

# **ASX RELEASE**

# Scoping Study for Underground Development at Big River and Alexander River

# **Highlights**

- Siren to undertake scoping study for underground access at the Company's Big River and Alexander River Gold projects at Reefton NZ.
- Study to commence immediately and is anticipated to be completed during March 2022.

#### Background

Siren Gold Limited (ASX: **SNG**) (**Siren** or the **Company**) is pleased to advise that it has engaged Entech Pty Ltd (**Entech**) to provide mine planning and technical assistance to design exploration declines (a **Study**) for the Big River and Alexander River Gold projects in the South Island of New Zealand.

#### **Scoping Study**

The Study will be undertaken by Entech, an experienced mining consultant based in Perth, Western Australia, with offices in Tauranga, New Zealand and Toronto and Vancouver in Canada. Entech has over 35 mining and engineering professionals in the disciplines of Mining Engineering, Geology, Geotechnical Engineering and Ventilation design.

The scoping study will focus on the design of underground access declines for both the Alexander River and Big River projects to allow underground exploration diamond drilling to ~1,500 vertical metres below the surface.

Entech will assist with the design and scheduling of mine decline development and ventilation planning, as well site layout plans that address the requirements of the decline development.

Once the Study is completed, the Company intends to engage with all relevant government authorities to commence the approval processes necessary for the construction of the exploration declines.

#### **Reefton Goldfields Historical Production**

The Reefton Goldfield in the South Island of New Zealand was discovered in 1866 and produced +2M oz of gold at an average recovered grade of 16g/t from 84 historic mines. Most underground mining ceased by 1942, with the famous Blackwater mine closing in 1951, when the shaft failed after producing ~740koz down to 710m below surface. At the Blackwater mine Federation Mining is currently developing twin declines to allow underground exploration drilling and to gain access to 1,500m below the surface.

Siren holds a large, strategic package of tenements along the under-explored 40km long Reefton and Lyell Goldfields, with permits covering a further 40kms of buried and historically unmined Greenland Group rocks that potentially host the gold mineralisation to the south of the large historic Blackwater mine (Figure 1).

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The Reefton goldfield was originally part of the Lachlan Fold and gold mineralisation at Reefton has many important similarities to the Fosterville mine in Victoria.

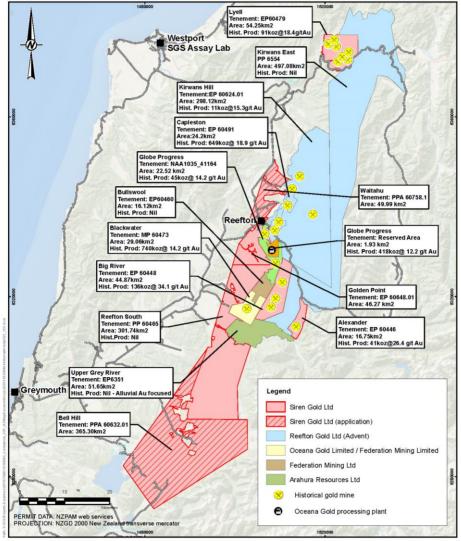


Figure 1. Reefton tenement plan as of 1 December 2021<sup>1</sup>

### Alexander River

The Alexander River project (comprised of Exploration Permit 60446) is located ~26 kms southeast of Reefton. The Alexander River project overlays the areas of the historic McVicar Mine which produced 41,089 oz of gold at an average recovered grade of ~26g/t Au before it closed in 1942.

The Alexander mineralisation outcrops for over 1.2kms and comprises quartz reefs and disseminated mineralisation. Surface trenching and channel sampling shows that the mineralisation ranges from 2-15m thick, with an average thickness and grade of 4m @ 8g/t Au. Surface sampling identified four mineralised shoots, named Bull, McVicar, Bruno and Loftus-McKay. Only the McVicar shoot was mined to any extent, with the shallow plunging shoot mined to 250m below surface, extracting 41koz at an average recovered grade of 26g/t Au.

Siren has drilled over 10,200m since drilling commenced at Alexander River in October 2020 and has estimated an Exploration Target of 500k-700koz at 5-7g/t Au<sup>1</sup> (Figure 1). In quarter 1 of 2022, Siren will focus on defining a maiden JORC resource at Alexander River drilling out the Bull East, Loftus-McKay and McVicar West shoots to around 300m below surface (500m down plunge).

<sup>&</sup>lt;sup>1</sup> Bell Hill and Waitahu tenements have been granted.



# **Big River**

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

Drilling commenced in Big River, Big River South and St George in 2011 when Oceana Gold Limited (OGL) drilled 26 diamond holes for a total of 5,032.6m. Siren commenced diamond drilling at Big River in October 2020, with 16 holes completed to date for a total of 2,742.8m.

The historic Big River underground mine workings have been modelled in 3D and have been divided into 6 mineralised shoots over a combined strike length of 500m, overlaid by anomalous gold and arsenic soil geochemistry. Only shoots 1, 4 and A2 have been drilled to date. Shoot 4 has been drilled between 100m and 400m below surface and is open at depth. Intersections include 6.6m @ 21.4g/t Au in BRDDH004, 3m @ 18.5g/t Au and 4m @ 7.8g/t Au in BRDDH009, 3m @ 12.1g/t Au in BRDDH003 and 5.1m @ 5.8g/t Au in BRDDH027. The A2 Shoot has only been drilled near surface, with BRDDH020 intersecting 5m @ 4.2g/t Au below a stope. The A2 Shoot is up to 10m thick, containing significant quartz and sulphide mineralisation, and has not been drill tested or mined below 50m.

The Company estimated an Exploration Target for Shoot 4 based on drilling to date. The shoot thickness and weighted grade currently average 4.7m @ 8.5g/t Au. With an estimated shoot width of 75m and extending the shoot 500m down plunge between 700mRL and 200mRL the Big River Exploration Target is estimated to be between 100koz and 125koz at a gold grade between 7-9g/t Au. With additional drilling similar exploration targets could potentially be estimated on the other shoots.

Mapping to the south of the Big River mine confirmed that a large broad anticline extends 3kms from the Big River mine to the Big River South and St George mines and is open to the north and south. The main reef track and soil anomalies run through the St George and Big River South mines along and 250m to the west of the anticline hinge and appear to link into the Big River mine. These structures are prime target areas for Big River mine style mineralisation.

The glacial till overlying these structures has been sampled using the new UltraFine+ (UF) soil technique to see if this method can detect gold mineralisation beneath cover. The UltraFine+ gold and arsenic results have extended the Big River South/Golden Hill anomaly 400m to the north and extended this Au anomaly further to the west under 1-3m of glacial till. The St George/Big River South Au anomaly now extends for 500m E-W and 1.5km N-S and is open to the south. During the quarter the initial UF soil lines were infilled and extended south. These samples have been submitted to LabWest in Perth for UF analysis. Analysis of the samples by portable XRF indicates that the arsenic anomaly continues to extend south towards the Snowy River.

Managing Director Brian Rodan said: "Prior to Siren Gold listing on the ASX in October 2020, there had only been a limited amount of exploration drilling completed historically over the entire Reefton Goldfield.

Siren has now completed around 13,000m of diamond drilling on its Alexander River and Big River projects and has recently announced an Exploration Target of 500,000 to 700,000 ounces @ 5-7g/t at Alexander River and an Exploration Target of 100koz-125koz at 7-9g/t Au at Big River<sup>2</sup>.

The Company plans to conduct over 20,000m of Diamond Drilling for 2022".

<sup>&</sup>lt;sup>2</sup> The potential quantity and grade of the targets is conceptual in nature and there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource. Refer also to the Company's announcement dated 23 September 2021.



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Authorised by the Board of Siren Gold Limited

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#### **Forward Looking Statements**

Certain statements contained in this announcement, including information as to the future financial or operating performance of the Company and its projects, are forward looking statements. Such forward looking statements are necessarily based upon a number of estimates and assumptions that, while considered reasonable by the Company, are inherently subject to significant technical, business, economic, competitive, political; and social uncertainties and contingencies; involve known and unknown risks and uncertainties that could cause actual events or results to differ materially from estimated or anticipated events or results reflected in such forward looking statements; and may include, among other things, statements regarding estimates and assumptions in respect of prices, costs, results and capital expenditure, and are or may be based on assumptions and estimates related to future technical, economic, market, political, social and other conditions. The Company disclaims any intent or obligation to publicly update any forward-looking statements, whether as a result of new information, future events or results or otherwise. The words "believe", "expect", "anticipate", "indicate", "contemplate", "target", "plan", "intends", "continue", "budget", "estimate", "may", "will", "schedule" and similar expressions identify forward looking statements. All forward-looking statements are not guarantees of future performance and accordingly recipients are cautioned not to put undue reliance on forward looking statements due to the inherent uncertainty therein.

#### **Competent Person Statement**

The information in this report that relates to exploration is extracted from previously released announcements ("Announcements"). The Company confirms that it is not aware of any new information or data that materially affects the information included in the Announcement.