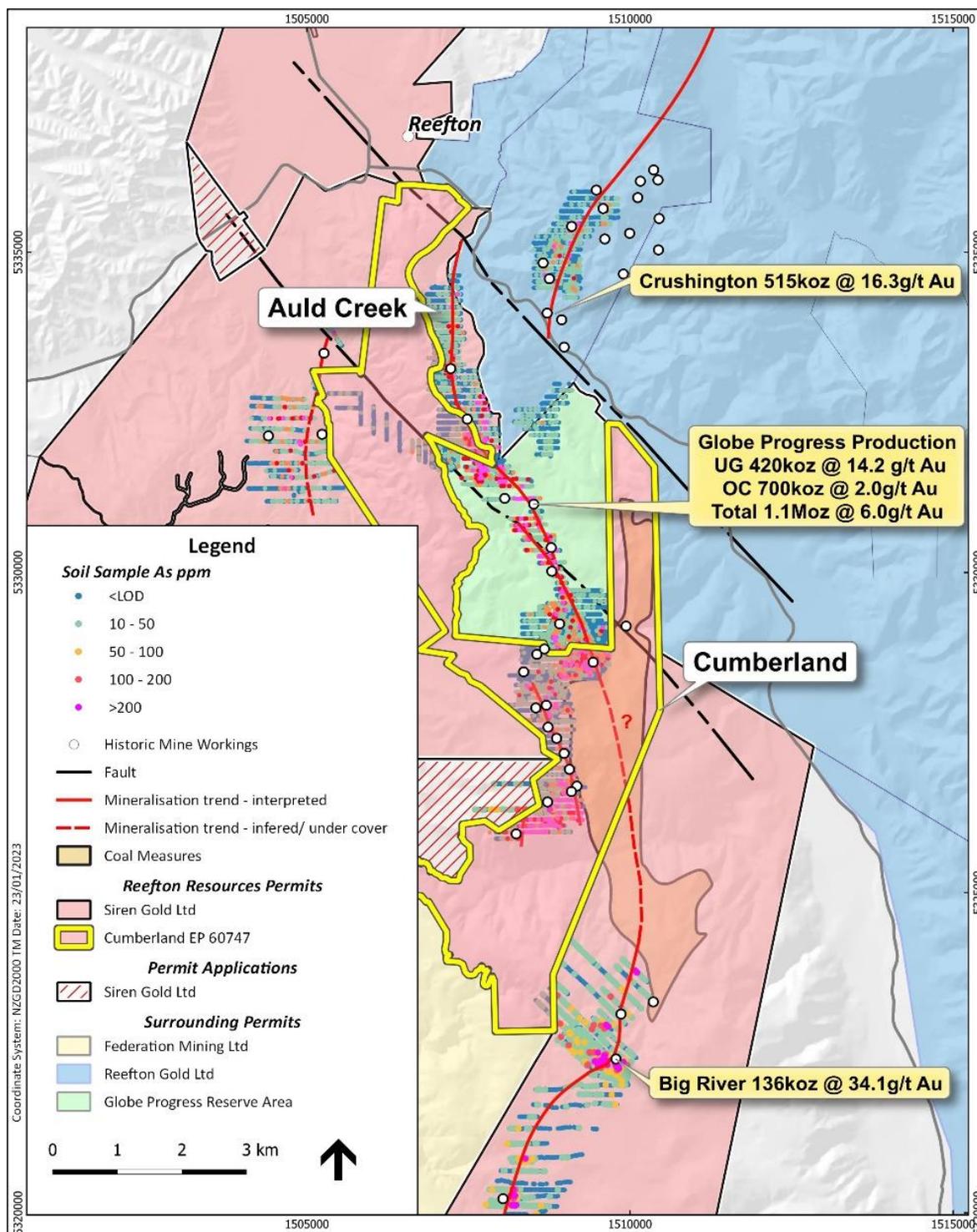


Figure 1. Auld Creek and Cumberland exploration permits surrounding Globe Progress mine

## Trenching

As previously reported, Siren has completed infill soil sampling at Auld Creek to better define the soil anomalies (refer to ASX announcement dated 10 October 2022).

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 and Bonanza into the Bonanza and Bonanza West zones.

Siren has excavated six trenches across the Fraternal Shoot (FTTR001, FTTR002, FTTR003, FTTR005, FTTR010, FTTR011 and FTTR013), six trenches across the Fraternal North Shoot (FTTR004, FTTR006, FTTR007, FTTR008 FTTR009 and FTTR012) and seven trenches across the Bonanza Shoot (BZTR001 - BZTR007) as shown in Figure 2.

During the quarter three trenches that ended in mineralisation were extended.

The gold equivalent (AuEq) factor was also increased from 1.58 to 2.36, based on an increase in the antimony price from **US\$8,500/t** to **US\$13,000/t** as reported by Mandalay Resources limited for Costerfield mine in Victoria Australia.

Trench **FTTR001** in the Fraternal Shoot was previously reported as 6.0m @ 8.9g/t Au and 4.4% Sb for 15.8 g/t AuEq (based on the old AuEq factor of 1.58). This trench has now been extended and intersected an additional 2.4m of mineralisation, including a 1.0m thick stibnite rich zone that assayed 15.9% Sb, and a 0.7m thick zone that assayed 123g/t Au, increasing the intersection significantly to **8.4m @ 19.7g/t Au, 5.3% Sb for 32.0g/t AuEq**.

Trench **FTTR004** in the Fraternal North Shoot was previously reported as 4.0m @ 4.2g/t Au, 0.36% Sb for 4.4g/t AuEq (based on a AuEq factor of 1.58). This trench has now been extended and intersected an additional 1.5m of mineralisation, increasing the intersection significantly to **5.5m @ 4.5g/t Au, 0.3% Sb for 5.1g/t AuEq**.

Trench **BZTR002** in the Bonanza West Shoot was previously reported as 2.7m @ 2.6g/t Au, 0.15% Sb for 3.0g/t AuEq. This trench has now been extended and intersected an additional 0.7m of mineralisation, increasing the intersection significantly to **3.4m @ 4.1g/t Au, 0.26% Sb for 4.8g/t AuEq**. BZTR002 is the only trench excavated on the Bonanza West Shoot to date and it will be targeted with additional trenches in Quarter 2.

At Bonanza a 2.4m wide quartz reef was mined from a shallow 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<sup>2</sup>.

Bonanza trench **BZTR008** was excavated 40m to the south of BZTR001 and intersected **6m @ 4.5g/t Au, 0.26% Sb for 5.1g/t AuEq**.

Soil geochemistry and trenching indicates that the Bonanza Shoot extends for around 125m along strike but is not well constrained. Trench BZTR009 did not intersect any significant mineralisation but the shoot maybe slightly further to the east of the trench (Figure 2).

This trench will be extended to the east to test this interpretation. Trench results indicate that the Bonanza mineralisation dips steeply to the east.

Significant trench intersections are summarised in Table 1.

<sup>2</sup> J. F. Downey, 1928. Quartz Reefs of the West Coast Mining District, New Zealand. Republished 2003 by Cadsonbury Publications, Christchurch.

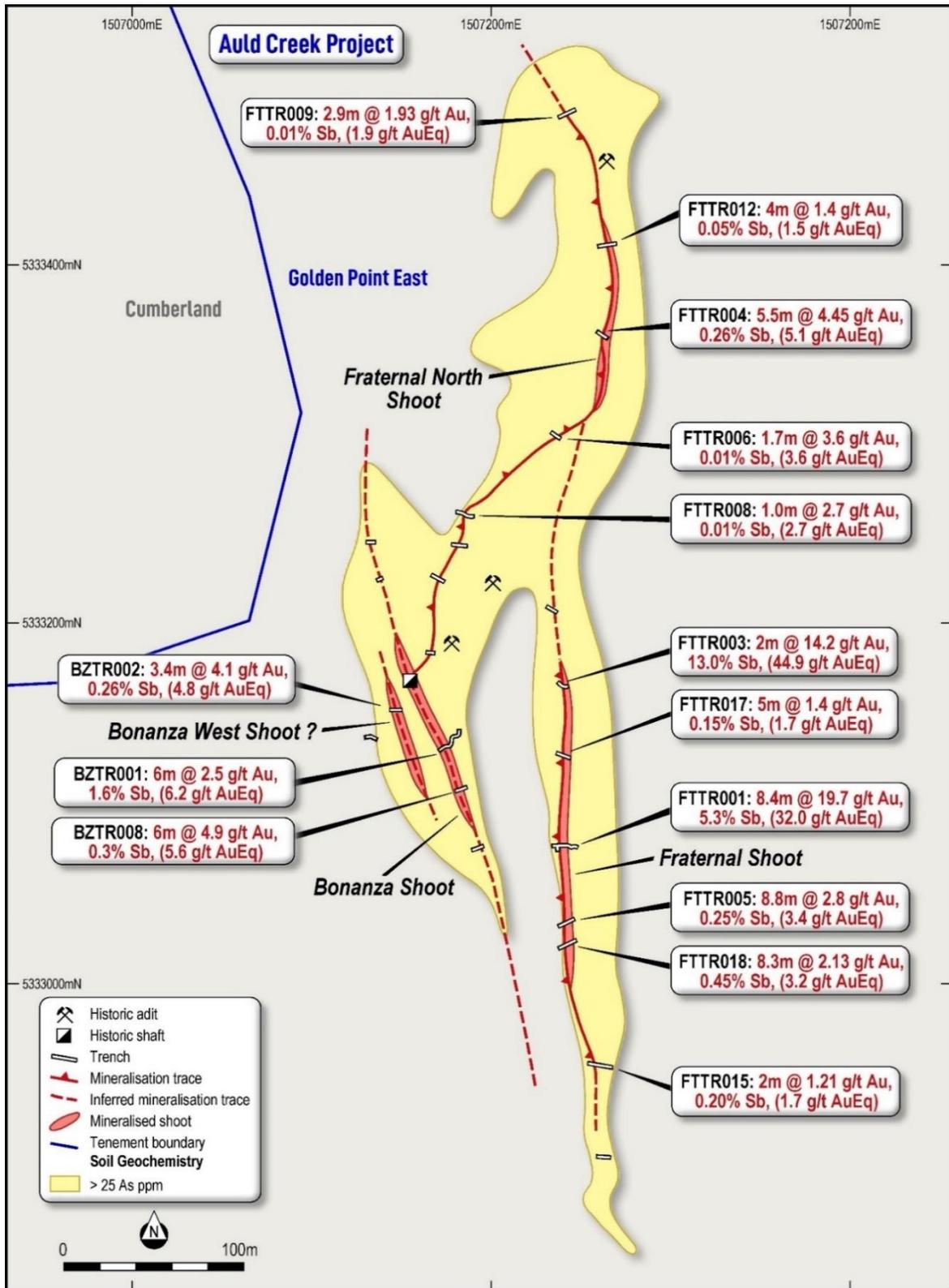


Figure 2. Auld Creek trench plan.

**Table 1 Significant Auld Creek trench intercepts.**

Trench ID	Mineralised Zone	From	To	Interval (m)	True Width (m)	Au g/t	Sb %	AuEq g/t <sup>1</sup>
FTTR001	Fraternal	3.5	11.9	8.4	8.4	19.7	5.3	32.0
FTTR002	Fraternal	0.0	1.5	1.5	1.5	17.1	9.0	38.3
FTTR003	Fraternal	3.0	5.0	2.0	2.0	14.2	13.0	44.9
FTTR004	Fraternal North	1.3	6.8	5.5	5.5	4.45	0.26	5.1
FTTR005	Fraternal	1.0	9.8	8.8	8.5	2.82	0.26	3.4
FTTR006	Fraternal North	1.9	3.6	1.7	1.7	3.61	0.01	3.6
FTTR018	Fraternal	2.2	10.5	8.3	8.3	2.13	0.45	3.2
BZTR001	Bonanza	2.5	16.5	14.0	14.0	2.0	0.82	3.9
<i>including</i>		10.5	16.5	6.0	6.0	2.5	1.55	6.2
BZTR002	Bonanza West	0.0	3.4	3.4	3.4	4.1	0.26	4.8
BZTR008	Bonanza	1.0	7.0	6.0	6.0	4.5	0.26	5.1

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

## Drilling

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 intersected an estimated true width of **12m @ 4.1g/t Au, 2.9% Sb for 11.0g/t AuEq** from 63m. The highest grades in the deposit are generally associated with strong antimony mineralisation. The deepest drillhole intersected gold mineralisation less than 100m below surface, and mineralisation remains open at depth and along strike.

Previously reported **Fraternal** diamond drillhole true width intercepts include:

- **12.0m @ 4.1g/t Au, 2.9% Sb for 11.0g/t AuEq;**
- **4.5m @ 3.0g/t Au, 3.2% Sb for 10.6g/t AuEq;**
- **3.0m @ 4.1g/t Au, 4.1% Sb for 13.8g/t AuEq;**

Significant intersections are shown in Figure 3 and Table 2.

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 3). 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 4. **ACDDH004** intersected the top of the **Bonanza Shoot** between **51.7m to 55.4m (3.7m)** and then continued to intersect the **Fraternal Shoot** between **116.2m to 135.0m (18.8m)** with a true thickness of estimated to be 10-12m as shown in Figure 5.

The **Fraternal Shoot** intersection comprised stibnite cemented breccia (Figures 6 and 7) on the hangingwall, followed by disseminated acicular arsenopyrite mineralisation with 1-5cm thick massive stibnite veins. Approximately **10 stibnite veins** were intersected, with the predominant vein orientation dipping moderately to the SW orthogonal to the drillhole (Figure 7), with some veins dipping to the NE parallel to the drillhole (Figure 7d). The full width of the intersection is mineralised, based on visual inspection and pXRF spot analysis, and the true width is consistent with existing drillhole and trench results, which is encouraging.

The core has been submitted to the laboratory for analysis and assay results are awaited.

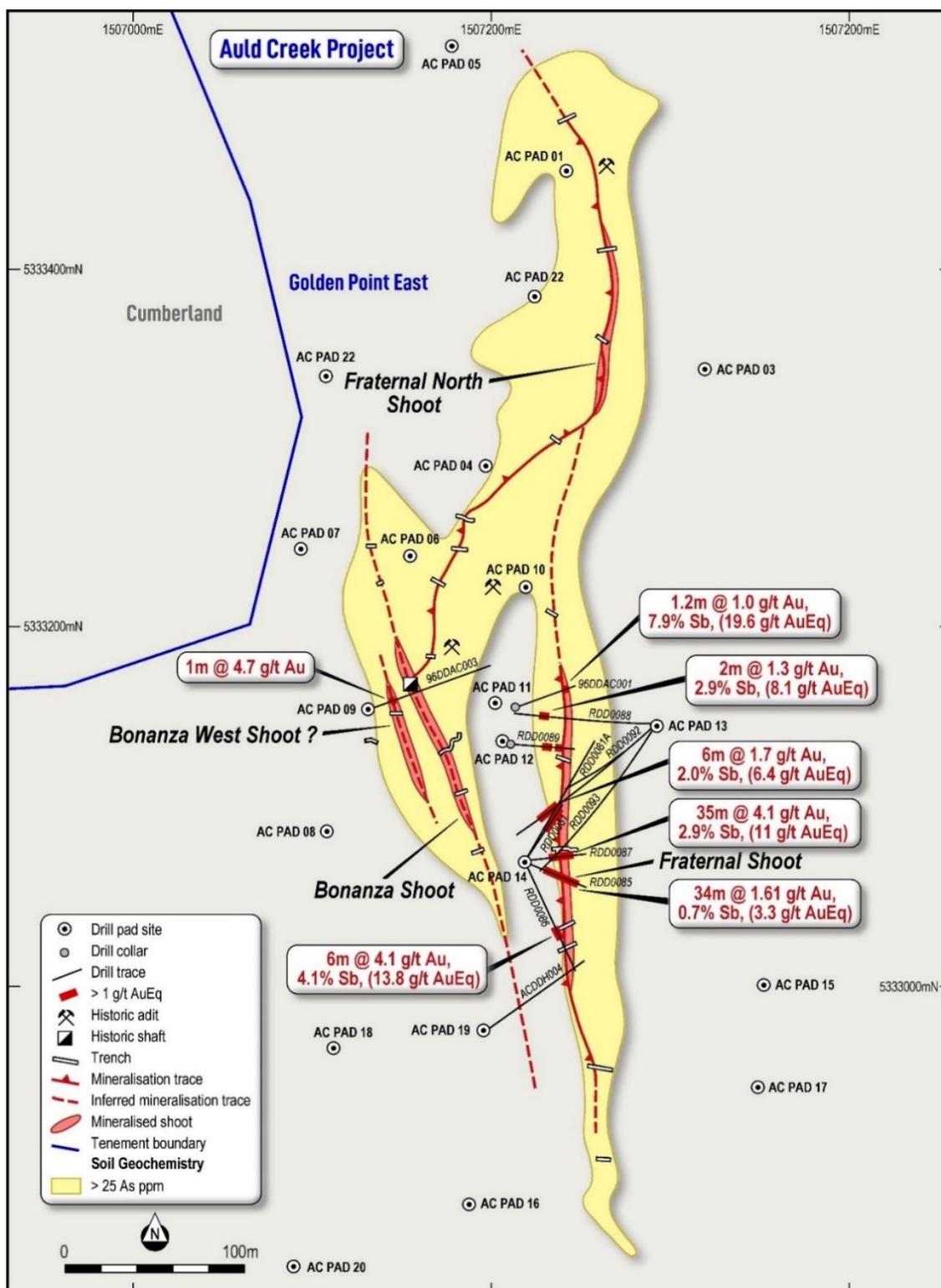


Figure 3. Auld Creek drillhole plan.

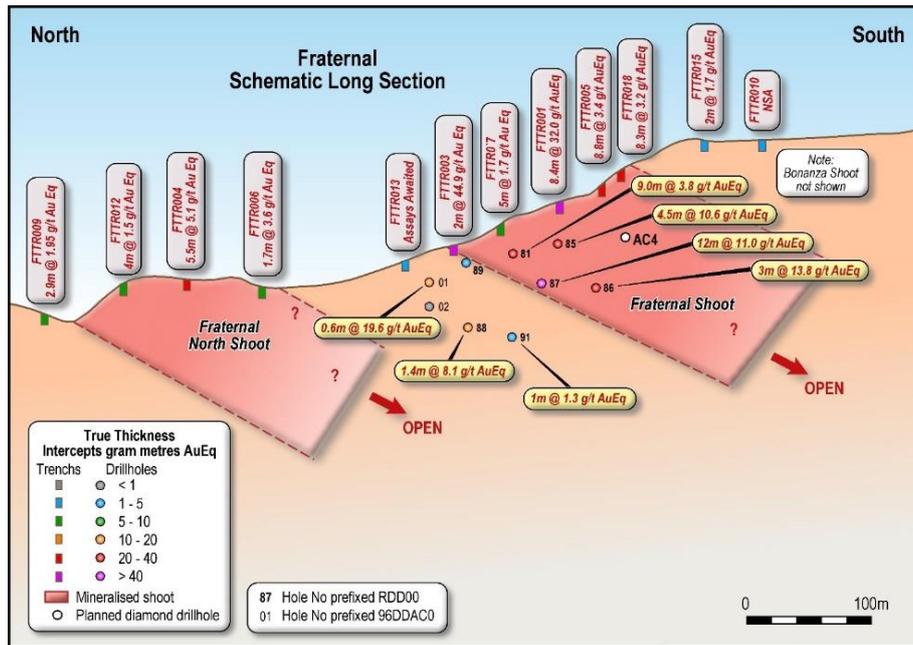


Figure 4. Fraternal N-S schematic long section.

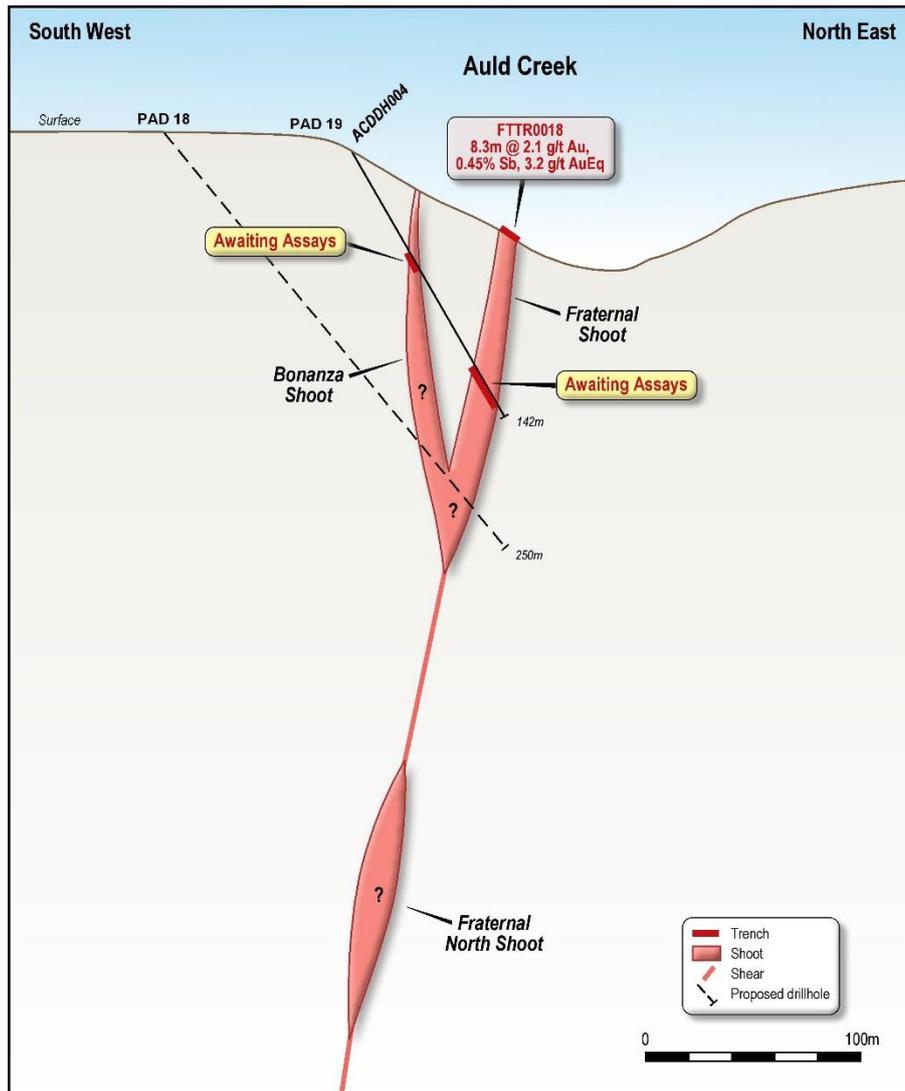


Figure 5. Auld Creek schematic cross section ACDDH004.



***Figure 6. Stibnite cemented breccia at the top of the Fraternal Shoot.***



Figure 7a. Fraternal Shoot intersected in AXDDH004 116.2m – 118.5m (SBX - stibnite cemented breccia, QBX – quartz breccia, HBX – host rock breccia, MGK – silicified disseminated arsenopyrite mineralised greywacke, MAR - silicified disseminated arsenopyrite mineralised argillite).

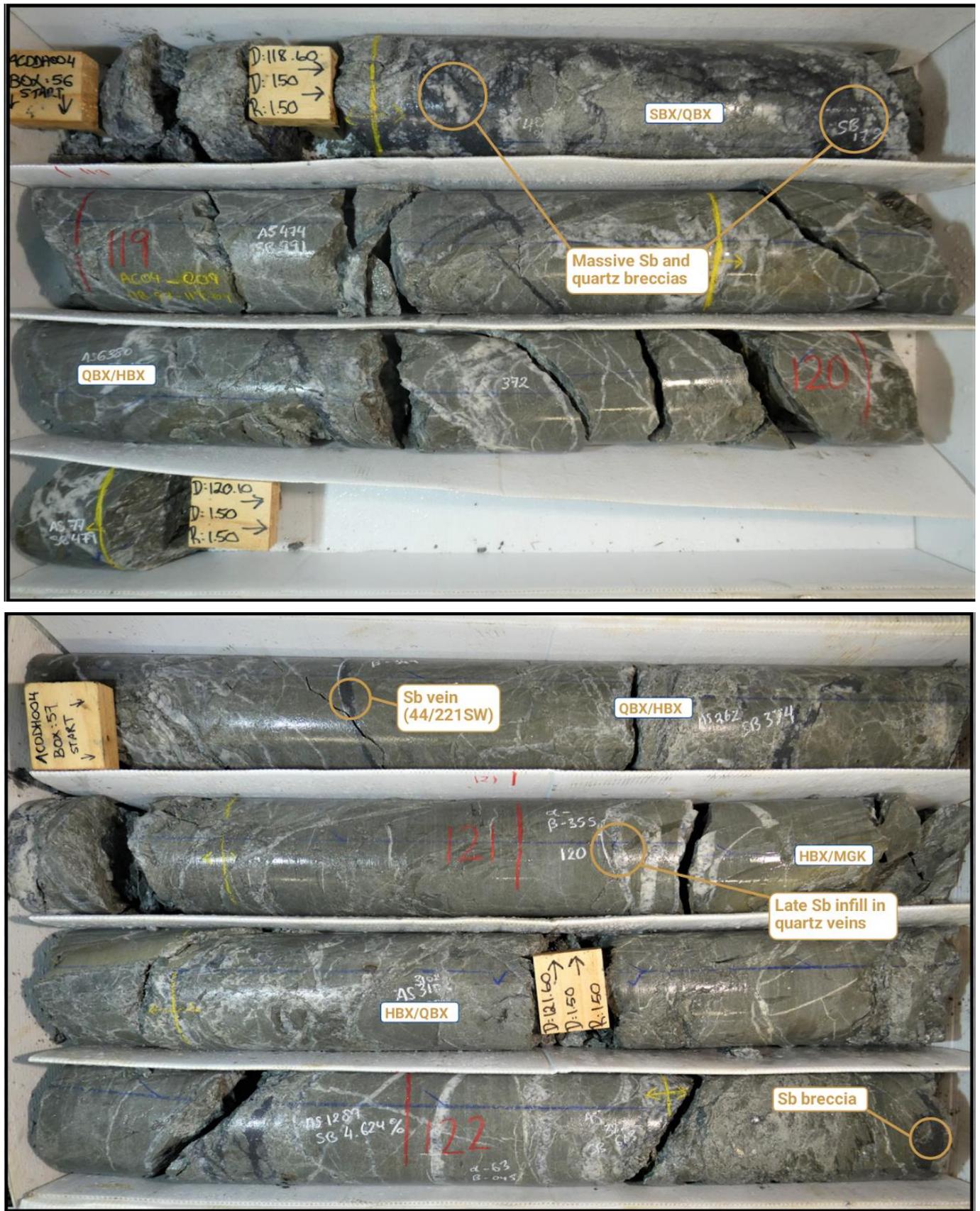


Figure 7b. Fraternal Shoot intersected in AXDDH004 118.5m – 122.5m.



Figure 7c. Fraternal Shoot intersected in AXDDH004 122.5m – 126.5m.



Figure 7d. Fraternal Shoot intersected in AXDDH004 125.5m – 130.9m. Inset photo = stibnite crystals

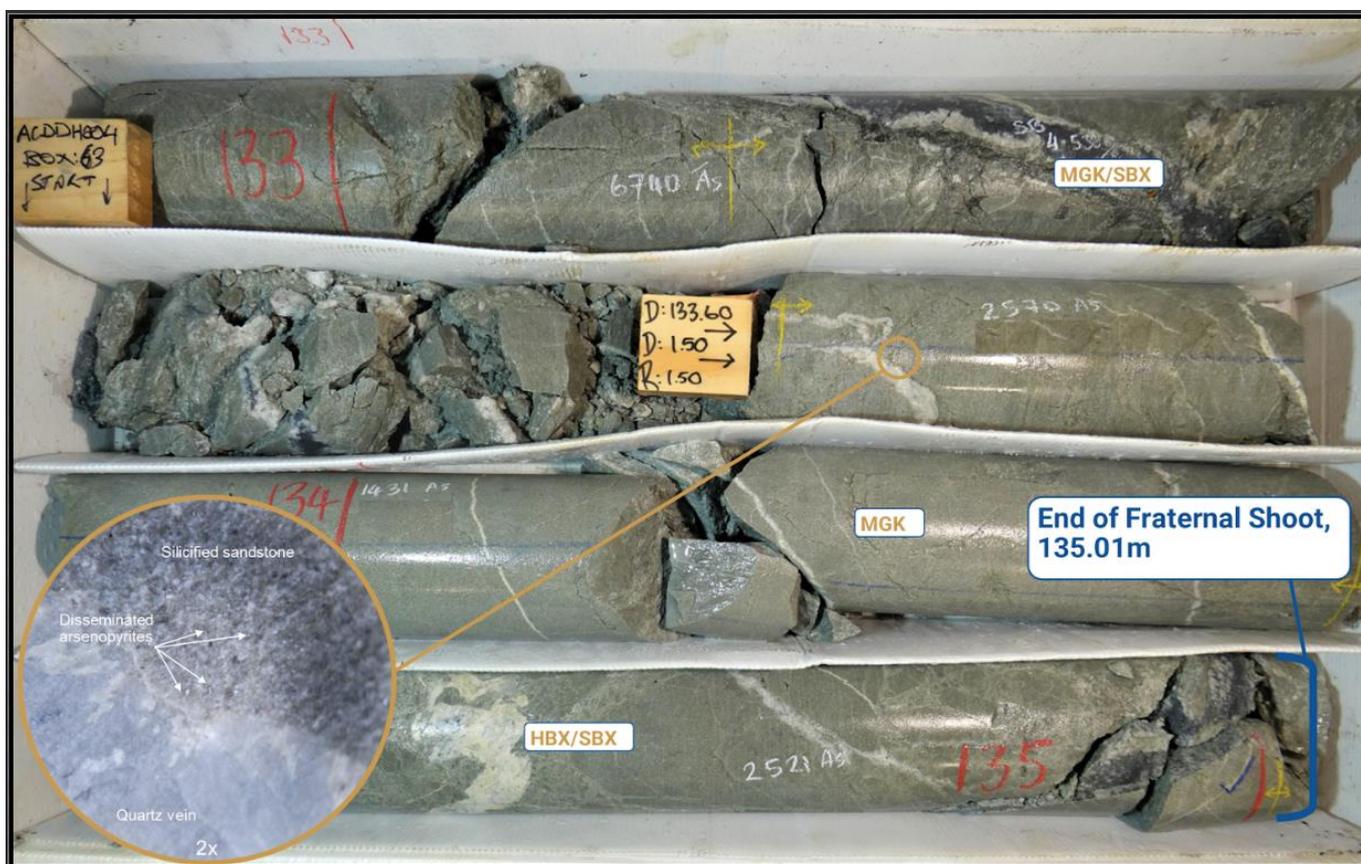


Figure 7e. Fraternal Shoot intersected in AXDDH004 130.9m – 135.0m. Inset photo = acicular arsenopyrite crystals

**Table 2. Significant Fraternal 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	<b>7.90</b>	<b>19.6</b>
RDD0081	Fraternal	45.0	51.0	6.0	3.0	1.73	<b>1.96</b>	<b>6.4</b>
	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	1.9
RDD0085	Fraternal	30.0	64.0	34.0	20.5	1.61	0.70	3.3
Incl		30.0	37.0	7.0	4.5	<b>3.02</b>	<b>3.20</b>	<b>10.6</b>
Incl		43.0	51.0	8.0	5.2	2.62	0.17	3.0
Incl		59.0	64.0	5.0	3.4	1.58	0.03	1.7
RDD0086	Fraternal	90.0	96.0	6.0	3.0	<b>4.14</b>	<b>4.10</b>	<b>13.8</b>
RDD0087	Fraternal	63.0	98.0	35.0	12.0	<b>4.11</b>	<b>2.90</b>	<b>11.0</b>
Incl		63.0	81.0	18.0	5.5	<b>5.74</b>	<b>4.80</b>	<b>17.1</b>
RDD0088	Fraternal	125.0	127.0	2.0	1.4	1.28	<b>2.90</b>	<b>8.1</b>

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

<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.

Diamond drillhole ACDDH004 intersected the interpreted top of the Bonanza Shoot (Figure 8). A 3.7m thick shoot was intersected between 51.7m and 55.4m (Figures 9a and 9b), 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, based on pXRF analysis of the core.

No stibnite was observed.

The intersection in ACDDH04 indicated that the Bonanza Shoot plunges shallowly (20°) to the south (Figure 8).

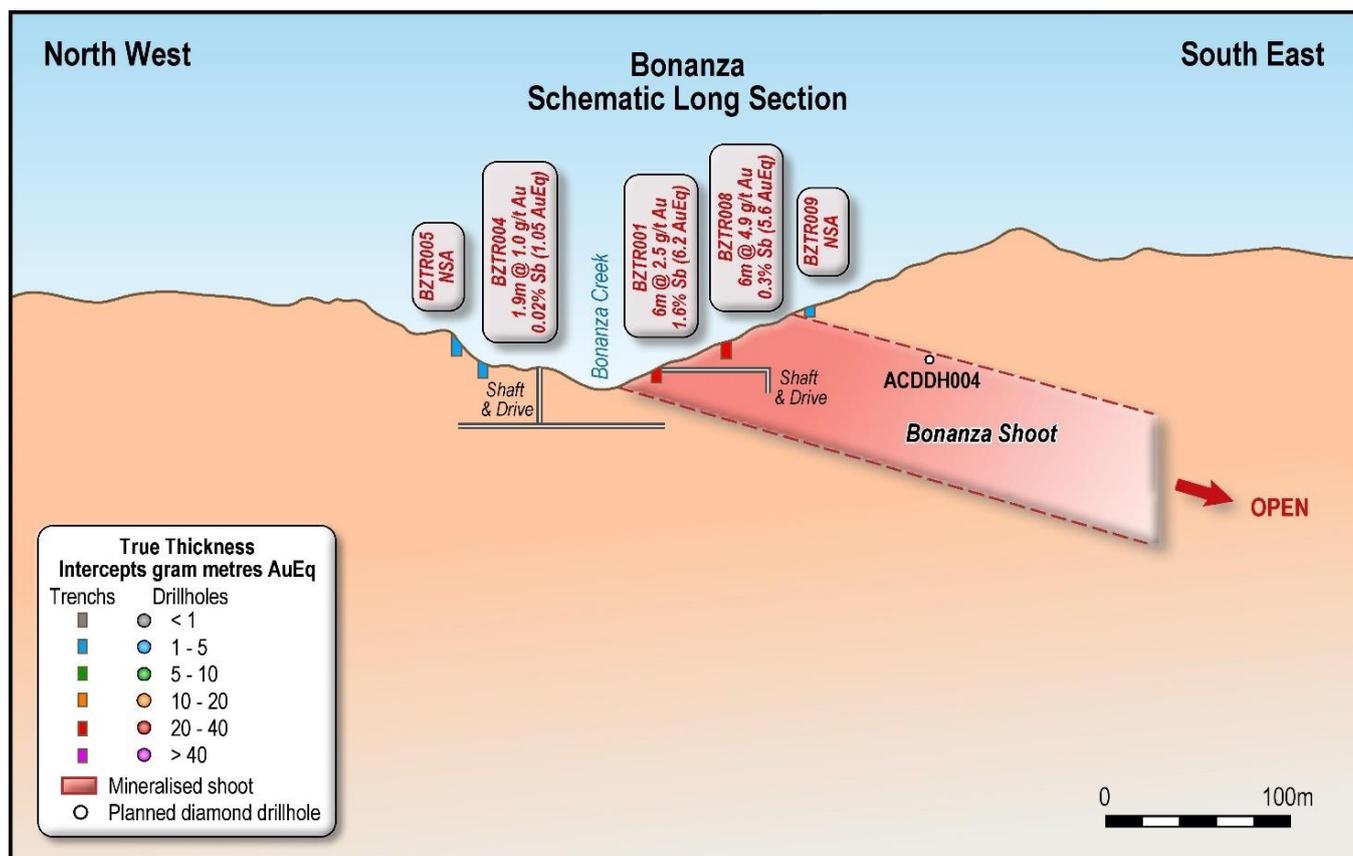


Figure 8. Bonanza N-S schematic long section.

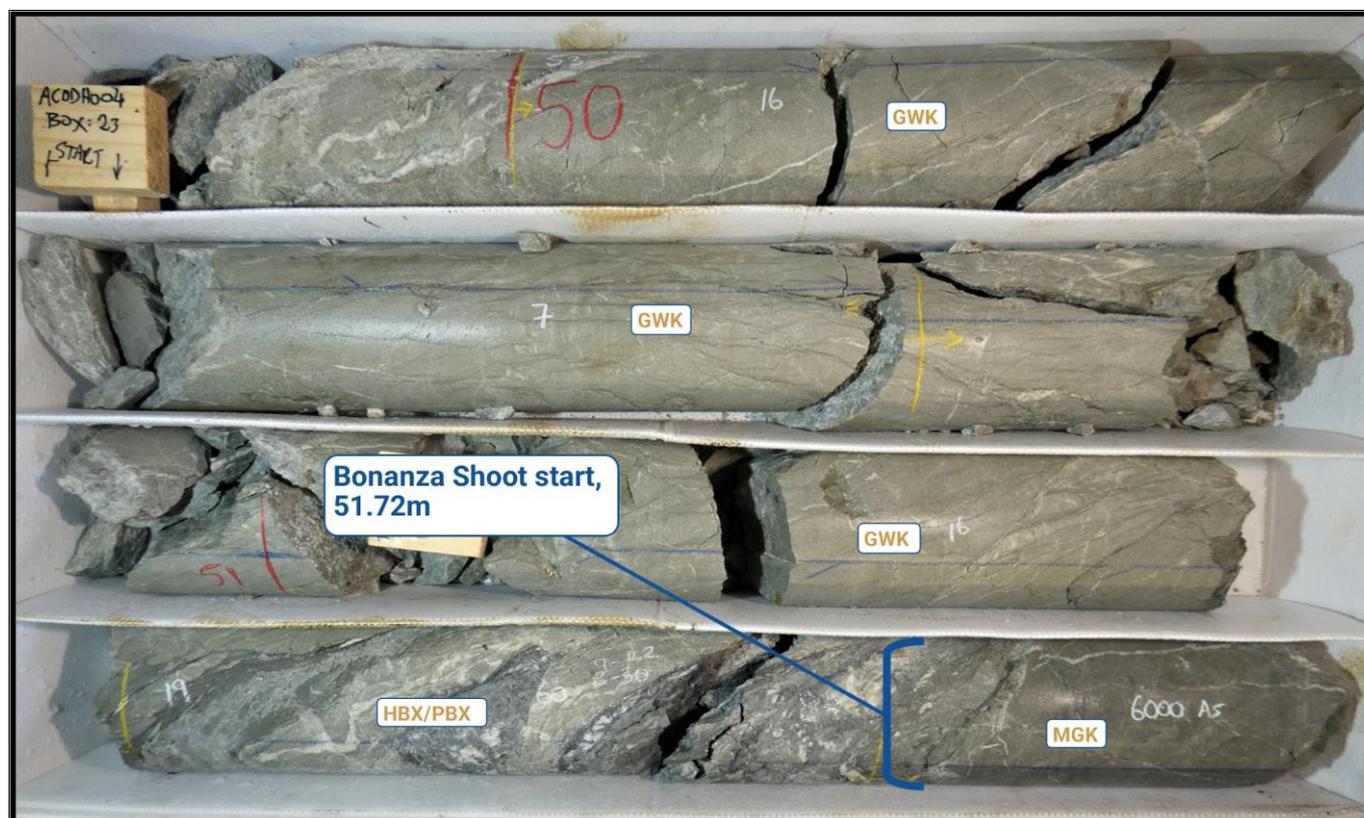


Figure 9a. Bonanza Shoot intersected in AXDDH004 at 51.7m (QBX – quartz breccia, HBX – host rock breccia, PBX – pug breccia, MGK – silicified disseminated arsenopyrite mineralised greywacke and FLT - fault).

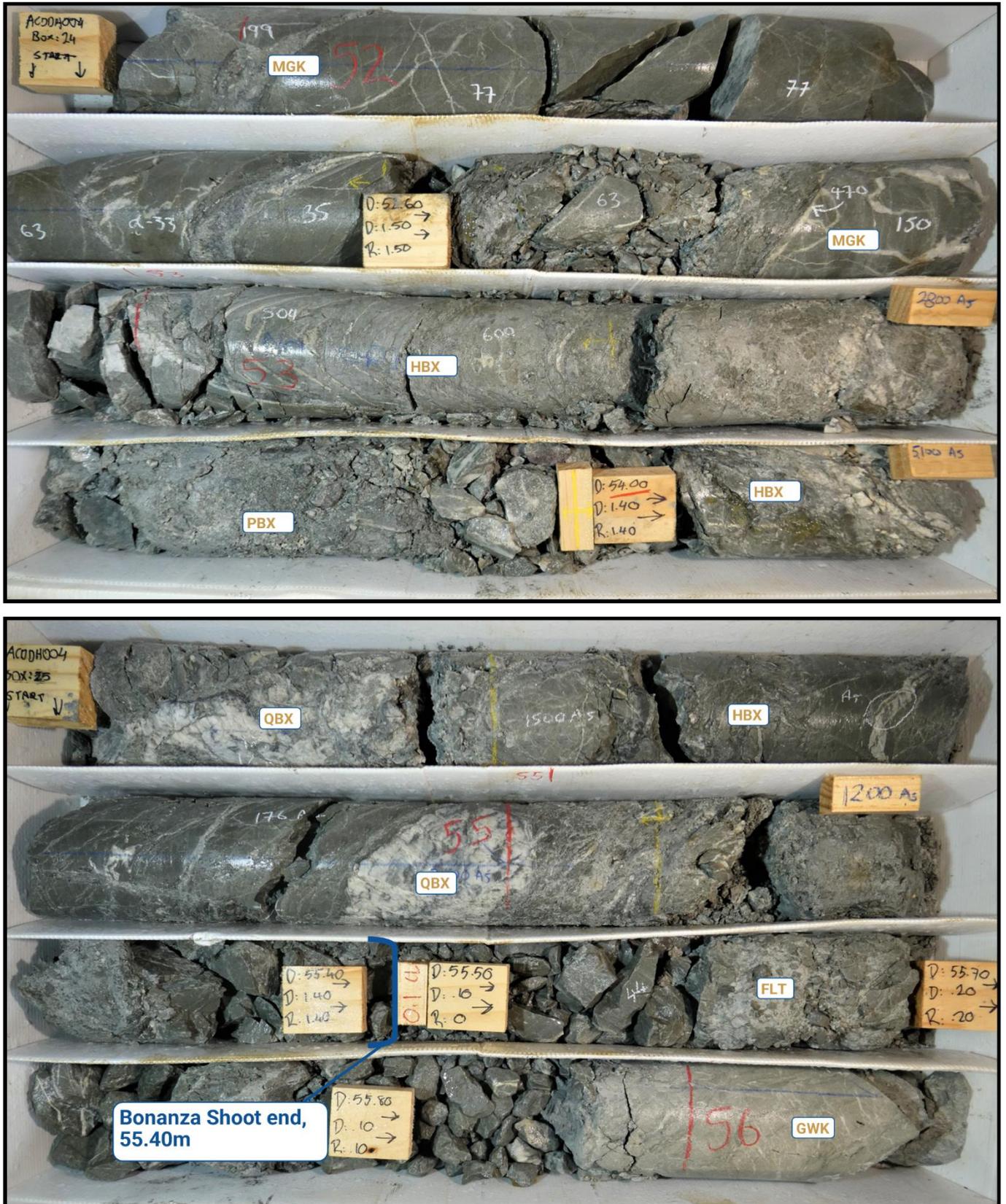
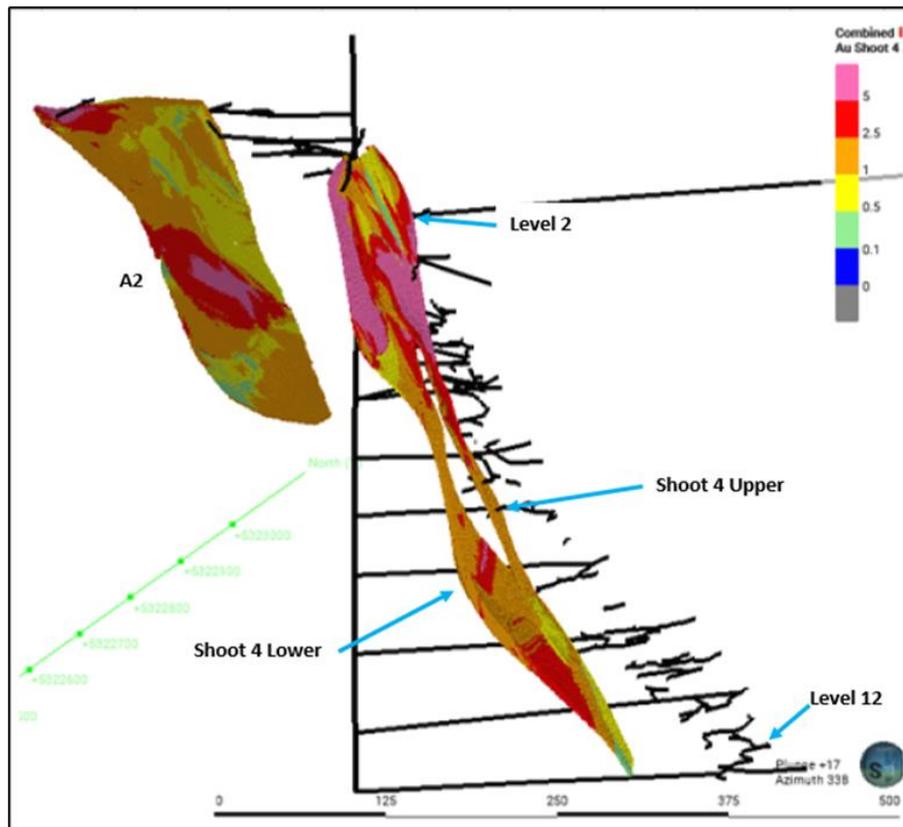


Figure 9b. Bonanza Shoot intersected in AXDDH004 51.9m – 55.4m.





**Figure 11. Big River MRE block model long section (magenta high grade, blue low grade) looking west with the historic workings and stoping depletion shell from level 2 to level 7 in Shoot 4 Upper domain.**

Soil geochemistry has now been completed for over 6kms from Big River North to around 2kms south of St George.

The gold soil geochemistry shows large anomalies at Big River mine and a **3km long anomaly** from Golden Hill to south of St George (Figure 12).

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

The St George No. 1 level tunnel was driven in on a 1m wide quartz reef that produced 70oz gold from 30 tonnes (72g/t Au) in the first crushing in late 1892<sup>3</sup>. The Level 1 adit is open from the entrance to a crosscut at 65m.

The quartz reef is visible in the tunnel roof and wall from 25m, and Siren sampled the exposed vein for a further 36m from this point (Figure 13). The sampled reef was ~0.5m thick, with an average grade of **28g/t Au** and assays up to **144g/t Au**.

The St George No.2 level tunnel, driven in at creek level, followed the same strike as the No.1 level adit and has collapsed (Figure 13). The crushing and gold recovery figures for this drive are unknown, however, the second crushing in the St George claim overall produced 37oz gold from 16 tonnes (**72g/t Au**).

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

<sup>3</sup>. Les Wright 1993. Big River Quartz Mine 1882 -1942.

The St George quartz reef has a similar grade and thickness to the historic Blackwater mine located 4kms to the SW (Figure 12). The Blackwater Reef has an average thickness of 0.7m at an estimated in situ grade of 23g/t Au. The Blackwater Reef was mined along strike for over 800m and down to 700m (Level 16) below surface, producing 740koz at a recovered grade of 14.2g/t Au. Drilling by OGL shows, that the reef extends for another 750m below the last mined level. Federation Mining Limited are planning to extract an additional 700koz of gold from the reef, with development well advanced.

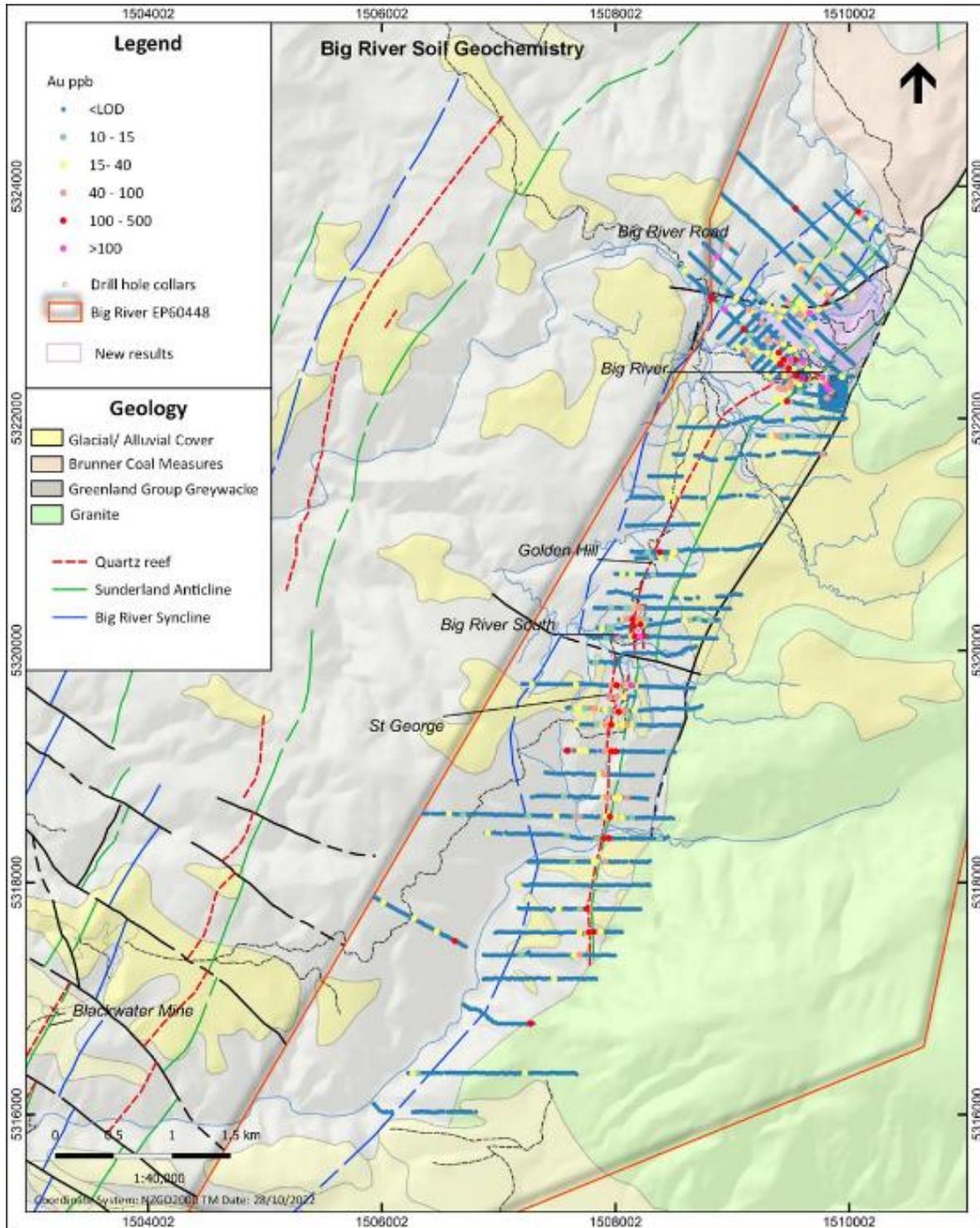


Figure 12. Big River gold soil geochemistry

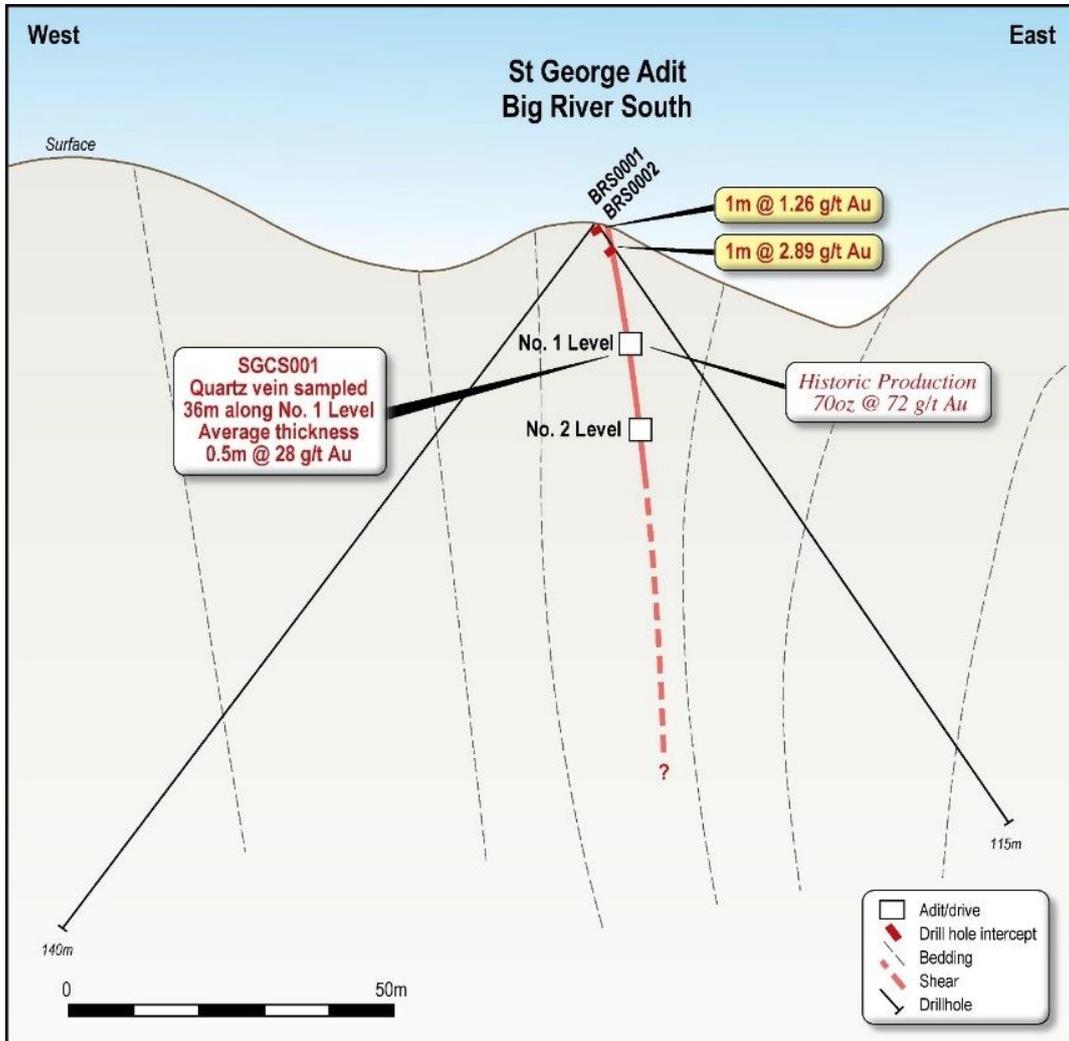


Figure 13. Sampling the quartz reef in St George Level 1 adit.

## Lyell

Recent exploration has focused on the Mt Lyell North area that extends for at least 1km to the SE of the United Victory mine (Figure 14).

Mt Lyell North is a new discovery with no historic mining or previous exploration except for the small United Victory mine, which was mined over two levels, but no production records or details are available.

As previously reported (refer announcement dated 24 October 2022), two trenches (**LYTR001** and **LYTR002**) approximately 100m apart were excavated across the Mt Lyell North mineralised zone (Figure 14). The trenches intersected disseminated arsenopyrite with thin grey quartz veins.

**LYTR001** exposed a **7m thick mineralised zone** that averaged **7m @ 13.8g/t Au**, with 1m grades as high as **25g/t Au**. The true thickness of the intersection is interpreted to be around 5m.

**LYTR002** exposed an 8m thick mineralised zone that averaged **8m @ 6.3g/t Au**, with 1m grades as high as **29.7g/t Au**. The true thickness of this intersection is also interpreted to be around 5m.

During recent fieldwork two additional trenches (**LYTR003** and **LYTR004**) were excavated approximately 100 and 200m north of LYTR001 across a high-grade soil anomaly (Figure 14), and an outcropping quartz reef with significant visible gold was found in a creek close to the United Victory mine (Figure 15).

This reef and the adjacent country rock were channel sampled at three locations and called **LYTR005**, **LYR008** and **LYR009** over a 20m strike length (Figure 14).

Channel sample LYR009 was located a further 3m along strike to the north of LYTR005 and returned **3.0m @ 19.1g/t Au**, comprising a 0.4m quartz reef with visible gold that assayed **39.0g/t Au**, surrounded by disseminated arsenopyrite mineralised sandstone that assayed **42.0g/t Au** and 1.4g/t Au (Figure 16).

Channel sample LYR008 was located a further 12.5m along strike to the south and returned **1.1m @ 36.0g/t Au**, comprising a 0.43m quartz reef with visible gold that assayed **70.0g/t Au**, surrounded by disseminated arsenopyrite mineralised sandstone that assayed **31.0g/t Au** and 3.2g/t Au (Figure 17).

The high-grade footwall (**31g/t Au**) was not fully exposed, so the mineralisation is likely to be thicker than sampled.

Channel sample LYR005 returned **1.7m @ 11.5g/t Au**, comprising a 0.5m quartz reef with visible gold that assayed **15g/t**, surrounded by disseminated arsenopyrite mineralised sandstone that assayed 6.7 and **14.9g/t Au** (Figure 18).

A float sample of the United Victory Reef with significant visible gold was found immediately downstream of the outcrop that assayed **205g/t Au** (Figure 15).

An acicular arsenopyrite mineralised outcrop was also found 30m to the south of LYTR008, with a grab sample returning **6.4g/t Au**.

A float sample of sulphide rich sandstone, a further 50m upstream from the reef outcrop, returned **12.7g/t Au** and **0.24% Sb**. This sample is likely to have come from the reef on the ridge above the creek (see Figure 14).

These samples extend the mineralised zone to around 100m along strike and it is open to the north and south.

The gold soil geochemistry in Figure 14 indicates this zone extends for a few hundred metres further south and may connect with the western anomaly at Mt Lyell North.

The current soil geochemistry only extends 100m north of the mineralised outcrop and will be extended.

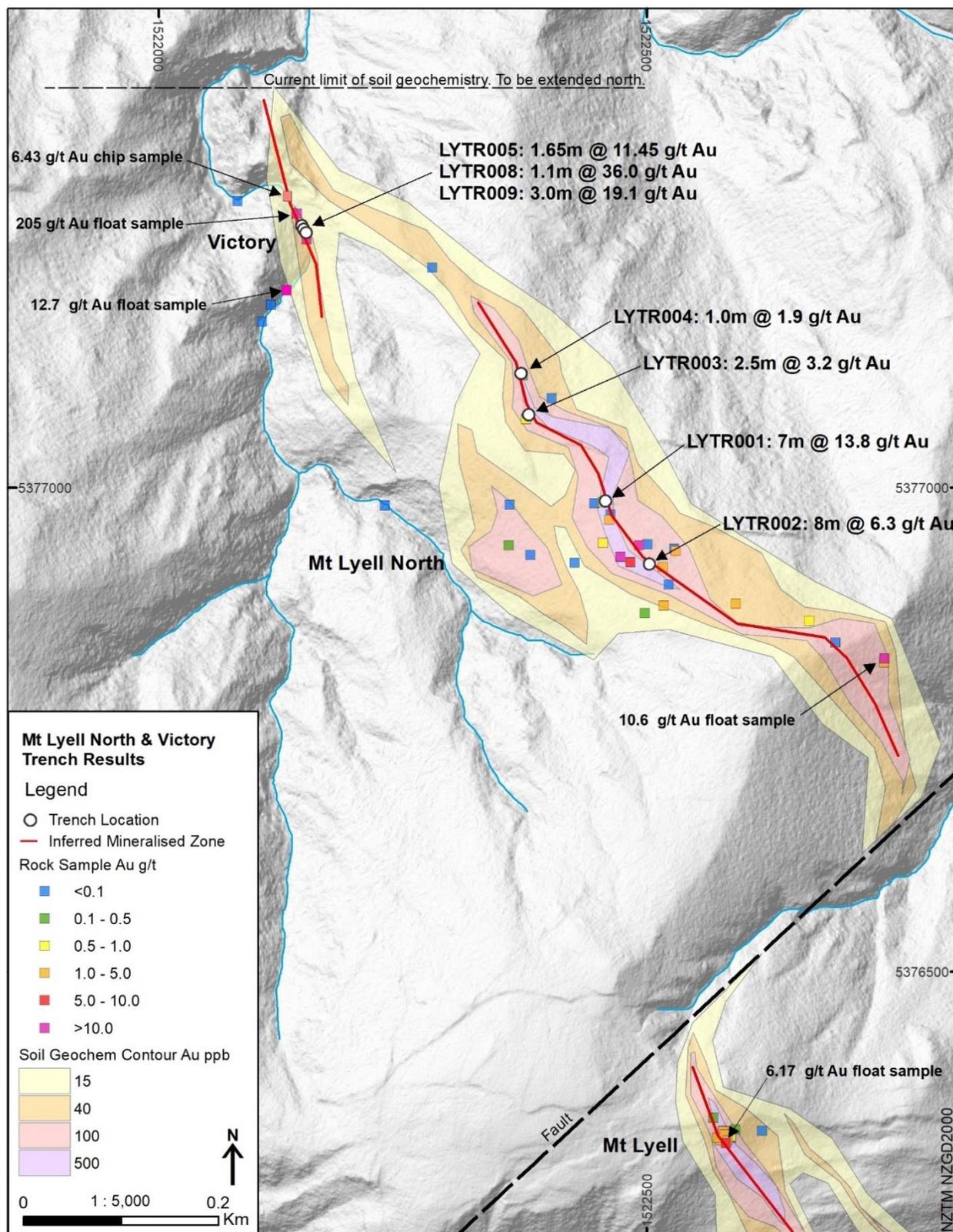


Figure 14. Lyell North trench results



**Figure 15. United Victory Reef float sample that assayed 205g/t Au**



**Figure 16. Victory United Reef -Trench LYTR009**

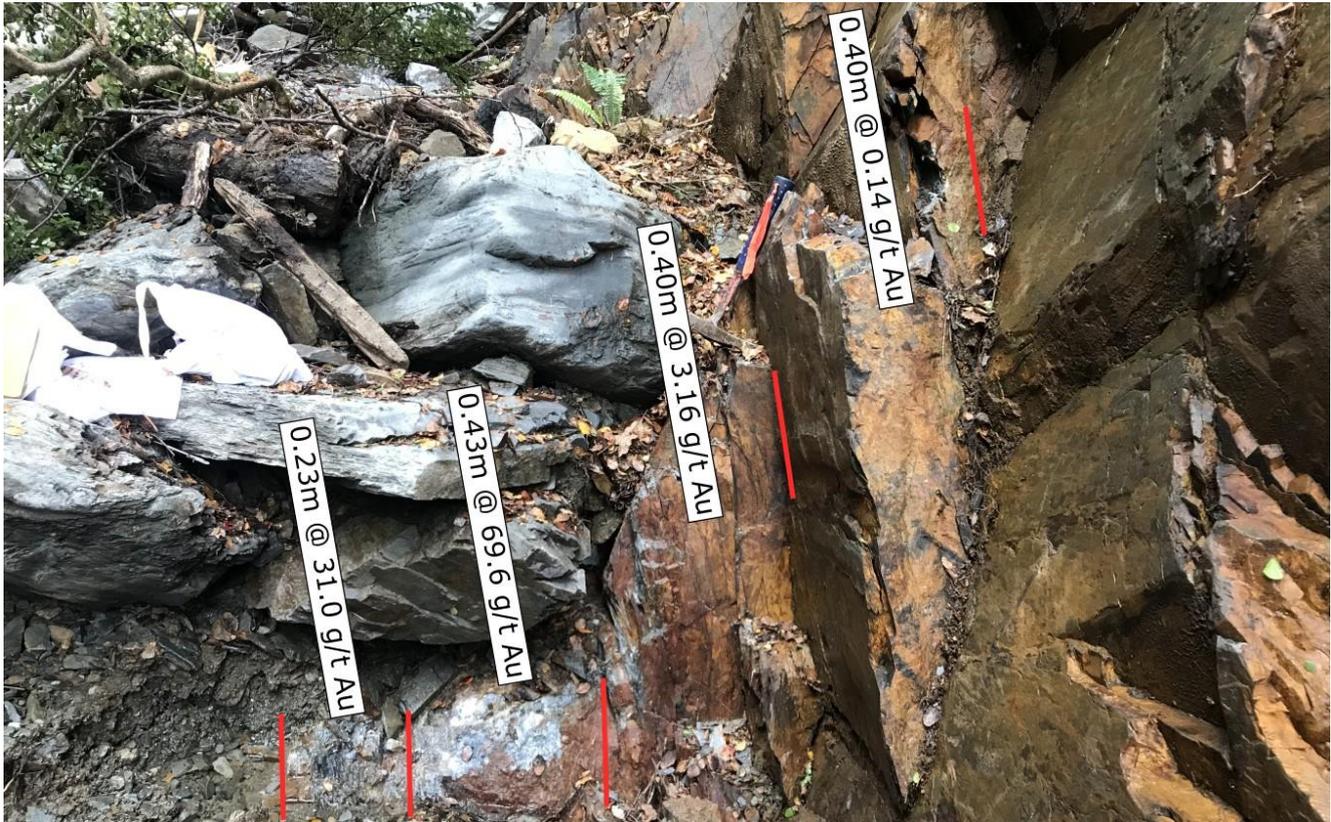


Figure 17. Victory United Reef – Trench LYTR008



Figure 18. Victory United Reef -Trench LYTR005

## Alexander River

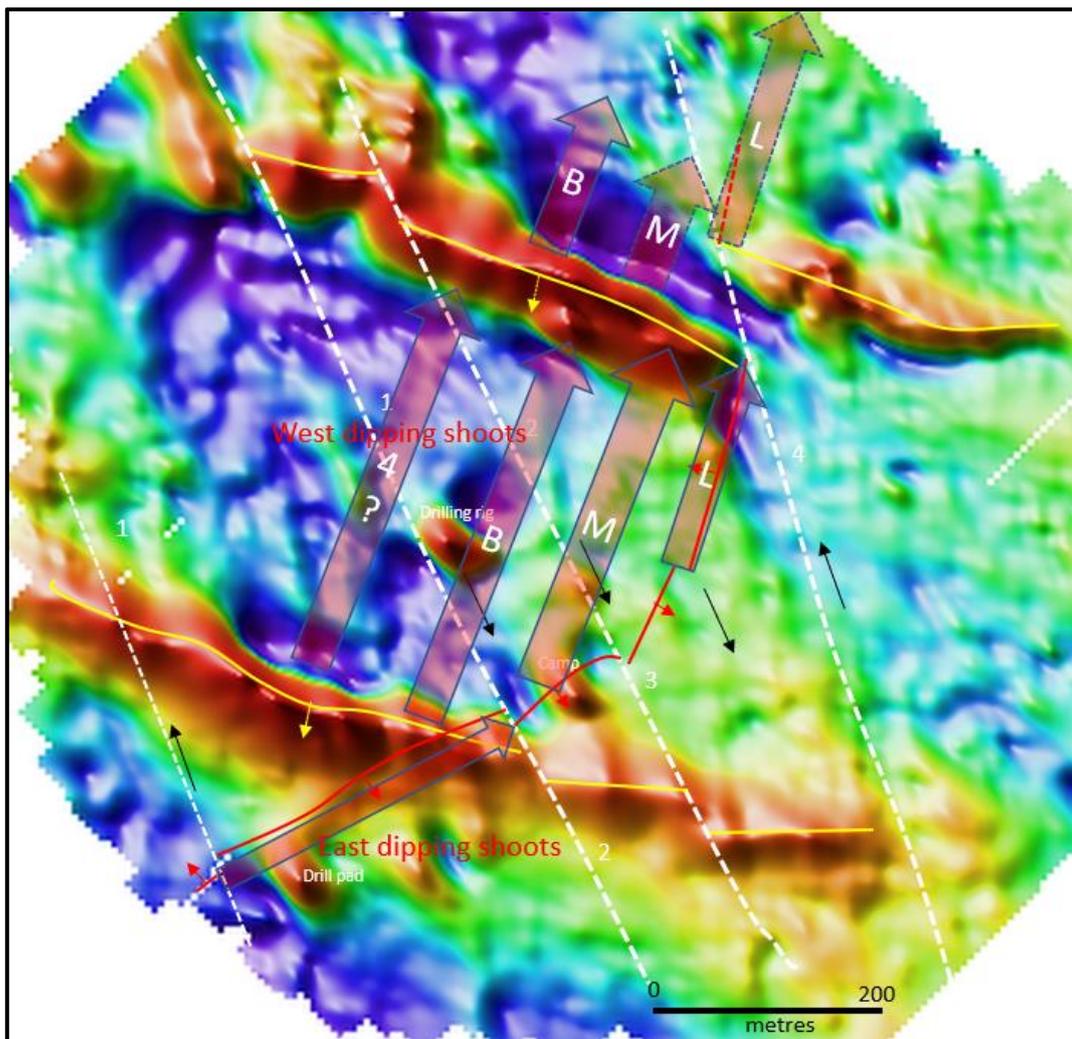
A magnetic drone survey was flown at Alexander River to define dolerite dykes mapped on surface and intersected in some of the drillholes. The aim of the survey was twofold. One to see the extent of dykes and secondly to see if faults could be detected offsetting the dykes.

The dykes postdate the mineralisation, so any offset of the dykes would also offset the mineralisation. Figure 19 shows the magnetic image. Two WNW trending dykes are clearly seen. The southern dyke tracks between the east and west dipping mineralised shoots presumably intruding along a structural weakness. The northern dyke cuts through to the north of diamond hole AXDDH089, which is the last hole to intersect mineralisation (Figure 20). Holes drilled further north intersected the dyke and did not intercept any significant mineralisation.

Four NW trending faults (1-4) are interpreted to displace the dykes (Figure 19). The fault No.4 displaces the northern dyke by around 125m and would also offset the Loftus-McKay Shoot by a similar amount. There appears to be no dykes further to the north, so the shoots may continue on the northern side of the dyke as shown in Figure 19.

An Ionic Leach soil survey over the known shoots and potential shoot extensions to the north has been undertaken to see if this geochemical technique can detect the mineralised shoots at the surface.

These results are awaited.



**Figure 19. Magnetic image showing WNW trending dykes (red), mineralised shoots (L = Loftus-McLay, M = McVicar West, B = Bull West), and inferred faults 1-4 shown by white dotted lines.**

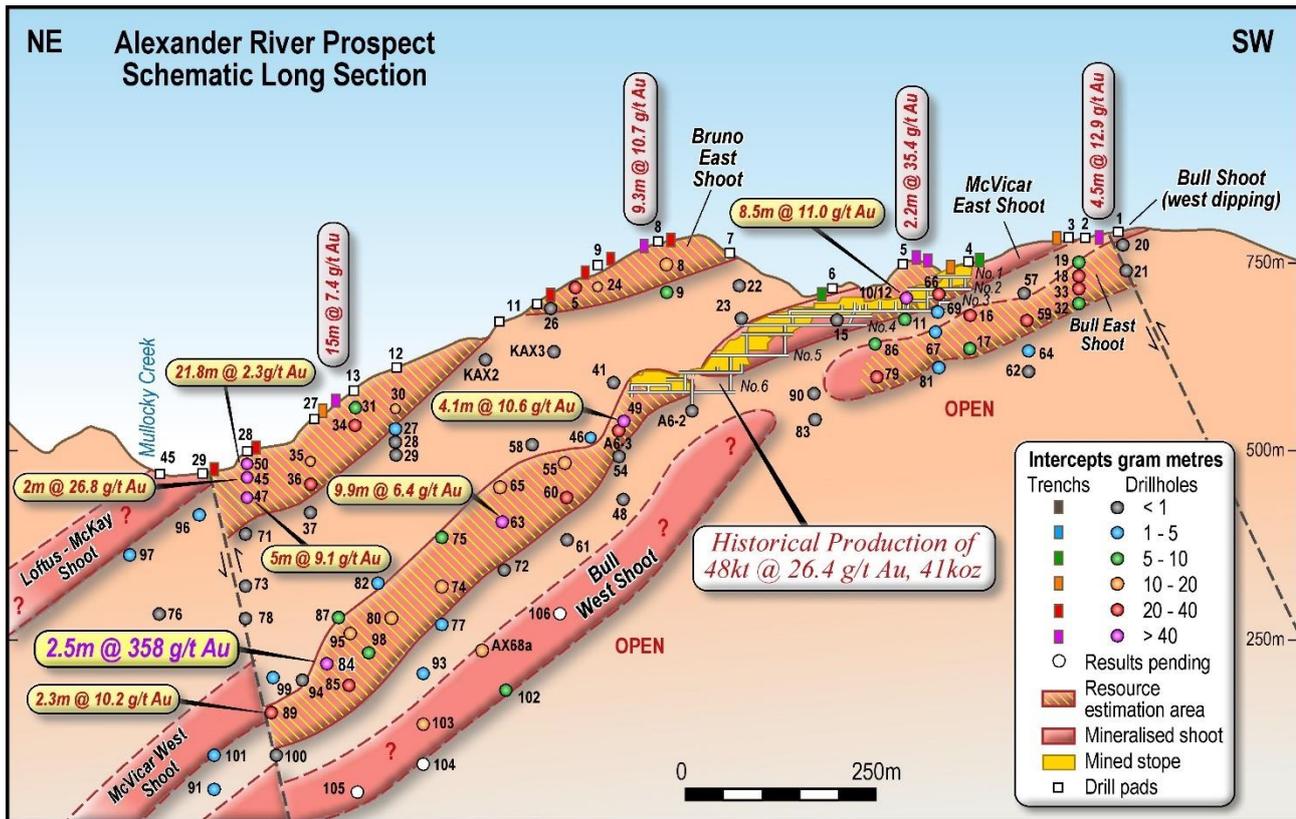


Figure 20. Alexander River schematic long section.

## Cumberland

Siren was granted an exploration permit on 14 December 2022 for an initial period of 5 years.

The Cumberland permit comprises the northern and southern areas of the previous Globe Progress mining permit, as shown in Figure 21.

The Cumberland permit joins Siren’s Big River, Golden Point and Reefton South permits and abuts the Federation Mining permit, where they are currently developing the Snowy River underground mine to extract around 700koz of gold below the historic Blackwater mine.

The Department of Conservation (DoC) has granted a Minimum Impact Activity (MIA) permit that allows handheld and aerial exploration techniques.

Gold bearing reefs in the Cumberland project area were first discovered at Supreme in 1872 and mining proceeded from then **until 1923** when Sir Francis Drake **mine closed**.

Relative to the rest of the Reefton Goldfield, the Cumberland mines were small scale and undercapitalised, with a total production of **44,626 oz** of gold from 97,993 tonnes of ore at an average grade of **14.2 g/t Au**.

The mineralisation in the Cumberland permit extends for 3kms south of the Globe Progress mine and is open to the west (under cover) and south (Figure 21).

This area lies along the **main structural corridor** that hosts all the larger mines in the Reefton Goldfield and links to Siren’s very promising Auld Creek Au-Sb prospect.

The **stibnite mineralisation extends for 10kms** from Auld Creek south into the Globe Progress Mine, including the Globe Deeps area below the open pit, through Souvenir, Supreme and Big River (Figure 21). A total of 77 drillholes for a total of 10,933m have been completed.

Supreme gold mineralisation is a **similar style to the Globe-Progress deposit**, with high-grade quartz breccia, pug and disseminated sulphides.

Supreme contains three sub-parallel mineralised shoots that have been traced down dip for approximately 200m and are open at depth (Figure 22).

The shoots plunge moderately to the SE, with an average thickness of approximately 12m. Significant intersections include **10m @ 3.5g/t Au** and **14m @ 3.5g/t Au** (RDD013), **14m @ 3.2g/t Au** (RDD017), 29m @ 2.6g/t Au (RDD018), 9.5m @ 2.3g/t Au (RDD021) and 9.5m @ 4.1g/t Au (RDD025).

Gallant contains a shear hosted, 1m-**5m thick quartz vein**, that extends for over 300m and dips steeply east and west.

Diamond hole GLA001 was drilled to the west and appears to have drilled obliquely down a steeply west dipping reef. The hole intersected a **27m mineralised zone** dominated by a quartz reef with visible gold and disseminated arsenopyrite mineralisation in the hangingwall.

The true thickness of the mineralised zone is unclear but estimated to be around **5m**. The average down-hole grade of the mineralised zone was **27m @ 74.9g/t Au**, which includes **1m @ 1,911g/t Au**.

Detailed soil sampling and trenching will be utilised in Quarter 2 to try and expose the Gallant Reef to determine its orientation and true thickness.

The Merrijigs **mineralisation extends for around 1.5kms** from Sir Francis Drake to Exchange.

The shear zone dips to the west and has a true width of between 1m and 6.5m. Significant drillholes include: **3.3m @ 5.1g/t Au** (GLA004), **6.5m @ 4.0g/t Au** (87DDMJ02) and **4.2m @ 17.6g/t Au** (HVS003). Gold mineralisation is associated with disseminated arsenopyrite in sheared argillite, black pug breccias and minor grey quartz veins.

The Golden Lead – A1 mineralisation lies a few hundred metres to the west of Merrijigs.

A mineralised zone is up to **27m wide**, containing mostly narrow quartz stockwork veinlets within a crushed sandstone unit.

Very little mapping has taken place since CRAE first explored the area and mapped and sampled the underground workings in the 1980's.

The broad arsenic **soil anomaly** is up to **1km wide** and open to the south and east under cover. It is largely undrilled (Figure 21), is unexplained and is a key target.

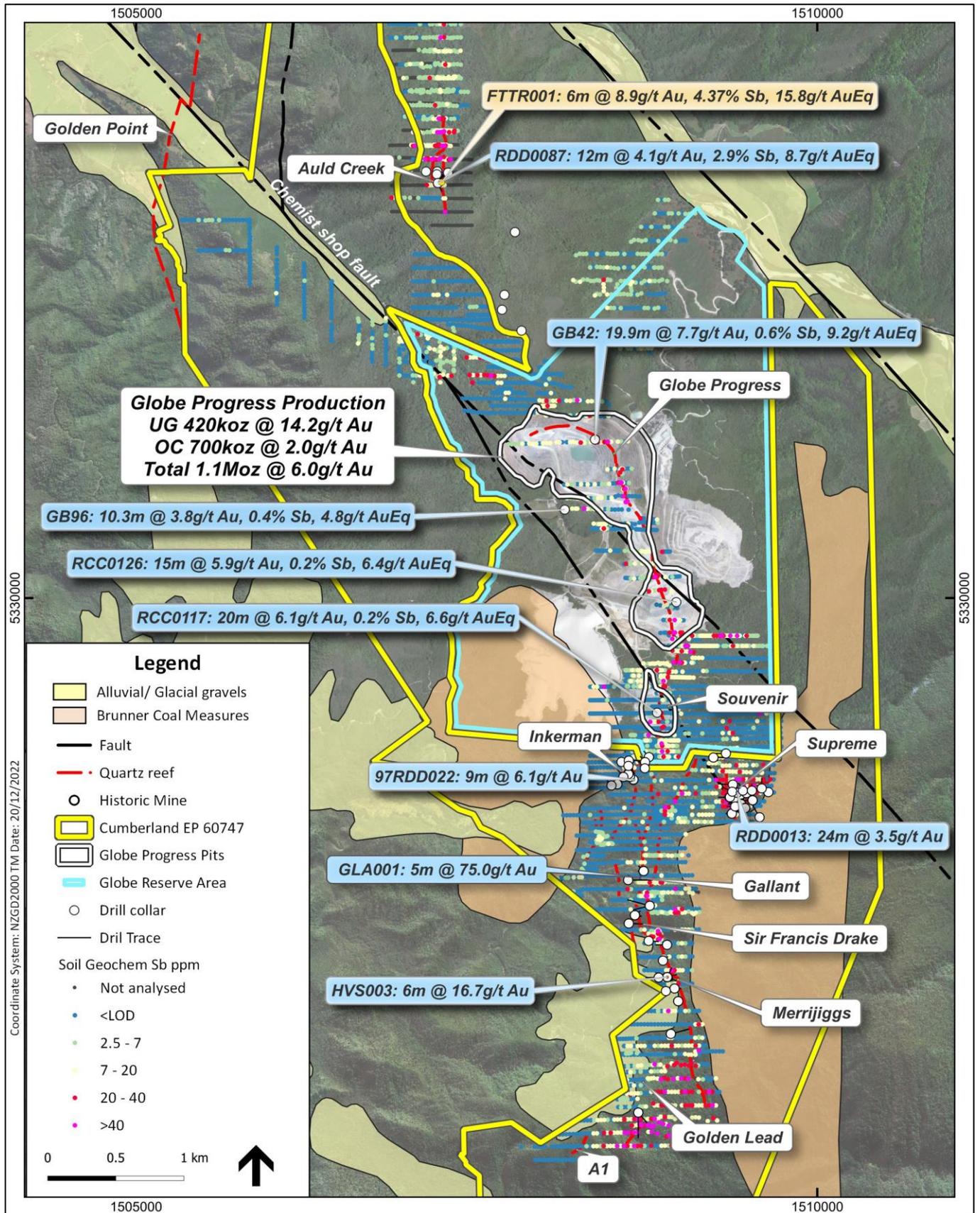
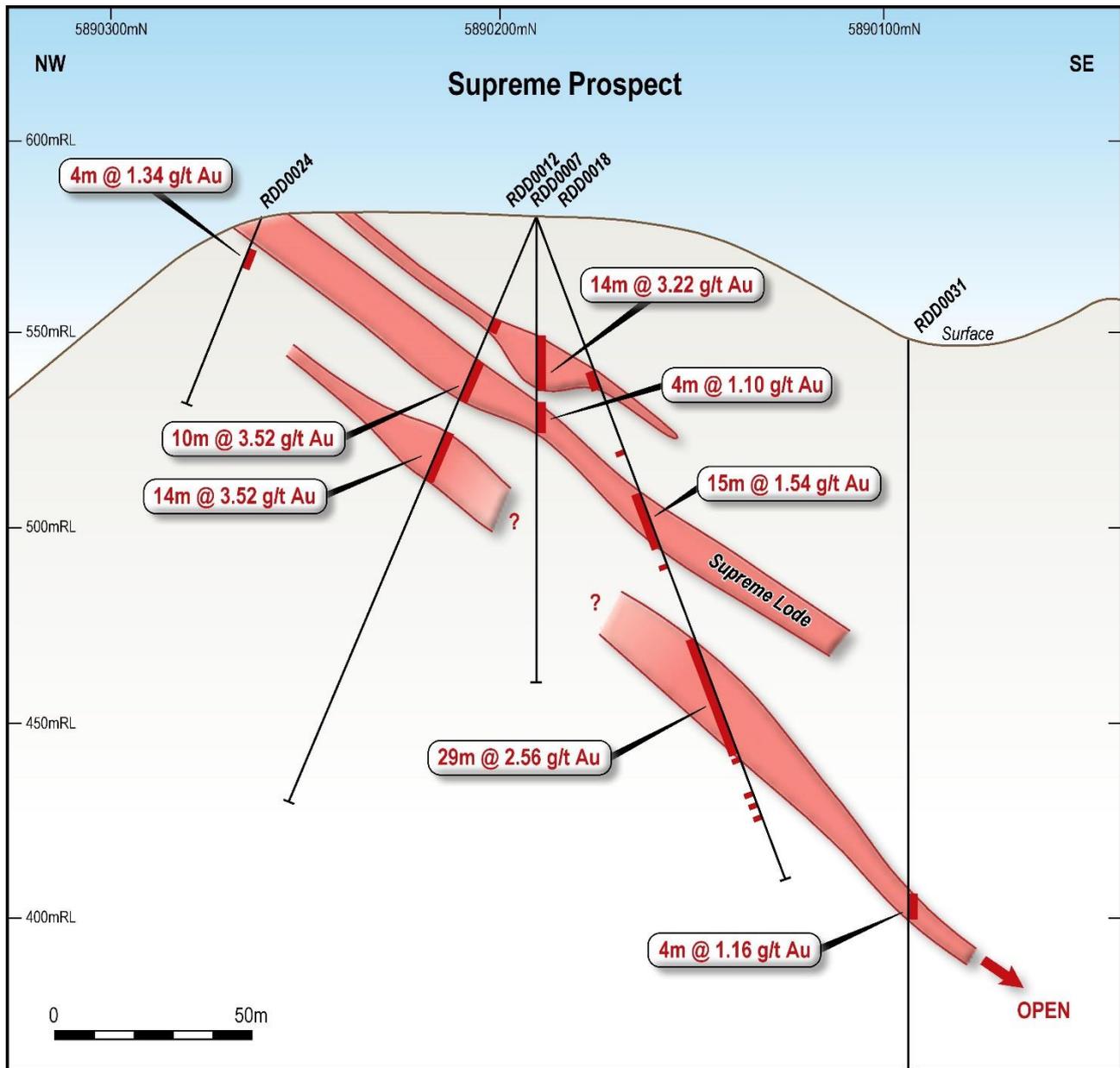


Figure 21. Regional stibnite soil geochemistry, historic gold production and key drillhole intersections.



**Figure 22. Supreme cross section.**

A **high-grade quartz reef** located within a shear zone **extends for 3kms** from Inkerman south through the Gallant, Sir Francis Drake, Merrijigs and Exchange group of workings (Figure 21).

At Inkerman, gold mineralisation is primarily contained within lenticular quartz lodes with similar styles and grades to the Blackwater mine, however, there is a small halo of arsenopyrite-gold mineralisation.

The reef extended for 100m on surface and was mined down to 97m below surface, with a vein thickness ranging from 0.3 to 2.1m. Drillhole 97RDD022 was drilled below the old mine workings and intersected **9m @ 6.1g/t Au** from 107m indicating that the mineralisation **remains open at depth**.

## Sams Creek

The Sams Creek porphyry dyke deposit is located in the Eastern Takaka Terrane, which is equivalent to the Eastern Lachlan belt that **hosts porphyry copper-gold deposits** like **Cadia** and **Ridgeway**.

The Sams Creek Gold Project is located 140kms NE of Reefton and 100kms NE of Lyell (Figure 23). The Project comprises two exploration tenements: EP 54454, which is 100% held by Sams Creek Gold Limited (SCGL) a wholly owned subsidiary of Siren, and EP40338, which is 81.9% held by SCGL under a joint-venture agreement with New Zealand's largest gold miner, OGL, who own the remaining 18.1% interest.

Siren believes there is significant potential at Sams Creek for a large underground mining operation.

The Sams Creek Dyke (SCD) is up to **60m thick**, can be traced for over **7kms along strike**, has a vertical extent of at least **1km and is open at depth**.

Drilling to date has focused on a 1km section of the dyke from the Carapace to the Main Zone (Figure 23). Topography is very steep, with the SCD outcropping from 800m-200m above sea level and it has been intersected in drillholes to -200m. The SCD has been folded into gentle NE plunging folds, with the gold veins preferentially forming in the fold hinges, resulting in NE plunging mineralised shoots. as shown in Figure 23. To date around 127 diamond holes have been drilled in this zone.

The Sams Creek MRE was completed in November 2022 with **824koz @2.80g/t Au** estimated at a 1.5g/t cut-off (Table 4). This represents an increase of 236koz on the previous estimate, with the **grade increasing from 2.44g/t Au to 2.80g/t Au** (+0.36g/t Au).

Drilling to date has been focussed around the Main Zone, Carapace and SE Traverse (resource model area) with little or no drilling at Doyles, Anvil West and Anvil East.

To date only around **15%** of the SCD has **been drill tested**. Rock chip sampling along the SCD show that Roirdans, Western Outcrops, Doyles, Anvil West and Anvil East all have high-grade rock chips, interpreted to be associated with NE trending anticline hinges and have the potential to contain additional mineralisation. An Annual Work Program (AWP) has been lodged with the DoC to allow drilling at Doyles, Main Zone, and Anvil West later in the year.

**Table 4. Sams Creek MRE at a 1.5g/t Au cut-off (100% basis).**

Sams Creek Project <i>in situ</i> Mineral Resources November 2022						
Total Mineral Resources						
Zone	Category	Cut-off	Mt	Au g/t	Au koz	
Main Zone	Indicated	1.5	3.29	2.80	295.6	
<b>Total</b>	<b>Indicated</b>		<b>3.29</b>	<b>2.80</b>	<b>295.6</b>	
Main Zone	Inferred	1.5	3.79	2.71	330.0	
SE Traverse	Inferred	1.5	1.28	3.56	146.1	
Carapace	Inferred	0.5	0.54	2.06	36.0	
Bobby Dazzler	Inferred	1.5	0.20	2.59	16.7	
<b>Total</b>	<b>Inferred</b>		<b>5.62</b>	<b>2.84</b>	<b>512.1</b>	
<b>Total</b>	<b>Indicated + Inferred</b>		<b>9.1</b>	<b>2.80</b>	<b>824.0</b>	



## Mineral Resources Estimate

Siren's global resource on a 100% basis is shown in Table 5 and depleted for Siren's 81.9% share of Sams Creek is shown in Table 6.

**Table 5. Global Resource Estimate at a 1.5g/t Au cut-off (100% basis)**

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

**Table 6. Siren's Global Mineral Resource estimate including 81.9% of Sams Creek.**

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

## Strategy

Siren's strategy is to grow its Exploration Targets organically with continued drill-focused exploration on the Company's key projects over the next 24 months.

Exploration over the next 12 months will focus on Auld Creek, Cumberland, Lyell, Sams Creek, Alexander River and Big River.

Siren's initial focus will be on **identifying high grade gold** and **stibnite mineralisation** along the Auld Creek – Cumberland line of strike.

## Tenement Status

The Company confirms that all the Company’s tenements remain in good standing. The Company has applied for 5-year extensions to 60446 (Alexander River) and 60448 (Big River). The Reefton South exploration permit, Langdons and Grey River prospecting permit and Extension of Land (EOL) applications for Alexander River, Big River and Waitahu are still being processed by New Zealand Petroleum and Minerals (NZPAM).

No tenements were disposed of during the quarter. The Company further confirms that as at the end of the quarter the beneficial interest held by the Company in the various tenements has not changed. Details of the tenements and their locations are set out in Figure 24, Figure 25 and Annexure 1. The Company now has over **1,096sqkm** of applications for and granted tenements.

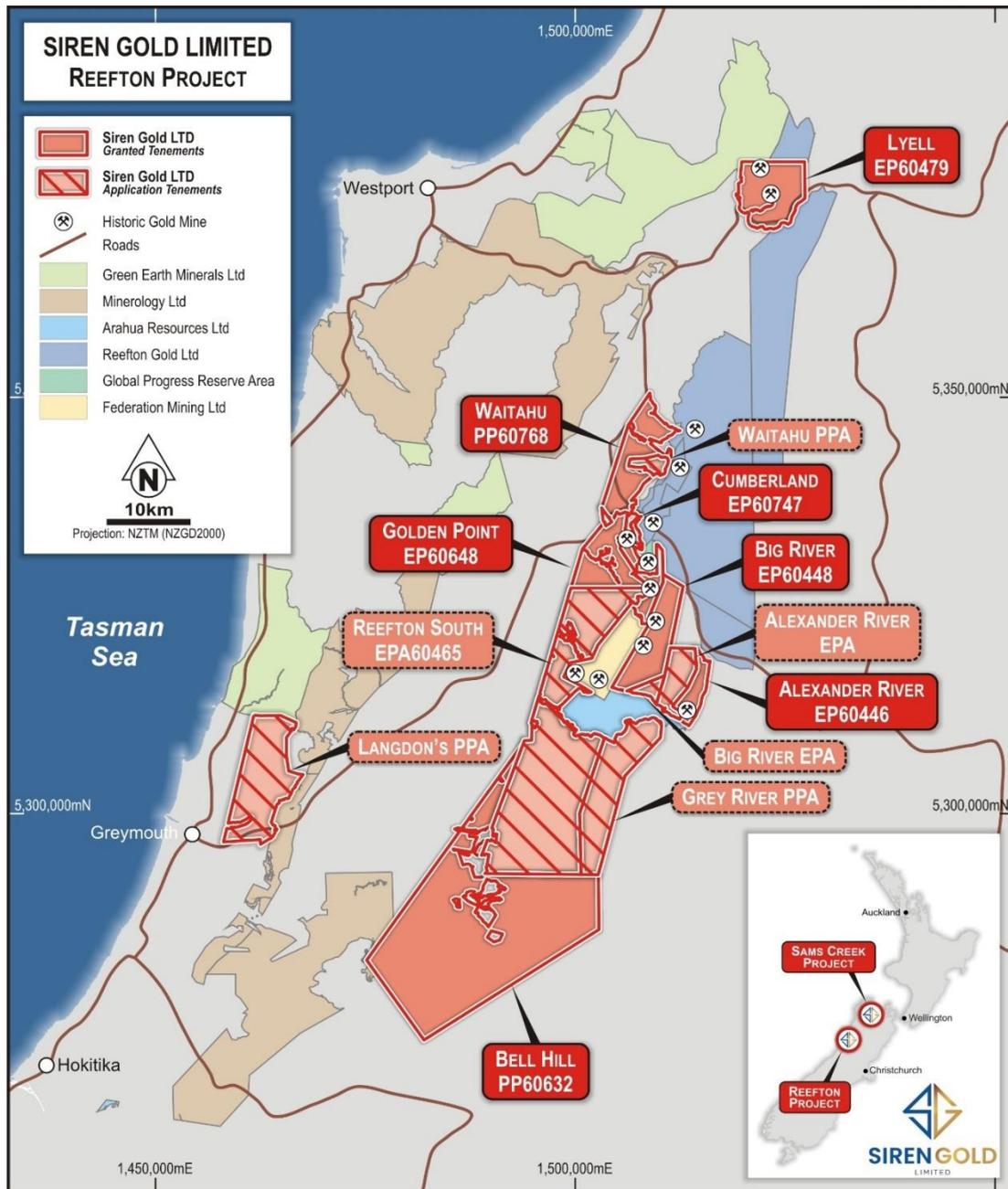
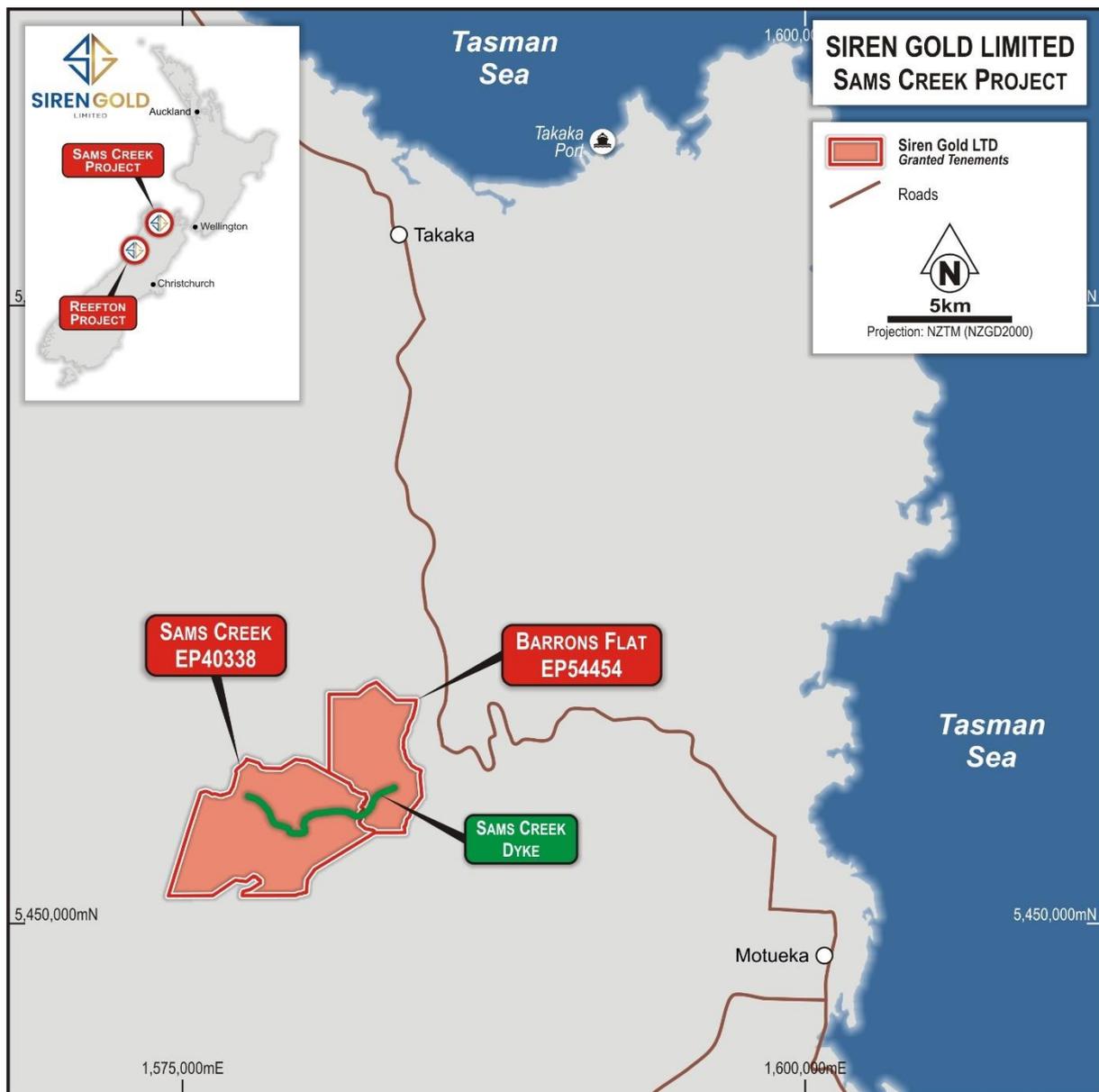


Figure 24. Reefton and Lyell Tenement Plan



**Figure 25. Sams Creek Tenement Plan**

## Corporate & Finance

The cash flows relating to the quarter included \$414k spent on exploration and evaluation expenditure, which is primarily associated with the costs of exploration activities at Alexander River and Golden Point. The Company had a closing cash balance at the end of the quarter of \$1.915m. For the purposes of section 6 of the Appendix 5B, all payments made to related parties are for director fees, office rent, administration services and geological consulting services.

- ENDS -

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

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

**Brian Rodan** – Managing Director

Phone: +61 (8) 6458 4200

**Paul Angus** – Technical Director

Phone: +64 274 666 526

### Competent Person Statement

The information contained in this report relating to exploration results, exploration targets and mineral resources has been previously reported by the Company (Announcements). The Company confirms that it is not aware of any new information or data that would materially affects the information included in the Announcements and, in the case of estimates of mineral resources, released on 20 April 2023, that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.

## ANNEXURE 1 – TENEMENT SCHEDULE

TENEMENT / STATUS	OPERATION NAME	REGISTERED HOLDER	% HELD	GRANT DATE	EXPIRY DATE	AREA SIZE (HA)
EP 60446	Alexander River	Reefton Resources Pty Limited	100%	10 May 2018	9 May 2023	1,675.459
EP 60448	Big River	Reefton Resources Pty Limited	100%	20 June 2018	19 June 2023	4,847.114
EP 60479	Lyell	Reefton Resources Pty Limited	100%	13 December 2018	12 December 2023	5,424.592
EPA 60928	Reefton South	Reefton Resources Pty Limited	100%	application		25,519.0
EP 60648	Golden Point	Reefton Resources Pty Limited	100%	19 March 2021	18 March 2026	4,622.7
PP 60632	Bell Hill	Reefton Resources Pty Limited	100%	15 December 2021	14 December 2023	36,487.0
PP 60758	Waitahu	Reefton Resources Pty Limited	100%	17 December 2021	16 December 2023	4,991.1
EP 60747	Cumberland	Reefton Resources Pty Limited	100%	14 December 2022	13 December 2027	2,249.7
PPA 60893.01	Langdons	Reefton Resources Pty Limited	100%	application		8,159.0
PPA 60894.01	Grey River	Reefton Resources Pty Limited	100%	application		7,419.0
EOL 60758.02	Waitahu	Reefton Resources Pty Limited	100%	application		692.1
EOL 60446.02	Alexander River	Reefton Resources Pty Limited	100%	application		2,341.0
EOL 60448.02	Big River	Reefton Resources Pty Limited	100%	application		569.8
EP 40338	Sams Creek	Sams Creek Gold Limited	81.9%	27 March 1998	26 March 2025	3,046.513
EP54454	Barrons Flat	Sams Creek Gold Limited	100%	4-yr extension application		1,601.159

## Appendix 5B

### Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

Siren Gold Limited

ABN

59 619 211 826

Quarter ended ("current quarter")

31 March 2023

<b>Consolidated statement of cash flows</b>	<b>Current quarter \$A'000</b>	<b>Year to date (3 months) \$A'000</b>
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers	-	-
1.2 Payments for		
(a) exploration & evaluation	(414)	(414)
(b) development	-	-
(c) production	-	-
(d) staff costs	(97)	(97)
(e) administration and corporate costs	(271)	(271)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	4	4
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	-	-
1.8 Other (provide details if material)	-	-
<b>1.9 Net cash from / (used in) operating activities</b>	<b>(778)</b>	<b>(778)</b>

<b>2. Cash flows from investing activities</b>		
2.1 Payments to acquire or for:		
(a) entities	-	-
(b) tenements	-	-
(c) property, plant and equipment	-	-
(d) exploration & evaluation	-	-
(e) investments	(5)	(5)
(f) other non-current assets	-	-

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (3 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>	<b>(5)</b>	<b>(5)</b>
<b>3.</b>	<b>Cash flows from financing activities</b>		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	2,600	2,600
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(195)	(195)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	(35)	(35)
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
<b>3.10</b>	<b>Net cash from / (used in) financing activities</b>	<b>2,370</b>	<b>2,370</b>
<b>4.</b>	<b>Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1	Cash and cash equivalents at beginning of period	328	328
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(778)	(778)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(5)	(5)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	2,370	2,370

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (3 months) \$A'000</b>
4.5	Effect of movement in exchange rates on cash held	-	-
<b>4.6</b>	<b>Cash and cash equivalents at end of period</b>	<b>1,915</b>	<b>1,915</b>

<b>5.</b>	<b>Reconciliation of cash and cash equivalents</b> at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	<b>Current quarter \$A'000</b>	<b>Previous quarter \$A'000</b>
5.1	Bank balances	1,909	328
5.2	Call deposits	25	25
5.3	Bank overdrafts	-	-
5.4	Other (Corporate Credit Card)	(19)	(25)
<b>5.5</b>	<b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>1,915</b>	<b>328</b>

<b>6.</b>	<b>Payments to related parties of the entity and their associates</b>	<b>Current quarter \$A'000</b>
6.1	Aggregate amount of payments to related parties and their associates included in item 1	(250)
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-

*Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.*

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

<b>7. Financing facilities</b>	<b>Total facility amount at quarter end \$A'000</b>	<b>Amount drawn at quarter end \$A'000</b>
<i>Note: the term "facility" includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.</i>		
7.1 Loan facilities	-	-
7.2 Credit standby arrangements	-	-
7.3 Other (please specify)	50	(19)
<b>7.4 Total financing facilities</b>	<b>50</b>	<b>(19)</b>
<b>7.5 Unused financing facilities available at quarter end</b>		<b>31</b>
7.6 Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		
Other at item 7.3 represents business credit card facilities with total limits of \$50,000 with Westpac NZ with no maturity date and is secured against a term deposit the Company has with the lender.		

<b>8. Estimated cash available for future operating activities</b>	<b>\$A'000</b>
8.1 Net cash from / (used in) operating activities (item 1.9)	(778)
8.2 (Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	-
8.3 Total relevant outgoings (item 8.1 + item 8.2)	(778)
8.4 Cash and cash equivalents at quarter end (item 4.6)	1,915
8.5 Unused finance facilities available at quarter end (item 7.5)	31
8.6 Total available funding (item 8.4 + item 8.5)	1,946
<b>8.7 Estimated quarters of funding available (item 8.6 divided by item 8.3)</b>	<b>2.5</b>
<i>Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.</i>	
8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:	
8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?	
Answer: N/A	
8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?	
Answer: N/A	
8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?	
Answer: N/A	
<i>Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.</i>	

**Compliance statement**

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: 28 April 2023

Authorised by: By the Board  
(Name of body or officer authorising release – see note 4)

**Notes**

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.