



SIREN GOLD LIMITED  
ACN 619 211 826

# PROSPECTUS

---

**For an offer of 40,000,000 Shares at an issue price of \$0.25 per Share to raise \$10,000,000 (Offer).**

**Underwriter:** Morgans Corporate Limited



#### **IMPORTANT INFORMATION**

This is an important document that should be read in its entirety. If you do not understand it you should consult your professional advisers without delay. **The Shares offered by this Prospectus should be considered highly speculative.**

# Important Notice

This Prospectus is dated 31 August 2020 and was lodged with the ASIC on that date.

The ASIC, the ASX and their officers take no responsibility for the contents of this Prospectus or the merits of the investment to which this Prospectus relates.

No Shares may be issued on the basis of this Prospectus later than 13 months after the date of this Prospectus.

No person is authorised to give information or to make any representation in connection with this Prospectus, which is not contained in the Prospectus. Any information or representation not so contained may not be relied on as having been authorised by the Company in connection with this Prospectus.

It is important that you read this Prospectus in its entirety and seek professional advice where necessary. The Shares the subject of this Prospectus should be considered highly speculative.

## EXPOSURE PERIOD

This Prospectus will be circulated during the Exposure Period. The purpose of the Exposure Period is to enable this Prospectus to be examined by market participants prior to the raising of funds. You should be aware that this examination may result in the identification of deficiencies in this Prospectus and, in those circumstances, any application that has been received may need to be dealt with in accordance with section 724 of the Corporations Act. Applications for Shares under this Prospectus will not be accepted by the Company until after the expiry of the Exposure Period. No preference

will be conferred on applications lodged prior to the expiry of the Exposure Period.

## NO OFFERING WHERE OFFERING WOULD BE ILLEGAL

The distribution of this Prospectus in jurisdictions outside Australia or New Zealand may be restricted by law and persons who come into possession of this Prospectus should seek advice on and observe any of these restrictions. Failure to comply with these restrictions may violate securities laws. Applicants who are resident in countries other than Australia or New Zealand should consult their professional advisers as to whether any governmental or other consents are required or whether any other formalities need to be considered and followed.

This Prospectus does not constitute an offer in any place in which, or to any person to whom, it would not be lawful to make such an offer. It is important that investors read this Prospectus in its entirety and seek professional advice where necessary.

No action has been taken to register or qualify the Shares or the offers, or to otherwise permit an offering of the Shares in any jurisdiction outside Australia or New Zealand. This Prospectus has been prepared for publication in Australia and New Zealand and may not be released or distributed in the United States of America.

## INFORMATION FOR NEW ZEALAND RESIDENTS

The Offer to New Zealand investors is a regulated offer made under Australian and New Zealand law. In Australia, this is Chapter 8 of the

Corporations Act and regulations made under that Act. In New Zealand, this is subpart 6 of Part 9 of the *Financial Markets Conduct Act 2013* and Part 9 of the *Financial Markets Conduct Regulations 2014*.

The Offer and the content of this Prospectus are principally governed by Australian rather than New Zealand law. In the main, the Corporations Act and the regulations made under that Act set out how the Offer must be made.

There are differences in how financial products are regulated under Australian law. For example, the disclosure of fees for managed investment schemes is different under the Australian regime.

The rights, remedies, and compensation arrangements available to New Zealand investors in Australian financial products may differ from the rights, remedies, and compensation arrangements for New Zealand financial products.

Both the Australian and New Zealand financial markets regulators have enforcement responsibilities in relation to the Offer. If you need to make a complaint about the Offer, please contact the Financial Markets Authority, New Zealand (<http://www.fma.govt.nz>). The Australian and New Zealand regulators will work together to settle your complaint.

The taxation treatment of Australian financial products is not the same as for New Zealand financial products. If you are uncertain about whether this investment is appropriate for you, you should seek the advice of an appropriately qualified financial adviser.

The Offer may involve a currency exchange risk. The currency for the financial products is not New



Zealand dollars. The value of the financial products will go up or down according to changes in the exchange rate between that currency and New Zealand dollars. These changes may be significant.

If you expect the financial products to pay any amounts in a currency that is not New Zealand dollars, you may incur significant fees in having the funds credited to a bank account in New Zealand in New Zealand dollars.

If the financial products are able to be traded on a financial product market and you wish to trade the financial products through that market, you will have to make arrangements for a participant in that market to sell the financial products on your behalf. If the financial product market does not operate in New Zealand, the way in which the market operates, the regulation of participants in that market, and the information available to you about the financial products and trading may differ from financial product markets that operate in New Zealand.

## **WEB SITE - ELECTRONIC PROSPECTUS**

A copy of this Prospectus can be downloaded from the website of the Company at [www.sirengold.com.au](http://www.sirengold.com.au). If you are accessing the electronic version of this Prospectus for the purpose of making an investment in the Company, you must be an Australian or New Zealand resident and must only access this Prospectus from within Australia or New Zealand.

The Corporations Act prohibits any person passing onto another person an Application Form unless it is attached to a hard copy of

this Prospectus or it accompanies the complete and unaltered version of this Prospectus. You may obtain a hard copy of this Prospectus free of charge by contacting the Company by phone on +61 8 6555 2950 during office hours or by emailing the Company at [sandre@sirengold.com.au](mailto:sandre@sirengold.com.au).

The Company reserves the right not to accept an Application Form from a person if it has reason to believe that when that person was given access to the electronic Application Form, it was not provided together with the electronic Prospectus and any relevant supplementary or replacement prospectus or any of those documents were incomplete or altered.

## **WEBSITE**

No document or information included on our website is incorporated by reference into this Prospectus.

## **NO COOLING-OFF RIGHTS**

Cooling-off rights do not apply to an investment in Shares issued under the Prospectus. This means that, in most circumstances, you cannot withdraw your application once it has been accepted.

## **INVESTMENT ADVICE**

This Prospectus does not provide investment advice and has been prepared without taking account of your financial objectives, financial situation or particular needs (including financial or taxation issues). You should seek professional investment advice before subscribing for Shares under this Prospectus.

## **RISKS**

You should read this document in its entirety and, if in any doubt, consult your professional advisers before deciding whether to apply for Shares. There are risks associated with an investment in the Company. The Shares offered under this Prospectus carry no guarantee with respect to return on capital investment, payment of dividends or the future value of the Shares. Refer to Section D of the Investment Overview as well as Section 7 for details relating to some of the key risk factors that should be considered by prospective investors. There may be risk factors in addition to these that should be considered in light of your personal circumstances.

## **FORWARD-LOOKING STATEMENTS**

This Prospectus contains forward-looking statements which are identified by words such as 'may', 'could', 'believes', 'estimates', 'targets', 'expects', or 'intends' and other similar words that involve risks and uncertainties.

These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions regarding future events and actions that, as at the date of this Prospectus, are expected to take place.

Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company, the Directors and the management.

## Important Information (continued)

The Company cannot and do not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this Prospectus will actually occur and investors are cautioned not to place undue reliance on these forward-looking statements.

The Company has no intention to update or revise forward-looking statements, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained in this Prospectus, except where required by law.

These forward looking statements are subject to various risk factors that could cause the Company's actual results to differ materially from the results expressed or anticipated in these statements. These risk factors are set out in Section 7.

### FINANCIAL FORECASTS

The Directors have considered the matters set out in *ASIC Regulatory Guide 170* and believe that they do not have a reasonable basis to forecast future earnings on the basis that the operations of the Company are inherently uncertain. Accordingly, any forecast or projection information would contain such a broad range of potential outcomes and possibilities that it is not possible to prepare a reliable best estimate forecast or projection.

### COMPETENT PERSONS STATEMENT

The information in the Investment Overview Section of the Prospectus, included at Section 3, the Company and Projects Overview, included at Section 5, and the Independent Geologist's Report, included at Annexure A of the Prospectus, which relate to exploration targets, exploration results, mineral resources or ore reserves is based on information compiled by Aaron Radonich, who is a Member and Chartered Professional of the AusIMM. Aaron Radonich has sufficient 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 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (the **JORC Code**). Aaron Radonich is a full time employee of Golder Associates (NZ) Ltd. Aaron Radonich consents to the inclusion of the information in these Sections of the Prospectus in the form and context in which it appears.

### CONTINUOUS DISCLOSURE OBLIGATIONS

Following admission of the Company to the Official List, the Company will be a "disclosing entity" (as defined in section 111AC of the Corporations Act) and, as such, will be subject to regular reporting and disclosure obligations. Specifically, like all listed companies, the Company

will be required to continuously disclose any information it has to the market which a reasonable person would expect to have a material effect on the price or the value of the Company's Shares.

Price sensitive information will be publicly released through ASX before it is disclosed to Shareholders and market participants. Distribution of other information to Shareholders and market participants will also be managed through disclosure to the ASX. In addition, the Company will post this information on its website after the ASX confirms an announcement has been made, with the aim of making the information readily accessible to the widest audience.

### CLEARING HOUSE ELECTRONIC SUB-REGISTER SYSTEM (CHES) AND ISSUER SPONSORSHIP

The Company will apply to participate in CHES, for those investors who have, or wish to have, a sponsoring stockbroker. Investors who do not wish to participate through CHES will be issuer sponsored by the Company.

Electronic sub-registers mean that the Company will not be issuing certificates to investors. Instead, investors will be provided with statements (similar to a bank account statement) that set out the number of Shares issued to them under this Prospectus. The notice will also advise holders of their Holder Identification Number or Security Holder Reference Number



and explain, for future reference, the sale and purchase procedures under CHESS and issuer sponsorship.

Electronic sub-registers also mean ownership of securities can be transferred without having to rely upon paper documentation. Further monthly statements will be provided to holders if there have been any changes in their security holding in the Company during the preceding month.

## **PHOTOGRAPHS AND DIAGRAMS**

Photographs used in this Prospectus which do not have descriptions are for illustration only and should not be interpreted to mean that any person shown endorses the Prospectus or its contents or that the assets shown in them are owned by the Company. Diagrams used in this Prospectus are illustrative only and may not be drawn to scale.

## **DEFINITIONS AND TIME**

Unless the contrary intention appears or the context otherwise requires, words and phrases contained in this Prospectus have the same meaning and interpretation as given in the Corporations Act and capitalised terms have the meaning given in the Glossary in Section 12.

All references to time in this Prospectus are references to Australian Western Standard Time.

## **PRIVACY STATEMENT**

If you complete an Application Form, you will be providing personal information to the Company. The Company collects, holds and will use that information to assess your application, service your needs as a Shareholder and to facilitate distribution payments and corporate communications to you as a Shareholder.

The information may also be used from time to time and disclosed to persons inspecting the register, including bidders for your securities in the context of takeovers, regulatory bodies including the Australian Taxation Office, authorised securities brokers, print service providers, mail houses and the share registry.

You can access, correct and update the personal information that we hold about you. If you wish to do so, please contact the share registry at the relevant contact number set out in this Prospectus.

Collection, maintenance and disclosure of certain personal information is governed by legislation including the *Privacy Act 1988* (as amended), the Corporations Act and certain rules such as the ASX Settlement Operating Rules. You should note that if you do not provide the information required on the application for Shares, the Company may not be able to accept or process your application.

## **ENQUIRIES**

If you are in any doubt as to how to deal with any of the matters raised in this Prospectus, you should consult with your broker or legal, financial or other professional adviser without delay. Should you have any questions about the Offer or how to accept the Offer please call the Company Secretary on +61 8 6555 2950.





# Corporate Directory

## > DIRECTORS

Dave Filov  
Non-Executive Chairman

Brian Rodan  
Managing Director

Paul Angus  
Technical Director

Keith Murray  
Non-Executive Director

## > COMPANY SECRETARY

Sebastian Andre

## > PROPOSED ASX CODE

SNG

## > REGISTERED OFFICE

Suite 1  
295 Rokeby Road  
Subiaco WA 6008

Telephone: + 61 8 6555 2950  
Facsimile: +61 8 6166 0261

Email: sandre@sirengold.com.au  
Website: www.sirengold.com.au

## > SOLICITORS

Steinepreis Paganin  
Level 4  
The Read Buildings  
16 Milligan Street  
Perth WA 6000

## > INVESTIGATING ACCOUNTANT

Nexia Australia  
Level 3  
88 William Street  
Perth WA 6001

## > AUDITOR\*

Nexia Australia  
Level 3  
88 William Street  
Perth WA 6001

## > INDEPENDENT GEOLOGIST

Golder Associates (NZ) Ltd  
Level 1  
105A Montgomery Square  
Nelson 7010  
New Zealand

## > UNDERWRITER

Morgans Corporate Limited  
Level 2  
22 Delhi Street  
West Perth WA 6005

Telephone: + 61 8 6160 8700

## > SHARE REGISTRY\*

Automic Registry Services  
Level 2  
267 St Georges Terrace  
Perth WA 6000

\* This entity is included for information purposes only.  
It has not been involved in the preparation of this Prospectus.





# Contents

1. Chairman's Letter .....	8
2. Key Offer Information .....	11
3. Investment Overview.....	12
4. Details of the Offer .....	21
5. Company and Projects Overview .....	27
6. Financial Information .....	39
7. Risk Factors .....	41
8. Board, Management and Corporate Governance .....	51
9. Material Contracts .....	57
10. Additional Information .....	65
11. Directors Authorisation .....	75
12. Glossary.....	76
Annexure A - Independent Geologist's Report .....	77
Annexure B - Solicitor's Report on Title .....	243
Annexure C - Investigating Accountant's Report .....	275

# 1. Chairman's Letter

Dear Investor

On behalf of the directors of Siren Gold Limited (**Company**), it gives me great pleasure to invite you to become a shareholder of the Company.

The Company's wholly owned subsidiary, Reefton Resources Pty Limited (**RRL**), is the holder of, and applicant for, a package of permits in the Reefton Goldfield (**Reefton Gold Project**) on the South Island of New Zealand, which has been explored and mined for both hard rock and alluvial gold since the first discovery of gold in 1870, and most recently at the Globe-Progress Mine held by OceanaGold Limited.

The Reefton Gold Project is made up of three granted exploration permits (the Big River Project, Alexander River Project and Lyell Project) and one prospecting permit (the Reefton South Project), which has expired and is in the process of being renewed. The Company has made applications for an additional prospecting permit (the Bell Hill Project) and exploration permit within part of the area of the Reefton South Project (the Golden Point Prospect).

This Prospectus is seeking to raise \$10,000,000 via the issue of Shares at an issue price of \$0.25 per Share under the Offer. The purpose of the Offer is to provide funds to implement the Company's proposed exploration programs and business strategies (further detailed in Section 5). The Company's primary activities following listing will be undertaking a drilling program at the Big River Project and Alexander River Project, with a drilling program also planned at the Golden Point Prospect should the relevant permit be granted.

The Board have significant expertise and experience in the gold exploration industry and will aim to ensure that funds raised through the Offer will be utilised in a cost-effective manner to advance the Company's business.

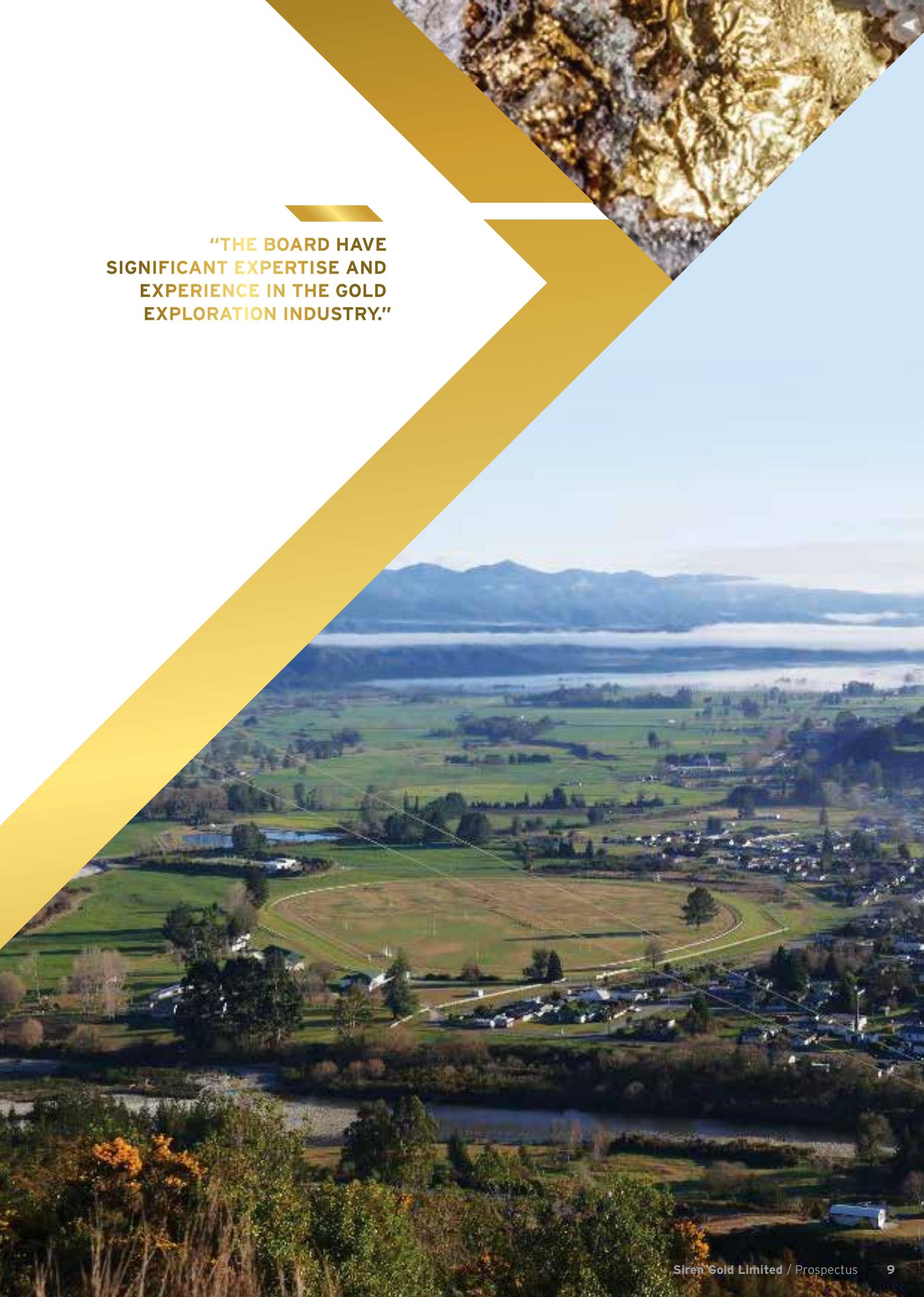
This Prospectus is issued for the purpose of supporting an application to list the Company on the Australian Securities Exchange. This Prospectus contains detailed information about the Company, its business and the Offer, as well as the risks of investing in the Company, and I encourage you

to read it carefully. The Shares offered by this Prospectus should be considered highly speculative. Risks associated with an investment in the Company include exploration risks, risks with respect to access, environmental consents, tenure to mining permits and commodity price and demand risks (particularly gold).

I look forward to you joining us as a Shareholder and sharing in what we believe are exciting and prospective times ahead for the Company. Before you make your investment decision, I urge you to read this Prospectus in its entirety and seek professional advice if required.

Yours sincerely

**David Filov**  
Non-Executive Chairman



**"THE BOARD HAVE  
SIGNIFICANT EXPERTISE AND  
EXPERIENCE IN THE GOLD  
EXPLORATION INDUSTRY."**



**"FUNDS RAISED THROUGH  
THE OFFER WILL BE UTILISED  
IN A COST-EFFECTIVE  
MANNER TO ADVANCE THE  
COMPANY'S BUSINESS."**

## 2. Key Offer Information

### INDICATIVE TIMETABLE<sup>1</sup>

Lodgement of Prospectus with the ASIC	31 August 2020
Exposure Period begins	31 August 2020
Opening Date	8 September 2020
Closing Date	21 September 2020
Issue of Shares under the Offer	28 September 2020
Despatch of holding statements	29 September 2020
Expected date for quotation on ASX	6 October 2020

1. The above dates are indicative only and may change without notice. Unless otherwise indicated, all times given are WST. The Exposure Period may be extended by the ASIC by not more than 7 days pursuant to section 727(3) of the *Corporations Act*. The Company reserves the right to extend the Closing Date or close the Offer early without prior notice. The Company also reserves the right not to proceed with the Offer at any time before the issue of Shares to applicants.
2. If the Offer is cancelled or withdrawn before completion of the Offer, then all application monies will be refunded in full (without interest) as soon as possible in accordance with the requirements of the *Corporations Act*. Investors are encouraged to submit their applications as soon as possible after the Offer open.
3. The Closing Date set out above is the date that the Company will cease accepting public applications for Shares. However, the Offer will technically remain open until such time as applications for all shortfall Shares in respect of the Offer are received from the Underwriter.

### KEY STATISTICS OF THE OFFERS

Offer Price per Share	\$0.25
Shares currently on issue	40,913,094
Options currently on issue <sup>2</sup>	18,395,833
Shares to be issued under the Offer	40,000,000
Underwriter Options <sup>3</sup>	1,618,262
Gross Proceeds of the Offer	\$10,000,000
Shares on issue Post-Listing (undiluted) <sup>1</sup>	80,913,094
Options on issue Post-Listing	20,014,095
Shares on issue Post-Listing (fully diluted) <sup>1</sup>	100,927,189

#### Notes:

1. Certain Securities on issue post-listing will be subject to ASX-imposed escrow. Refer to Section 5.8 for the likely escrow position.
2. Options currently on issue comprise the following:
  - (a) 3,116,667 Options exercisable at \$0.25 each on or before 30 September 2021
  - (b) 2,604,166 Options exercisable at \$0.25 each on or before 11 January 2022
  - (c) 5,000,000 Options exercisable at \$0.25 each on or before 15 January 2023
  - (d) 7,675,000 Options exercisable at \$0.375 on or before 26 September 2024.
Refer to Section 10.3 for the terms and conditions currently on issue.
3. Exercisable at \$0.375 on or before 26 September 2024. Refer to Section 10.4 for the terms of the Underwriter Options.

## 3. Investment Overview

This Section is a summary only and is not intended to provide full information for investors intending to apply for Shares offered pursuant to this Prospectus. This Prospectus should be read and considered in its entirety.

Item	Summary	Further information
<b>A. COMPANY</b>		
<b>Who is the issuer of this Prospectus?</b>	Siren Gold Limited (ACN 619 211 826) ( <b>Company</b> or <b>Siren</b> ).	Section 5.1
<b>Who is the Company?</b>	<p>The Company is an Australian public company, incorporated on 19 May 2017.</p> <p>The Company, via its 100%-owned New Zealand subsidiary Reefton Resources Pty Limited (RRL), has secured the Reefton Gold Project, comprising three granted exploration permits:</p> <ul style="list-style-type: none"> <li>(a) the Big River Project - EP 60448;</li> <li>(b) the Alexander River Project - EP 60446;</li> <li>(c) the Lyell Project - EP 60479; and</li> <li>(d) the Reefton South Project - PP 60465 (currently subject to renewal).</li> </ul> <p>The Company has also applied for:</p> <ul style="list-style-type: none"> <li>(a) an exploration permit within the area of the Reefton South Project, being the Golden Point Project - EPA 60648.01; and</li> <li>(b) a prospecting permit, being the Bell Hill Project - PPA60632.01.</li> </ul>	Section 5.1
<b>B. REEFTON GOLD PROJECT</b>		
<b>Where is the Reefton Gold Project?</b>	<p>The Reefton Gold Project is located within the Reefton Goldfield on the South Island of New Zealand.</p> <p>The Reefton Goldfield has been explored and mined for both hard rock and alluvial gold since the first discovery of gold in 1870 and most recently at the Globe-Progress Mine held by OceanaGold Limited (<b>OGL</b>).</p> <p>Total recorded historical quartz lode production in the Reefton Goldfield to 1954 was approximately 2 million ounces of gold. More recently, the Globe-Progress Mine held by OGL, which closed in 2015, was an open cut mine that produced 620,000 oz of gold around the historic mine.</p>	Section 5.2
<b>What is the Reefton Gold Project</b>	The Reefton Gold Project is made up primarily of the Big River Project, Alexander River Project and Reefton South Project, a contiguous package of permits located in the Reefton Goldfield.	Section 5.3



Item	Summary	Further information
<b>B. REEFTON GOLD PROJECT (CONTINUED)</b>		

**(a) Big River Project**

The Big River Project overlays the area of the Big River Mine, which produced approximately 136,000 oz of gold at an average recovered grade of 34.1g/t between 1880 and 1942.

**(b) Alexander River Project**

The Alexander River Project overlays the area of the historic Alexander River Mine until closure in 1943, which produced 41,089 oz of gold at an average recovered grade of approximately 26.4g/t.

**(c) Lyell Project**

The Lyell Project overlays the area of the Alpine United Mine and a number of other small mines which produced 91,000 oz at an average recovered grade of 18.4 g/t.

**(d) Reefton South Project**

The Reefton South Project overlays an area to the West of the Globe Progress Mine (>1Moz historical production) and south of the Blackwater Mine (740koz historical production) and contains several small hard rock historical mines (Golden Point and Morning Star mines). In the area south of Blackwater the target rocks are covered by glacial till and alluvial deposits, which have produced significant quantities of alluvial gold.

The Big River Project, Alexander River Project and Reefton South Project have been the subject of exploration drilling by OGL, with results from drilling considered by the Board to be encouraging. The Lyell Project has been subject to exploration drilling by Auzex Resources Pty Limited, with results from drilling considered by the Board to be encouraging.

The Bell Hill Project is an application for a Prospecting Permit, which extends to the south of the Reefton South Project and covers an area of buried Greenland Group rocks which host the gold mineralisation at Reefton.

**What is the Company's business model?**

Following completion of the Offer, the Company's proposed business model will be to further explore and develop the Reefton Gold Project in accordance with the exploration program set out in Section 5.4.

The Company proposes to fund its exploration activities over the first two years following listing as outlined in the table at Section 5.5.

Sections 5.4 and 5.5

### 3. Investment Overview (continued)

Item	Summary	Further information
<b>B. REEFTON GOLD PROJECT (CONTINUED)</b>		
<b>What are the key business objectives of the Company?</b>	<p>The Company's main objectives on completion of the Offer are to:</p> <ul style="list-style-type: none"> <li>(a) identify priority drill targets by undertaking surface exploration activities at its Big River, Alexander River Projects and the Golden Point Prospect (if granted);</li> <li>(b) target extensions to known gold opportunities identified by previous drilling and surface trenching along mineralised rock outcrops at the Big River, Alexander River and Lyell Projects;</li> <li>(c) undertake high level exploration activities on the Reefton South (if renewed), Bell Hill (if granted) to identify drill targets;</li> <li>(d) implement an exploration strategy aimed at the discovery of new high-grade grade gold resources at the Reefton Gold Project as rapidly as practicable;</li> <li>(e) through exploration success, evaluate opportunities for near term gold production; and</li> <li>(f) seek further exploration, acquisition and joint venture opportunities in New Zealand and elsewhere.</li> </ul> <p>The Directors are satisfied that on completion of the Offer, the Company will have sufficient funds to carry out its stated objectives.</p>	Sections 5.4 and 5.5
<b>What are the key dependencies of the Company's business model?</b>	<p>The key dependencies of the Company's business model include:</p> <ul style="list-style-type: none"> <li>(a) completing the Offer;</li> <li>(b) the Company's ability to continue to negotiate access at the Reefton Gold Project in order to undertake its proposed exploration programs;</li> <li>(c) retaining title to the permits making up the Reefton Gold Project, particularly the Big River and Alexander River Projects;</li> <li>(d) retaining and recruiting key personnel skilled in the exploration and mining sector;</li> <li>(e) sufficient worldwide demand for gold;</li> <li>(f) the market price of gold remaining higher than the Company's costs of any future production (assuming successful exploration by the Company);</li> <li>(g) raising sufficient funds to satisfy expenditure requirements for exploration and operating costs in respect of the Reefton Gold Project; and</li> <li>(h) minimising environmental impact and complying with health and safety requirements.</li> </ul>	Section 5.3.6



Item	Summary	Further information
<b>C. KEY RISKS</b>		
<b>General</b>	<p>The business, assets and operations of the Company are subject to certain risk factors that have the potential to influence the operating and financial performance of the Company in the future. These risks can impact on the value of an investment in the securities of our Company.</p> <p>The Board aims to manage these risks by carefully planning its activities and implementing risk control measures. Some of the risks are, however, highly unpredictable and the extent to which the Board can effectively manage them is limited.</p>	Section 7
<b>Access Arrangements</b>	<p>In New Zealand, the granting of an Exploration Permit does not automatically award the right of access to the land subject to the permit. Land access must be arranged with the owner and occupier of the land prior to the commencement of any exploration activities for minerals on or below the surface other than minimum impact activities as defined in the <i>New Zealand Crown Minerals Act 1991</i>.</p> <p>Access arrangements are required for all activities other than minimum impact activities (MIA). Access to Crown land, such as conservation land, is required from the relevant Minister of the Crown with responsibility for the land. The majority of the areas of interest at the Reefton Project are situated over land administered by the New Zealand Department of Conservation (<b>DoC</b>). RRL has been granted an access agreement with the DoC for the Big River and Alexander River Projects, however, there can be no certainty that adequate access arrangements will be achievable in the future.</p>	Section 7.2(a)
<b>Tenure</b>	<p>Exploration permits are subject to periodic renewal. There is no guarantee that current or future permits or future applications for production permits will be approved.</p> <p>The permits are also at various stages of application and grant, specifically the permits making up the Bell Hill Project and Golden Point Prospect are still under application and the Permit making up the Reefton South Project is expired and is subject to renewal. There can be no assurance that the permit applications and renewal currently pending will be granted. There can be no assurance that when the permit is granted, it will be granted in its entirety. Additionally, some of the permit areas applied for may be excluded.</p> <p>It is the Company's intention to proceed with the Offer and listing regardless of whether these applications and renewals are granted.</p>	Section 7.2(b)

### 3. Investment Overview (continued)

Item	Summary	Further information
<b>C. KEY RISKS (CONTINUED)</b>		
<b>Exploration and operating</b>	<p>The permits comprising the Projects are at various stages of exploration, and potential investors should understand that mineral exploration and development are high-risk undertakings.</p> <p>There can be no assurance that future exploration of these permits, or any other mineral permits that may be acquired in the future, will result in the discovery of an economic resource. Even if an apparently viable resource is identified, there is no guarantee that it can be economically exploited.</p>	7.2(c)
<b>Other risks</b>	<p>In addition to the above, the Company is subject to customary risks associated with exploration companies, including heritage, Treaty of Waitangi claims, changes in legislation, funding, foreign exchange, commodity price, commodity demand and environmental risks, as well as general risks associated with an investment in shares.</p> <p>For additional specific risks please refer to Section 7.2. For other risks with respect to the industry in which the Company operates and general investment risks, many of which are largely beyond the control of the Company and its Directors, please refer to Sections 7.3 and 7.4.</p>	Sections 7.2, 7.3 and 7.4
<b>D. DIRECTORS AND KEY MANAGEMENT PERSONNEL</b>		
<b>Who are the Directors?</b>	<p>The Board consists of:</p> <p>(a) Dave Filov - Non-Executive Chairman;</p> <p>(b) Brian Rodan - Managing Director;</p> <p>(c) Paul Angus - Technical Director; and</p> <p>(d) Keith Murray - Non-Executive Director.</p> <p>The profiles of each of the Directors are set out in Section 8.1.</p>	Section 8.1
<b>What are the significant interests of Directors in the Company?</b>	Each Director's interest in the Company is set out at Section 8.3.	Section 8.3
<b>What related party agreements are the Company party to?</b>	The Company is party to an ESA with Brian Rodan and a Consultancy Agreement with Paul Angus, summaries of which are set out in Section 9.2.	Sections 8.4 and 9.2



Item	Summary	Further information
<b>E. FINANCIAL INFORMATION</b>		
<b>How has the Company been performing?</b>	<p>The Company's audited financial information for the financial years ending 31 December 2018 and 31 December 2019 and audit-reviewed financial information for the half-year ended 30 June 2020 are set out in Annexure C.</p> <p>As a mineral exploration company, the Company is not in a position to disclose any key financial ratios other than its statement of profit and loss, statement of cash flows and pro-forma balance sheet which are included in Annexure C.</p>	Annexure C
<b>What is the financial outlook for the Company?</b>	<p>Given the current status of the Reefton Gold Project, the Directors do not consider it appropriate to forecast future earnings.</p> <p>Any forecast or projection information would contain such a broad range of potential outcomes and possibilities that it is not possible to prepare a reliable best estimate forecast or projection on a reasonable basis.</p>	Annexure C
<b>F. OFFER</b>		
<b>What is being offered?</b>	The Offer is an offer of 40,000,000 Shares at an issue price of \$0.25 per Share to raise \$10,000,000 (before costs).	Section 4.1
<b>Is there a minimum subscription under the Offer?</b>	The minimum amount to be raised under the Offer is the full underwritten amount of \$10,000,000.	Section 4.7
<b>What is the purpose of the Offer?</b>	<p>The purposes of the Offer are to facilitate an application by the Company for admission to the Official List, to position the Company to seek to achieve the objectives stated at Section B of this Investment Overview Section and to provide the Company with future access to equity capital markets for funding.</p> <p>The Board believes that on completion of the Offer, the Company will have sufficient working capital to achieve its objectives.</p>	Section 4.6
<b>Is the Offer underwritten?</b>	<p>The Offer is fully underwritten by Morgans Corporate Limited (<b>Underwriter</b> or <b>Morgans</b>). Morgans will receive the following fees in consideration for underwriting the Offer:</p> <ul style="list-style-type: none"><li>(a) a management fee equal to 2% of the total amount raised under the Offer; and</li><li>(b) an underwriting fee equal to 4% of the total amount raised under the Offer; and</li><li>(c) 1,618,262 Underwriter Options, exercisable at \$0.375 on or before 26 September 2024.</li></ul>	Sections 4.3 and 9.1

### 3. Investment Overview (continued)

Item	Summary	Further information
<b>F. OFFER (CONTINUED)</b>		
<b>What is the structure of the Offer?</b>	<p>The Offer comprises:</p> <ul style="list-style-type: none"> <li>(a) the Broker Firm Offer, which is open to investors that have received a firm allocation from their broker (refer to Section 4.4); and</li> <li>(b) the Chairman's List Offer, which is open to selected investors who have received an invitation from the Chairman to participate (refer to Section 4.5).</li> </ul>	Section 4.2
<b>What is the allocation policy under the Offer?</b>	Refer to Section 4.10 for a summary of the Company's allocation policy in respect of the Offer and Sections 4.4.4 and 4.5.3 for the allocation policies in respect of the Broker Firm Offer and Chairman's List Offer specifically.	Sections 4.4.4, 4.5.3, 4.10
<b>Who is eligible to participate in the Offer?</b>	This Prospectus does not, and is not intended to, constitute an offer in any place or jurisdiction, or to any person to whom, it would not be lawful to make such an offer or to issue this Prospectus. The distribution of this Prospectus in jurisdictions outside Australia, New Zealand or the United Kingdom may be restricted by law and persons who come into possession of this Prospectus should seek advice on and observe any of these restrictions. Any failure to comply with such restrictions may constitute a violation of applicable securities laws.	Section 4.13
<b>How do I apply for Securities under the Offer?</b>	<p>Applications for Shares under the Offer must be made by completing the Application Form provided to you by your broker or the Chairman.</p> <p>There will be no general public offer of Shares made under the Offer. Members of the public wishing to apply for Shares under the Offer must do so through a broker with a firm allocation of Shares.</p>	Sections 4.2 and 4.10
<b>What will the Company's capital structure look like on completion of the Offer?</b>	<p>The Company's capital structure on a post-Offer basis is set out in Section 5.6.</p> <p>Upon completion of the Offer, the Company estimates that it will have a 'free float' of approximately 50%, being the Shares issued under the Offer. The Company notes that a number of Shares currently on issue are likely to be tradeable post-listing, which will increase the Company's free float.</p>	Section 5.6
<b>What are the terms of the Shares offered under the Offer?</b>	<p>A summary of the material rights and liabilities attaching to the Shares offered under the Offer is set out in Section 10.2.</p> <p>A summary of the material rights and liabilities attaching to the Options currently on issue and to be granted to the Underwriter are set out in Sections 10.3 and 10.4.</p> <p>Also refer to Section 10.5 for a summary of the Company's employee incentive plan, pursuant to which additional Securities may be issued in the future.</p>	Sections 10.2 to 10.5



Item	Summary	Further information
<b>F. OFFER (CONTINUED)</b>		
<b>Will any Securities be subject to escrow?</b>	<p>None of the Securities issued under the Offer will be subject to escrow.</p> <p>However, subject to the Company complying with Chapters 1 and 2 of the ASX Listing Rules and completing the Offer, certain Securities on issue may be classified by ASX as restricted securities and will be required to be held in escrow for up to 24 months from the date of Official Quotation.</p> <p>During the period in which restricted Shares are prohibited from being transferred, trading in Shares may be less liquid, which may impact on the ability of a Shareholder to dispose of their Shares in a timely manner.</p> <p>The Company will announce to ASX full details (quantity and duration) of the Securities required to be held in escrow prior to the Shares commencing trading on ASX.</p>	Section 5.8
<b>Will the Securities be quoted?</b>	<p>Application for quotation of all Shares to be issued under the Offer will be made to ASX no later than 7 days after the date of this Prospectus.</p> <p>No Options on issue, or to be issued, are currently anticipated to be quoted at the time the Company is admitted to the Official List.</p>	Section 4.11
<b>What are the key dates of the Offer?</b>	The key dates of the Offer are set out in the indicative timetable in the Key Offer Information Section of this Prospectus.	Key Offer Information
<b>What is the minimum investment size under the Offer?</b>	Applications under the Offer must be for a minimum of \$2,000 worth of Shares (8,000 Shares).	Section 4.9
<b>Are there any conditions to the Offer?</b>	No, other than raising the Minimum Subscription and ASX approval for quotation of the Shares, the Offer is unconditional.	Sections 4.7 and 4.11
<b>G. ADDITIONAL INFORMATION</b>		
<b>Is there any brokerage, commission or duty payable by applicants?</b>	<p>No brokerage, commission or duty is payable by applicants on the acquisition of Shares under the Offer.</p> <p>However, the Company will pay to the Underwriter 6% (ex GST) of the total amount raised under the Prospectus (an underwriting fee of 4% and management fee of 2% of the total amount raised under the Offer).</p>	Sections 4.14 and 9.1
<b>Can the Offer be withdrawn?</b>	<p>The Company reserves the right not to proceed with the Offer at any time before the issue of Shares to successful applicants.</p> <p>If the Offer does not proceed, application monies will be refunded (without interest).</p>	Section 4.16

### 3. Investment Overview (continued)

Item	Summary	Further information
<b>G. ADDITIONAL INFORMATION (CONTINUED)</b>		
<b>What are the tax implications of investing in Securities?</b>	<p>Holders of Securities may be subject to Australian tax on dividends and possibly capital gains tax on a future disposal of Securities subscribed for under this Prospectus.</p> <p>The tax consequences of any investment in Securities will depend upon an investor's particular circumstances. Applicants should obtain their own tax advice prior to deciding whether to subscribe for Securities offered under this Prospectus.</p>	Section 4.15
<b>What is the Company's Dividend Policy?</b>	<p>The Company anticipates that significant expenditure will be incurred in the evaluation and development of the Reefton Gold Project. These activities, together with the possible acquisition of interests in other projects, are expected to dominate at least the first two-year period following the date Company's admission to the Official List. Accordingly, the Company does not expect to declare any dividends during that period.</p> <p>Any future determination as to the payment of dividends by the Company will be at the discretion of the Directors and will depend on the availability of distributable earnings and the operating results and financial condition of the Company, future capital requirements and general business and other factors considered relevant by the Directors. No assurance in relation to the payment of dividends or franking credits attaching to dividends can be given by the Company.</p>	Section 5.10
<b>What are the corporate governance principles and policies of the Company?</b>	<p>To the extent applicable, in light of the Company's size and nature, the Company has adopted The Corporate Governance Principles and Recommendations (4th Edition) as published by ASX Corporate Governance Council (<b>Recommendations</b>).</p> <p>In addition, the Company's full Corporate Governance Plan is available from the Company's website (<a href="http://www.sirengold.com.au">www.sirengold.com.au</a>).</p> <p>Prior to listing on the ASX, the Company will announce its main corporate governance policies and practices and the Company's compliance and departures from the Recommendations.</p>	Section 8.5
<b>Where can I find more information?</b>	<p>(a) By speaking to your sharebroker, solicitor, accountant or other independent professional adviser;</p> <p>(b) By contacting the Company Secretary, on +61 8 6555 2950; or</p> <p>(c) By contacting the Share Registry on 1300 288 644.</p>	



## 4. Details of the Offer

## 4. Details of the Offer (continued)

### 4.1 The Offer

Pursuant to this Prospectus, the Company invites applications for up to 40,000,000 Shares at an issue price of \$0.25 per Share to raise \$10,000,000.

The Shares offered under this Prospectus will rank equally with the existing Shares on issue. A summary of the material rights and liabilities attaching to the Shares offered under the Offer is set out in Section 10.2.

### 4.2 Offer Structure

The Offer comprises:

- (a) the Broker Firm Offer, which is open to investors that have received a firm allocation from their broker (refer to Section 4.4); and
- (b) the Chairman's List Offer, which is open to selected investors who have received an invitation from the Chairman to participate (refer to Section 4.5).

The allocation of Shares between the Broker Firm Offer and the Chairman's List Offer will be determined by agreement between the Company and the Underwriter having regard to the allocation policy described in Section 4.10.

There will be no general public offer of Shares made under the Offer. Members of the public wishing to apply for Shares under the Offer must do so through a broker with a firm allocation of Shares.

### 4.3 Underwritten Offer

The Offer is fully underwritten by Morgans Corporate Limited (**Underwriter** or **Morgans**). Morgans will receive the following fees in consideration for underwriting the Offer:

- (a) a management fee equal to 2% of the total amount raised under the Offer;
- (b) an underwriting fee equal to 4% of the total amount raised under the Offer; and
- (c) 1,618,262 Underwriter Options, exercisable at \$0.375 on or before 26 September 2024.

Refer to Section 9.1 for a summary of the terms and conditions of the Underwriting Agreement.

### 4.4 Broker Firm Offer

#### 4.4.1 Who can apply?

The Broker Firm Offer is open to persons who have received a firm allocation of Shares from their broker and who have a registered address in Australia or New Zealand. If you have received a firm allocation of Shares from your broker, you will be treated as a Broker Firm Offer Applicant in respect of that allocation. You should contact your Broker to determine whether you can receive an allocation of Shares from them under the Broker Firm Offer.

#### 4.4.2 How to apply?

If you have received an allocation of Shares from your broker and wish to apply for those Shares under the Broker Firm Offer, you should contact your broker for information about how to submit your Broker Firm Offer Application Form and for payment instructions.

Applicants under the Broker Firm Offer must not send their Application Forms or payment to the Share Registry. Applicants under the Broker Firm Offer should contact their broker to request a copy of this Prospectus and Application Form. Your broker will act as your agent and it is your broker's responsibility to ensure that your Application Form and application funds are received before 5:00pm (WST) on the Closing Date or any earlier closing date as determined by your Broker.

If you are an investor applying under the Broker Firm Offer, you should complete and lodge your Broker Firm Offer Application Form with the broker from whom you received your firm allocation. Broker Firm Offer Application Forms must be completed in accordance with the instructions given to you by your broker and the instructions set out on the reverse of the Application Form.

The Company, the Underwriter and the Company's Share Registry take no responsibility for any acts or omissions committed by your broker in connection with your Application.



#### 4.4.3 Payment methods

Applicants under the Broker Firm Offer must pay their application amounts to their broker in accordance with instructions provided by their broker.

#### 4.4.4 Allocation policy under the Broker Firm Offer

Shares that have been allocated to brokers will be issued to the Applicants nominated by those brokers. It will be a matter for each broker as to how they allocate Shares among their retail clients and they (and not the Company or the Underwriter) will be responsible.

### 4.5 Chairman's List Offer

#### 4.5.1 Who can apply?

The Chairman's List Offer is open to selected investors who have received an invitation from the Chairman to participate and who have a registered address in Australia.

The Chairman's List Offer is not a general public offer and is not open to persons in the United States.

#### 4.5.2 How to apply?

If you have received an invitation from the Chairman and you wish to apply for Shares, you should follow the instructions in your personalised invitation.

#### 4.5.3 Allocation policy under the Chairman's List Offer

Applicants under the Chairman's List Offer will receive a guaranteed allocation of Shares in the amount notified on their invitation. Beyond this, the allocation of Shares to

Applicants under the Chairman's List Offer will be determined by the Underwriter and the Company taking into account the factors set out in Section 4.10.

The Offer is underwritten by Morgans Corporate Limited (**Morgans** or **Underwriter**). Refer to Section 9.1 for a summary of the material terms and conditions of the Underwriting Agreement.

### 4.6 Purpose of the Offer

The primary purposes of the Offer are to:

- (a) assist the Company to meet the admission requirements of ASX under Chapters 1 and 2 of the ASX Listing Rules;
- (b) provide the Company with additional funding for:
  - (i) the proposed exploration programs at the Projects (as further detailed in Section 5.4);
  - (ii) considering acquisition opportunities that may be presented to the Board from time to time; and
  - (iii) the Company's working capital requirements while it is implementing the above.
- (c) remove the need for an additional disclosure document to be issued upon the sale of any Shares that are to be issued under the Offer.

The Company intends on applying the funds raised under the Offer together with its existing cash reserves in the manner detailed in Section 5.5.

### 4.7 Minimum subscription

The minimum subscription under the Offer is \$10,000,000 (**Minimum Subscription**).

If the Minimum Subscription has not been raised within four months after the date of this Prospectus, or such period as varied by the ASIC, the Company will not issue any Shares and will repay all application monies for the Shares within the time prescribed under the Corporations Act, without interest.

### 4.8 Oversubscriptions

No oversubscriptions will be offered under the Offer.

### 4.9 Applications

Applications for Shares under the Offer must be made using the relevant Application Form. Applications under the Offer must be for a minimum of \$2,000 of Shares.

By completing an Application Form, each applicant will be taken to have represented, warranted, agreed and acknowledged as follows:

- (a) that all details and statements made by them are complete and accurate;
- (b) that they have personally received the Application Form together with a complete and unaltered copy of the Prospectus;
- (c) they agree to become a member of the Company and to be bound by the terms of the Constitution and the terms and conditions of the Offer;

## 4. Details of the Offer (continued)

- (d) that the applicant(s), if a natural person, is/are over 18 years of age;
- (e) that, once the Company or a broker receives an Application Form, it may not be withdrawn;
- (f) that they have applied for the number of Shares at the Australian dollar amount shown on the front of the Application Form;
- (g) that they have agreed to being allocated and issued the number of Shares applied for (or a lower number allocated in a way described in this Prospectus), or no Shares at all;
- (h) that they have authorised the Company, the Underwriter and their respective officers or agents, to do anything on behalf of the applicant(s) necessary for Shares to be allocated to the applicant(s), including to act on instructions received by the Share Registry upon using the contact details in the Application Form;
- (i) that the Company may not pay dividends, or that any dividends paid may not be franked;
- (j) that the information contained in this Prospectus is not financial product advice or a recommendation that Shares are suitable for applicant(s), given the investment objectives, financial situation and particular needs (including financial and taxation issues) of the applicant(s);
- (k) that the applicant(s) is/are a resident of Australia or New Zealand (except as applicable to the Chairman's List Offer);

- (l) that the Offer may be withdrawn by the Company or may otherwise not proceed in the circumstances described in this Prospectus; and
- (m) that if listing does not occur for any reason, the Offer will not proceed.

Completed Application Forms must be dealt with in accordance with the instructions on the Application Form, with sufficient time to be received by or on behalf of the Company by **no later than 5:00pm (WST) on the Closing Date**, which is currently scheduled to occur on 21 September 2020.

Applications under the Offer must be accompanied by payment in full in Australian currency in accordance with the instructions set out on the Application Form.

The Company will also accept payment on a delivery versus payment (**DvP**) basis, provided that Shares under the Offer will be issued at the same time as all other Shares are issued under the Offer. Please contact your broker if you wish to pay for Shares under the Offer on a DvP basis.

Where no issue is made under the Offer, Application monies will be refunded (without interest) to the Applicants as soon as practicable after the Closing Date.

The Company reserves the right to close the Offer early.

### 4.10 Allocation Policy under the Offer

The allocation of Shares between the Broker Firm Offer and the Chairman's List Offer will be determined by the Company in agreement with the Underwriter.

The Company, in agreement with the Underwriter, has absolute discretion regarding the basis of allocation of Shares under the Offer.

No applicant under the Offer has any assurance of being allocated all or any Shares applied for. The allocation of Shares by Directors (in conjunction with the Underwriter) will be influenced by the following factors:

- (a) the number of Shares applied for;
- (b) the overall level of demand for the Offer;
- (c) the desire for a spread of investors, including institutional investors; and
- (d) the desire for an informed and active market for trading Shares following completion of the Offer.

The Company will not be liable to any person not allocated Shares or not allocated the full amount applied for.

### 4.11 ASX listing

Application for Official Quotation by ASX of the Shares offered pursuant to this Prospectus will be made within 7 days after the date of this Prospectus. However, applicants should be aware that ASX will not commence Official Quotation of any Shares until the Company has complied with Chapters 1 and 2 of the ASX Listing Rules and has received the approval of ASX to be admitted to the Official List. As such, the Shares may not be able to be traded for some time after the close of the Offer.



If the Shares are not admitted to Official Quotation by ASX before the expiration of 3 months after the date of issue of this Prospectus, or such period as varied by the ASIC, the Company will not issue any Shares and will repay all application monies for the Shares within the time prescribed under the Corporations Act, without interest.

The fact that ASX may grant Official Quotation to the Shares is not to be taken in any way as an indication of the merits of the Company or the Shares now offered for subscription.

#### **4.12 Issue**

Subject to the Minimum Subscription to the Offer being reached and ASX granting conditional approval for the Company to be admitted to the Official List, issue of Shares offered by this Prospectus will take place as soon as practicable after the Closing Date.

Pending the issue of the Shares or payment of refunds pursuant to this Prospectus, all application monies will be held by the Company in trust for the applicants in a separate bank account as required by the Corporations Act. The Company, however, will be entitled to retain all interest that accrues on the bank account and each applicant waives the right to claim interest.

The Directors (in conjunction with the Underwriter) will determine the recipients of the issued Shares in their sole discretion in accordance with the allocation policy detailed in Section 4.10. The Directors reserve the right to reject any application or to allocate any applicant fewer Shares than the

number applied for. Where the number of Shares issued is less than the number applied for, or where no issue is made, surplus application monies will be refunded without any interest to the applicant as soon as practicable after the Closing Date.

Holding statements for Shares issued to the Company sponsored subregister and confirmation of issue for Clearing House Electronic Subregister System (CHES) holders will be mailed to applicants being issued Shares pursuant to the Offer as soon as practicable after their issue.

#### **4.13 Applicants outside Australia, New Zealand and the United Kingdom**

This Prospectus does not, and is not intended to, constitute an offer in any place or jurisdiction, or to any person to whom, it would not be lawful to make such an offer or to issue this Prospectus. The distribution of this Prospectus in jurisdictions outside Australia, New Zealand and the United Kingdom may be restricted by law and persons who come into possession of this Prospectus should seek advice on and observe any of these restrictions. Any failure to comply with such restrictions may constitute a violation of applicable securities laws.

No action has been taken to register or qualify the Shares or otherwise permit an offering of the Shares the subject of this Prospectus in any jurisdiction outside Australia, New Zealand or the United Kingdom. Applicants who are resident in countries other than Australia, New Zealand or the United Kingdom should

consult their professional advisers as to whether any governmental or other consents are required or whether any other formalities need to be considered and followed.

If you are outside Australia, New Zealand or the United Kingdom it is your responsibility to obtain all necessary approvals for the issue of the Shares pursuant to this Prospectus. The return of a completed Application Form will be taken by the Company to constitute a representation and warranty by you that all relevant approvals have been obtained.

##### **4.13.1 New Zealand**

The Offer to New Zealand investors is a regulated offer made under Australian and New Zealand law. In Australia, this is Chapter 8 of the Corporations Act and regulations made under that Act. In New Zealand, this is subpart 6 of Part 9 of the *Financial Markets Conduct Act 2013* and Part 9 of the *Financial Markets Conduct Regulations 2014*. Refer to the Important Notices Section of this Prospectus.

##### **4.13.2 United Kingdom**

Neither this Prospectus nor any other document relating to the Offer has been delivered for approval to the Financial Conduct Authority in the United Kingdom and no prospectus (within the meaning of section 85 of the *Financial Services and Markets Act 2000*, as amended (**FSMA**)) has been published or is intended to be published in respect of the Shares.

The Shares may not be offered or sold in the United Kingdom by means of this document or any other document, except in circumstances that do not require the publication of a

## 4. Details of the Offer (continued)

prospectus under section 86(1) of the FSMA. This Prospectus is issued on a confidential basis in the United Kingdom to “qualified investors” (within the meaning of Article 2(e) of the Prospectus Regulation (2017/1129/EU), replacing section 86(7) of the FSMA). This Prospectus may not be distributed or reproduced, in whole or in part, nor may its contents be disclosed by recipients, to any other person in the United Kingdom.

Any invitation or inducement to engage in investment activity (within the meaning of section 21 of the FSMA) received in connection with the issue or sale of Shares has only been communicated or caused to be communicated and will only be communicated or caused to be communicated in the United Kingdom in circumstances in which section 21(1) of the FSMA does not apply to the Company.

In the United Kingdom, this Prospectus is being distributed only to, and is directed at, persons (i) who have professional experience in matters relating to investments falling within Article 19(5) (investment professionals) of the *Financial Services and Markets Act 2000* (Financial Promotions) Order 2005 (**FPO**), (ii) who fall within the categories of persons referred to in Article 49(2)(a) to (d) (high net worth companies, unincorporated associations, etc.) of the FPO or (iii) to whom it may otherwise be lawfully communicated (together **relevant persons**). The investment to which this document relates is available only to relevant persons. Any person who is not a relevant person should not act or rely on this document.

### 4.14 Commissions payable

The Company reserves the right to pay commissions of up to 6% (exclusive of goods and services tax) of amounts subscribed through any licensed securities dealers or Australian financial services licensee in respect of any valid applications lodged and accepted by the Company and bearing the stamp of the licensed securities dealer or Australian financial services licensee. Payments will be subject to the receipt of a proper tax invoice from the licensed securities dealer or Australian financial services licensee.

The Underwriter will be responsible for paying all commissions that they and the Company agree with any other licensed securities dealers or Australian financial services licensees out of the fees paid by the Company to the Underwriter under the Underwriting Agreement.

### 4.15 Taxation

The acquisition and disposal of Shares will have tax consequences, which will differ depending on the individual financial affairs of each investor.

It is not possible to provide a comprehensive summary of the possible taxation positions of all potential applicants. As such, all potential investors in the Company are urged to obtain independent financial advice about the consequences of acquiring Shares from a taxation viewpoint and generally.

To the maximum extent permitted by law, the Company, its officers and each of their respective advisors accept no liability and

responsibility with respect to the taxation consequences of subscribing for Shares under this Prospectus.

No brokerage, commission or duty is payable by applicants on the acquisition of Shares under the Offer.

### 4.16 Withdrawal of Offer

The Offer may be withdrawn at any time. In this event, the Company will return all application monies (without interest) in accordance with applicable laws.





## **5. Company and Projects Overview**

## 5. Company Projects and Overview (continued)

### 5.1 Background

The Company was incorporated as an unlisted public company limited by shares on 19 May 2017, for the purpose of acquiring and then proceeding to explore and develop gold projects in New Zealand. Siren is headquartered in Perth, Western Australia.

In March 2018, Reefton Resources Pty Limited (RRL) was incorporated in New Zealand as a wholly owned subsidiary of the Company. RRL is the holder of the Company's Reefton Gold Project

(located within the Reefton Goldfield), consisting of the Big River Project, Alexander River Project, Reefton South Project, Lyell Project, Bell Hill Project (if granted) and Golden Point Prospect (if granted) (as set out in Figure 1 below).

### 5.2 Overview of Reefton Goldfield

#### 5.2.1 Geological Setting

The Reefton Goldfield is situated in late Cambrian to early Ordovician Greenland Group sedimentary

rocks. Gold mineralisation in the Reefton Goldfield is structurally controlled; the formation of the different deposit types is interpreted to be due to focussing of the same hydrothermal fluid into different structural settings during a single gold mineralisation event, however, some of the deposits (e.g. Globe-Progress, Big River) appear to have been re-worked, with gold and sulphide mineral remobilisation having occurred during a later phase of brittle deformation. There are many similarities in the geology of gold mineralisation in the Reefton Goldfield to those of the mesothermal gold deposits of Victoria (Australia) and these areas are interpreted to have been contiguous.

#### 5.2.2 Mining and Exploration History

Historically, the Reefton Goldfield has been explored and mined for both hard rock and alluvial gold, as well as coal. Alluvial gold was first discovered in 1866 in Redmans Creek at the height of the West Coast gold rush. Further discoveries were soon made throughout the area. There has been a total of four cycles of alluvial gold mining in the region.

The first discovery of auriferous quartz in the Reefton area was made in 1870 in the headwaters of Murray Creek. During 1874 and 1875 several lodes went into production. After 12 years of poor economic prosperity from 1880, the gold mining industry was revived by Consolidated Goldfields New Zealand (CGNZ). CGNZ operated in the Reefton area for the next 55 years, when the last of their operations, the Blackwater Mine, closed in 1954.

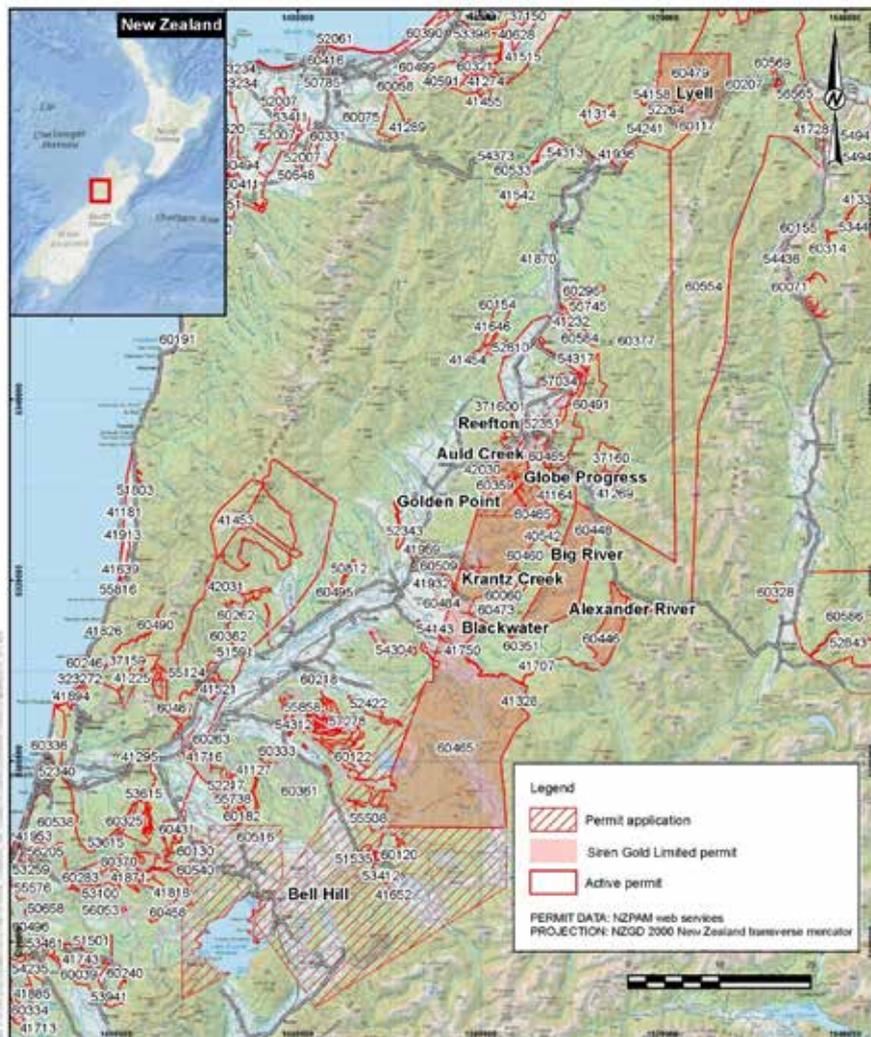


Figure 1: Location of EP 60448 (Big River Project), EP 60446 (Alexander River Project), PP 60465 (Reefton South Project), EPA 60648.01 (Golden Point Prospect), PPA 60632.01 (Bell Hill Project) and EP 60479 (Lyell Project)



Total recorded historical quartz lode production to 1954 was approximately 2 million ounces of gold as presented in the table below.

These figures do not include recent open pit mining at the Globe-Progress Mine, where a total of approximately 620,000 oz of gold was produced by OceanaGold Limited (OGL). The Globe-Progress Mine, which was closed in 2015, was an open cut mine that targeted mineralisation left behind by historical mining.

Historical mining focused on free gold within the quartz lodes due to stamper battery and extractive technology limitations of the era. The gold within the sulphides contained in the host rock and pug zones was often left behind as this material could not be processed in the processing plants

of the time. Reefton was the first place in the world to use cyanide systems to begin to extract gold from this material, however, processing techniques were in their infancy. Recent mining and processing undertaken by OGL at the Globe-Progress Mine, where they successfully targeted gold contained in the disseminated sulphide halo around the historical workings, demonstrated that this gold is recoverable using modern processing techniques.

In 2018, Tasman Mining (now Federation Mining) purchased an exclusive right to purchase the Blackwater Mine from OGL and received a mining permit from New Zealand Petroleum & Minerals in December 2018. In December 2019, the New Zealand Government, via the Provincial Growth Fund approved a NZ\$15 million loan

(conditional on Federation securing co-funding) to help re-establish a gold mining operation at the Blackwater Mine. In early August 2020 Federation announced it has secured funds from AustralianSuper, a large Australian superannuation fund.

### 5.3 Overview of the Reefton Gold Project

The Reefton Gold Project is located in the Reefton area of New Zealand's South Island. The Reefton Gold Project is made up of three granted exploration permits and one prospecting permit (which has expired and is in the process of being renewed) and the Company has made applications for an additional prospecting permit and exploration permit.

Rank	Mine	Production Tonnes (t)	Production Ounces (oz)	Recovered Au Grade (g/t)	Percentage of Total Au (oz)
1	Blackwater	1,603,157	740,403	14.2	35.9
2	Globe-Progress	1,062,727	418,345	12.2	20.3
3	Wealth of Nations	458,038	208,980	14.2	10.1
4	Keep-It-Dark	333,780	182,616	17.0	8.8
5	Big River	124,060	135,965	34.1	6.6
6	Ajax/Golden Fleece	136,642	89,636	20.4	4.3
7	Welcome/Hopeful	44,867	88,607	61.4	4.3
8	Alpine United	146,640	80,510	15.6	3.9
9	Alexander	48,492	41,089	26.4	2.0
10	Murray Creek Mines	52,943	33,887	19.9	1.6
11	Fiery Cross	24,956	27,843	34.8	1.3
12	Just-In-Time	13,755	17,168	38.8	0.8
<b>Total Production</b>		<b>4,050,053</b>	<b>2,065,149</b>		<b>100</b>

Note: Due to rounding, numbers presented may not add up precisely to the totals provided

## 5. Company Projects and Overview (continued)

Further details with respect to the Projects and Prospect making up the broader Reefton Gold Project are set out below, in the Independent Geologist’s Report set out in Annexure A to this Prospectus and in the Solicitor’s Report on Title set out in Annexure B.

### 5.3.1 Big River Project

The Big River Project (comprised of Exploration Permit 60448) is located approximately 15 km southeast of Reefton, in the South Island of New Zealand. The Company has been granted an authority to enter and operate on the public conservation land on which the Big River Project is located in order to complete its proposed exploration program (as detailed in Section 5.4). Refer to the Solicitor’s Report on Title in Annexure B for further details.

Gold mineralisation present at the Big River Project is predominantly hosted in sheared anticline hinges with complex cross-cutting structures that create dilatational structures that have allowed mineralisation to be hosted in the host rock, fault gouge and in quartz reefs.

The largest historical mine located within the Big River Project was the Big River Mine, which produced approximately 136,000oz of gold at an average recoverable grade of 34.1g/t Au. The mine was discovered in 1880 and was mined between 1887 and early 1927, then was re-mined by a subsequent owner, Big River Gold Mines Ltd (**BRGM**) in the late 1930s. The mine was closed in 1942 due to labour shortages. Other smaller mines in the area, such as Big River South and St George also produced gold.

Exploration data collection has been undertaken within the Big River Project area by two companies since the closure of the Big River Mine, being CRAE and OGL. Figure 2 presents Big River Project historical production, the location of historical mine workings, OGL drilling results, wacker soil geochemistry results for arsenic (As) and the location of vein outcrop and major structures.

Figure 3 presents a long-section of the Big River Project showing the down-dip extents of the historical Big River Mine, the location of historical mine workings, interpreted bedding and structure and OGL drilling results.

Refer to section 5.1 of the Independent Geologist’s Report for further detail with respect to the historic exploration undertaken at the Big River Project.

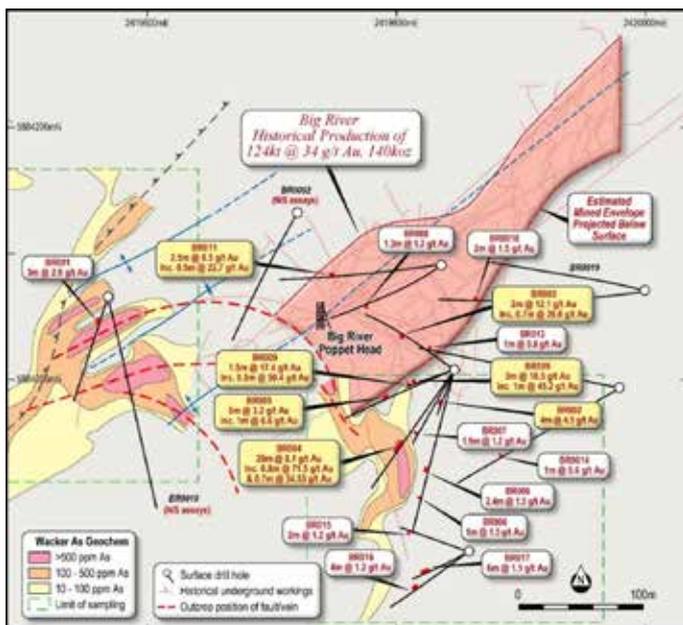


Figure 2: Plan view of the Big River Project, showing historical production, the location of historical mine workings, OGL drilling results, wacker soil geochemistry results for As, the location of vein outcrop and major structures (Siren)

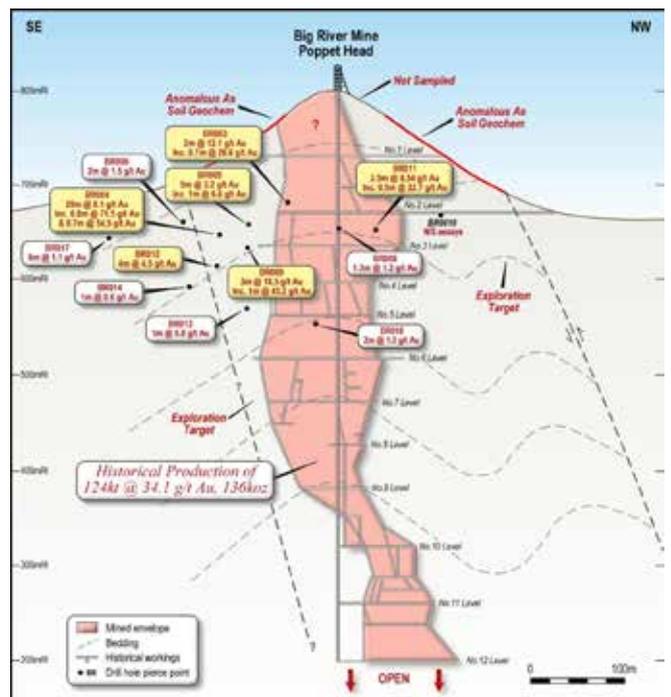


Figure 3: Long-section of the Big River Project, showing the down-dip extents of the historical Big River Mine, the location of historical mine workings, interpreted bedding and structure and OGL drilling results (Siren)



### 5.3.2 Alexander River Project

The Alexander River Project (comprised of Exploration Permit 60446) is located approximately 25 km southeast of Reefton, in the South Island of New Zealand. The Alexander River Project lies in a separate fault bounded block of the Ordovician Greenland Group metasedimentary rocks some 5 km southeast of the main belt. These rocks are weakly metamorphosed, variably deformed and are the primary host rock for gold mineralisation.

The Alexander River Project overlays the Alexander River Mine, which is in reality a group of mines along a series of ore shoots or lodes. The discovery of quartz float in the Alexander River in 1920 led to the development of the last quartz mining area in the Reefton Goldfield. Until the closure

of the mine in 1943, it produced a total of 41,089oz of gold from 48,492 tonnes of quartz lode, with a mean recovered grade of approximately 26.4 g/t Au.

The quartz lodes at the Alexander River Project are fissure reefs hosted by a northeast trending shear zone. The shear has been interpreted to be near-vertical or dipping steeply east to west and disrupted by later faulting. The historically mined quartz lodes plunge shallowly to the northeast within the shear.

Exploration data collection has been undertaken within the Alexander River Project area by three companies since the closure of the Alexander River Mine, being CRAE, Macraes Mining Company Limited (**MMCL**) (the predecessor to OGL) and Kent Exploration NZ Ltd (**Kent**).

Figure 4 and Figure 5 present the CRAE trenching and rock chip sampling, MMCL drilling and sampling and the Kent drilling in long-section and plan view respectively.

Refer to section 5.2 of the Independent Geologist's Report for further detail with respect to the historic exploration undertaken at the Alexander River Project.

### 5.3.3 Reefton South Project

The northern extent of the Reefton South Project (comprised of Prospecting Permit 60465) is located on the southern edge of Reefton. Prospecting Permit 60465 expired on 6 August 2020 and the Company made an application to extend the permit for a further 2 years prior to expiry of the permit over an area making up approximately 90% of the former permit area, which is currently being considered by New Zealand Petroleum and Minerals (**NZP&M**).

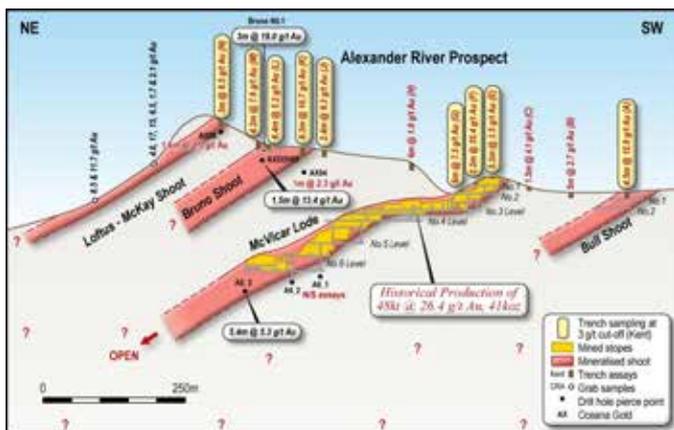


Figure 4: Long-section of the Alexander River Project with drilling and trenching results, AX drill holes are surface drilling from MMCL and the A6 series drilling is from MMCL underground drilling from the No.6 level in the McVicar workings. Trench results are from Kent re-sampling with a 3 g/t Au cut-off applied

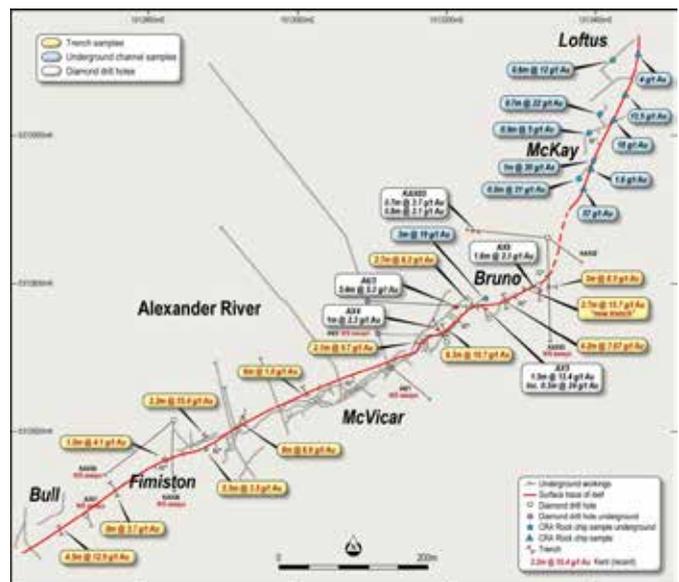


Figure 5: Plan view (line of strike) of the Alexander River Project with drilling and trenching results and underground workings

## 5. Company Projects and Overview (continued)

The Company has made payment to the NZP&M for a renewal of the Reefton South Project permit, with the renewal currently pending. In the event the permit is not renewed, it is the Company's intention to proceed with the Offer and listing on ASX. The Company is confident that the permit will be renewed and will confirm the status of the permit upon release of pre-quotations disclosure at the time it is admitted to the Official List.

The Company has also applied for the Golden Point Prospect (comprised of Exploration Permit Application 60648.01 made on 11 June 2020), which is located wholly within the area of the Reefton South Project.

Two hard rock gold mines (the Morning Star and Golden Point mines) lie within the Reefton South Project, near the northern boundary and another (the Globe-Progress Mine) lies to the northeast of the Reefton South Project boundary. The Morning Star Mine was subsequently renamed the New Discovery Mine and although it was worked intermittently over a period of around 50 years, recorded gold production is negligible. However, significant quantities of alluvial gold have been produced from within and immediately east of the Reefton South Project area e.g. Slab Hut Creek (>10 000 oz), Antonio's Creek (>36 000 oz), Blackwater River (>18 000 oz), Snowy River (>56 000 oz) and Mossy Creek (>10 000 oz), amongst others.

The exploration history of the Reefton South Project can be split into two main areas, these being the exploration work completed

across the greater Reefton South Project area undertaken by two main companies, CRAE and Golden Fern Resources Ltd (**GFR**) and the Golden Point Prospect, which has largely been explored (more intensely) by both CRAE and OGL. Exploration in the Reefton South Project area (excluding the Golden Point Prospect area) consist of rock chip and soil samples completed by CRAE and GFR.

Exploration undertaken in the Golden Point Prospect area have focused on the Auld Creek area,

which was first prospected for gold in the 1880s. CRAE undertook a program of soil, stream sediment and rock chip sampling in 1987, with a further program of soil sampling and trenching undertaken in 1988. OGL subsequently undertook a program of stream sediment and rock chip sampling in 1996, followed up by diamond drilling programs completed in 1996 and then again between 2005 and 2011.

Figure 6 below presents significant drilling results from the Golden Point Prospect.

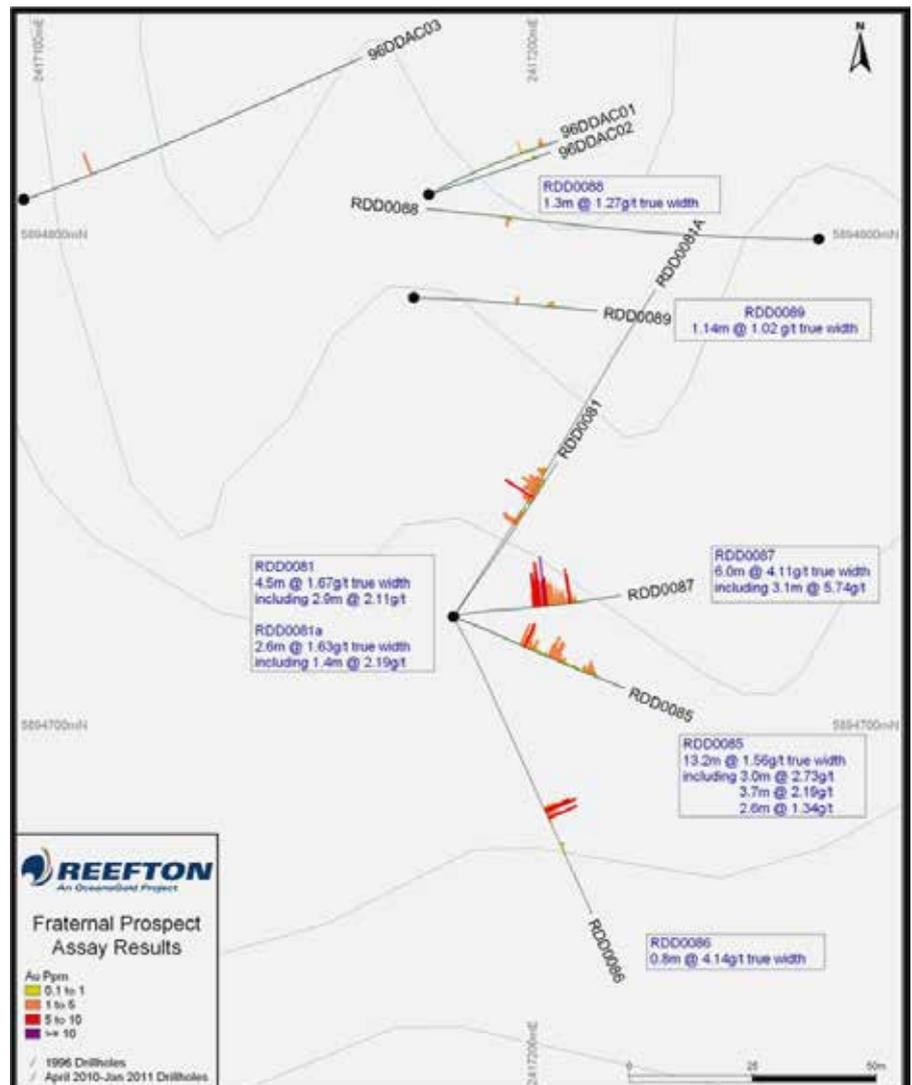


Figure 6: Location of diamond drill holes and gold mineralisation intersections at the Fraternal lode



Refer to section 5.3 of the Independent Geologist's Report for further detail with respect to the historic exploration undertaken at the Reefton South Project.

#### 5.3.4 Bell Hill Project

The Bell Hill Project (comprising Prospecting Permit Application 60632.01, applied for on 3 April 2020) is located approximately 40 km south of Reefton and abuts the southern boundary of the Reefton South Project.

There has been historical alluvial mining in creek beds of gold shedding from the Greenland Group. The Bell Hill Project surrounds and excludes alluvial gold Exploration Permits EP 55508 (Alistair Davidson), EP 60120 (Belborough Holdings) and Mining Permits MP 53412 and MP 41652 held by Birchfield Coal Mines Ltd (Birchfield Coal).

FMG Pacific Limited (**FMGP**) held a Prospecting Permit for alluvial gold and coal over the northern portion of the Bell Hill Project between 2010 and 2012. Whilst FMGP's main focus was coal, they concluded that the potential for economically extractable deposits of alluvial gold existed within the permit area. The deposit type was not a high priority for FMGP and, as such, a subsequent exploration permit for metallic minerals was not sought.

Modern exploration/prospecting/mining activity in the Bell Hill Project area includes work by various companies, including Titan Resources Ltd, Eureka Mining Ltd, South Pacific Mines Ltd, Sugar Anne Partnership, Perkins, G.N. and J.W.N, Birchfield Minerals Ltd and Strategic Materials Pty Ltd.

Refer to section 5.4 of the Independent Geologist's Report for

further detail with respect to the historic exploration undertaken at the Bell Hill Project.

#### 5.3.5 Lyell Project

The Lyell Project (comprised of Exploration Permit 60479) is located approximately 40 km northeast of Reefton, in the South Island of New Zealand. The Lyell Project is the northern extension of the Reefton Goldfield.

The main gold deposits within the Lyell Project include the Alpine United, Tichborne and Break of Day mines. Within these mines, gold tends to occur primarily in narrow high-grade quartz veins controlled by fold-related high-angle shears and faults within the Greenland Group.

The initial discovery of rich alluvial ground in Lyell Creek was in 1862, where at least 10,000 oz of gold were mined during the first gold rush. The Lyell Project and surrounding Lyell District contain approximately 21 historic mines, with a total historic underground production of approximately 95,000oz gold from narrow high-grade quartz veins. The most significant and profitable of these mines being the Alpine United Mine, which operated between 1874 and 1912. Total production from the Alpine United Mine is estimated at 80,510 oz gold at a grade of 16.8 g/t gold.

Modern exploration/prospecting activity in the Lyell Project area includes work by various companies, including Otter Minerals Exploration Ltd (1972-1980), Auzex Resources (NZ) Pty Ltd (2005-2013), Kent (2008-2013), OGL (2012-2014) and Tectonex Ltd (2016-2018), the most material of which were a geochemical program and drill program undertaken by Auzex in 2008 and 2011 respectively.

Refer to section 5.5 of the Independent Geologist's Report for further detail with respect to the historic exploration undertaken at the Lyell Project.

#### 5.3.6 Key Dependencies

The key dependencies of the Company's business model include:

- (a) completing the Offer;
- (b) the Company's ability to continue to negotiate tenure access at the Reefton Gold Project in order to undertake its proposed exploration programs;
- (c) the Company's ability to continue to negotiate tenure access at the Reefton Gold Project in order to undertake its proposed exploration programs;
- (d) retaining title to the permits making up the Reefton Gold Project, particularly the Big River and Alexander River Projects;
- (e) retaining and recruiting key personnel skilled in the exploration and mining sector;
- (f) sufficient worldwide demand for gold;
- (g) the market price of gold remaining higher than the Company's costs of any future production (assuming successful exploration by the Company);
- (h) raising sufficient funds to satisfy expenditure requirements, exploration and operating costs in respect of the Reefton Gold Project; and
- (i) minimising environmental impact and complying with environmental and health and safety requirements.

## 5. Company Projects and Overview (continued)

### 5.4 Proposed Exploration Program and Expenditure

The Company's main objectives on completion of the Offer are to:

- (a) identify priority drill targets by undertaking surface exploration activities at its Big River, Alexander River and Lyell Projects and Golden Point Prospect (if granted);
- (b) target extensions to known gold opportunities identified by previous drilling and surface trenching along mineralised rock outcrops;
- (c) undertake high level exploration activities on the Reefton South (if renewed) and Bell Point (if granted) to identify drill targets;

- (d) implement an exploration strategy aimed at the discovery of new high-grade grade gold resources at the Reefton Gold Project as rapidly as practicable;
- (e) through exploration success, evaluate opportunities for near term gold production; and
- (f) seek further exploration, acquisition and joint venture opportunities in New Zealand and elsewhere.

A detailed breakdown of the Company's proposed exploration program during the 2 years post-listing is set out below.

Approximately \$7.2M has been allocated for drilling which allow between approximately 12,000m and 15,000m of diamond drilling to be completed over two-years.

Drilling activities at Big River and Alexander River are anticipated to commence shortly after the date of this Prospectus, with first results expected in mid-late October 2020.

In the event that the Reefton South Project permit is not renewed or the Golden Point Prospect permit is not granted, funds allocated to exploration on those permits will be reallocated to activities at the Company's other Projects (including the Bell Hill Project, if granted) and to working capital.

Further details of the Company's intended exploration program are contained in the Independent Geologist's Report in Annexure A.

	Year 1 (\$)	Year 2 (\$)
<b>Big River Project</b>		
Mapping and Sampling	100,000	-
Geophysics	150,000	150,000
Drilling	1,000,000	1,500,000
Sub-Total	1,250,000	1,650,000
<b>Alexander River Project</b>		
Mapping and Sampling	100,000	-
Geophysics	50,000	25,000
Drilling	1,000,000	1,500,000
Sub-Total	1,150,000	1,525,000
<b>Reefton South Project (including Golden Point Prospect)</b>		
Mapping and Sampling	50,000	-
Geophysics	200,000	100,000
Drilling	700,000	1,500,000
Sub-Total	950,000	1,600,000
<b>Lyell Project</b>		
Mapping and Sampling	50,000	25,000
Geophysics	25,000	50,000
Sub-Total	75,000	75,000
<b>TOTAL</b>	<b>3,425,000</b>	<b>4,850,000</b>
<b>TOTAL (Year 1 + Year 2)</b>	<b>8,275,000</b>	



## 5.5 Use of Funds

The Company intends to apply funds raised from the Offer, together with existing cash reserves, over the first two years following admission of the Company to the Official List of ASX as follows:

Funds available	Funding Allocation	Percentage of Funds (%)
Existing cash reserves <sup>1</sup>	1,258,524	11.18%
Funds raised from the Offer	10,000,000	88.82%
<b>Total</b>	<b>11,258,524</b>	<b>100%</b>
Exploration at Big River Project <sup>2</sup>	2,900,000	25.76%
Exploration at Alexander River Project <sup>2</sup>	2,675,000	23.76%
Exploration at Reefton South Project <sup>2</sup>	2,550,000	22.65%
Exploration at Lyell Project <sup>2</sup>	150,000	1.33%
Expenses of the Offer <sup>3</sup>	850,000	7.55%
Administration Costs <sup>4</sup>	1,300,000	11.55%
Working Capital <sup>5</sup>	883,424	7.40%
<b>Total</b>	<b>11,258,524</b>	<b>100%</b>

Notes:

- Existing cash reserves incorporate funds held by the Company at 30 June 2020 and an additional \$915,500 accounting for the subsequent events set out in section 6 of the Investigating Accountant's Report in Annexure C. The Company intends to apply these funds towards the purposes set out in this table, including the payment of the expenses of the Offer of which various amounts will be payable prior to completion of the Offer.
- Refer to Section 5.4 and the Independent Geologist's Report in Annexure A for further details with respect to the Company's proposed exploration programs at the Projects. In the event that the Reefton South Project permit is not renewed or the Golden Point Prospect permit is not granted, funds allocated to exploration on those permits will be reallocated to activities at the Company's other Projects (including the Bell Hill Project, if granted) and to working capital.
- Refer to Section 10.10 for further details.
- Administration costs include the general costs associated with the management and operation of the Company's business including administration expenses, management salaries, directors' fees, rent, advisory costs (including in connection with the former advisory mandate referred to in Section 10.6) and other associated costs.
- To the extent that:
  - the Company's exploration activities warrant further exploration activities; or
  - the Company is presented with additional acquisition opportunities,
the Company's working capital will fund such further exploration and acquisition costs (including due diligence investigations and expert's fees in relation to such acquisitions). Any amounts not so expended will be applied toward administration costs for the period following the initial 2-year period following the Company's quotation on ASX.

It is anticipated that the funds raised under the Offer will enable 2 years of full operations. It should be noted that the Company may not be fully self-funding through its own operational cash flow at the end of this period. Accordingly, the Company may require additional capital beyond this point, which will likely involve the use of additional debt or equity funding. Future capital needs will also depend on the success or failure of the Company's Projects. The use of further debt or equity funding will be considered by the Board where it is appropriate to fund additional exploration on the Projects or to capitalise on acquisition opportunities in the resources sector.

The above table is a statement of current intentions as of the date of this Prospectus. As with any budget, intervening events (including exploration success or failure) and new circumstances have the potential to affect the manner in which the funds are ultimately applied. The Board reserves the right to alter the way funds are applied on this basis.

The Directors consider that following completion of the Offer, the Company will have sufficient working capital to carry out its stated objectives. It should however be noted that an investment in the Company is speculative and investors are encouraged to read the risk factors outlined in Section 7.

## 5. Company Projects and Overview (continued)

### 5.6 Capital Structure

The capital structure of the Company following completion of the Offer is summarised below:

#### Shares<sup>1</sup>

	Shares
Shares currently on issue	40,913,094
Shares to be issued pursuant to the Offer <sup>2</sup>	40,000,000
Total Shares on completion of the Offer	80,913,094

Notes:

- The rights attaching to the Shares are summarised in Section 10.2.
- 40,000,000 Shares to be issued at an issue price of \$0.25 per Share to raise \$10,000,000 under the Offer.

#### Options

	Options
Options currently on issue <sup>1</sup>	18,395,833
Options to be issued to Underwriter <sup>2</sup>	1,618,262
Total Options on completion of the Offer	20,014,095

Notes:

- Options comprised of the following:
  - 3,116,667 Options exercisable at \$0.25 on or before 30 September 2021;
  - 2,604,166 Options exercisable at \$0.25 on or before 11 January 2022;
  - 5,000,000 Options exercisable at \$0.25 on or before 15 January 2023; and
  - 7,675,000 Options exercisable at \$0.375 on or before 26 September 2024.

Refer to Section 10.3 for the full terms of all Options on issue.

- Options exercisable at \$0.375 on or before 26 September 2024 to be issued to the Underwriter or its nominees pursuant to the Underwriting Agreement, a summary of which is set out in Section 9.1. Refer to Section 10.3 for the terms and conditions of the Underwriter Options.

### 5.7 Substantial Shareholders

Those Shareholders holding 5% or more of the Shares on issue both as at the date of this Prospectus and on completion of the Offer are set out in the respective tables below.

#### As at the date of the Prospectus

Shareholder	Shares	Options	Percentage (%) (undiluted)	Percentage (%) (fully diluted)
Mr Brian Rodan and associates <sup>1</sup>	13,928,806	5,619,524	34%	33%

On completion of the issue of Shares under the Offer (assuming no existing substantial Shareholder subscribes and receives additional Shares pursuant to the Offer)

Shareholder	Shares	Options	Percentage (%) (undiluted)	Percentage (%) (fully diluted)
Mr Brian Rodan and associates <sup>1</sup>	13,928,806	5,619,524	17%	19%

Notes:

- Comprising:
  - MCA Nominees Pty Ltd holding 2,857,143 Shares;
  - Redland Plains Pty Ltd <Brian Bernard Rodan S/F A/C holding 4,463,090 Shares, 333,333 Options exercisable at \$0.25 on or before 30 September 2021, 2,000,000 Options exercisable at \$0.25 on or before 15 January 2023 and 2,250,000 Options exercisable at \$0.375 on or before 26 September 2024;
  - Redland Plains Pty Ltd <Majestic Investment A/C> holding 6,608,573 Shares and 1,036,191 Options exercisable at \$0.25 on or before 30 September 2021.



Mr Rodan has indicated that he will apply for up to 100,000 Shares under the Offer. A decision with respect to the issue of Shares to Mr Rodan will be made by the Company in conjunction with the Underwriter in accordance with the allocation policy set out in Section 4.10. If the application is successful, Mr Rodan will hold 14,028,806 Shares at listing and have a voting power of 17.34% on an undiluted basis and 19.47% on a fully diluted basis.

Mr Rodan has also indicated that, after the Company's listing, he:

1. intends to purchase Shares on-market with a view to increasing his voting power to 19.9%;
2. may sell Shares in accordance with the Company's securities trading policy to fund the exercise of Options; and
3. may seek to further increase his voting power in reliance on the exceptions set out in section 611 of the Corporations Act.

Mr Rodan is aware of the restrictions set out in section 606 of the Corporations Act and will ensure compliance with those restrictions in making any Share acquisitions, including with respect to any exercise of Options.

Ms Bronwyn Bergin, Mr Rodan's spouse, also holds 1,000,000 Shares and 500,000 Options exercisable at \$0.375 on or before 26 September 2024. However, Mr Rodan and Ms Bergin are not considered associates for the purposes of the Corporations Act.

The Company will announce to the ASX details of its top-20 Shareholders (following completion of the Offer) prior to the Shares commencing trading on ASX.

## 5.8 Restricted Securities

Subject to the Company being admitted to the Official List and completing the Offer, certain Securities will be classified by ASX as restricted securities and will be required to be held in escrow for up to 24 months from the date of Official Quotation. During the period in which these Securities are prohibited from being transferred, trading in Shares may be less liquid, which may impact on the ability of a Shareholder to dispose of their Shares in a timely manner.

While the ASX has not yet confirmed the final escrow position applicable to the Company's Shareholders, the Company anticipates that the following Securities will be subject to escrow:

- (a) approximately 22,200,000 Shares for either 12 months from the date of issue of Shares or 24 months from the date of quotation; and
- (b) approximately 12,675,000 Options for either 12 months from the date of issue of Shares or 24 months from the date of quotation.

The number of Securities that are subject to ASX imposed escrow are at ASX's discretion in accordance with the ASX Listing Rules and underlying policy. The above is a good faith estimate of the Securities that are expected to be subject to ASX imposed escrow.

The Company will announce to the ASX full details (quantity and duration) of the securities required to be held in escrow prior to the Shares commencing trading on ASX (which admission is subject to ASX's discretion and approval).

## 5.9 Additional Information

Prospective investors are referred to and encouraged to read in its entirety both the:

- (a) the Independent Geologist's Report in Annexure A for further details about the geology, location and mineral potential of the Company's Projects; and
- (b) the Solicitor's Report on Title in Annexure B for further details in respect to the Company's interests in the permits making up the Reefton Gold Project.

## 5.10 Dividend Policy

The Company anticipates that significant expenditure will be incurred in the evaluation and development of the Company's Projects. These activities, together with the possible acquisition of interests in other projects, are expected to dominate, at least, the first two-year period following the date of this Prospectus. Accordingly, the Company does not expect to declare any dividends during that period.

Any future determination as to the payment of dividends by the Company will be at the discretion of the Directors and will depend on the availability of distributable earnings and the operating results and financial condition of the Company, future capital requirements and general business and other factors considered relevant by the Directors. No assurance in relation to the payment of dividends or franking credits attaching to dividends can be given by the Company.



"EXCITING AND  
PROSPECTIVE TIMES  
ARE AHEAD FOR  
THE COMPANY."



## 6. Financial Information



## 6.1 General

The Investigating Accountant's Report set out in Annexure C sets out:

- (a) the audited historical statements of profit or loss and other comprehensive income and statements of cash flows of the Company for the years ended 31 December 2017, 2018 and 2019;
- (b) the reviewed historical statements of profit or loss and other comprehensive income and statements of cash flows of the Company for the half year ended 30 June 2020; and
- (c) the pro forma statement of financial position of the Company as at 30 June 2020.

Investors are urged to read the Investigating Accountant's Report in full.

## 6.2 Forecast financial information

There are significant uncertainties associated with forecasting future revenues and expenses of the Company. In light of uncertainty as to timing and outcome of the Company's growth strategies and the general nature of the industry in which the Company will operate, as well as uncertain macro market and economic conditions in the Company's markets, the Company's performance in any future period cannot be reliably estimated. On this basis and after considering ASIC Regulatory Guide 170, the Directors do not believe they have a reasonable basis to reliably forecast future earnings and accordingly forecast financials are not included in this Prospectus.



“FUNDS RAISED THROUGH  
THE OFFER WILL BE UTILISED  
IN A COST-EFFECTIVE  
MANNER TO ADVANCE THE  
COMPANY’S BUSINESS.”



## 7. Risk Factors



## 7.1 Introduction

The Shares offered under this Prospectus are considered highly speculative. An investment in the Company is not risk free and the Directors strongly recommend potential investors to consider the risk factors described below, together with information contained elsewhere in this Prospectus, before deciding whether to apply for Shares and to consult their professional advisers before deciding whether to apply for Shares pursuant to this Prospectus.

There are specific risks which relate directly to the business. In addition, there are other general risks, many of which are largely beyond the control of the Company and the Directors. The risks identified in this Section, or other risk factors, may have a material impact on the financial performance of the Company and the market price of the Shares.

The following is not intended to be an exhaustive list of the risk factors to which the Company is exposed.

## 7.2 Company specific risks

### (a) Access Arrangements

In New Zealand, the granting of an Exploration Permit does not automatically award the right of access to the land subject to the permit. Land access must be arranged with the owner and occupier of the land prior to the commencement of any exploration activities for minerals on or below the surface other than minimum impact activities as defined in the *New Zealand Crown Minerals Act 1991*.

Access arrangements are required for all activities other than minimum impact activities (**MIA**). Access to Crown land, such as conservation land, is required from the relevant Minister of the Crown with responsibility for the land. The majority of the areas of interest at the Reefton Project are situated over land administered by the New Zealand Department of Conservation (**DoC**) (refer to Schedule 1 of the Solicitor's Report on Title for details).

RRL has been granted access by the DoC for the Big River Project (EP 60448) and Alexander River Project (EP 60446), including to undertake its proposed exploration at those Projects. Refer to the Solicitor's Report on Title set out in Annexure B for further details.

There can be no certainty that adequate access arrangements will be achievable with DoC or private landowners in the future.

### (b) Tenure

Mining and exploration permits are subject to periodic renewal. There is no guarantee that current or future permits or future applications for production permits will be approved.

The permits are also at various stages of application and grant. Specifically, the permits making up the Bell Point Project and Golden Point Prospect are still under application and the permit making up the Reefton South Project is expired and is subject to renewal. There can be no assurance that the permit applications and renewal currently pending will be granted. There can be no assurance that when the permit is granted, it will be granted in its entirety.

Additionally, some of the permit areas applied for may be excluded.

The Company is unaware of any circumstances that would prevent the permit applications and renewals from being granted, however the consequence of being denied the applications or renewals for reasons beyond the control of the Company could be significant. It is the Company's intention to proceed with the Offer and listing regardless of whether these applications and renewals are granted.

The Projects are subject to the applicable mining acts and regulations in New Zealand. The renewal of the term of a granted permit is also subject to the discretion of the relevant Minister. Renewal conditions may include increased expenditure and work commitments or compulsory relinquishment of areas of the permits comprising the Company's projects. In this regard, the renewal sought in respect of the permit making up the Reefton South Project is over an area covering 90% of the former permit area. The imposition of new conditions or the inability to meet those conditions may adversely affect the operations, financial position and/or performance of the Company.

The Company considers the likelihood of tenure forfeiture to be low given the laws and regulations governing exploration in New Zealand and the ongoing expenditure budgeted for by the Company.

However, the consequence of forfeiture or involuntary surrender of a granted permits for reasons beyond the control of the Company could be significant.

## 7. Risk Factors (continued)

Please refer to the Solicitor's Report on Title in Annexure B for further details.

### (c) Exploration and permits

The permits comprising the Projects are at various stages of exploration and potential investors should understand that mineral exploration and development are high-risk undertakings.

There can be no assurance that future exploration of these permits, or any other mineral permits that may be acquired in the future, will result in the discovery of an economic resource. Even if an apparently viable resource is identified, there is no guarantee that it can be economically exploited.

The future exploration activities of the Company may be affected by a range of factors including geological conditions, limitations on activities due to seasonal weather patterns or adverse weather conditions, unanticipated operational and technical difficulties, difficulties in commissioning and operating plant and equipment, mechanical failure or plant breakdown, unanticipated metallurgical problems which may affect extraction costs, industrial and environmental accidents, industrial disputes, unexpected shortages and increases in the costs of consumables, spare parts, plant, equipment and staff, changing government regulations and many other factors beyond the control of the Company.

The success of the Company will also depend upon the Company being able to maintain title to the mineral exploration permits

comprising the Projects and obtaining all required approvals for their contemplated activities. In the event that exploration programs prove to be unsuccessful, this could lead to a diminution in the value of the Projects, a reduction in the cash reserves of the Company and possible relinquishment of one or more of the mineral exploration permits comprising the Projects.

### (d) Political Risk

The New Zealand Coalition Government currently consists of the Labour Party and pro regional development NZ First Party with support from the Greens Party. In November 2017, the NZ Government announced in the Speech from the Throne that there would be no new mines on DoC land. The announcement was part of the Labour Government's supply and confidence agreement with the Green Party but has not been formally implemented. Each of the Company's Projects overlap DoC land (refer to the Solicitor's Report on Title in Annexure B for further details).

Until the policy is implemented the status quo applies - meaning that any mining activity can be applied for on DoC land that is not land deemed to be of high conservation value. The Company has received exploration access approvals from the DoC for the Big River Project and Alexander River Project.

The Company has experienced no adverse impact to the processing of its various applications at this time but will remain vigilant in monitoring the political landscape concerning the Greens opposition to mining on DoC lands.

### (e) Treaty of Waitangi and Heritage

The *Treaty of Waitangi Act 1975 (TWA)* established the Waitangi Tribunal to hear claims of Crown breaches of the Treaty of Waitangi. The TWA allowed any Maori to lodge a claim against the Crown for breaches of the Treaty of Waitangi and its principles. The TWA does not create any direct obligations on the Company with respect to its Projects. However, the Projects are on Crown land and may therefore be subject to a treaty claim or settlement. Any such treaty or settlement could potentially give rise to rights and obligations that the Crown is required to enforce in respect of the Company's Projects.

Te Runanga o Ngāi Tahu is the iwi representing the majority of the Maori hapu groups in the South Island. In 1997, the Crown and Ngāi Tahu signed a Deed of Settlement to give redress for Treaty breaches within Ngāi Tahu's boundaries. The terms of the settlement are given effect to by the *Ngāi Tahu Claims Settlement Act 1998 (NTCSA)*, and include provisions for transferring specified assets (including Crown forest land) and settlement properties to Ngāi Tahu, creation of a first right of refusal over Crown land, confirmation of Ngāi Tahu's ownership of pounamu (greenstone), the grant of certain rights to sites of significance, and a role in managing conservation estate resources within their boundaries.

Where any of the land within a Project has been vested in, or leased to, Ngāi Tahu, an access arrangement will need to be entered into with Ngāi Tahu as



the owner or occupier of the land. The NZP&M and DOC have actively liaised with the Ngāi Tahu at all times during the process for the grant of the permits making up the Projects and the access agreements relating thereto and the Company will continue to liaise with the Ngāi Tahu during all stages of its exploration programs. As such, the Company is comfortable that it is in compliance with its obligations under the TWA and NTCSA.

While the Ngāi Tahu settlement relates to a large proportion of the South Island, the TWA does not preclude claims being made by other hapu to address historic treaty breaches. NZP&M have an obligation to consult iwi and hapu on proposed permit application areas. The Company has not been notified by NZP&M of any claims being considered or made by other hapu in respect of its Projects. In the event any such claims are made, the Company will actively discuss with the relevant hapu to ensure that its operations take into account that hapu's interest in the relevant land.

Further, a person wishing to carry out an investigation or activity on an archaeological site (including any exploratory investigation), or to damage or modify a site must apply for "an authority" under New Zealand's heritage legislation. Before applying for an authority to conduct an activity on a site of interest to Maori the applicant must have the consent of the relevant iwi or hapu. Commonly, a resource consent for land-use activities such as site clearance and excavation will include a condition setting out

"accidental discovery protocol" in the event that archaeological or historic materials are uncovered. The Company has not been notified of any archaeological sites of interest, but has been issued with accidental discovery protocols.

Please refer to the Solicitor's Report on Title in Annexure B of this Prospectus for further details.

#### **(f) Conditions to Permits**

Exploration Permits are granted subject to various standard conditions, including conditions relating to undertaking a minimum work program, the payment of royalties and observance of environmental protection and reporting requirements. A failure to comply with these conditions or obtain an exemption from compliance may lead to revocation of the Exploration Permits.

#### **(g) Grant of Future Authorisations to Explore and Mine**

If the Company discovers an economically viable mineral deposit that it then intends to develop, it will, among other things, require various approvals, consents, licences and permits before it will be able to mine the deposit. There is no guarantee that the Company will be able to obtain all required approvals, consents, licences and permits. To the extent that required authorisations are not obtained or are delayed, the Company's operational and financial performance may be materially adversely affected.

All Permits are limited to exploration activities only and do not extend to full-scale mining and extraction activities (beyond exploration). There can be no

certainty that a mining permit will be granted in the future by New Zealand Petroleum and Minerals.

Even if a mining permit is granted in the future, there is no certainty that:

- (i) the relevant local authority will grant the necessary resource consents required for mining activity; or
- (ii) the relevant landowner will grant access required for mining activities.

Obtaining necessary resource consents can be subject to numerous conditions and challenged by conservation groups and others. Resolving these challenges can require litigation.

#### **(h) Results of Studies**

Subject to the results of exploration and testing programs to be undertaken, the Company may progressively undertake a number of studies in respect to the Project. These studies may include scoping, pre-feasibility, definitive feasibility and bankable feasibility studies.

These studies will be completed within parameters designed to determine the economic feasibility of the Project within certain limits. There can be no guarantee that any of the studies will confirm the economic viability of the Project or the results of other studies undertaken by the Company (e.g. the results of a feasibility study may materially differ to the results of a scoping study).

Even if a study confirms the economic viability of the Project, there can be no guarantee that the project will be successfully brought into production as

## 7. Risk Factors (continued)

assumed or within the estimated parameters in the feasibility study (e.g. operational costs and commodity prices) once production commences. Further, the ability of the Company to complete a study may be dependent on the Company's ability to raise further funds to complete the study if required.

### (i) Future Funding

The funds raised under the Offer are considered sufficient to meet the immediate objectives of the Company. Further funding may be required by the Company in the event costs exceed estimates or revenues do not meet estimates, to support its ongoing operations and implement its strategies. For example, funding may be needed undertake further exploration activities, or acquire complementary assets.

Accordingly, the Company may need to engage in equity or debt financings to secure additional funds. Any additional equity financing may be dilutive to Shareholders, may be undertaken at lower prices than the Offer price or may involve restrictive covenants that limit the Company's operations or business strategy.

There can be no assurance that such funding will be available on satisfactory terms or at all at the relevant time. Any inability to obtain sufficient financing for the Company's activities and future projects may result in the delay or cancellation of certain activities or projects, which would likely adversely affect the potential growth of the Company.

### (j) Reliance on key management

The responsibility of overseeing the day-to-day operations and the strategic management of the Company depends substantially on its senior management and its key personnel. There can be no assurance given that there will be no detrimental impact on the Company if one or more of these employees cease their employment.

### (k) Currently no market

There is currently no public market for the Company's Shares, the price of its Shares is subject to uncertainty and there can be no assurance that an active market for the Company's Shares will develop or continue after the Offer.

The price at which the Company's Shares trade on ASX after listing may be higher or lower than the Offer Price and could be subject to fluctuations in response to variations in operating performance and general operations and business risk, as well as external operating factors over which the Directors and the Company have no control, such as movements in mineral prices and exchange rates, changes to government policy, legislation or regulation and other events or factors.

There can be no guarantee that an active market in the Company's Shares will develop or that the price of the Shares will increase.

There may be relatively few or many potential buyers or sellers of the Shares on ASX at any given time. This may increase the volatility of the market price of

the Shares. It may also affect the prevailing market price at which Shareholders are able to sell their Shares. This may result in Shareholders receiving a market price for their Shares that is above or below the price that Shareholders paid.

### (l) Restricted securities reducing liquidity

Subject to the Company being admitted to the Official List, certain Shares and Options on issue prior to the Offer will be classified by ASX as restricted securities (or will be subject to voluntary escrow restrictions) and will be required to be held in escrow for up to 24 months from the date of Official Quotation. During the period in which these securities are prohibited from being transferred, trading in Shares may be less liquid, which may impact on the ability of a Shareholder to dispose of their Shares in a timely manner.

The Company will announce to the ASX full details (quantity and duration) of the Shares and Options required to be held in escrow prior to the Shares commencing trading on ASX.

## 7.3 Industry specific risks

### (a) Mine development

Possible future development of mining operations at the Projects is dependent on a number of factors including, but not limited to, the acquisition and/or delineation of economically recoverable mineralisation, favourable geological conditions, receiving the necessary approvals from all relevant authorities and parties, seasonal weather



patterns, unanticipated technical and operational difficulties encountered in extraction and production activities, mechanical failure of operating plant and equipment, shortages or increases in the price of consumables, spare parts and plant and equipment, cost overruns, access to the required level of funding and contracting risk from third parties providing essential services.

If the Company commences production on one of the Projects, its operations may be disrupted by a variety of risks and hazards which are beyond the control of the Company. No assurance can be given that the Company will achieve commercial viability through the development of the Projects.

The risks associated with the development of a mine will be considered in full should the Projects reach that stage and will be managed with ongoing consideration of stakeholder interests.

#### **(b) Agents and Contractors**

The Company intends to outsource substantial parts of its exploration activities pursuant to service contracts with third party contractors. The Company is yet to enter into these formal arrangements. The Directors are unable to predict the risk of financial failure or default or the insolvency of any of the contractors that will be engaged by the Company in any of its activities or other managerial failure by any of the other service providers used by the Company for any activity. Contractors may also underperform their obligations of their contract, and in the event that their contract is terminated,

the Company may not be able to find a suitable replacement on satisfactory terms.

#### **(c) Operational Risks**

The operations of the Company may be affected by various factors, including:

- (i) failure to locate or identify mineral deposits;
- (ii) failure to achieve predicted grades in exploration and mining;
- (iii) operational and technical difficulties encountered in mining;
- (iv) insufficient or unreliable infrastructure, such as power, water and transport;
- (v) difficulties in commissioning and operating plant and equipment;
- (vi) mechanical failure or plant breakdown;
- (vii) unanticipated metallurgical problems which may affect extraction costs; and
- (viii) adverse weather conditions.

In the event that any of these potential risks eventuate, the Company's operational and financial performance may be adversely affected.

#### **(d) Contamination Risks**

The Company's operations may use hazardous materials and produce hazardous waste, which may have an adverse impact on the environment or cause exposure to hazardous materials. Despite efforts to conduct its activities in an environmentally responsible manner and in accordance with all applicable laws, the Company may be subject to claims for toxic torts, natural resources damages and other damages. In addition,

the Company may be subject to the investigation and clean up of contaminated soil, surface water and groundwater. This may delay the timetable of Projects and may subject the Company to substantial penalties, including fines, damages, clean-up costs or other penalties. The Company is also subject to environmental protection legislation, which may affect the Company's access to certain areas of its properties and could result in unforeseen expenses and areas of moratorium.

#### **(e) Metallurgy Risk**

When compared with many industrial and commercial operations, mining exploration projects are high risk. Each ore body is unique and the nature of the mineralisation, the occurrence and grade of the ore, as well as its behaviour during mining can never be wholly predicted. Estimations of a mineral deposit are not precise calculations but are based on interpretation and on samples from drilling, which represent a very small sample of the entire ore body. Reconciliation of past production and reserves, where available, can confirm the reasonableness of past estimates, but cannot categorically confirm accuracy of future projections.

The applications of metallurgical test work results and conclusions to the process design, recoveries and throughput depend on the accuracy of the test work and an assumption that the sample tests are representative of the ore body as a whole. There is a risk associated with the scale-up of laboratory and pilot plant results to a commercial scale and with the subsequent design and construction of any plant.

## 7. Risk Factors (continued)

### (f) Rehabilitation of Permits

In relation to the Company's proposed operations, issues could arise from time to time with respect to abandonment costs, consequential clean-up costs, environmental concerns and other liabilities. In these instances, the Company could become subject to liability if, for example, there is environmental pollution or damage from the Company's exploration activities and there are consequential clean-up costs at a later point in time.

### (g) Insurance Risks

Insurance coverage of all risks associated with minerals exploration, development and production is not always available and, where available, the cost can be high. The Company will have insurance in place considered appropriate for the Company's needs. The Company will not be insured against all possible losses, either because of the unavailability of cover or because the Directors believe the premiums are excessive relative to the benefits that would accrue. The Directors will continue to review the insurance cover in place to ensure that it is adequate.

### (h) Safety

Safety is a fundamental risk for any exploration and production company in regards to personal injury, damage to property and equipment and other losses. The occurrence of any of these risks could result in legal proceedings against the Company and substantial losses to the Company due to injury or loss of life, damage or destruction of property, regulatory investigation, and penalties or suspension of operations. Damage occurring to third parties as a result of such risks

may give rise to claims against the Company.

### (i) Climate change risks

There are a number of climate-related factors that may affect the operations and proposed activities of the Company. The climate change risks particularly attributable to the Company include:

- (i) the emergence of new or expanded regulations associated with the transitioning to a lower-carbon economy and market changes related to climate change mitigation. The Company may be impacted by changes to local or international compliance regulations related to climate change mitigation efforts, or by specific taxation or penalties for carbon emissions or environmental damage. These examples sit amongst an array of possible restraints on industry that may further impact the Company and its profitability. While the Company will endeavour to manage these risks and limit any consequential impacts, there can be no guarantee that the Company will not be impacted by these occurrences;
- (ii) certain physical and environmental risks that cannot be predicted by the Company, including events such as increased severity of weather patterns and incidence of extreme weather events and longer-term physical risks such as shifting climate patterns. All these risks associated with climate change may significantly change the industry in which the Company operates; and

- (iii) adverse weather events which may disrupt field work and exploration activities.

### (j) Environmental

The operations and proposed activities of the Company are subject to State and Federal laws and regulations concerning the environment. As with most exploration projects and mining operations, the Company's activities are expected to have an impact on the environment, particularly if advanced exploration or mine development proceed. It is the Company's intention to conduct its activities to the highest standard of environmental obligation, including compliance with all environmental laws.

Mining operations have inherent risks and liabilities associated with safety and damage to the environment and the disposal of waste products occurring as a result of mineral exploration and production. The occurrence of any such safety or environmental incident could delay production or increase production costs. Events, such as unpredictable rainfall or bushfires, may impact on the Company's ongoing compliance with environmental legislation, regulations and licences. Significant liabilities could be imposed on the Company for damages, clean up costs or penalties in the event of certain discharges into the environment, environmental damage caused by previous operations or non-compliance with environmental laws or regulations.

The disposal of mining and process waste and mine water discharge are under constant legislative scrutiny and regulation. There is a risk that environmental laws and



regulations become more onerous, making the Company's operations more expensive.

Approvals are required for land clearing and for ground disturbing activities. Delays in obtaining such approvals can result in the delay to anticipated exploration programs or mining activities.

**(k) Commodity price volatility and exchange rate risks**

If the Company achieves success leading to mineral production, the revenue it will derive through the sale of product exposes the potential income of the Company to commodity price and exchange rate risks. Commodity prices fluctuate and are affected by many factors beyond the control of the Company. Such factors include supply and demand fluctuations for precious and base metals, technological advancements, forward selling activities and other macro-economic factors. The Company is a gold exploration company and the gold price has recently seen record highs. In the event that the gold price falls significantly, there is a risk that the Company's projects may cease to be viable or that the trading price of the Company's Shares will drop.

Furthermore, international prices of various commodities (including gold) are denominated in United States dollars, whereas the income and expenditure of the Company will be taken to account in Australian currency, exposing the Company to the fluctuations and volatility of the rate of exchange between the United States dollar and the Australian dollar as determined in international markets.

**(l) Acquisitions**

The Company may make acquisitions of, or significant investments in, companies or assets that are complementary to its business. Any such future transactions are accompanied by the risks commonly encountered in making acquisitions of companies or assets, such as integrating cultures and systems of operation, relocation of operations, short term strain on working capital requirements, achieving mineral exploration success and retaining key staff.

**(m) Litigation**

The Company may in the ordinary course of business become involved in litigation and disputes, for example with agents, contractors or third parties in respect of land access to its Permits. Any such litigation or dispute could involve significant economic costs and damage to relationships with agents, contractors or other stakeholders. Such outcomes may have an adverse impact on the Company's business, reputation and financial performance.

**(n) Regulatory Risks**

The Company's operating activities are subject to extensive laws and regulations relating to numerous matters, including resource licence consent, environmental compliance and rehabilitation, taxation, employee relations, health and worker safety, waste disposal, protection of the environment and heritage matters, protection of endangered and protected species and other matters. The Company requires permits from regulatory authorities to authorise the Company's operations.

These permits relate to exploration, development, production and rehabilitation activities.

Obtaining necessary permits can be a time-consuming process and there is a risk that Company will not obtain these permits on acceptable terms, in a timely manner or at all. The costs and delays associated with obtaining necessary permits and complying with these permits and applicable laws and regulations could materially delay or restrict the Company from proceeding with the development of a project or the operation or development of a mine. Any failure to comply with applicable laws and regulations or permits, even if inadvertent, could result in material fines, penalties or other liabilities. In extreme cases, failure could result in suspension of the Company's activities or forfeiture of one or more of the permits.

**7.4 General risks**

**(a) Economic**

General economic conditions, introduction of tax reform, new legislation, movements in interest and inflation rates and currency exchange rates may have an adverse effect on the Company's exploration, development and production activities, as well as on its ability to fund those activities.

**(b) Competition risk**

The industry in which the Company will be involved is subject to domestic and global competition. Although the Company will undertake all reasonable due diligence in its business decisions and operations, the Company will have no influence or control over the activities or actions of

## 7. Risk Factors (continued)

its competitors, which activities or actions may, positively or negatively, affect the operating and financial performance of the Company's projects and business.

### (c) Market conditions

Share market conditions may affect the value of the Company's Shares regardless of the Company's operating performance. Share market conditions are affected by many factors such as:

- (i) general economic outlook;
- (ii) introduction of tax reform or other new legislation;
- (iii) interest rates and inflation rates;
- (iv) changes in investor sentiment toward particular market sectors;
- (v) the demand for, and supply of, capital; and
- (vi) pandemics, terrorism or other hostilities.

The market price of Shares can fall as well as rise and may be subject to varied and unpredictable influences on the market for equities in general and resource exploration stocks in particular. Neither the Company nor the Directors warrant the future performance of the Company or any return on an investment in the Company.

Applicants should be aware that there are risks associated with any securities investment. Securities listed on the stock market, and in particular securities of exploration companies, experience extreme price and volume fluctuations that have often been unrelated to the operating performance of such companies. These factors may materially affect the market price of the Shares regardless of the Company's performance.

### (d) Additional requirements for capital

The Company's capital requirements depend on numerous factors. The Company may require further financing in addition to amounts raised under the capital raising. Any additional equity financing will dilute shareholdings and debt financing, if available, may involve restrictions on financing and operating activities. If the Company is unable to obtain additional financing as needed, it may be required to reduce the scope of its operations and scale back its exploration programs as the case may be. There is however no guarantee that the Company will be able to secure any additional funding or be able to secure funding on terms favourable to the Company.

### (e) Insurance

The Company intends to insure its operations in accordance with industry practice. However, in certain circumstances the Company's insurance may not be of a nature or level to provide adequate insurance cover. The occurrence of an event that is not covered or fully covered by insurance could have a material adverse effect on the business, financial condition and results of the Company.

Insurance of all risks associated with mineral exploration and production is not always available and where available the costs can be prohibitive.

### (f) Taxation

The acquisition and disposal of Securities will have tax consequences, which will differ depending on the individual financial affairs of each investor.

All potential investors in the Company are urged to obtain independent financial advice about the consequences of acquiring Shares from a taxation viewpoint and generally.

To the maximum extent permitted by law, the Company, its officers and each of their respective advisors accept no liability and responsibility with respect to the taxation consequences of subscribing for Securities under this Prospectus.

### (g) Coronavirus (COVID-19)

The outbreak of the coronavirus disease (**COVID-19**) is impacting global economic markets. The nature and extent of the effect of the outbreak on the performance of the Company remains unknown. If admitted to the official list of ASX, the Company's Share price may be adversely affected in the short to medium term by the economic uncertainty caused by COVID-19. Further, any governmental or industry measures taken in response to COVID-19 may adversely impact the Company's operations and are likely to be beyond the control of the Company. The Company's ability to freely move people and equipment to and from exploration projects may cause delays or cost increases.

The Directors are monitoring the situation closely and have considered the impact of COVID-19 on the Company's business and financial performance. However, the situation is continually evolving, and the consequences are therefore inevitably uncertain. If any of these impacts appear material prior to close of the Offer, the Company will notify investors under a supplementary prospectus.



**(h) Force Majeure**

The Company's projects now or in the future may be adversely affected by risks outside the control of the Company including labour unrest, civil disorder, war, subversive activities or sabotage, fires, floods, explosions or other catastrophes, epidemics or quarantine restrictions.

**(i) Government policy changes**

Adverse changes in government policies or legislation may affect ownership of mineral interests, taxation, royalties, land access, labour relations, and mining and exploration activities of the Company. It is possible that the current system of exploration and mine permitting in New Zealand may change, resulting in impairment of rights and possibly expropriation of the Company's properties without adequate compensation.

**(j) Litigation Risks**

The Company is exposed to possible litigation risks including tenure disputes, environmental claims, occupational health and safety claims and employee claims. Further, the Company may be involved in disputes with other parties in the future, which may result in litigation. Any such claim or dispute if proven, may impact adversely on the Company's operations, financial performance and financial position. The Company is not currently engaged in any litigation.

**7.5 Investment speculative**

The above list of risk factors ought not to be taken as exhaustive of the risks faced by the Company or by investors in the Company. The above factors, and others not specifically referred to above, may in the future materially affect the financial performance of the Company and the value of the Shares offered under this Prospectus. Therefore, the Shares to be issued pursuant to this Prospectus carry no guarantee with respect to the payment of dividends, returns of capital or the market value of those Shares.

Potential investors should consider that an investment in the Company is highly speculative and should consult their professional advisers before deciding whether to apply for Shares pursuant to this Prospectus.





## **8. Board, Management and Corporate Governance**



## 8.1 Directors and key personnel

The Board of the Company consists of:

(a) **David Filov -  
Non-Executive Chairman**

David Filov is a corporate partner at national law firm, HWL Ebsworth, with over 10 years' experience advising on equity capital markets, mergers and acquisitions, IPOs, backdoor listings and corporate governance. Mr Filov is a recommended corporate lawyer in Western Australia by Doyle Guide in 2017, 2018 and 2019.

The Board considers that Mr Filov is an independent Director.

(b) **Brian Rodan -  
Managing Director**

Brian Rodan is a Fellow of the Australian Institute of Mining and Metallurgy (FAusIMM) with 43 years' experience. Previously, Mr Rodan was the managing director and owner of Australian Contract Mining Pty Ltd (ACM), a mid-tier mining contracting company that successfully completed \$1.5 billion worth of work over a 20 year period. ACM was sold to an ASX listed company in 2017. Mr Rodan was also a founding director of Dacian Gold Limited, which purchased the Mt Morgans Gold Mine from the administrator of Range River Gold Ltd. After listing on the ASX in 2012, Mr Rodan was Dacian's largest shareholder. For 15 years, Mr Rodan held various roles with Eltin Limited (including executive director between 1996 and 1999), being Australia's largest full service

ASX listed contracting mining company with annual turnover of \$850 million.

The Board considers that Brian Rodan is not an independent Director.

(c) **Paul Angus -  
Technical Director**

Paul Angus is an exploration geologist with over 30 years of mining and geology experience in New Zealand. Mr Angus has held senior management roles with New Zealand based OceanaGold and discovered >3Moz of gold at Macraes, Reefton and Sams Creek as its exploration manager.

The Board considers that Paul Angus is not an independent Director.

(d) **Keith Murray -  
Non-Executive Director**

Keith Murry is a chartered accountant with over 40 years' experience at a general manager level in audit, accounting, tax, finance, treasury and corporate governance. During the 1990's Mr Murray was general manager corporate and joint company secretary for Eltin Limited, a leading Australian based international mining services company.

Mr Murray is currently general manager corporate and company secretary for the Heytesbury Group and is a non-executive director of Icen Gold Limited and Indochine Mining Limited (**IDC**). IDC is currently in administration and subject to a deed of company arrangement. IDC's administration arose largely as a result of the Papua New Guinea Government's

decision not to renew IDC's flagship Mt Kare Project, with no adverse findings having been made against the directors of IDC by its administrators. IDC remains engaged in legal action in Papua New Guinea with respect to the Minister's decision not to renew the Mt Kare Project permit.

The Board considers that Keith Murray is an independent Director.

## 8.2 Key Management

**Sebastian Andre -  
Company Secretary**

Mr Andre is a Chartered Secretary with over 10 years of experience in corporate advisory, governance and risk services. He has previously acted as an adviser at the ASX and has a thorough understanding of the ASX Listing Rules, specialising in providing advice to companies and their boards in respect to capital raisings, IPOs, backdoor listings, corporate compliance and governance matters. Mr Andre holds qualifications in accounting, finance, corporate governance and is a member of the Governance Institute of Australia.

The Company is aware of the need to have sufficient management to properly supervise its operations and the Company has, or will in the future have, an interest and the Board will continually monitor the management roles in the Company. As the Company's Reefton Project requires an increased level of involvement the Board will look to appoint additional management and/or consultants when and where appropriate to ensure proper management of the Company's Reefton Project.

## 8. Board Management and Corporate Governance (continued)

### 8.3 Disclosure of Interests

#### Remuneration and Interests

Details of the Directors' remuneration and interest in Securities of the Company upon completion of the Offer are set out below:

Director	Remuneration	Shares	Options	Percentage (%) (Undiluted)	Percentage (%) (Fully Diluted)
David Filov <sup>1</sup>	\$40,000	Nil	750,000	Nil	0.74%
Brian Rodan <sup>2</sup>	\$210,000	13,928,806	5,619,524	17.21%	19.35%
Paul Angus <sup>3</sup>	\$40,000	Nil	3,500,000	Nil	3.47%
Keith Murray <sup>4</sup>	\$35,000	Nil	750,000	Nil	0.74%

Notes:

- Commencing from 1 July 2020, comprising Director's fees of \$40,000 per annum. Options are exercisable at \$0.375 on or before 26 September 2024.
- Commencing from 1 July 2020, comprising a director fee of \$40,000 and salary of \$170,000 (excluding GST). Mr Rodan was appointed director of the Company on 12 June 2019 and has not drawn any director fees in the previous financial year. Options are on the following terms:
  - 1,369,524 Options exercisable at \$0.25 on or before 30 September 2021;
  - 2,000,000 Options exercisable at \$0.25 on or before 15 January 2023; and
  - 2,250,000 Options exercisable at \$0.375 on or before 26 September 2024.

Ms Bronwyn Bergin, Mr Rodan's spouse, also holds 1,000,000 Shares and 500,000 Options exercisable at \$0.375 on or before 26 September 2024.

- Commencing 1 July 2020. In addition to his Director fees, Mr Angus provides technical consulting services to the Company pursuant to the Consultancy Agreement summarised in Section 9.2.2 at a rate of NZ\$220 per hour to a maximum of NZ\$1,760 per day. The Company estimates that Mr Angus will work on Company activities an average of three days per week following the Company's admission to the Official List, which would result in Mr Angus being paid approximately NZ\$274,560 per annum. Options are on the following terms:
  - 2,000,000 Options exercisable at \$0.25 on or before 15 January 2023; and
  - 1,500,000 Options exercisable at \$0.375 on or before 26 September 2024.
- Commencing from 1 July 2020, comprising Director's fees of \$35,000. Options are exercisable at \$0.375 on or before 26 September 2024.

The Directors have indicated that they may take up the following Shares under the Offer:

Director	Shares	Subscription Sum
David Filov	40,000	\$10,000
Brian Rodan	100,000	\$25,000
Paul Angus	20,000	\$5,000
Keith Murray	40,000	\$10,000

While the Directors have expressed an interest in taking up the Shares set out above, any final allocation of Shares to the Directors will be subject to the allocation policy set out in Section 4.10 and will be determined by the Directors in conjunction with the Underwriter. Refer to Section 5.7 for discussion with respect to Brian Rodan's voting power in the Company.



The Company's Constitution provides that the remuneration of Non-Executive Directors will be not more than the aggregate fixed sum determined by a general meeting. The aggregate remuneration for Non-Executive Directors is \$250,000 per annum, although they may be varied by ordinary resolution of the Shareholders in general meeting.

The remuneration of any executive director that may be appointed to the Board will be fixed by the Board and may be paid by way of fixed salary or consultancy fee.

#### 8.4 Agreements with Directors and Related Parties

The Company's policy in respect of related party arrangements is:

- (a) a Director with a material personal interest in a matter is required to give notice to the other Directors before such a matter is considered by the Board; and
- (b) for the Board to consider such a matter, the Director who has a material personal interest is not present while the matter is being considered at the meeting and does not vote on the matter.

The agreements between the Company and related parties are summarised in Section 9.2.

#### 8.5 Corporate Governance

##### (a) ASX Corporate Governance Council Principles and Recommendations

The Company has adopted comprehensive systems of control and accountability as the basis for the administration of corporate governance. To implement these

systems, the Company has adopted a set of policies and procedures. The Board is committed to administering the policies and procedures with openness and integrity, pursuing the true spirit of corporate governance commensurate with the Company's needs.

To the extent applicable, the Company has adopted *The Corporate Governance Principles and Recommendations (4th Edition)* as published by ASX Corporate Governance Council (**Recommendations**).

In light of the Company's size and nature, the Board considers that the current board is a cost effective and practical method of directing and managing the Company. As the Company's activities develop in size, nature and scope, the size of the Board and the implementation of additional corporate governance policies and structures will be reviewed.

The Company's main corporate governance policies and practices as at the date of this Prospectus are outlined below and the Company's full Corporate Governance Plan is available in a dedicated corporate governance information Section of the Company's website [www.sirengold.com.au](http://www.sirengold.com.au).

##### (b) Board of directors

The Board is responsible for corporate governance of the Company. The Board develops strategies for the Company, reviews strategic objectives and monitors performance against those objectives. The goals of the corporate governance processes are to:

- (i) maintain and increase Shareholder value;

- (ii) ensure a prudential and ethical basis for the Company's conduct and activities consistent with the Company's stated values; and
- (iii) ensure compliance with the Company's legal and regulatory objectives.

Consistent with these goals, the Board assumes the following responsibilities:

- (i) leading and setting the strategic direction, values and objectives of the Company;
- (ii) appointing the Chairman of the Board, Managing Director or Chief Executive Officer and approving the appointment of senior executives and the Company Secretary;
- (iii) overseeing the implementation of the Company's strategic objectives, values, code of conduct and performance generally;
- (iv) approving operating budgets, major capital expenditure and significant acquisitions and divestitures;
- (v) overseeing the integrity of the Company's accounting and corporate reporting systems, including any external audit (satisfying itself financial statements released to the market fairly and accurately reflect the Company's financial position and performance);
- (vi) establishing procedures for verifying the integrity of those periodic reports which are not audited or reviewed by an external auditor, to ensure that each periodic report is materially accurate, balanced and provides investors with appropriate information to make informed investment decisions;

## 8. Board Management and Corporate Governance (continued)

(vii) overseeing the Company's procedures and processes for making timely and balanced disclosure of all material information that a reasonable person would expect to have a material effect on the price or value of the Company's securities;

(viii) reviewing, ratifying and monitoring the effectiveness of the Company's risk management framework, corporate governance policies and systems designed to ensure legal compliance; and

(ix) approving the Company's remuneration framework.

The Company is committed to the circulation of relevant materials to Directors in a timely manner to facilitate Directors' participation in the Board discussions on a fully-informed basis.

### (c) Composition of the Board and diversity

Election of Board members is substantially the responsibility of the Shareholders in general meeting, subject to the following:

- (i) membership of the Board of Directors will be reviewed regularly to ensure the mix of skills and expertise is appropriate; and
- (ii) the composition of the Board has been structured so as to provide the Company with an adequate mix of directors with industry knowledge, technical, commercial and financial skills together with integrity and judgment considered necessary to represent shareholders and fulfil the business objectives and values of the Company, as well as to deal with new and emerging business and governance issues.

The Board currently consists of four directors (two non-executive Directors and two executive Directors) of whom David Filov and Keith Murray are considered independent. The Board considers the current balance of skills and expertise to be appropriate for the Company, given its currently planned level of activity.

The Company, the Company's stated values and all the Company's related bodies corporate are committed to workplace diversity. The Company is committed to inclusion at all levels of the organisation, regardless of gender, marital or family status, sexual orientation, gender identity, age, disabilities, ethnicity, religious beliefs, cultural background, socio-economic background, perspective and experience.

To assist in evaluating the appropriateness of the Board's mix of qualifications, experience and expertise, the Board intends to maintain a Board Skills Matrix to ensure that the Board has the skills to discharge its obligations effectively and to add value.

The Board undertakes appropriate checks before appointing a person as a Director or putting forward to Shareholders a candidate for election as a Director or senior executive.

The Board ensures that Shareholders are provided with all material information in the Board's possession relevant to a decision on whether or not to elect or re-elect a Director.

The Company shall develop and implement a formal induction program for Directors, which is tailored to their existing skills, knowledge and experience.

The purpose of this program is to allow new directors to participate fully and actively in Board decision-making at the earliest opportunity, and to enable new directors to gain an understanding of the Company's policies and procedures.

The Board maintains oversight and responsibility for the Company's continual monitoring of its diversity practices. The Company's Diversity Policy provides a framework for the Company to achieve enhanced recruitment practices whereby the best person for the job is employed, which requires the consideration of a broad and diverse pool of talent.

### (d) Identification and management of risk

The Board's collective experience will enable accurate identification of the principal risks that may affect the Company's business. Key operational risks and their management will be recurring items for deliberation at Board meetings.

### (e) Ethical standards

The Board is committed to the establishment and maintenance of appropriate ethical standards and to conducting all of the Company's business activities fairly, honestly with integrity, and in compliance with all applicable laws, rules and regulations. In particular, the Company and the Board are committed to preventing any form of bribery or corruption and to upholding all laws relevant to these issues as set out in in the Company's Anti-Bribery and Anti-Corruption Policy. In addition, the Company encourages reporting of actual and suspected violations of the Company's Code of Conduct or other instances



of illegal, unethical or improper conduct. The Company and the Board provide effective protection from victimisation or dismissal to those reporting such conduct as set out in its Whistleblower Protection Policy.

**(f) Independent professional advice**

Subject to the Chairman's approval (not to be unreasonably withheld), the Directors, at the Company's expense, may obtain independent professional advice on issues arising in the course of their duties.

**(g) Remuneration arrangements**

The remuneration of an executive Director will be decided by the Board, without the affected executive Director participating in that decision-making process.

The total maximum remuneration of non-executive Directors is initially set by the Constitution. Subsequent variation is by ordinary resolution of Shareholders in general meeting in accordance with the Constitution, the Corporations Act and the *ASX Listing Rules*, as applicable.

The determination of non-executive Directors' remuneration within that maximum cap will be made by the Board having regard to the inputs and value to the Company of the respective contributions by each non-executive Director. The current amount has been set at an amount not to exceed \$250,000 per annum.

In addition, a Director may be paid fees or other amounts (i.e. subject to any necessary Shareholder approval, non-cash performance incentives such as Options) as the Directors determine, where a Director performs special duties or otherwise performs services outside the scope of the ordinary duties of a Director.

Directors are also entitled to be paid reasonable travelling, hotel and other expenses incurred by them respectively in the performance of their duties as Directors.

The Board reviews and approves the remuneration policy to enable the Company to attract and retain executives and Directors who will create value for Shareholders having consideration to the amount considered to be commensurate for a company of its size and level of activity as well as the relevant Directors' time, commitment and responsibility. The Board is also responsible for reviewing any employee incentive and equity-based plans, including the appropriateness of performance hurdles and total payments proposed.

**(h) Trading policy**

The Board has adopted a trading policy that sets out the guidelines on the sale and purchase of securities in the Company by its Directors, officers, employees and contractors. The trading policy generally provides that for directors, the written acknowledgement of the Chair (or the Board in the case of the Chairman) must be obtained prior to trading.

**(i) External audit**

The Company in general meetings is responsible for the appointment of the external auditors of the Company. From time to time, the Board will review the scope, performance and fees of those external auditors.

**(j) Audit committee**

The Company will not have a separate audit committee until such time as the Board is of a sufficient size and structure, and the Company's operations

are of a sufficient magnitude for a separate committee to be of benefit to the Company. In the meantime, the full Board will carry out the duties that would ordinarily be assigned to that committee under the written terms of reference for that committee, including but not limited to:

- (i) monitoring and reviewing any matters of significance affecting financial reporting and compliance;
- (ii) verifying the integrity of those periodic reports which are not audited or reviewed by an external auditor;
- (iii) monitoring and reviewing the Company's internal audit and financial control system, risk management systems; and
- (iv) management of the Company's relationships with external auditors.

**(k) Departures from Recommendations**

Under the ASX Listing Rules the Company will be required to provide a statement in its annual financial report or on its website disclosing the extent to which it has followed the Recommendations during each reporting period. Where the Company has not followed a Recommendation, it must identify the Recommendation that has not been followed and give reasons for not following it.

The Company's compliance and departures from the Recommendations will also be announced prior to admission to the Official List of the ASX.



## 9. Material Contracts





Set out below is a brief summary of certain contracts to which the Company is a party and which the Directors have identified as material to the Company or are of such a nature that an investor may wish to have details of particulars of them when making an assessment of whether to apply for Shares.

To fully understand all rights and obligations of a material contract, it would be necessary to review it in full and these summaries should be read in this light.

## 9.1 Underwriting Agreement

The Company entered into an underwriting agreement (**Underwriting Agreement**) with Morgans Corporate Limited (**Underwriter** or **Morgans**) on 31 August 2020, pursuant to which Morgans has agreed to underwrite the Offer, the material terms and conditions of which are summarised below:

<b>Fees and Expenses</b>	<p>The Company must pay Morgans out of the proceeds of the Offer in immediately available funds:</p> <p>(a) <b>Underwriting Fee</b> An underwriting fee of 4% of the proceeds raised under the Offer.</p> <p>(b) <b>Management Fee</b> A management fee of 2% of the proceeds raised under the Offer.</p> <p>The Company has also agreed to grant Morgans 1,618,262 Underwriter Options and reimburse Morgans for expenses reasonably incurred in respect of the Offer (including legal fees to a maximum of \$20,000). Any single expenditure item in excess of \$2,000 shall be subject to prior approval from the Company.</p>
<b>Termination Events Not Subject to Materiality</b>	<p>Morgans may terminate the Underwriting Agreement, at any time after the date of the Underwriting Agreement by notice to the other parties if any of the following events occur:</p> <p>(a) the S&amp;P/ASX 200 Index published by ASX is at any time more than 7.5% below its level as at 5pm on the Business Day immediately preceding the date of the Underwriting Agreement;</p> <p>(b) the gold price is at any time more than 7.5% below its level as at 5pm on the Business Day immediately preceding the date of the Underwriting Agreement;</p> <p>(c) there is a Material Adverse Effect (as defined below), or any development involving a prospective Material Adverse Effect, on the Company from that described in the Prospectus;</p> <p>(d) ASIC:</p> <ul style="list-style-type: none"><li>(i) makes an order or interim order under section 739 concerning the Prospectus;</li><li>(ii) applies for an order under Part 9.5 in relation to the Offer or any documents prepared in connection with the Offer (<b>Offer Documents</b>); or</li><li>(iii) holds, or gives notice of intention to hold, a hearing or investigation in relation to the Offer or any Offer Document under the Corporations Act or the <i>Australian Securities and Investments Commission Act 2001</i> (Cth); or</li><li>(iv) prosecutes or gives notice of an intention to prosecute or commences proceedings against, or gives notice of an intention to commence proceedings against the Company or any of its officers, employees or agents in relation to the Offer or any Offer Document.</li></ul>

## 9. Material Contracts (continued)

### 9.1 Underwriting Agreement (continued)

**Termination  
Events Not  
Subject to  
Materiality  
(continued)**

- (e) the Takeovers Panel makes a declaration that circumstances in relation to the affairs of the Company are unacceptable circumstances, or an application for such a declaration is made to the Takeovers Panel;
- (f) there is an event or occurrence, including any statute, order, rule, regulation, directive or request of any Governmental agency, which makes it illegal for the Underwriter to satisfy a material obligation of the Underwriting Agreement, or to market, promote or settle the Offer;
- (g) any person (other than the Underwriter) whose consent to the issue of the Prospectus or any supplementary prospectus is required by section 720 of the Corporations Act and who has previously consented to the issue of the Prospectus or any supplementary prospectus withdraws such consent;
- (h) any person (other than the Underwriter) gives a notice under section 733(3);
- (i) any person (other than the Underwriter) who has previously consented to the inclusion of their name or any statement in the Prospectus or any supplementary prospectus withdraws that consent;
- (j) the Company withdraws the Prospectus or the Offer;
- (k) any circumstance arises after lodgement of the Prospectus that results in the Company either repaying the money received from persons who have applied for Shares or offering persons who have applied for Shares an opportunity to withdraw their application for Shares and be repaid their application money;
- (l) ASX indicates to the Company or the Underwriter that any necessary approval for the Company to list on ASX is not likely to be provided, or any such approval that has been provided is subsequently withdrawn;
- (m) the Company or any of its directors or officers engages in any fraudulent, misleading or deceptive conduct or activity in connection with the Offer;
- (n) a person gives a notice to the Company under section 730;
- (o) the Company or any subsidiary becomes Insolvent, or an act occurs or an omission is made which may result in one of them becoming Insolvent;
- (p) a certificate required to be furnished by the Company under the Underwriting Agreement is not furnished when required, or if furnished is untrue, incorrect or misleading or deceptive in any material respect;
- (q) any authorisation which is material to anything referred to in the Prospectus is repealed, revoked, terminated or expires, or is modified or amended in a manner unacceptable to the Underwriter;
- (r) any expression of belief, expectation or intention, or statement relating to future matters (including any forecast or prospective financial statements, information or data) in an Offer Document is or becomes incapable of being met or, in the reasonable opinion of the Underwriter, is unlikely to be met in the projected timeframe;
- (s) any event specified in the timetable is delayed for more than 2 business days without the prior written approval of the Underwriter;
- (t) the Company or its subsidiary breaches, or defaults under, any provision, undertaking, covenant or ratio of a material debt or financing arrangement or any related documentation to which that entity is a party which has, or may have, a Material Adverse Effect on the Group;



## 9.1 Underwriting Agreement (continued)

### Termination Events Not Subject to Materiality (continued)

- (u) there occurs:
  - (i) an event of default;
  - (ii) a review event which gives a lender or financier the right to accelerate or require repayment of the debt or financing; or
  - (iii) any other similar event, under or with respect to any such debt or financing arrangement or related documentation of the Company or its subsidiary.
- (v) a Director is charged with a criminal offence relating to any financial or corporate matter;
- (w) any Government agency commences any public action against the Company or any of the Directors, or announces that it intends to take any such action;
- (x) any Director of the Company is disqualified under the Corporations Act from managing a corporation; or
- (y) a restriction agreement:
  - (i) is terminated, void, avoided, illegal, invalid, unenforceable or materially limited in its effect; or
  - (ii) is amended in any material respect without the prior written consent of Morgans.

### Termination Events Subject to Materiality

- If any of the following events occur and Morgans has reasonable grounds to believe the event:
- (a) has, or is likely to have, a materially adverse effect on the success or outcome of the Offer, the ability of Morgans to market or promote the Offer, the willingness of persons to apply for Shares under the Offer or likely price at which Shares are likely to trade on ASX or the condition, trading or financial position, performance, profits and losses, results, business or operations of the Company (**Material Adverse Effect**); or
  - (b) has given or is likely to give rise to a contravention by the Underwriter of, or the Underwriter being involved in a contravention of, the Corporations Act or any other applicable law or a liability for the Underwriter, the Underwriter may at any time by notice given to the Company immediately, without cost or liability to itself, terminate the Underwriting Agreement so that it is relieved of all its obligations under the Underwriting Agreement if any of the following events occurs:
    - (a) the Underwriter forms the view (acting reasonably) that:
      - (i) there is an omission from the Prospectus or any supplementary prospectus of material required by the Corporations Act to be included;
      - (ii) an Offer Document contains a statement which is untrue, inaccurate, misleading or deceptive or likely to mislead or deceive (whether by inclusion or omission); or
      - (iii) an Offer Document does not contain all information required to comply with all applicable laws, and such statement is not remedied by way of supplementary disclosure.
    - (b) the Company lodges a supplementary prospectus;

## 9. Material Contracts (continued)

### 9.1 Underwriting Agreement (continued)

#### Termination Events Subject to Materiality (continued)

- (c) the Underwriter forms the view (acting reasonably) that a supplementary prospectus must be lodged with ASIC under the Corporations Act;
- (d) the Company fails to comply with any of its obligations under the Underwriting Agreement, or any representation or warranty by the Company in the Underwriting Agreement is or becomes incorrect;
- (e) a new circumstance arises which is a matter adverse to investors in the Shares and which would have been required by the Corporations Act to be included in the Offer Documents had the new circumstance arisen before the Offer Documents were given to ASIC or ASX (as applicable);
- (f) in respect of any one or more of Australia, the United States of America, any member state of the European Union, Indonesia, Japan, Russia, the People's Republic of China, North Korea, South Korea or the Middle East:
  - (i) hostilities not presently existing commence (whether or not war has been declared);
  - (ii) a major escalation in existing hostilities occurs (whether or not war has been declared);
  - (iii) a declaration is made of a national emergency or war;
  - (iv) a terrorist act is perpetrated in any of those countries or a diplomatic, military, commercial or political establishment of any of those countries elsewhere in the world; or
  - (v) there is a material escalation of a pandemic or an epidemic such as novel coronavirus, a recurrence of severe acute respiratory syndrome or an outbreak of swine or avian influenza.
- (g) there is introduced, or there is a public announcement of a proposal to introduce, into the Parliament of the Commonwealth of Australia or any State or Territory of Australia a new law, or the Government of Australia, or any State or Territory of Australia, the Reserve Bank of Australia, or any Minister or other Government Agency of Australia or any State or Territory of Australia, adopts or announces a proposal to adopt a new law, policy or regulatory directive (other than a law, policy or regulatory directive which has been announced before the date of the Underwriting Agreement);
- (h) any of the following occurs:
  - (i) any material adverse change or disruption to the political conditions or financial markets of Australia, Japan, the United Kingdom, the United States of America or any member state of the European Union or the international financial markets or any change or development involving a prospective change in national or international political, financial or economic conditions;
  - (ii) a general moratorium on commercial banking activities in Australia, the United States of America, Japan, any member state of the European Union or the United Kingdom is declared by the relevant central banking authority in any of those countries, or there is a material disruption in commercial banking or security settlement or clearance services in any of those countries; or
  - (iii) trading in all securities quoted or listed on ASX, the London Stock Exchange or the New York Stock Exchange is suspended or limited in a material respect for two consecutive trading days on which that exchange is open for trading.



## 9.1 Underwriting Agreement (continued)

### Termination Events Subject to Materiality (continued)

- (i) the Underwriter believes (acting reasonably) that an adverse change in the operations, assets, liabilities, financial position or performance, profits, losses or prospects of the Company or the Group (insofar as the position in relation to an entity in the Group affects the overall position of the Company) has occurred as a direct or indirect result of the coronavirus disease 2019 (**COVID-19**) or the transmission of the severe acute respiratory syndrome coronavirus 2 (**SARS-CoV-2**). This includes, without limitation, an adverse change as a direct or indirect result of an outbreak of COVID-19 or the transmission of SARS-CoV-2 at any of the Group's mine sites, or the temporary, complete or partial closure of or disruption to any of those mine sites due to an outbreak of COVID-19, a transmission of SARS-CoV-2, a direction of a Governmental Agency, or otherwise;
- (j) a change in the Directors occurs (other than in a manner described in the Prospectus), or a Director dies or becomes permanently incapacitated;
- (k) there is an adverse change, or an event occurs that is likely to give rise to an adverse change, in the business, assets, liabilities, financial position or performance, operations, management, outlook or prospects of the Company;
- (l) it transpires that any of the results of the due diligence undertaken in respect of the Prospectus was false, misleading or deceptive or that there was an omission from them, notwithstanding the fact that the Underwriter (or a representative of the Underwriter) was involved in the due diligence process;
- (m) a contravention by the Company or any of its subsidiaries of any provision of its constitution, the Corporations Act, the ASX Listing Rules or any other applicable legislation or any policy or requirement of ASIC or ASX;
- (n) litigation, arbitration, administrative or industrial proceedings are after the date of the Underwriting Agreement commenced against the Company or any of its subsidiaries, other than any claims disclosed in the Prospectus;
- (o) any person is appointed under any legislation in respect of companies to investigate the affairs of the Company or any of its subsidiaries;
- (p) any contract, deed or other agreement which is material to the making of an informed investment decision in relation to Shares is:
  - (i) terminated, rescinded, altered or amended without the prior written consent of the Underwriter (such consent not to be unreasonably withheld); or
  - (ii) found to be void or voidable.
- (q) without the prior written consent of the Underwriter (such consent not to be unreasonably withheld), the Company alters its share capital or the Constitution; or
- (r) any event specified in paragraphs (a) to (h) of subsection 652C(1) of the Corporations Act occurs in respect of the Company during the Offer period, other than as contemplated by the Underwriting Agreement.

## 9. Material Contracts (continued)

### 9.1 Underwriting Agreement (continued)

#### Conditions, Warranties, Undertaking and Other Terms

The Underwriting Agreement contains certain standard representations, warranties and undertakings by the Company as well as common conditions precedent, including the receipt by the Underwriter of the final, signed due diligence report and ASX indicating that it will grant permission for quotation of the Shares on ASX.

The representations and warranties given by the Company relate to matters such as conduct of the Company, power and authorisations, information provided by the Company, information in this Prospectus and compliance with applicable laws and regulations. The Company also provides additional representations and warranties in connection with the Projects.

The Company's undertakings include that it will not, until 120 days after listing, issue (or agree to issue) or indicate in any way that it may or will issue or agree to issue any Shares or other Securities without the prior written consent of Morgans. This undertaking is subject to certain exceptions, including any issue made pursuant to this Prospectus, an employee incentive scheme, a non-underwritten dividend investment or a bonus share plan.

#### Indemnity

Subject to certain exclusions relating to, among other things, fraud, wilful misconduct, recklessness or gross negligence of any indemnified party, the Company agrees to keep Morgans and its representatives indemnified from losses suffered by them in connection with the Offer or the appointment of Morgans pursuant to the Underwriting Agreement.

### 9.2 Agreements with Directors and Management

#### 9.2.1 Brian Rodan - Managing Director

The Company and Mr Brian Rodan have entered into an executive services agreement (ESA) pursuant to which Mr Rodan is appointed as "Managing Director" of the Company. The material terms of the ESA are as follows:

#### Remuneration

The Company will pay Mr Rodan a salary of \$170,000 per annum (plus superannuation). Mr Rodan's salary will be reviewed annually by the Company. In addition to the salary, the Company may at any time during the term of Mr Rodan's employment, pay to Mr Rodan an annual short term incentive.

In addition, Mr Rodan will receive a director's fee of \$40,000 per annum, for a total cash remuneration of \$210,000 per annum (plus superannuation).

#### Term

Mr Rodan's employment commenced on 1 July 2020 and will continue until the ESA is validly terminated in accordance with its terms;

#### Termination by Company

The Company may terminate Mr Rodan's employment in the following manner:

- (a) by giving not less than six (6) months' notice;
- (b) by giving not less than one (1) month's written notice if at any time Mr Rodan:
  - (i) is or becomes incapacitated by illness or injury of any kind which prevents Mr Rodan from performing his duties for a period of two (2) consecutive months or any periods aggregating two (2) months in any period of 12 months during the term of his employment;
  - (ii) is or becomes of unsound mind or under the control of any committee or officer under any law relating to mental health;



## 9.2 Agreements with Directors and Management Underwriting Agreement (continued)

### Termination by Company (continued)

- (iii) commits any serious or persistent breach of any of the provisions contained in the ESA and the breach is not remedied within 14 days of the receipt of written notice from the Company to Mr Rodan to do so;
- (iv) in the reasonable opinion of the Board, is absent in, or demonstrates incompetence with regard to the performance of his duties, or is neglectful of any duties under the ESA or otherwise does not perform all duties under the ESA in a satisfactory manner, provided that Mr Rodan:
  - (A) has been counselled on at least three separate occasions of the specific matters complained of by the Board; and
  - (B) after each such occasion has been provided with a reasonable opportunity of at least a month to remedy the specific matters complained of by the Board.
- (v) commits or becomes guilty of any gross misconduct; or
- (vi) refuses or neglects to comply with any lawful reasonable direction or order given by the Company which Mr Rodan, after receipt of prior notice, has failed to rectify to the reasonable satisfaction of the Company within 21 business days of receipt of that notice; or
- (c) summarily without notice:
  - (i) if at any time Mr Rodan is convicted of any major criminal offence which brings the Company or any of its related bodies corporate into lasting disrepute, by giving notice effective immediately and without payment of any salary other than salary accrued to the date of termination; or
  - (ii) if Mr Rodan breaches the Company's internet policy or email policy; or
  - (iii) if Mr Rodan discloses, communicates, uses or misuses price sensitive information without the prior written consent of the Board except to the extent that Mr Rodan is required by law to disclose, communicate or use it.

## 9. Material Contracts (continued)

### Termination by Mr Rodan

Mr Rodan may at his sole discretion, terminate the ESA in the following manner:

- (a) after providing written notice to the Company if at any time the Company commits any serious or persistent breach of any of the provisions contained in the ESA and the breach is not remedied within 28 days of receipt of that notice, by giving notice effective immediately; or
- (b) without cause, by giving notice to the Company that the termination is effective at the end of 6 months.

The ESA otherwise contains provisions considered standard for an agreement of its nature (including representations and warranties and confidentiality provisions).

### 9.2.2 Letters of Appointment and Consultancy Agreement

The Company entered into letters of appointment with David Filov, Keith Murray (together, the **Non-Executive Directors**) and Paul Angus respectively, pursuant to which:

- (a) David Filov has been appointed as a Non-Executive Chairman;
- (b) Paul Angus has been appointed as a Technical Director; and
- (c) Keith Murray has been appointed as a Non-Executive Director.

Each of the Non-Executive Directors' and the Technical Director's service will cease when the respective Non-Executive or Technical Director resigns, retires or is removed from office in accordance with the Company's constitution or the Corporations Act or if they resign from office by notice in writing to the Company.

These Directors will receive the remuneration set out in Section 8.3.

Paul Angus is also party to a consultancy agreement with the Company, dated 1 September 2017, pursuant to which the Company may engage him in respect of technical matters, for which the Company will pay Mr Angus NZ\$220 per hour (to a maximum of NZ\$1,760 per day) upon presentation of timesheets to the Company. Mr Angus agrees that he will be available for a minimum of 15 hours per week in order to provide these services, should they be required.

### 9.2.3 Deeds of indemnity, insurance and access

The Company has entered into a deed of indemnity, insurance and access with each of its Directors. Under these deeds, the Company will agree to indemnify each officer to the extent permitted by the Corporations Act against any liability arising as a result of the officer acting as an officer of the Company. The Company will also be required to maintain insurance policies for the benefit of the relevant officer and allow the officers to inspect board papers in certain circumstances.



## **10. Additional Information**

## 10. Additional Information (continued)

### 10.1 Litigation

As at the date of this Prospectus, the Company is not involved in any legal proceedings and the Directors are not aware of any legal proceedings pending or threatened against the Company.

### 10.2 Rights attaching to Shares

The following is a summary of the more significant rights attaching to Shares offered under this Prospectus. This summary is not exhaustive and does not constitute a definitive statement of the rights and liabilities of Shareholders. To obtain such a statement, persons should seek independent legal advice.

Full details of the rights attaching to Shares are set out in the Constitution, a copy of which is available for inspection at the Company's registered office during normal business hours.

#### (a) General meetings

Shareholders are entitled to be present in person, or by proxy, attorney or representative to attend and vote at general meetings of the Company.

Shareholders may requisition meetings in accordance with section 249D of the Corporations Act and the *Constitution*.

#### (b) Voting rights

Subject to any rights or restrictions for the time being attached to any class or classes of Shares, at general meetings of Shareholders or classes of Shareholders:

- (i) each Shareholder entitled to vote may vote in person or by proxy, attorney or representative;

- (ii) on a show of hands, every person present who is a Shareholder or a proxy, attorney or representative of a Shareholder has one vote; and
- (iii) on a poll, every person present who is a Shareholder or a proxy, attorney or representative of a Shareholder shall, in respect of each fully paid Share held by them, or in respect of which they are appointed a proxy, attorney or representative, have one vote for the Share, but in respect of partly paid Shares shall have such number of votes as bears the same proportion to the total of such Shares registered in the Shareholder's name as the amount paid (not credited) bears to the total amounts paid and payable (excluding amounts credited).

#### (c) Dividend rights

Subject to the rights of any preference Shareholders and to the rights of the holders of any shares created or raised under any special arrangement as to dividend, the Directors may from time to time declare a dividend to be paid to the Shareholders entitled to the dividend, which shall be payable on all Shares according to the proportion that the amount paid (not credited) is of the total amounts paid and payable (excluding amounts credited) in respect of such Shares.

The Directors may from time to time pay to the Shareholders any interim dividends as they may determine. No dividend shall carry interest as against the Company. The Directors may set aside out of the profits of the Company any amounts that they may determine as reserves, to be applied at the discretion of the Directors, for any purpose for which the profits of the Company may be properly applied.

Subject to the *ASX Listing Rules* and the Corporations Act, the Company may, by resolution of the Directors, implement a dividend reinvestment plan on such terms and conditions as the Directors think fit and which provides for any dividend which the Directors may declare from time to time payable on Shares which are participating Shares in the dividend reinvestment plan, less any amount which the Company shall either pursuant to the Constitution or any law be entitled or obliged to retain, be applied by the Company to the payment of the subscription price of Shares.

#### (d) Winding-up

If the Company is wound up, the liquidator may, with the authority of a special resolution of the Company, divide among the shareholders in kind the whole or any part of the property of the Company, and may for that purpose set such value as the liquidator considers fair upon any property to be so divided, and may determine how the division is to be carried out as between the Shareholders or different classes of Shareholders.

The liquidator may, with the authority of a special resolution of the Company, vest the whole or any part of any such property in trustees upon such trusts for the benefit of the contributories as the liquidator thinks fit, but so that no Shareholder is compelled to accept any Shares or other securities in respect of which there is any liability.

#### (e) Shareholder liability

As the Shares under the Prospectus are fully paid shares, they are not subject to any calls for money by the Directors and will therefore not become liable for forfeiture.

#### (f) Transfer of Shares

Generally, Shares are freely transferable, subject to formal requirements, the registration of



the transfer not resulting in a contravention of or failure to observe the provisions of a law of Australia and the transfer not being in breach of the Corporations Act or the ASX Listing Rules.

**(g) Variation of rights**

Pursuant to section 246B of the Corporations Act, the Company may, with the sanction of a special resolution passed at a meeting of Shareholders, vary or abrogate the rights attaching to Shares.

If at any time the share capital is divided into different classes of Shares, the rights attached to any class (unless otherwise provided by the terms of issue of the shares of that class), whether or not the Company is being wound up, may be varied or abrogated with the consent in writing of the holders of three-quarters of the issued shares of that class, or if authorised by a special resolution passed at a separate meeting of the holders of the shares of that class.

**(h) Alteration of Constitution**

The Constitution can only be amended by a special resolution passed by at least three quarters of Shareholders present and voting at the general meeting. In addition, at least 28 days written notice specifying the intention to propose the resolution as a special resolution must be given.

**10.3 Options**

**(a) Entitlement**

Each Option entitles the holder to subscribe for one Share upon exercise of the Option.

**(b) Exercise Price and Expiry Date**

Subject to paragraph 10.4(j) the amount payable upon exercise of each Option and the expiry date of each Option is:

Number of Options	Exercise Price	Expiry Date
3,116,667	\$0.25	30 September 2021
2,604,166	\$0.25	11 January 2022
5,000,000	\$0.25	15 January 2023
7,675,000 <sup>1</sup>	\$0.375	26 September 2024

Note:

- 5,250,000 Options held by Directors of the Company (**Director Options**). Refer to Section 8.3 for details.

**(c) Expiry Date**

An Option not exercised before the Expiry Date will automatically lapse on the Expiry Date.

**(d) Exercise Period**

The Options are exercisable at any time on or prior to the Expiry Date (**Exercise Period**).

**(e) Notice of Exercise**

The Options may be exercised during the Exercise Period by notice in writing to the Company in the manner specified on the Option certificate (**Notice of Exercise**) and payment of the Exercise Price for each Option being exercised in Australian currency by electronic funds transfer or other means of payment acceptable to the Company.

**(f) Exercise Date**

A Notice of Exercise is only effective on and from the later of the date of receipt of the Notice of Exercise and the date of receipt of the payment of the Exercise Price for each Option being exercised in cleared funds (**Exercise Date**).

**(g) Cashless Exercise**

In respect of the Director Options, the Option holder may elect not to be required to provide payment of the Exercise Price for the number of Options specified in a Notice of Exercise but that on exercise of those Options the

Company will transfer or issue to the Option holder that number of Shares equal in value to the positive difference between the then Market Value of the Shares at the date of the Notice of Exercise and the Exercise Price that would otherwise be payable to exercise those Options (with the number of Shares rounded down to the nearest whole Share).

Where Market Value means the volume weighted average price per Share traded on the ASX over the five (5) trading days immediately preceding the date of the Notice of Exercise.

**(h) Timing of issue of Shares on exercise**

Within 15 Business Days after the Exercise Date, the Company will:

- allot and issue the number of Shares required under these terms and conditions in respect of the number of Options specified in the Notice of Exercise and for which cleared funds have been received by the Company;
- if required, give ASX a notice that complies with section 708A(5)(e) of the Corporations Act, or, if the Company is unable to issue such a notice, lodge with ASIC a prospectus prepared in accordance with the Corporations Act and

## 10. Additional Information (continued)

do all such things necessary to satisfy section 708A(11) of the Corporations Act to ensure that an offer for sale of the Shares does not require disclosure to investors; and

- (iii) if admitted to the official list of ASX at the time, apply for official quotation on ASX of Shares issued pursuant to the exercise of the Options.

If a notice delivered under 10.4(g) (ii) for any reason is not effective to ensure that an offer for sale of the Shares does not require disclosure to investors, the Company must, no later than 20 Business Days after becoming aware of such notice being ineffective, lodge with ASIC a prospectus prepared in accordance with the Corporations Act and do all such things necessary to satisfy section 708A(11) of the Corporations Act to ensure that an offer for sale of the Shares does not require disclosure to investors.

### (i) Shares issued on exercise

Shares issued on exercise of the Options rank equally with the then issued shares of the Company.

### (j) Reconstruction of capital

If at any time the issued capital of the Company is reconstructed, all rights of an Optionholder are to be changed in a manner consistent with the Corporations Act and the *ASX Listing Rules* at the time of the reconstruction.

### (k) Participation in new issues

There are no participation rights or entitlements inherent in the Options and holders will not be entitled to participate in new issues of capital offered to Shareholders during the currency of the Options without exercising the Options.

### (l) Change in exercise price

An Option does not confer the right to a change in Exercise Price or a change in the number of underlying securities over which the Option can be exercised.

### (m) Transferability

The Options are transferable subject to any restriction or escrow arrangements imposed by ASX or under applicable Australian securities laws.

## 10.4 Underwriter Options

### (a) Entitlement

Each Option entitles the holder to subscribe for one Share upon exercise of the Option.

### (b) Exercise Price

Subject to paragraph (j) the amount payable upon exercise of each Option will be \$0.375 (**Exercise Price**).

### (c) Expiry Date

Each Option will expire at 5:00 pm (WST) on 26 September 2024 (**Expiry Date**). An Option not exercised before the Expiry Date will automatically lapse on the Expiry Date.

### (d) Exercise Period

The Options are exercisable at any time on or prior to the Expiry Date (**Exercise Period**).

### (e) Notice of Exercise

The Options may be exercised during the Exercise Period by notice in writing to the Company in the manner specified on the Option certificate (**Notice of Exercise**) and payment of the Exercise Price for each Option being exercised in Australian currency by electronic funds transfer or other means of payment acceptable to the Company.

### (f) Exercise Date

A Notice of Exercise is only effective on and from the later of the date of receipt of the Notice of Exercise and the date of receipt of the payment of the Exercise Price for each Option being exercised in cleared funds (**Exercise Date**).

### (g) Timing of issue of Shares on exercise

Within 15 Business Days after the Exercise Date, the Company will:

- (i) allot and issue the number of Shares required under these terms and conditions in respect of the number of Options specified in the Notice of Exercise and for which cleared funds have been received by the Company;
- (ii) if required, give ASX a notice that complies with section 708A(5)(e) of the Corporations Act, or, if the Company is unable to issue such a notice, lodge with ASIC a prospectus prepared in accordance with the Corporations Act and do all such things necessary to satisfy section 708A(11) of the Corporations Act to ensure that an offer for sale of the Shares does not require disclosure to investors; and
- (iii) if admitted to the official list of ASX at the time, apply for official quotation on ASX of Shares issued pursuant to the exercise of the Options.

If a notice delivered under 10.4(g)

(ii) for any reason is not effective to ensure that an offer for sale of the Shares does not require disclosure to investors, the Company must, no later than 20 Business Days after becoming aware of such notice being ineffective, lodge with ASIC a



prospectus prepared in accordance with the Corporations Act and do all such things necessary to satisfy section 708A(11) of the Corporations Act to ensure that an offer for sale of the Shares does not require disclosure to investors.

#### (h) Shares issued on exercise

Shares issued on exercise of the Options rank equally with the then issued shares of the Company.

#### (i) Reconstruction of capital

If at any time the issued capital of the Company is reconstructed, all rights of an Optionholder are to be changed in a manner consistent with the Corporations Act and the ASX Listing Rules at the time of the reconstruction.

#### (j) Participation in new issues

There are no participation rights or entitlements inherent in the Options and holders will not be entitled to participate in new issues of capital offered to Shareholders during the currency of the Options without exercising the Options.

#### (k) Change in exercise price

An Option does not confer the right to a change in Exercise Price or a change in the number of underlying securities over which the Option can be exercised.

#### (l) Transferability

The Options are transferable subject to any restriction or escrow arrangements imposed by ASX or under applicable Australian securities laws.

## 10.5 Employee Incentive Scheme

The Company has adopted an employee securities incentive plan (**Plan**), a summary of which is set out below. The full terms of the Plan may be inspected at the registered

office of the Company during normal business hours. It is intended that the Executive, Technical and Non-Executive Directors will participate in the Plan. No securities have been issued under this Plan.

#### (a) Eligible Participant

Eligible Participant means a person that:

- (i) is an 'eligible participant' (as that term is defined in ASIC Class Order 14/1000) in relation to the Company or an Associated Body Corporate (as that term is defined in ASIC Class Order 14/1000); and
- (ii) has been determined by the Board to be eligible to participate in the Plan from time to time.

#### (b) Maximum allocation

The Company must not make an offer of Securities under the Plan where the total number of Shares issued under the Plan (**Plan Shares**) that may be issued, or acquired upon exercise of securities convertible into Shares issued under the Plan (**Convertible Securities**) offered, when aggregated with the number of Shares issued or that may be issued as a result of offers made under the Plan at any time during the previous 3 year period would exceed 5% of the total number of Shares on issue at the date of the offer.

The maximum number of equity securities proposed to be issued under the Plan for the purposes of the ASX Listing Rules is 8,091,309 Shares (representing 10% of the issued Shares on completion of the Offer) (**ASX Limit**), meaning that the Company may issue up to the ASX Limit under the Plan, without seeking Shareholder approval and without reducing its placement capacity under ASX Listing Rule 7.1.

The ASX Limit is not intended to be a prediction of the actual number of securities to be issued under the Plan, simply a ceiling for the purposes of Listing Rule 7.2 (Exception 13(b)).

#### (c) Purpose

The purpose of the Plan is to:

- (i) assist in the reward, retention and motivation of Eligible Participants;
- (ii) link the reward of Eligible Participants to Shareholder value creation; and
- (iii) align the interests of Eligible Participants with Shareholders by providing an opportunity to Eligible Participants to receive an equity interest in the Company in the form of Securities.

#### (d) Plan administration

The Plan will be administered by the Board. The Board may exercise any power or discretion conferred on it by the Plan rules in its sole and absolute discretion. The Board may delegate its powers and discretion.

#### (e) Eligibility, invitation and application

The Board may from time to time determine that an Eligible Participant may participate in the Plan and make an invitation to that Eligible Participant to apply for Securities on such terms and conditions as the Board decides.

On receipt of an Invitation, an Eligible Participant may apply for the Securities the subject of the invitation by sending a completed application form to the Company. The Board may accept an application from an Eligible Participant in whole or in part.

## 10. Additional Information (continued)

If an Eligible Participant is permitted in the invitation, the Eligible Participant may, by notice in writing to the Board, nominate a party in whose favour the Eligible Participant wishes to renounce the invitation.

### (f) Grant of Securities

The Company will, to the extent that it has accepted a duly completed application, grant the Eligible Participant that has participated (**Participant**) the relevant number of Securities, subject to the terms and conditions set out in the invitation, the Plan rules and any ancillary documentation required.

### (g) Terms of Convertible Securities

Each Convertible Security represents a right to acquire one or more Shares, subject to the terms and conditions of the Plan.

Prior to a Convertible Security being exercised, a Participant does not have any interest (legal, equitable or otherwise) in any Share the subject of the Convertible Security by virtue of holding the Convertible Security. A Participant may not sell, assign, transfer, grant a security interest over, collateralise a margin loan against, utilise for the purposes of short selling, enter into a derivative with reference to, or otherwise deal with a Convertible Security that has been granted to them. A Participant must not enter into any arrangement for the purpose of hedging their economic exposure to a Convertible Security that has been granted to them. For the avoidance of doubt, a Participant includes any contractor or consultant to the Company.

### (h) Vesting

Any vesting conditions applicable to the grant of Convertible Securities will be described in the invitation. If all the vesting conditions are satisfied and/or otherwise waived by the Board, a vesting notice will be sent to the Participant by the Company informing them that the relevant Plant Convertible Securities have vested. Unless and until the vesting notice is issued by the Company, the Convertible Securities will not be considered to have vested. For the avoidance of doubt, if the vesting conditions relevant to a Convertible Security are not satisfied and/or otherwise waived by the Board, that Convertible Security will lapse.

### (i) Exercise of Options and cashless exercise

To exercise a Convertible Security, the Participant must deliver a signed notice of exercise and, subject to a cashless exercise of Convertible Securities (see below), pay the exercise price (if any) to or as directed by the Company, at any time prior to the earlier of any date specified in the vesting notice and the expiry date as set out in the invitation.

An invitation may specify that at the time of exercise of the Convertible Securities, the Participant may elect not to be required to provide payment of the Convertible Security exercise price for the number of Convertible Securities specified in a notice of exercise, but that on exercise of those Convertible Securities the Company will transfer or issue to the Participant that number of Shares equal in value to the positive difference between the Market Value of the Shares

at the time of exercise and the exercise price that would otherwise be payable to exercise those Convertible Securities.

Market Value means, at any given date, the volume weighted average price per Share traded on the ASX over the 5 trading days immediately preceding that given date, unless otherwise specified in an invitation.

A Convertible Security may not be exercised unless and until that Convertible Security has vested in accordance with the Plan rules, or such earlier date as set out in the Plan rules.

### (j) Delivery of Shares on exercise of Convertible Securities

As soon as practicable after the valid exercise of a Convertible Security by a Participant, the Company will issue or cause to be transferred to that Participant the number of Shares to which the Participant is entitled under the Plan rules and issue a substitute certificate for any remaining unexercised Convertible Securities held by that Participant.

### (k) Forfeiture of Convertible Securities

Where a Participant who holds Convertible Securities ceases to be an Eligible Participant or becomes insolvent, all unvested Convertible Securities will automatically be forfeited by the Participant, unless the Board otherwise determines in its discretion to permit some or all of the Convertible Securities to vest.

Where the Board determines that a Participant has acted fraudulently or dishonestly, acted negligently, acted in contravention of a Company policy or wilfully breached his or her duties to the Company (including but not limited to breaching a material



term of an employment, executive services or consultancy agreement), the Board may in its discretion deem all unvested Convertible Securities held by that Participant to have been forfeited.

Unless the Board otherwise determines, or as otherwise set out in the Plan rules:

- (i) any Convertible Securities which have not yet vested will be forfeited immediately on the date that the Board determines (acting reasonably and in good faith) that any applicable vesting conditions have not been met or cannot be met by the relevant date; and
- (ii) any Convertible Securities which have not yet vested will be automatically forfeited on the expiry date specified in the invitation.

A Participant may by written notice to the Company voluntarily forfeit their Convertible Securities for no consideration.

#### **(l) Change in control**

If a change of control event occurs in relation to the Company, or the Board determines that such an event is likely to occur, the Board may in its discretion determine the manner in which any or all of the Participant's Convertible Securities will be dealt with, including, without limitation, in a manner that allows the Participant to participate in and/or benefit from any transaction arising from or in connection with the change of control event.

#### **(m) Rights attaching to Plan Shares**

All Plan Shares issued or transferred to a Participant upon the valid exercise of a Convertible

Security will rank *pari passu* in all respects with the Shares of the same class. A Participant will be entitled to any dividends declared and distributed by the Company on the Plan Shares and may participate in any dividend reinvestment plan operated by the Company in respect of Plan Shares. A Participant may exercise any voting rights attaching to Plan Shares.

#### **(n) Disposal restrictions on Plan Shares**

If the invitation provides that any Plan Shares are subject to any restrictions as to the disposal or other dealing by a Participant for a period, the Board may implement any procedure it deems appropriate to ensure the compliance by the Participant with this restriction.

For so long as a Plan Share is subject to any disposal restrictions under the Plan, the Participant will not:

- (i) transfer, encumber or otherwise dispose of, or have a security interest granted over that Plan Share; or
- (ii) take any action or permit another person to take any action to remove or circumvent the disposal restrictions without the express written consent of the Company.

#### **(o) Adjustment of Convertible Securities**

If there is a reorganisation of the issued share capital of the Company (including any subdivision, consolidation, reduction, return or cancellation of such issued capital of the Company), the rights of each Participant holding Convertible Securities will be changed to the

extent necessary to comply with the ASX Listing Rules applicable to a reorganisation of capital at the time of the reorganisation.

If Shares are issued by the Company pro rata to Shareholders generally by way of bonus issue (other than an issue in lieu of dividends or by way of dividend reinvestment), the holder of Convertible Securities is entitled, upon exercise of the Convertible Securities, to receive an allotment of as many additional Shares as would have been issued to the holder if the holder held Shares equal in number to the Shares in respect of which the Convertible Securities are exercised.

Unless otherwise determined by the Board, a holder of Convertible Securities does not have the right to participate in a pro rata issue of Shares made by the Company or sell renounceable rights.

#### **(p) Participation in new issues**

There are no participation rights or entitlements inherent in the Convertible Securities and holders are not entitled to participate in any new issue of Shares of the Company during the currency of the Convertible Securities without exercising the Convertible Securities.

#### **(q) Amendment of Plan**

Subject to the following paragraph, the Board may at any time amend any provisions of the Plan rules, including (without limitation) the terms and conditions upon which any Securities have been granted under the Plan and determine that any amendments to the Plan rules be given retrospective effect, immediate effect or future effect.

## 10. Additional Information (continued)

No amendment to any provision of the Plan rules may be made if the amendment materially reduces the rights of any Participant as they existed before the date of the amendment, other than an amendment introduced primarily for the purpose of complying with legislation or to correct manifest error or mistake, amongst other things, or is agreed to in writing by all Participants.

### (r) Plan duration

The Plan continues in operation until the Board decides to end it. The Board may from time to time suspend the operation of the Plan for a fixed period or indefinitely, and may end any suspension. If the Plan is terminated or suspended for any reason, that termination or suspension must not prejudice the accrued rights of the Participants.

If a Participant and the Company (acting by the Board) agree in writing that some or all of the Securities granted to that Participant are to be cancelled on a specified date or on the occurrence of a particular event, then those Securities may be cancelled in the manner agreed between the Company and the Participant.

### 10.6 Former Advisory Mandate

The Company was previously party to an advisory mandate with a company associated with former director of the Company, Anna Nahajki-Staples (resigned in June 2019).

In connection with termination of that mandate, the Company agreed to pay Ms Nahajki-Staples \$75,000 if the Company completed a successful listing, of which \$37,500 was paid in connection with termination of the mandate and \$37,500 will be paid post-listing.

### 10.7 Interests of Directors

Other than as set out in this Prospectus, no Director or proposed Director holds, or has held within the 2 years preceding lodgement of this Prospectus with the ASIC, any interest in:

- (a) the formation or promotion of the Company;
- (b) any property acquired or proposed to be acquired by the Company in connection with:
  - (i) its formation or promotion;
  - or
  - (ii) the Offer.
- (c) the Offer, and no amounts have been paid or agreed to be paid and no benefits have been given or agreed to be given to a Director or proposed Director:
- (d) as an inducement to become, or to qualify as, a Director; or
- (e) for services provided in connection with:
  - (i) the formation or promotion of the Company; or
  - (ii) the Offer.

### 10.8 Interests of Experts and Advisers

Other than as set out below or elsewhere in this Prospectus, no:

- (a) person named in this Prospectus as performing a function in a professional, advisory or other capacity in connection with the preparation or distribution of this Prospectus;
- (b) promoter of the Company; or
- (c) underwriter (but not a sub-underwriter) to the issue or a financial services licensee named in this Prospectus as a financial services licensee involved in the issue,

holds, or has held within the 2 years preceding lodgement of this Prospectus with the ASIC, any interest in:

- (d) the formation or promotion of the Company;
- (e) any property acquired or proposed to be acquired by the Company in connection with:
  - (i) its formation or promotion;
  - or
  - (ii) the Offer.
- (f) the Offer, and no amounts have been paid or agreed to be paid and no benefits have been given or agreed to be given to any of these persons for services provided in connection with:
- (g) the formation or promotion of the Company; or
- (h) the Offer.

Golder Associates (NZ) Ltd has acted as Independent Geologist and has prepared the Independent Geologist's Report which is included in Annexure A. The Company estimates it will pay Golder Associates (NZ) Ltd a total of \$40,000 (excluding GST) for these services. During the 24 months preceding lodgement of this Prospectus with the ASIC, Golder Associates (NZ) Ltd has not received fees from the Company for other services.

Nexia Australia has acted as Investigating Accountant and has prepared the Investigating Accountant's Report which is included in Annexure C. The Company estimates it will pay Nexia Australia a total of \$5,500 (excluding GST) for these services. During the 24 months preceding lodgement of this Prospectus with the ASIC, Nexia Australia has received \$35,094 in fees from the Company for audit services.



Morgans Corporate Limited will receive 6% of the total amount raised under the Prospectus (plus GST) following the successful completion of the Offer for its services as Underwriter and will receive up to 1,618,262 Options. Morgans Corporate Limited will be responsible for paying all capital raising fees that Morgans Corporate Limited and the Company agree with any other financial service licensees. Further details in respect to the Underwriting Agreement with Morgans Corporate Limited are summarised in Section 9.1. Morgans Corporate Limited has received \$30,000 in fees capital raising services provided to the Company in the last two years.

Steinepreis Paganin has acted as the Australian solicitors to the Company in relation to the Offer. The Company estimates it will pay Steinepreis Paganin \$30,000 (excluding GST) for these services. Subsequently, fees will be charged in accordance with normal charge out rates. During the 24 months preceding lodgement of this Prospectus with the ASIC, Steinepreis Paganin has not received fees from the Company for any other services.

Quigg Partners has acted as the New Zealand solicitors to the Company in relation to the Offer and has prepared the Solicitor's Report on the Title which is included in Annexure B. The Company estimates it will pay Quigg Partners \$15,000 (excluding GST) for these services. During the 24 months preceding lodgement of this Prospectus with the ASIC, Quigg Partners has received an aggregate of \$71,095 in fees from the Company for other services.

## 10.9 Consents

Chapter 6D of the Corporations Act imposes a liability regime on the Company (as the offer or of the Shares), the Directors, any persons named in the Prospectus with their consent as proposed Directors, any underwriters, persons named in the Prospectus with their consent having made a statement in the Prospectus and persons involved in a contravention in relation to the Prospectus, with regard to misleading and deceptive statements made in the Prospectus. Although the Company bears primary responsibility for the Prospectus, the other parties involved in the preparation of the Prospectus can also be responsible for certain statements made in it.

Each of the parties referred to in this Section:

- (a) does not make, or purport to make, any statement in this Prospectus other than those referred to in this Section; and
- (b) in light of the above, only to the maximum extent permitted by law, expressly disclaim and take no responsibility for any part of this Prospectus other than a reference to its name and a statement included in this Prospectus with the consent of that party as specified in this Section.

Golder Associates (NZ) Ltd has given its written consent to being named as Independent Geologist in this Prospectus, the inclusion of the Independent Geologist's Report in Annexure A in the form and context in which the report is included. Golder Associates (NZ) Ltd has not withdrawn its consent prior to lodgement of this Prospectus with the ASIC.

Nexia Perth Corporate Finance Pty Ltd has given its written consent to being named as Investigating Accountant in this Prospectus and to the inclusion of the Investigating Accountant's Report in Annexure C in the form and context in which the information and report is included. Nexia Australia has not withdrawn its consent prior to lodgement of this Prospectus with the ASIC.

Nexia Perth Audit Services Pty Ltd has given its written consent to being named as auditor of the Company in this Prospectus and the inclusion of the audited financial information of the Company contained in the Investigating Accountants Report included in Annexure C to this Prospectus in the form and context in which it appears. Nexia Australia has not withdrawn its consent prior to lodgement of this Prospectus.

Steinepreis Paganin has given its written consent to being named as the Australian solicitors to the Company in relation to the Offer in this Prospectus. Steinepreis Paganin has not withdrawn its consent prior to the lodgement of this Prospectus with the ASIC.

Quigg Partners has given its written consent to being named as the New Zealand solicitors to the Company in relation to the Offer in this Prospectus. Quigg Partners has not withdrawn its consent prior to the lodgement of this Prospectus with the ASIC.

Morgans Corporate Limited has given its written consent to being named as the Underwriter of the Offer in this Prospectus. Morgans Corporate Limited has not withdrawn its consent prior to the lodgement of this Prospectus with the ASIC.

## 10. Additional Information (continued)

Automatic Registry Services has given its written consent to being named as the share registry to the Company in this Prospectus. Automatic Registry Services has not withdrawn its consent prior to the lodgement of this Prospectus with the ASIC.

### 10.10 Expenses of the Offer

The total expenses of the Offer (excluding GST) are estimated to be approximately \$850,000 under the Offer and are expected to be applied towards the items set out in the table below:

Item of Expenditure	Expenditure (\$)
ASIC fees	3,206
ASX fees	88,094
Underwriter Fees <sup>1</sup>	600,000
Legal Fees <sup>2</sup>	50,000
Independent Geologist's Fees	40,000
Investigating Accountant's Fees	5,500
Auditor's Fees	35,000
Printing and Distribution	15,000
Miscellaneous	13,200
<b>TOTAL</b>	<b>850,000</b>

Notes:

1. Refer to Section 9.1 for a summary of the Underwriting Agreement.
2. This incorporates fees payable in connection with this Prospectus, the Solicitor's Report on Title and due diligence costs associated with RRL.



# 11. Directors Authorisation

This Prospectus is issued by the Company and its issue has been authorised by a resolution of the Directors. In accordance with section 720 of the Corporations Act, each Director has consented to the lodgement of this Prospectus with the ASIC.

**David Filov**  
Non-Executive Chairman  
For and on behalf of  
Siren Gold Limited



## 12. Glossary

Where the following terms are used in this Prospectus they have the following meanings:

**\$** means an Australian dollar.

**Alexander River Project** means the exploration project described in Section 5.3.2.

**Application Form** means the application form attached to or accompanying this Prospectus relating to the Offer.

**ASIC** means Australian Securities & Investments Commission.

**ASX** means ASX Limited (ACN 008 624 691) or the financial market operated by it as the context requires.

**ASX Listing Rules** means the official listing rules of ASX.

**Bell Hill Project** means the exploration project described in Section 5.3.4.

**Big River Project** means the exploration project described in Section 5.3.1.

**Board** means the board of Directors as constituted from time to time.

**Broker Firm Offer** means the offer summarised in Section 4.4, which forms part of the Offer.

**Chairman's List Offer** means the offer summarised in Section 4.5, which forms part of the Offer.

**CHESS** means the Clearing House Electronic Subregister System operated by ASX Settlement.

**Closing Date** means the closing date of the Offer as set out in the indicative timetable in the Key Offer Information Section of this Prospectus (subject to the Company reserving the right to extend the Closing Date or close the Offer early).

**Company** or **Siren** means Siren Gold Limited (ACN 619 211 826).

**Constitution** means the constitution of the Company.

**Corporations Act** means the *Corporations Act 2001* (Cth).

**Directors** means the directors of the Company at the date of this Prospectus.

**Exposure Period** means the period of 7 days after the date of lodgement of this Prospectus, which period may be extended by the ASIC by not more than 7 days pursuant to section 727(3) of the Corporations Act.

**JORC Code** has the meaning given in the Important Notice Section of this Prospectus.

**Lyell Project** means the exploration project described in Section 5.3.5.

**Minimum Subscription** means the minimum amount to be raised under the Offer, being \$10,000,000.

**NZP&M** means New Zealand Petroleum and Minerals.

**Offer** means the offer of Shares pursuant to this Prospectus as set out in Section 4.1

**Official List** means the official list of ASX.

**Official Quotation** means official quotation by ASX in accordance with the ASX Listing Rules.

**Option** means an option to acquire a Share.

**Optionholder** means a holder of an Option.

**Projects** means the Big River Project, Alexander River Project, Reefton South Project and Lyell Project.

**Prospectus** means this prospectus.

**Recommendations** has the meaning set out in Section 8.5.

**Reefton South Project** means the exploration project described in Section 5.3.3.

**Section** means a Section of this Prospectus.

**Securities** means Shares and Options.

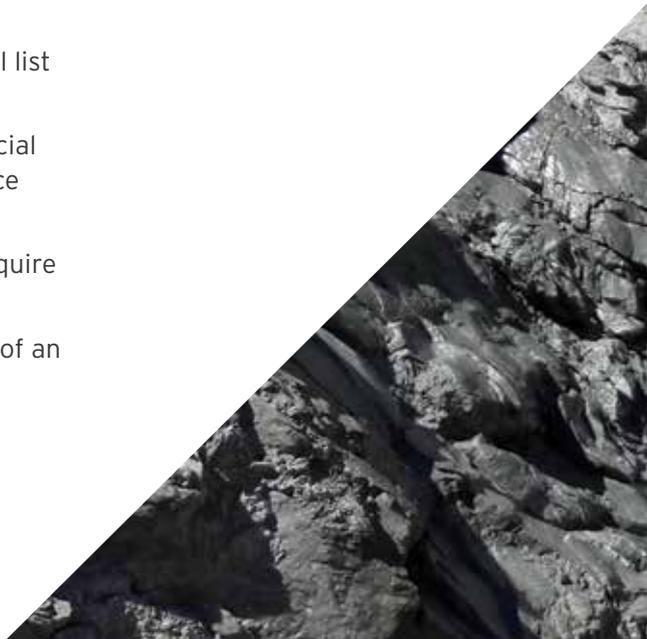
**Share** means a fully paid ordinary share in the capital of the Company.

**Shareholder** means a holder of Shares.

**Underwriter** or **Morgans** means Morgans Corporate Limited.

**Underwriting Agreement** means the agreement with the Underwriter summarised in Section 9.1.

**WST** means Western Standard Time as observed in Perth, Western Australia.





# **Annexure A - Independent Geologist's Report**



**REPORT**

**Siren Gold Limited**

*Independent Geologist's Report for the Reefton Gold Project, New Zealand*

Submitted to:

**Mr. Paul Angus**

Siren Gold Limited  
41-43 Ord Street  
West Perth WA 6005

Submitted by:

**Golder Associates (NZ) Limited**

Level 1 105A Montgomery Square Nelson 7010  
New Zealand

+64 3 548 1707

20141607-001-R-Rev0

27 August 2020

**Distribution List**

Electronic Copy – Siren Gold Limited

Electronic Copy – Golder Associates Pty Ltd

Electronic Copy – Golder Associates (NZ) Ltd

# Table of Contents

<b>1.0</b>	<b>INTRODUCTION .....</b>	<b>1</b>
1.1	Terms of Reference .....	1
1.2	Standard .....	1
1.3	Verification of Tenement Status .....	1
1.4	Experience and Statement of Independence .....	1
1.5	Warranties and Indemnities .....	3
1.6	Compliance Statement and Competent Person's Consent .....	3
1.7	Principal Sources of Information .....	3
<b>2.0</b>	<b>PROJECT OVERVIEW .....</b>	<b>4</b>
2.1	Big River Project .....	4
2.2	Alexander River Project .....	4
2.3	Reefton South Project .....	5
2.4	Bell Hill Project .....	5
2.5	Lyell Project .....	6
2.6	Scope of Work .....	8
2.7	Abbreviations and Conventions .....	8
<b>3.0</b>	<b>BIG RIVER, ALEXANDER RIVER, REEFTON SOUTH, BELL HILL AND LYELL PROJECTS .....</b>	<b>9</b>
3.1	Location and Access .....	9
3.1.1	Big River Project .....	10
3.1.2	Alexander River Project .....	11
3.1.3	Reefton South Project .....	11
3.1.4	Bell Hill Project .....	11
3.1.5	Lyell Project .....	12
3.2	Climate .....	12
3.3	Site Infrastructure .....	12
3.3.1	Current Regional Infrastructure .....	12
3.3.2	Potential Infrastructure .....	12
3.3.3	Mining Personnel .....	12
3.4	Tenements, Ownership and Encumbrances .....	12

3.4.1	Minerals Exploration Permits .....	12
3.4.2	Minerals Prospecting Permits .....	13
3.4.3	Big River Project .....	14
3.4.4	Alexander River Project .....	15
3.4.5	Reefton South Project .....	15
3.4.6	Golden Point Project .....	17
3.4.7	Bell Hill Project .....	17
3.4.8	Lyell Project .....	17
3.4.9	Minimum Future Work Programme Obligations .....	18
3.4.9.1	Big River Project .....	18
3.4.9.2	Alexander River Project .....	19
3.4.9.3	Reefton South Project .....	19
3.4.9.4	Golden Point Project .....	20
3.4.9.5	Bell Hill Project .....	20
3.4.9.6	Lyell Project .....	20
3.5	Land Access .....	21
3.6	Resource Consents .....	22
3.7	Royalties for Minerals .....	22
3.7.1	Crown Mineral (Royalties for Minerals Other than Petroleum) Regulations 2013 .....	23
3.8	New Zealand Economic and Political Background .....	23
<b>4.0</b>	<b>GEOLOGY .....</b>	<b>24</b>
4.1	Geological Setting .....	24
4.2	Reefton Goldfield Structure .....	26
4.3	Reefton Goldfield Alteration and Mineralisation .....	27
4.4	Deposit Geology .....	29
4.4.1	Big River Project .....	29
4.4.2	Alexander River Project .....	29
4.4.3	Reefton South Project .....	29
4.4.4	Bell Hill Project .....	32
4.4.5	Lyell Project .....	33
<b>5.0</b>	<b>MINING AND EXPLORATION HISTORY .....</b>	<b>34</b>
5.1	Big River Project .....	37

5.1.1	Mining History .....	37
5.1.2	Exploration History .....	37
5.1.2.1	OGL Exploration Programs .....	37
5.2	Alexander River Project .....	47
5.2.1	Mining History .....	47
5.2.2	Exploration History .....	47
5.2.2.1	CRAE .....	47
5.2.2.2	OGL.....	49
5.2.2.3	Kent.....	50
5.3	Reefton South Project .....	53
5.3.1	Mining History .....	53
5.3.2	Exploration History .....	54
5.3.2.1	Reefton South .....	54
5.3.2.1.1	CRAE .....	54
5.3.2.1.2	GFR.....	54
5.3.2.1.3	FMG Pacific Ltd .....	54
5.3.2.2	Golden Point Prospect .....	54
5.3.2.3	Auld Creek .....	54
5.3.2.3.1	CRAE .....	55
5.3.2.3.2	OGL.....	55
5.4	Bell Hill Project .....	58
5.4.1	Mining History .....	58
5.4.1.1	Alluvial Mining .....	58
5.4.1.2	Hard Rock Mining.....	58
5.4.2	Exploration History .....	58
5.4.2.1	Titan .....	58
5.4.2.2	Eureka .....	59
5.4.2.3	Strategic Materials .....	59
5.5	Lyell Project.....	59
5.5.1	Mining History .....	59
5.5.1.1	Alluvial Mining .....	59
5.5.1.2	Hard Rock Mining.....	59

5.5.2	Exploration History .....	60
5.5.2.1	Otter .....	60
5.5.2.2	Auzex .....	61
5.5.2.3	Kent .....	67
5.5.2.4	OGL .....	69
5.5.2.5	Tectonex .....	69
<b>6.0</b>	<b>DATA COLLECTION .....</b>	<b>69</b>
6.1	Aerial Topographic Surveying .....	70
6.1.1	Big River Project .....	70
6.1.2	Alexander River Project .....	70
6.1.3	Reefton South Project .....	70
6.1.4	Golden Point Prospect .....	70
6.1.5	Bell Hill Project .....	70
6.1.6	Lyell Project .....	70
6.2	Geophysical Surveying .....	70
6.2.1	Big River Project .....	72
6.2.2	Alexander River Project .....	72
6.2.3	Reefton South Project .....	75
6.2.4	Golden Point Prospect .....	75
6.2.5	Bell Hill Project .....	75
6.2.6	Lyell Project .....	75
6.3	Geological Mapping .....	78
6.3.1	Big River Project .....	78
6.3.2	Alexander River Project .....	78
6.3.3	Reefton South Project .....	78
6.3.4	Golden Point Prospect .....	78
6.3.5	Bell Hill Project .....	78
6.3.6	Lyell Project .....	79
6.4	Surface and Underground Sampling .....	79
6.4.1	General .....	79
6.4.2	Big River Project .....	79

6.4.3	Alexander River Project .....	80
6.4.4	Reefton South Project .....	80
6.4.5	Golden Point Prospect .....	81
6.4.6	Bell Hill Project .....	83
6.4.7	Lyell Project .....	83
6.5	Drilling .....	84
6.5.1	Big River Project .....	84
6.5.2	Alexander River Project .....	84
6.5.3	Reefton South Project .....	84
6.5.4	Golden Point Prospect .....	84
6.5.5	Bell Hill Project .....	85
6.5.6	Lyell Project .....	85
6.6	Test Pitting .....	85
6.6.1	Bell Hill Project .....	85
6.7	Sampling and Assay .....	86
6.7.1	CRAE .....	87
6.7.2	OGL .....	87
6.7.3	Kent .....	89
6.7.4	GFR .....	90
6.7.5	Otter .....	91
6.7.6	Auzex .....	91
6.7.7	Tectonex .....	92
6.7.8	Titan .....	93
6.7.9	Eureka .....	93
6.8	QAQC .....	93
6.8.1	Big River Project .....	93
6.8.2	Alexander River Project .....	94
6.8.3	Reefton South Project .....	94
6.8.4	Golden Point Prospect .....	94
6.8.5	Bell Hill Project .....	95
6.8.6	Lyell Project .....	95

<b>7.0 TECHNICAL STUDIES .....</b>	<b>95</b>
<b>8.0 REVIEW OF EXPLORATION ACTIVITIES .....</b>	<b>95</b>
<b>9.0 RECOMMENDATIONS FOR FURTHER WORK .....</b>	<b>96</b>
9.1 Exploration .....	96
9.2 Technical Studies .....	96
<b>10.0 EXPLORATION PROGRAMS AND BUDGETS.....</b>	<b>97</b>
10.1 Big River Project .....	97
10.2 Alexander River Project .....	97
10.3 Reefton South Project .....	97
10.4 Golden Point Project .....	98
10.5 Bell Hill Project .....	98
10.6 Lyell Project.....	98
10.7 Expenditure .....	98
<b>11.0 ECONOMIC ASSESSMENT OF THE REEFTON GOLD PROJECT.....</b>	<b>100</b>
<b>12.0 REPORT LIMITATIONS .....</b>	<b>100</b>
<b>13.0 REFERENCES .....</b>	<b>100</b>

## TABLES

Table 1: Project team qualifications, professional memberships and responsibilities .....	2
Table 2: EP 60448 (BRP) details.....	15
Table 3: EP 60446 (ARP) details.....	15
Table 4: PP 60465 (RSP) details.....	15
Table 5: EPA 60648.01 (GPP) details .....	17
Table 6: PPA 60632.01 (BHP) details .....	17
Table 7: EP 60479 (LP) details.....	17
Table 8: Minimum future work programme obligations for EP 60448 (BRP) .....	18
Table 9: Minimum future work programme obligations for EP 60446 (ARP) .....	19
Table 10: Minimum future work programme obligations for EP 60479 (LP) .....	20
Table 11: MIA consent details .....	21
Table 12: Reefton Goldfield major historical gold producers (OGL 2013 and Wopereis 1987) .....	34
Table 13: BRP significant historical OGL drilling results (Gardner 2013 and Hood Hills 2011).....	40
Table 14: Significant historical ARP drilling results (Dunphy and Barry 1997 and O'Neill 2011).....	50
Table 15: Fraternal lode significant drilling results (Hood Hills and Doyle 2011 and Gardner 2013).....	55

Table 16: Significant drilling results for the LP (Kenex 2012).....	67
Table 17: South Pacific Mines test pitting results (South Pacific Mines 1987).....	86
Table 18: Perkins test pitting results (Anon 1989).....	86
Table 19: Amdel analytical detail for the 2007 drilling at the GPP (McCulloch and Timms 2007).....	87
Table 20: Analytical details of OGL field samples (Hood Hills 2011).....	88
Table 21: Analytical details for OGL diamond core samples collected from the BRP (Hood Hills 2012).....	88
Table 22: Analytical details for ALS ICP analysis (ME-ICP61) – OGL diamond core samples collected from the BRP (Hood Hills 2012).....	89
Table 23: Analytical details for Kent drill sample assay analysis – SGS (NZ) Ltd (O’Neill 2011).....	90
Table 24: Analytical details for Auzex drill sample assay analysis – SGS (NZ) Ltd (Kenex 2012).....	91
Table 25: Analytical details for Tectonex sample analysis – SGS (NZ) Ltd (Nichols 2018).....	92
Table 26: Rock standards used by Kent (O’Neill 2011).....	94
Table 27: Proposed budgets for BRP, ARP, RSP, GP, BHP and LP exploration works over the next two years in AU\$.....	99

## FIGURES

Figure 1: Location of EP 60448 (BRP), EP 60446 (ARP), PP 60465 [RSP] (expired EoD application pending), EPA 60648.01 (GPP), PPA 60632.01 (BHP), and EP 60479 (LP).....	7
Figure 2: DoC public conservation land and EP 60448 (BRP), EP 60446 (ARP), PP 60465 [RSP] (expired EoD application pending), EPA 60648.01 (GPP), PPA 60632.01 (BHP), and EP 60479 (LP).....	10
Figure 3: PP 60465 2 year EoD area applied for by Siren (Siren).....	16
Figure 4: 1:250 000 scale Reefton Goldfield geology (GNS Qmap 2002 – Greymouth sheet).....	25
Figure 5: Reefton mineralisation/structural corridor, historical gold production and geology.....	28
Figure 6: Potential anticlinal axes across the re-interpreted 2D seismic line (Velseis 2020).....	31
Figure 7: Geology of the BHP PPA area (Reefton Resources 2020).....	33
Figure 8: Reefton Goldfield historical gold production and the location of EP 60448 (BRP), EP 60446 (ARP), PP 60465 [RSP] (expired EoD application pending) and EP 60479 (LP).....	36
Figure 9: OGL BRP drill hole locations (Gardner 2013).....	39
Figure 10: Plan view of the BRP, showing historical production, the location of historical mine workings, OGL drilling results, wacker soil geochemistry results for As, the location of vein outcrop and major structures (Siren).....	44
Figure 11: Long-section of the BRP, showing the down-dip extents of the historical Big River Mine, the location of historical mine workings, interpreted bedding and structure and OGL drilling results (Siren).....	45
Figure 12: Simplified geological map illustrating the distribution of lithologies and mines within the BRP area and those areas covered by Greenland Group rocks (Shand 2015).....	46
Figure 13: CRAE gold soil sampling contours, sample lines and the location of historical workings (Dunphy and Barry 1997).....	48
Figure 14: Drilling plan showing Kent drill holes (AX001 to AX009) and OGL/GRDMM drill holes (AX4, AX5, AX6 and the A6 series) [O’Neill 2011].....	51

Figure 15: Long-section of the ARP with drilling and trenching results, AX drill holes are surface drilling from OGL/GRDMM and the A6 series drilling is from OGL/GRDMM underground drilling from the No.6 level in the McVicar workings. Trench results are from Kent re-sampling with a 3 g/t Au cut-off applied (Siren) .....	52
Figure 16: Plan view (line of strike) of the ARP with drilling and trenching results and underground workings (Siren) .....	53
Figure 17: Location of diamond drill holes and gold mineralisation intersections at the Fraternal lode (Doyle and Hood Hills 2011) .....	57
Figure 18: Cross-section through the Alpine United Mine (Bull 2018d) .....	60
Figure 19: Historical sample locations from Crown Minerals exploration reports (Hill 2010).....	62
Figure 20: Auzex soil sampling program (Auzex 2010).....	63
Figure 21: Au in soils and gridded Au (Auzex 2010).....	64
Figure 22: Final drill hole collar locations with 0.1 ppm Au contour (soils) and historical mine workings (Kenex 2012).....	66
Figure 23: Foley Creek and Deep Creek sample locations (Kent 2010b).....	68
Figure 24: Airborne geophysical survey flown for CRAE in 1988 (Reynolds and James 2005) .....	71
Figure 25: Location of the IP survey stations and their source (Kent 2010a) .....	73
Figure 26: IP anomalies overlain on topography and historical mine workings (Kent 2010a) .....	74
Figure 27: Analytic signal magnetics displayed for Lyell PP 54446 (McLelland 2014b) .....	76
Figure 28: Lyell aeromagnetics (TMI) and Otter Geology North geological map (Nichols 2018).....	77
Figure 29: Soil and rock chip sampling across the GPP (Bull 2020).....	82

## APPENDICES

### APPENDIX A

JORC 2012 Competent Person's Consent Form

### APPENDIX B

JORC 2012 Table 1: Check List of Assessment and Reporting Criteria

### APPENDIX C

Historical Drilling Details for the ARP, BRP, GPP and LP

### APPENDIX D

ARP CRAE and Kent Trench Assay Results Summary

### APPENDIX E

Report Limitations

## 1.0 INTRODUCTION

### 1.1 Terms of Reference

Siren Gold Limited (Siren), Australian Company Number (ACN) 619 211 826, has commissioned Golder Associates (NZ) Ltd. (GANZL) to provide an Independent Geologist's Report (IGR) on Siren's Reefton Gold Project (RGP), consisting of the Big River Project (BRP), Alexander River Project (ARP), Reefton South Project (RSP), Golden Point Project, (GPP), Bell Hill Project (BHP), and Lyell Project (LP), which are located both south (ARP, BRP, RSP, GPP, and BHP) and north (LP) of Reefton, in the South Island of New Zealand. It is GANZL's understanding that this IGR is to be included in a Prospectus to be lodged with the Australian Securities & Investments Commission (ASIC) in or about the third quarter (Q3) of 2020.

From information provided to GANZL by Siren, the purpose of the Prospectus is to offer 40 000 000 fully paid ordinary shares at an issue price of \$0.25 per share, to raise \$10 000 000 Australian Dollars (AU\$), before the costs of issue (Prospectus).

The objective of this IGR is to present a geological description of the projects, an outline of previously completed exploration and other work, an opinion on the exploration potential of the projects and commentary on Siren's proposed costed exploration programs over the next two years.

### 1.2 Standard

This IGR has been prepared in accordance with:

- The 2012 Edition of the '*Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves*' (the JORC Code).
- The 2015 Edition of the '*Australasian Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets*' (the VALMIN Code).

In addition, this IGR has been prepared in accordance with the relevant requirements of the Listing Rules of the Australian Stock Exchange (ASX) and relevant ASIC Regulatory Guidelines.

GANZL has not been requested to provide an Independent Valuation or detailed Risk Assessment for the BRP, ARP, RSP, GPP, BHP or LP. This IGR does not express an opinion regarding the value of Mineral Assets or project tenements comprising the BRP, ARP, RSP, GPP, BHP or LP.

### 1.3 Verification of Tenement Status

Whilst GANZL has referred to tenement holdings in New Zealand in this IGR, such reference is for convenience only and may not be complete or accurate. GANZL is not expert in tenement management and has not therefore undertaken independent verification of Siren's tenement holdings. The reader should not rely on information in this IGR relating to the current ownership and legal standing of the tenements or any encumbrances whatsoever impacting on those tenements. These matters are dealt with in a separate report on tenements contained within the Prospectus.

### 1.4 Experience and Statement of Independence

The author of this IGR and GANZL are independent of Siren, its directors, senior management and advisors and have no economic or beneficial interest (present or contingent) in any of the Mineral Assets being reported on. GANZL is remunerated for this IGR by way of a professional fee determined in accordance with a standard schedule of commercial rates, which is calculated based on time charges for work carried out and is not contingent on the outcome of the Prospectus. Fees arising from the preparation of this IGR are listed elsewhere in the Prospectus.

The relationship between Siren and GANZL is solely one of professional association between client and independent consultant. None of the individuals employed by GANZL are officers, employees or proposed officers of Siren or any group, holding or associated companies of Siren.

This IGR has been prepared in compliance with the Corporations Act and ASIC Regulatory Guides 111 and 112 with respect to GANZL's independence as experts. GANZL regards RG112.31 to be in compliance, whereby there are no business or professional relationships or interests which would affect the ability of the author to present an unbiased opinion within this IGR.

This IGR has been compiled based on information available up to and including the date of this IGR, any statements and opinions are based on this date and could alter over time depending on exploration results, commodity prices and other relevant market factors.

This IGR was prepared by Aaron Radonich.

Aaron possesses a total of 18 years of experience in the mining industry, having graduated with a Bachelor of Science with Honours in Geology from the University of Tasmania, Australia in 2002 and achieved the degree of Post Graduate Certificate in Geostatistics from Edith Cowan University, Australia in 2016. Aaron is a Member and Chartered Professional (in the discipline of Geology) of the Australasian Institute of Mining and Metallurgy (AusIMM) and a member of the Australian Institute of Geoscientists (AIG). Aaron has worked for Golder Associates Pty Ltd (GAP) since 2013.

This IGR was peer reviewed by Sue Bonham-Carter.

Sue possesses a total 31 years of experience in the mining industry, having graduated with a Bachelor of Applied Science with Honours in Mining Engineering from Queen's University, Canada in 1989, she is a Registered Professional Engineer (PEng), of the Professional Engineers and Geoscientists of British Columbia, Canada and is a Chartered Professional (in the discipline of Mining) of the AusIMM. Sue has worked for GANZL since 2003.

Golder Associates (Golder) employs more than 6 500 staff worldwide. Golder is a respected global consulting firm specialising in ground engineering, geological and environmental consulting services. Golder operates from 165 offices worldwide deliver deep technical understanding, cross-disciplinary thinking and a passion to help our clients succeed.

Golder has been consulting to the mining industry for more than 50 years. Golder is an employee-owned, global organisation providing consulting, design and construction services in the specialist areas of earth, environment and energy through technical excellence, innovative solutions and award-winning client service. Today, Golder's clients represent the world's major industries and drivers of development: Oil and Gas, Mining, Manufacturing, Power and Urban Development and Infrastructure.

A summary of the project team personnel, their qualifications, professional memberships and responsibilities pertaining to this IGR is presented in Table 1.

**Table 1: Project team qualifications, professional memberships and responsibilities**

Name	Qualifications	Professional Membership/s	IGR Section Responsibilities
Aaron Radonich	PGradCertGeostats, BSc (Hons)	MAusIMM CP (Geo), MAIG	All sections of this IGR
Sue-Bonham Carter	B.Sc. Engineering (Mining) (Hons)	MAusIMM CP (Mining), (PEng)	Peer review of all sections of this IGR

## 1.5 Warranties and Indemnities

Siren has warranted, in writing to GANZL, that:

- Full, accurate and true disclosure of all Material information has been made and that, to the best of its knowledge and understanding, such information is complete, accurate and true.
- A draft copy of the IGR was provided to Siren so that it could advise the Practitioner of any Material omissions, comment on the factual accuracy and assumptions made and advise on any included information that is confidential.
- The Directors of Siren provided a guarantee of independence.

As recommended by the VALMIN Code, Siren provided GANZL with an indemnity, under which GANZL will be compensated for any liability and/or any additional work or expenditure resulting from any additional work required:

- Resulting from GANZL's reliance on information provided by Siren that is Materially inaccurate or incomplete; and
- Relating to any consequential extension of workload through queries, questions or public hearings arising from this IGR.

## 1.6 Compliance Statement and Competent Person's Consent

The information in this IGR that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Aaron Radonich, a Competent Person, who is a Member and Chartered Professional of the AusIMM and is employed by Golder on a full-time basis.

For information relating to the relationship between Aaron Radonich and Siren, please refer to Section 1.4.

Aaron Radonich possesses sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the *'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'*. Aaron consents to the inclusion in the IGR of the matters based on his information in the form and context in which it appears.

Consent has been sought from Siren's representatives to include technical information and opinions expressed by them. No other entities referred to in this IGR have consented to the inclusion of any information or opinions and have only been referred to in the context of reporting relevant activities. A JORC Competent Person's Consent Form is attached as APPENDIX A.

A JORC Table 1: Check List of Assessment and Reporting Criteria is attached as APPENDIX B.

## 1.7 Principal Sources of Information

The principal sources of information used to compile this IGR comprise technical reports and data variously compiled by Siren and their partners or consultants, publicly available information, government reports and discussions with Siren technical and corporate management personnel. A listing of the principal sources of information are included in the reference list attached to this IGR (Section 13.0).

No site visit was undertaken as part of this assignment. Aaron Radonich is satisfied that there is sufficient current information available to allow an informed evaluation of the BRP, ARP, RSP, GPP, BHP, and LP without the need for a personal inspection.

GANZL has endeavoured, by making all reasonable enquiries, to confirm the authenticity, accuracy and completeness of the technical data upon which this IGR is based. A final draft of this IGR was provided to Siren prior to finalisation by GANZL, requesting that Siren identify any Material errors or omissions prior to final submission. GANZL does not accept responsibility for any errors or omissions in the data and information upon which the opinions and conclusions in this IGR are based and does not accept any consequential liability arising from commercial decisions or actions resulting from errors or omissions in that data or information.

## 2.0 PROJECT OVERVIEW

Reefton Resources Pty Limited (RR) is a new company that has been set up specifically for the RGP, which consists of the BRP, ARP, RSP, GPP, BHP and LP. RR is a wholly owned subsidiary of Siren (formerly known as Condamine Resources Limited). Siren was incorporated in 2017 and is headquartered in Perth, Australia. For the purposes of this IGR, RR is referred to as Siren.

The first discovery of auriferous quartz in the Reefton area was made in 1870, in the headwaters of Murray Creek, where in 1874 several lodes went into production. After a downturn in the 1880s, the gold mining industry was revived by Consolidated Goldfields New Zealand (CGNZ). CGNZ operated in the Reefton area for the next 55 years, when the last of their operations, the Blackwater Mine, closed in 1954. CRA Exploration Limited (CRAE) explored in the area in the 1980s and GRD Macraes Mining (OGL) explored in the area from the 1990s and operated an open cut gold mine at Globe-Progress from 2005 to 2015.

The BRP, ARP, RSP, GPP, BHP and LP are located south (BRP, ARP, RSP, GPP and BHP) and north (LP) of Reefton, in the South Island of New Zealand (Figure 1).

### 2.1 Big River Project

The largest historical mine located within the BRP was the Big River Mine. The Big River Mine produced approximately 136 000 ounces (oz) of gold (Au) at an average recoverable grade of 34.1 grams per tonne (g/t) Au. The mine was discovered in 1880 and was mined down to the No.12 level between 1887 and early 1927, then was re-mined between the No. 2 and 3 levels down to the No. 7 level by a subsequent owner, Big River Gold Mines Ltd (BRGM) in the late 1930s. The mine was closed in 1942 due to labour shortages. Other smaller mines in the area, such as Big River South and St George also produced gold.

Gold mineralisation present at the BRP is predominantly hosted in sheared anticline hinges with complex cross-cutting structures that create dilatational structures that have allowed mineralisation to be hosted in the host rock, fault gouge and in quartz reefs.

Exploration data collection has been undertaken within the BRP area by two companies since the closure of the Big River Mine, these being:

- CRAE.
- OGL.

The BRP is located within Exploration Permit (EP) 60448, which was granted to Siren on 20 June 2018 by New Zealand Petroleum and Minerals (NZP&M) (Section 3.4). The duration is five years and the minerals sought are gold and silver only. The EP is a Tier 2 permit (Figure 1 and Figure 2).

### 2.2 Alexander River Project

The Alexander River Mine is in reality a group of mines along a series of ore shoots or lodes. The discovery of quartz float in the Alexander River in 1920 led to the development of the last quartz mining area in the Reefton Goldfield. Until the closure of the mine in 1943, it produced a total of 41 089 oz of gold from 48 492 tonnes (t) of quartz lode, with a mean recovered grade of approximately 26.4 g/t Au (Kent 2010a).

The quartz lodes at the ARP are fissure reefs hosted by a northeast trending shear zone. The shear has been interpreted to be near-vertical or dipping steeply east to west and disrupted by later faulting. The historically mined quartz lodes plunge shallowly to the northeast within the shear.

Exploration data collection has been undertaken within the ARP area by three companies since the closure of the Alexander River Mine, these being:

- CRAE.
- OGL.
- Kent Exploration NZ Ltd (Kent).

The ARP is located within EP 60446, which was granted to Siren on 18 May 2018 by NZP&M. The duration is five years and the minerals sought are gold and silver only. The EP is a Tier 2 permit (Figure 1 and Figure 2).

### 2.3 Reefton South Project

Prospecting Permit (PP) 60465 covers Early Ordovician Greenland Group rocks to the west of the Globe-Progress Mine and buried Greenland Group rocks to the south of the historical Blackwater Mine. The Greenland Group rocks are interpreted to extend south of Blackwater, beneath a veneer of glacial moraine and have only been lightly explored for hard rock gold deposits. The area contains two historical mines (the Golden Point and Morning Star mines), which are situated northwest of the Globe-Progress Mine. The PP 60465 area also possesses a significant history of alluvial mining of river gravels. The RSP is located within PP 60465, which was granted to Siren on 7 August 2018 and expired on 6 August 2020 (Section 3.4.5). On 6 May 2020, Siren applied for a 2 year Extension of Duration (EoD) over approximately 90% of the PP area. This application is currently being processed by NZP&M. The PP was a Tier 1 permit for a duration of two years and the minerals sought were aluminium, antimony, bismuth, copper, gold, ilmenite, iron, ironsand, lead, magnesium, magnetite, manganese, molybdenum, nickel, platinum group metals, rare earth elements, rutile, silver, tantalum, tin, titanium, tungsten, vanadium and zinc (Figure 1 and Figure 2).

PP 60465 (expired, EoD application pending) also contains the GPP, which Siren has submitted Exploration Permit Application (EPA) 60648.01 for. The EPA area abuts Mining Permit (MP) 41164 held by OceanaGold New Zealand Ltd (OGL) over the Globe-Progress Mine and contains the Bonanza and Fraternal lodes. The EPA is to explore for gold and silver only and if granted will be a Tier 2 permit.

This IGR will largely focus on the granted EPs i.e. EP 60448 (BRP), EP 60446 (ARP) and EP 60479 (LP), but will also cover PP 60465 (RSP), EPA 60648.01 (GPP) and Prospecting Permit Application (PPA) 60632.01 (BHP). Discussion regarding PP 60465 (RSP) has been split into two areas possessing differing exploration histories, namely the greater RSP area and the GPP.

### 2.4 Bell Hill Project

PPA 60632.01 is located approximately 40 km south of Reefton on the West Coast of the South Island and abuts the southern boundary of PP 60465 [RSP] (expired, EoD application pending).

There is no known history of hard rock mining in the immediate PPA area. The nearest historical hard rock mines were the South Blackwater Mine, including the Empire adit on the south bank of the Snowy River, and the Homer Mine, plus a battery in Quartz Creek, which are all located approximately 20 km north of the PPA area (Reefton Resources 2020).

There has been historical alluvial mining in creek beds of gold shedding from the Greenland Group. The PPA area surrounds and excludes two alluvial gold EPs, namely EP 55508 (Alistair Davidson) and EP 60120

(Belborough Holdings) and two MPs, namely MP 53412 and MP 41652 held by Birchfield Coal Mines (Birchfield Coal) [Reefton Resource Pty Limited 2020].

The BHP is located within PPA 60632.01, which was applied for by Siren on 3 April 2020 (Section 3.4). The duration applied for is two years and the minerals sought are gold and silver only. The PPA is for a Tier 1 permit (Figure 1 and Figure 2).

## 2.5 Lyell Project

The LP area covers the northern extension of the Reefton Goldfield and is underlain by Ordovician Greenland Group metasediments, intruded by or in fault contact with granites and diorites of the Cretaceous Rahu/Separation Point Suites and Carboniferous to Cretaceous Karamea Suite, which outcrop immediately to the east of the main channel of the Lyell Creek. The Lyell area contains approximately 21 historical mines, with a total historical underground production of 95 000 oz of gold (Auzex 2010).

The most significant of the historical mines was the Alpine United Mine that operated profitably between 1874 and 1897. Mined gold-bearing quartz veins from the Alpine United Mine are believed to have been deposited within the sheared steeply dipping axial plane of the anticline, plunging approximately 40-45° to the north (Auzex 2010).

Exploration data collection has been undertaken within the LP area by three companies since the suspension of historical mining and prospecting in 1937, these being:

- Otter Minerals (Otter).
- OGL.
- Auzex Resources NZ Pty Ltd (Auzex).

The LP is located within EP 60479, which was granted to Siren on 13 December 2018 by NZP&M. The duration is five years and the minerals sought are aluminium, antimony, bismuth, copper, gold, ilmenite, iron, ironsand, lead, magnesium, magnetite, manganese, molybdenum, nickel, platinum group metals, rare earth elements, rutile, silver, tantalum, tin, titanium, tungsten, vanadium and zinc. The EP is a Tier 2 permit (Figure 1 and Figure 2).

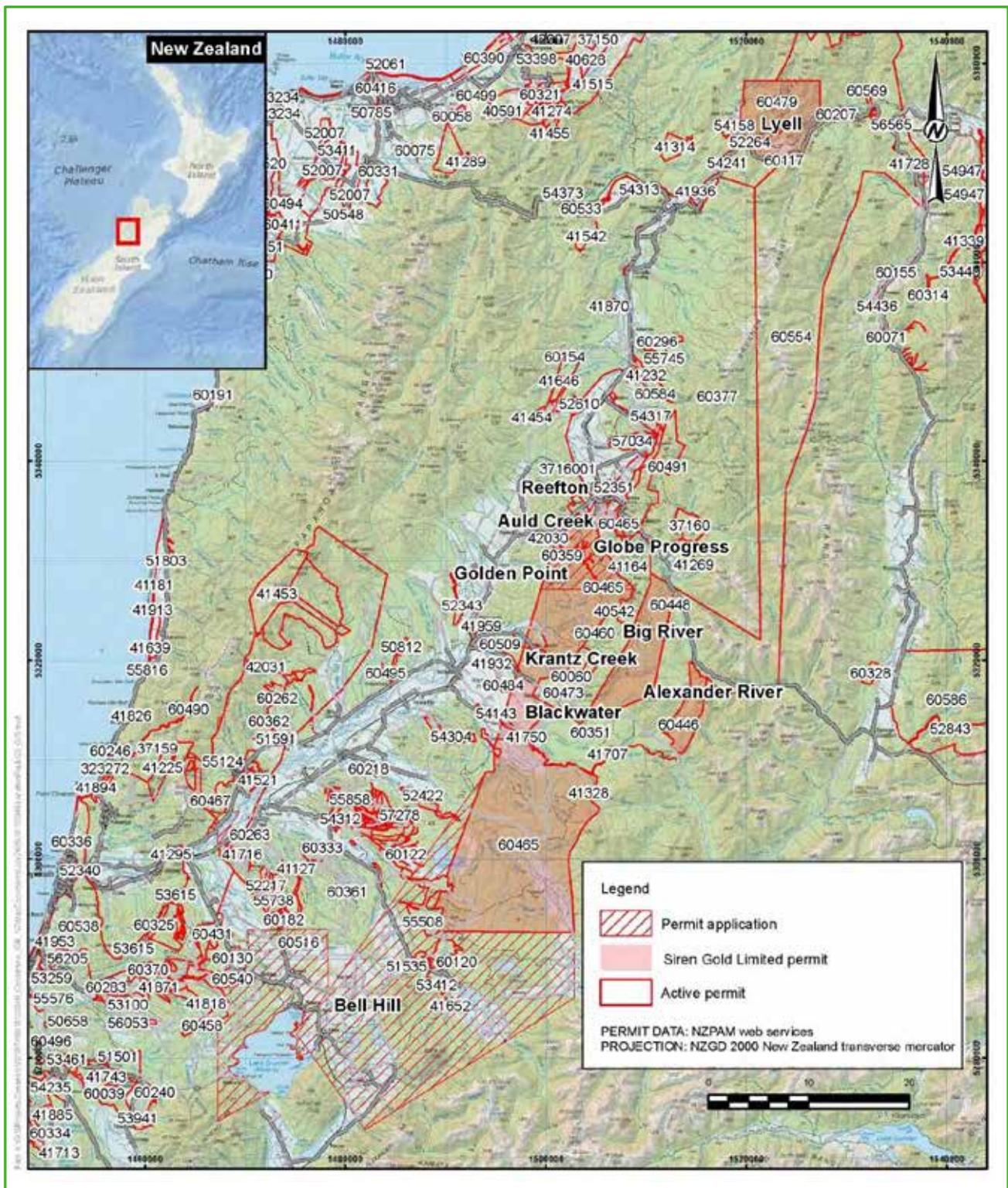


Figure 1: Location of EP 60448 (BRP), EP 60446 (ARP), PP 60465 [RSP] (expired EoD application pending), EPA 60648.01 (GPP), PPA 60632.01 (BHP), and EP 60479 (LP)

## 2.6 Scope of Work

The scope of work requested by Siren required the development of an IGR for the BRP, ARP, RSP and LP. The specific tasks undertaken are as follows:

- Desktop review of work completed to date.
- Identification and reporting of any material deficiencies.
- Development of an IGR inclusive of conclusions and recommendations for future work.

This IGR has been undertaken as a desktop review, based on prior published technical and exploration reports. This IGR documents the opinions formed by the author, based on the information provided.

Where required, any consideration of the commercial significance of the mineral deposits or any other metal in the BRP, ARP, RSP, GPP, BHP or LP areas impacting on the value of the tenements has been given due consideration to the requirements of the VALMIN Code. It should be noted that GANZL has not undertaken a valuation of the BRP, ARP, RSP, GPP, BHP or LP.

This IGR is based on data supplied to GANZL by Siren as well as information available in the public domain. Siren have provided warranty, in writing, that the directors of Siren have provided full access to all data available to them and have provided a guarantee of independence.

Whilst GANZL has referred to tenement holdings in New Zealand in this IGR, such reference is for convenience only and may not be complete or accurate. GANZL is not expert in tenement management and has not therefore undertaken independent verification of Siren's tenement holdings. The reader should not rely on information in this IGR relating to the current ownership and legal standing of the tenements or any encumbrances whatsoever impacting on those tenements. These matters are dealt with in a separate report on tenements contained within the Prospectus. This IGR assumes that all tenements are in good standing and free of all encumbrances other than those set out in this IGR.

This IGR specifically excludes:

- Validation/verification of tenement standing and licences.
- Sovereign risk.
- Environmental conditions.
- Preparation and/or reporting of Mineral Resource and/or Ore Reserve estimates.

## 2.7 Abbreviations and Conventions

Throughout this IGR, references to dollars refer either to AU\$ or New Zealand Dollars, designated "NZ\$". All references to planned exploration and or development expenditures and valuations are quoted in NZ\$ unless otherwise specified.

This document reports standard units in accordance with the international system of units, the *Système Internationale* (SI).

When reading the IGR, it may be necessary to consider historical Mineral Resource estimates not quoted in accordance with the guiding principles and minimum standards set out in either the 2004 or 2012 Edition of the JORC Code. Where appropriate and known, the author has clearly identified the standard to which the Mineral Resources have been estimated and subsequently reported.

### **3.0 BIG RIVER, ALEXANDER RIVER, REEFTON SOUTH, BELL HILL AND LYELL PROJECTS**

#### **3.1 Location and Access**

EP 60448 (BRP), EP 60446 (ARP), PP 60465 [RSP] (expired EoD application pending), EPA 60648.01 (GPP), and PPA 60632.01 (BHP) are located south of Reefton, in the South Island of New Zealand and are situated largely inside the Victoria Forest Park (Figure 2). EP 60479 (LP) is located north of the Reefton Goldfield and is situated largely inside the Upper Buller Gorge Scenic Reserve and Lyell Range-Radiant Range Conservation Area.

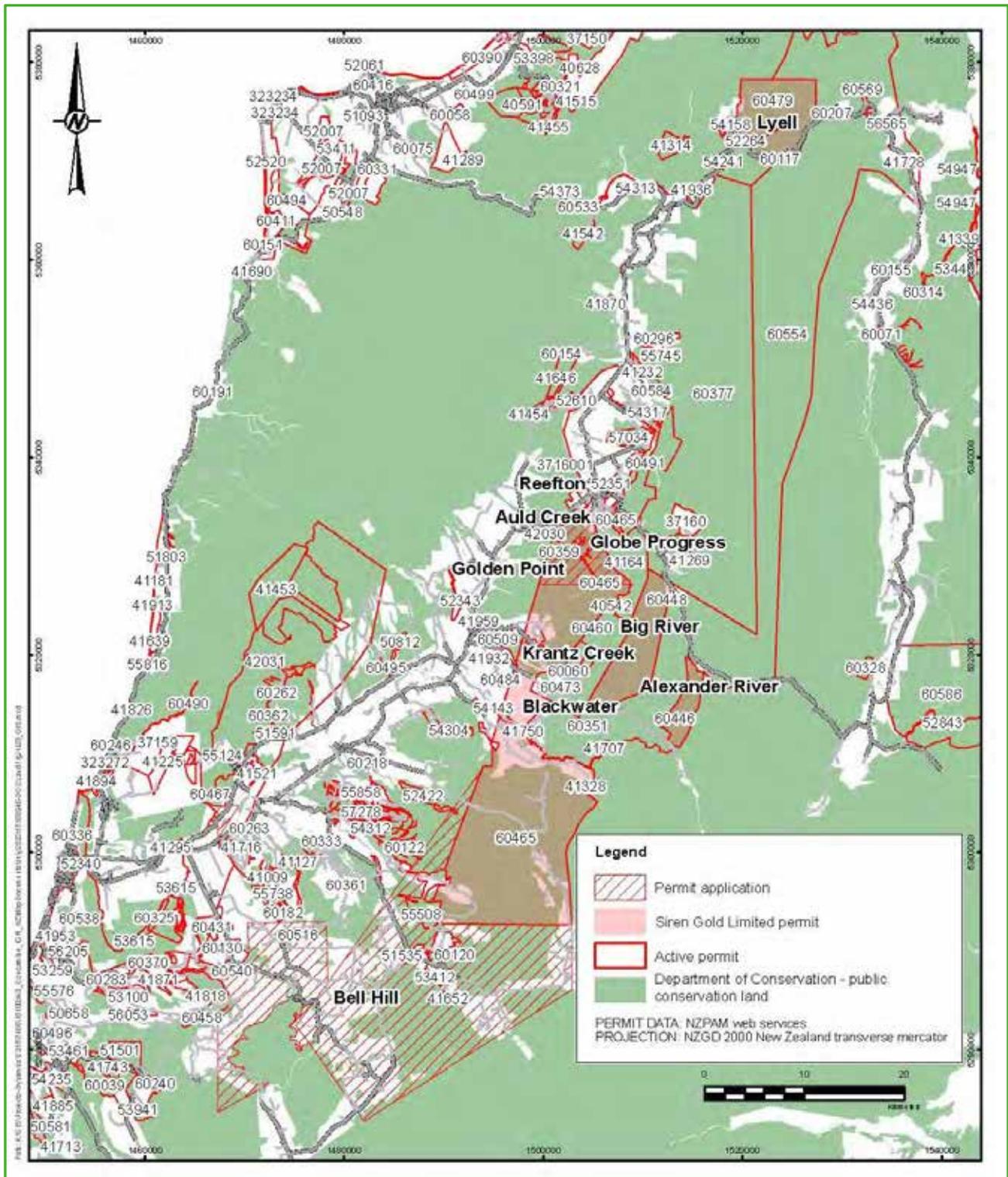


Figure 2: DoC public conservation land and EP 60448 (BRP), EP 60446 (ARP), PP 60465 [RSP] (expired EoD application pending), EPA 60648.01 (GPP), PPA 60632.01 (BHP), and EP 60479 (LP)

### 3.1.1 Big River Project

The BRP is located approximately 15 km southeast of Reefton, in the South Island of New Zealand.

The terrain over the BRP area is typical of the Reefton area, which consists of moderate to steep topography with elevations ranging between 400 metres (m) and 900 m above mean sea level (amsl). The BRP area is

located proximal to the catchment of several creeks and streams that drain into Big River, flowing to the west into the Grey River and to the north or east into the Inangahua River system. The BRP area varies between steep topography to flat low lying swampy areas of the Big River catchment.

Access to the BRP is off the Soldiers-Big River Road immediately south of Reefton, off State Highway 7. A rough 25 km four-wheel drive (4WD) track leads to the Big River historical area, which includes relics of historical mining and a Department of Conservation (DoC) hut. This road is a popular for recreational users and people visiting DoC areas and restored historical mine workings. From the DoC hut there is a walking track to Waiuta, which is used to gain access to areas to the south. In the vicinity of the historical Big River Mine, a walking track heads east from the old winching house, providing access. The BRP area can also be accessed by helicopter.

### **3.1.2 Alexander River Project**

The ARP is located approximately 25 km southeast of Reefton, in the South Island of New Zealand. Access to the ARP is via Snowy River Road, off State Highway 7. Access to the site from Snowy River Road is either by foot along historical mine trails or by helicopter.

The terrain over the ARP area consists of steep and rugged topography with elevations ranging between 300 m and 900 m amsl, with bush covered flats to the south, on the banks of the Upper Grey River. Steep sloping ridges are separated by creeks and the Alexander River Valley.

Walking access is by way of rough tracks or DoC tracks that connect the various known zones of mineralisation. Historically, helicopters have been used extensively for movement of personnel, camps, supplies and heavy equipment into and within both project areas.

### **3.1.3 Reefton South Project**

The northern extent of the RSP (GPP EPA) is located on the southern edge of Reefton.

The terrain over the RSP consists of moderate to steep topography with elevations ranging between 120 m and 750 m amsl. Many rivers and streams are deeply incised and slopes are negotiable but commonly steep in places.

Access to the RSP is via several roads off State Highway 7, by foot on rough tracks or DoC tracks or by helicopter.

### **3.1.4 Bell Hill Project**

The PPA area is located approximately 40 km south of Reefton and abuts the southern boundary of PP 60465 (expired, EoD application pending).

The PPA covers moderately steep to flat country on the western slopes and foothills of the Souther Alps. The highest point in the area is Granite Hill, which is approximately 1160 m amsl.

The area has been modified by mining activity, burning and forestry, however; it still contains a diverse range of vegetation, which varies considerably over the PPA area. Generally, the dominant cover comprises beech or beech/podocarp forest, although some extensive areas of seral hardwoods are present on highly modified sites (Reefton Resources 2020).

Access to the BHP is via two roads (Haupiri and Lake Brunner roads) off State Highway 7, by foot on rough tracks or DoC tracks or by helicopter.

### 3.1.5 Lyell Project

The LP is located approximately 40 km northeast of Reefton, in the South Island of New Zealand.

The LP area is located on the flanks of the southern end of the Lyell Range, generally at moderate altitudes between 400 m and 800 m amsl. The landscape is generally steep and in places is incised by deep creeks or broken by washouts and slips. Older slips are likely to have been caused by the Murchison (1929) and Inangahua (1968) earthquakes (Auzex 2010).

The southern part of the EP can be accessed by foot from State Highway 6. In general, historical fieldwork has been helicopter supported, with temporary fly camps located at various locations.

## 3.2 Climate

The climate is wet and temperate, with average annual rainfall of 1943 millimetres (mm) [observations recorded in Reefton between 1981 and 2010]. Spring tends to be the wettest season and late summer/early autumn the driest. The mean monthly temperature at Reefton ranges from 5°C in June/July to 17°C in January/February. Reefton typically averages three days of snowfall per year (Macara 2016).

The project areas are generally covered with regenerating beech/podocarp forest, with the BRP area also possessing swamp and low-lying vegetation areas. Some of the beech forest has been logged in the past to provide wood for historical mining, with other areas burned and grazed. Where logged or grazed in the past, the area is now regenerating as native scrub (McLelland 2014b).

## 3.3 Site Infrastructure

### 3.3.1 Current Regional Infrastructure

The Reefton area was the service centre for the OGL Globe-Progress Mine, between 2005 and 2015. Power and road and rail access exists in the region that serviced this mine and others. The area also hosts coal and alluvial gold mining operations.

### 3.3.2 Potential Infrastructure

While there are areas available adjacent to both project areas for the construction of infrastructure necessary for the development of the deposits under consideration, there have been no technical studies or other work undertaken to date aimed at understanding any challenges and potential solutions. The Globe-Progress Mine is a good working example of what could potentially be achieved as both project areas are similar in terms of the level of pre-development access and infrastructure.

### 3.3.3 Mining Personnel

There are sufficient people living within commuting distance of both project areas to provide labour as required for future exploration programs and subsequent mining activities. The Reefton and West Coast region are home to several active gold and coal mines and therefore experienced permanent employees for any future mining operations could potentially be sourced from those residing either in Reefton, Greymouth, Westport or just outside of the commuting area in Nelson and Christchurch, which are located within 2.5 hour and 3.5hour drives respectively of Reefton. It is considered likely that the recruitment of suitably skilled and experienced persons could be achieved.

## 3.4 Tenements, Ownership and Encumbrances

### 3.4.1 Minerals Exploration Permits

Section 23 of the Crown Mineral Act (1991) [the Act] provides that the purpose of a Minerals EP is to authorise the permit holder to explore for minerals as specified in the permit. “*Exploration*” is defined in the Act as “*any activity undertaken for the purpose of identifying mineral deposits or occurrences and evaluating the feasibility*”

*of mining particular deposits or occurrences of one or more minerals; and includes any drilling, dredging, or excavations (whether surface or subsurface) that are reasonably necessary to determine the nature and size of a mineral deposit or occurrence” (NZP&M 2013).*

Section 30(2) of the Act provides that the holder of an EP also has the rights of a PP holder within the area of the permit (NZP&M 2013).

The Minister will ordinarily grant an EP if he or she is satisfied that the objective of the exploration is (NZP&M 2013):

- To identify at least an Inferred Mineral Resource or deposit in the proposed permit area, or
- To determine the feasibility of mining particular Mineral Resources.

A work programme for an EP should consist of two distinct stages, ordinarily one three-year stage and one two-year stage. A work programme will not ordinarily have commitment deadlines at any time other than the end of each stage (NZP&M 2013).

In the case of a Tier 1 EP application, the Minister will ordinarily decline a proposed work programme for that application unless, in addition to the requirements presented above, the proposed work programme includes all the following minimum work commitments (it may also include other work commitments) (NZP&M 2013):

- Exploration targets for drilling, which will be finalised within the first stage of the work programme.
- Drilling and other exploration activities that are appropriate to assessing the scale and prospectivity of the identified exploration targets, or that are directed at increasing the level of geological confidence of a Mineral Resource or deposit.

Ordinarily an exploration permit will be no smaller than 150 ha (NZP&M 2013).

The Minerals Programme (4.6(2)) states that *“An exploration or mining permit will ordinarily be granted over an unbroken area, except if the exploration or mining is to be carried out in respect of both Crown-owned and privately owned minerals.”*

Section 35(5) and (6) of the Act provides that (NZP&M 2013):

- An EP expires:
  - After an initial 5 year term from the commencement date specified in the permit, or
  - 10 years after the commencement date specified in the permit, if a 5 year extension is applied for; and
- An EP may not be extended beyond 10 years after the commencement date specified in the permit, unless it is extended further under Section 35A of the Act to appraise a discovery. Appraisal Discoveries are granted for an initial 4 year term, with a right to apply for a second 4 year term if work programme commitments are met.

### 3.4.2 Minerals Prospecting Permits

Section 23 of the Act provides that the purpose of a minerals PP is to authorise the permit holder to prospect for minerals as specified in the permit. The definition of “prospecting” in the Act provides that this term (NZP&M 2013):

- Means any activity undertaken for the purpose of identifying land likely to contain mineral deposits or occurrences and includes the following activities:

- Geological, geochemical, and geophysical surveying.
- Aerial surveying.
- Taking samples by hand or hand held methods.
- Taking small samples offshore by low-impact mechanical methods.

Minerals PPs are intended for preliminary or reconnaissance investigations where the mineral potential of an area is not already well understood. On this basis, applications for prospecting permits for coal and all Tier 2 minerals will generally be declined, as the resource potential is well-established (NZP&M 2013).

The Minister will ordinarily (NZP&M 2013):

- Decline to grant a prospecting permit for coal over delineated coalfields
- Decline to grant a Tier 2 prospecting permit
- In the case of other minerals, grant a PP (and any extension of duration) only if the applicant proposes:
  - To use new or improved sampling, analytical or survey techniques, including those providing higher resolution of data or enhanced detection levels, or
  - To prospect for any mineral that has not previously been prospected for in part or all of the same permit area under any previous prospecting permit.
- Grant a PP (and any extension of duration) for the minimum period necessary to meet the conditions of the work programme.

Ordinarily, a PP will be no larger than (NZP&M 2013):

- 500 km<sup>2</sup> for an onshore area.
- 5000 km<sup>2</sup> for an offshore area.

The Minister may grant a PP of a larger size if he or she considers that competitive interest in the area is likely to be low or if a larger area is necessary to enable efficient and effective prospecting of the area (NZP&M 2013).

Section 35(1) and (2) of the Act provides that a PP expires (NZP&M 2013):

- 2 years after the commencement date specified in the permit, or
- 4 years after the commencement date specified in the permit, if a 2 year permit extension is applied for.

A PP may not be extended beyond four years after the commencement date specified in the permit.

The Minister will ordinarily grant a PP specifying (NZP&M 2013):

- An expiry date that is up to two years after the commencement date, and
- in accordance with section 35B of the Act, an amount of land that must be relinquished if an extension of duration is granted.

### 3.4.3 Big River Project

The BRP is located within EP 60448, which was granted by NZP&M on 20 June 2018 and expires on 19 June 2023. The EP covers the former EP 40604 and includes an additional adjacent area to the north and east. The

EP abuts Mining Permit (MP) 41164, which is held by OGL and covers the Globe-Progress Mine. The duration is five years and the minerals sought are gold and silver only. The EP is a Tier 2 permit.

Table 2 presents details of EP 60448 (BRP).

**Table 2: EP 60448 (BRP) details**

Permit Number	Location	Granted	Expires	Duration	Area (ha)	Minerals
60448	West Coast Region	20/06/2018	19/06/2023	5 Years	4847.114	Gold and silver

**Note:** ha = hectares.

### 3.4.4 Alexander River Project

The ARP is located within EP 60446, which was granted by NZP&M on 10 May 2018 and expires on 9 May 2023. The duration is five years and the minerals sought are gold and silver only. The EP is a Tier 2 permit.

Table 3 presents details of EP 60446 (ARP).

**Table 3: EP 60446 (ARP) details**

Permit Number	Location	Granted	Expires	Duration	Area (ha)	Minerals
60446	West Coast Region	10/05/2018	09/05/2023	5 Years	1675.459	Gold and silver

**Note:** ha = hectares.

### 3.4.5 Reefton South Project

The RSP is located within PP 60465, which was granted by NZP&M on 7 August 2018 and expired on 6 August 2020. The duration was two years and the minerals sought were aluminium, antimony, bismuth, copper, gold, ilmenite, iron, ironsand, lead, magnesium, magnetite, manganese, molybdenum, nickel, platinum group metals, rare earth elements, rutile, silver, tantalum, tin, titanium, tungsten, vanadium and zinc. The PP was a Tier 1 permit.

Table 4 presents details of PP 60465 (RSP).

**Table 4: PP 60465 (RSP) details**

Permit Number	Location	Granted	Expires	Duration	Area (km <sup>2</sup> )	Minerals
60465	West Coast Region	07/08/2018	06/08/2020	2 Years	333.652	Aluminium, antimony, bismuth, copper, gold, ilmenite, iron, iron sand, lead, magnesium, magnetite, manganese, molybdenum, nickel, platinum group metals, rare earth elements, rutile, silver, tantalum, tin, titanium, tungsten, vanadium and zinc

**Note:** km<sup>2</sup> = square kilometres.

The EP/PP boundary is legally described according to the boundaries of registered land titles as documented in the relevant EP/PP Certificate.

On 6 May 2020, Siren applied for a 2 year EoD over approximately 90% of the PP area. This application is currently being processed by NZP&M (Figure 3).

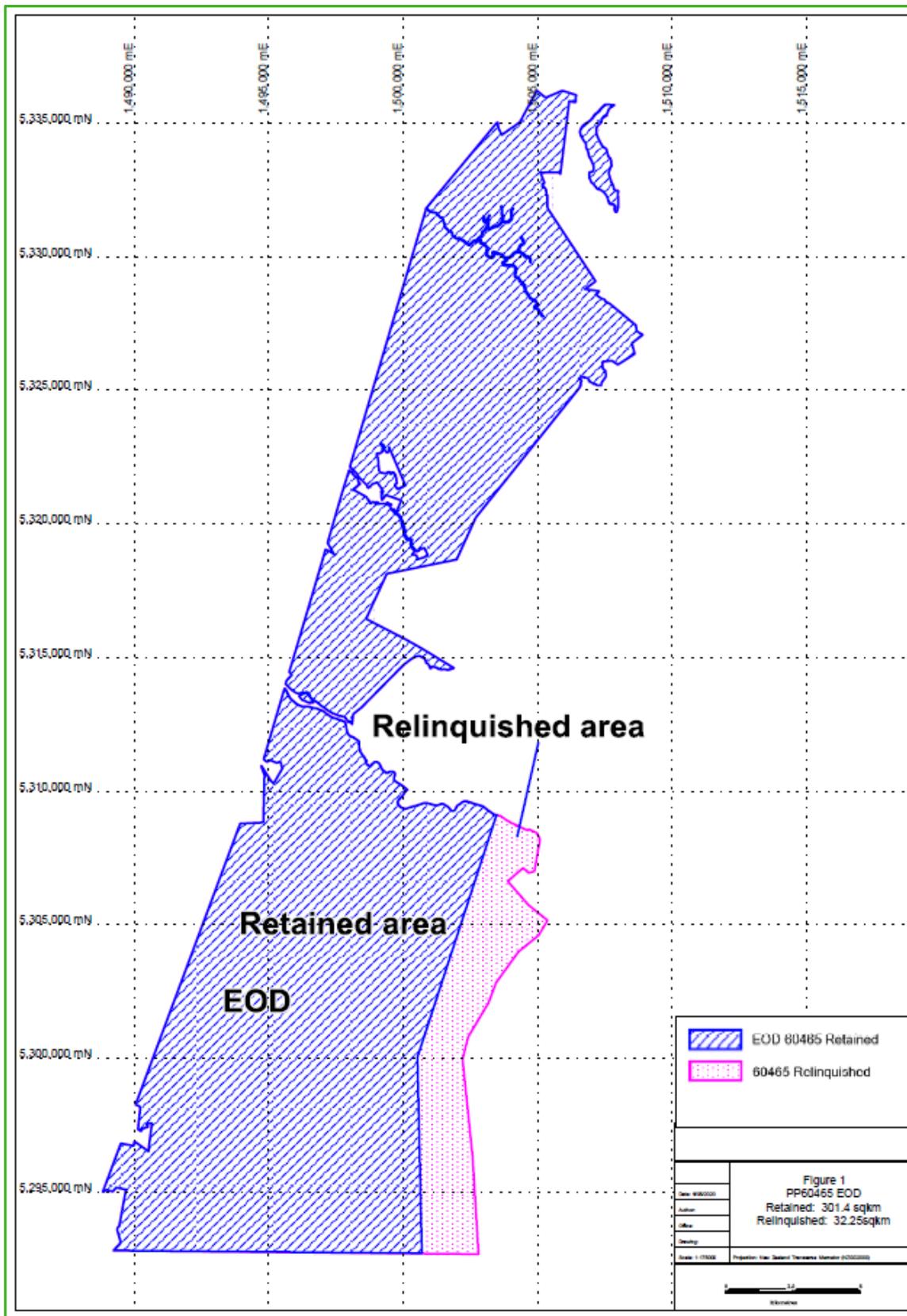


Figure 3: PP 60465 2 year EoD area applied for by Siren (Siren)

### 3.4.6 Golden Point Project

The GPP EPA is fully contained within PP 60465 and was applied for on 11 June 2020. The duration applied for is five years and the minerals sought are gold and silver. The EPA is for a Tier 2 permit.

Table 5 presents details of EPA 60648.01 (GPP).

**Table 5: EPA 60648.01 (GPP) details**

Permit Number	Location	Submitted	Duration	Area (ha)	Minerals
60648.01	West Coast Region	11/06/2020	5 years	4623	Gold and silver.

**Note:** ha = hectares.

### 3.4.7 Bell Hill Project

The BHP is located within PPA 60632.01, which was applied for on 3 April 2020. The duration applied for is two years and the minerals sought are gold and silver. The PPA is for a Tier 1 permit.

Table 6 presents details of PPA 60632.01 (BHP).

**Table 6: PPA 60632.01 (BHP) details**

Permit Number	Location	Submitted	Received	Duration	Area (km <sup>2</sup> )	Minerals
60632.01	West Coast Region	03/04/2020	14/04/2020	2 Years	365.295	Gold and silver.

**Note:** km<sup>2</sup> = square kilometres.

### 3.4.8 Lyell Project

The LP is located within EP 60479, which was granted by NZP&M on 13 December 2018 and expires on 12 December 2023. The duration is five years and the minerals sought are aluminium, antimony, bismuth, copper, gold, ilmenite, iron, iron sand, lead, magnesium, magnetite, manganese, molybdenum, nickel, platinum group metals, rare earth elements, rutile, silver, tantalum, tin, titanium, tungsten, vanadium and zinc. The EP is a Tier 2 permit.

Table 7 presents details of EP 60479 (LP).

**Table 7: EP 60479 (LP) details**

Permit Number	Location	Granted	Expires	Duration	Area (ha)	Minerals
60479	West Coast Region	13/12/2018	12/12/2023	5 Years	5424.592	Aluminium, antimony, bismuth, copper, gold, ilmenite, iron, iron sand, lead, magnesium, magnetite, manganese, molybdenum, nickel, platinum group metals, rare earth elements, rutile, silver, tantalum, tin, titanium, tungsten, vanadium and zinc.

**Note:** ha = hectares.

### 3.4.9 Minimum Future Work Programme Obligations

The conditions for each EP/PP contain a set of minimum future work programme obligations.

#### 3.4.9.1 Big River Project

Table 8 presents the minimum future work programme obligations and the dates by which they must be met for EP 60448 (BRP).

**Table 8: Minimum future work programme obligations for EP 60448 (BRP)**

Number	Part	Type	Due Date	Description
1	a	Data Compilation	20/06/2021	Complete a literature review of all relevant geological and geophysical data and compile into GIS database.
	b	Mapping	20/06/2021	Complete a programme of geological mapping.
	c	Geochemical	20/06/2021	Complete a programme of geochemical sampling including wacker sampling.
	d	Drilling	20/06/2021	Complete a programme of drilling for a minimum of 500 m.
	e	Other Activity	20/06/2021	Prepare a technical report detailing all work completed during this stage of the work programme in conjunction with QAQC information and data sufficient to demonstrate levels of accuracy and precision to be submitted to the chief executive in accordance with the regulations.
2	a	Geochemical	20/06/2023	Complete a further programme of geochemical sampling.
	b	Drilling	20/06/2023	Complete a further programme of drilling with a minimum of 1000 m, including drilling at Big River South prospect.
	c	Appraisal	20/06/2023	If results warrant, complete a mineral resource estimate to an inferred status.
	d	Other Activity	20/06/2023	Prepare a technical report detailing all work completed during this stage of the work programme in conjunction with QAQC information and data sufficient to demonstrate levels of accuracy and precision to be submitted to the chief executive in accordance with the regulations.

### 3.4.9.2 Alexander River Project

Table 9 presents the minimum future work programme obligations and the dates by which they must be met for EP 60446 (ARP).

**Table 9: Minimum future work programme obligations for EP 60446 (ARP)**

Number	Part	Type	Due Date	Description
1	a	Data Compilation	10/05/2021	Complete a literature review of all relevant geological and geophysical data.
	b	Mapping	10/05/2021	Complete a programme of geological mapping including structural mapping.
	c	Geochemical	10/05/2021	Complete a programme of geochemical sampling.
	d	Other Activity	10/05/2021	Identify drill targets beyond the known mineralised extent of the Alexander Mine.
	e	Other Activity	10/05/2021	Prepare a technical report detailing all work completed during this stage of the work programme in conjunction with QAQC information and data sufficient to demonstrate levels of accuracy and precision to be submitted to the chief executive in accordance with the regulations.
2	a	Geochemical	10/05/2023	Complete a programme of trenching.
	b	Drilling	10/05/2023	Complete a programme of drilling.
	c	Appraisal	10/05/2023	If results warrant, complete a Mineral Resource estimate.
	d	Other Activity	10/05/2023	Prepare a technical report detailing all work completed during this stage of the work programme in conjunction with QAQC information and data sufficient to demonstrate levels of accuracy and precision to be submitted to the chief executive in accordance with the regulations.

### 3.4.9.3 Reefion South Project

PP 60465 (RSP) expired on 6 August 2020, however; Siren has applied for a 2 year EoD over approximately 90% of the PP area. This application is currently being processed by NZP&M (Section 3.4.5). The PP for the extension will include minimum future work programme obligations. According to Siren, the minimum future work programme is likely to include additional geochemical soil sampling, geological mapping and geophysical surveys.

### 3.4.9.4 Golden Point Project

EPA 60648.01 (GPP) is currently being processed by NZP&M (Section 3.4.6). The EP will include minimum future work programme obligations. According to Siren, the minimum future work programme is likely to include geological mapping, geochemical sampling, trenching, and drilling.

### 3.4.9.5 Bell Hill Project

PPA 60632.01 (BHP) is currently being processed by NZP&M (Section 3.4.7). The PP will include minimum future work programme obligations. According to Siren, the minimum future work programme is likely to include geochemical soil sampling, mapping, and geophysical surveys.

### 3.4.9.6 Lyell Project

Table 10 presents the minimum future work programme obligations and the dates by which they must be met for EP 60479 (LP).

**Table 10: Minimum future work programme obligations for EP 60479 (LP)**

Number	Part	Type	Due Date	Description
1	a	Literature Review	13/12/2021	Complete a literature review and compile all available geological and geophysical data into a GIS database.
	b	Mapping	13/12/2021	Complete a programme of geological and structural mapping to produce a detailed geological map of the permit area.
	c	Geochemical	13/12/2021	Complete a programme of geochemical sampling for a minimum of 100 samples.
	d	Other Activity	13/12/2021	Identify potential drill sites for hard rock targets.
	e	Data Compilation	13/12/2021	Compile a GIS database of all new data obtained.
	f	Other Activity	13/12/2021	Provide a technical report detailing all work completed during this stage of the work programme in conjunction with QAQC information and data sufficient to demonstrate levels of accuracy and precision to be submitted to the chief executive in accordance with the regulations.
2	a	Geochemical	13/12/2023	Complete a further programme of geochemical sampling for a minimum of 100 samples.
	b	Drilling	13/12/2023	Complete a programme of drilling either surface or underground, with a minimum of 1000 m.
	c	Data Compilation	13/12/2023	Update the GIS database with all new data obtained.

Number	Part	Type	Due Date	Description
	d	Other Activity	13/12/2023	Define an Inferred Resource in accordance with a recognised resource classification code.
	e	Other Activity	13/12/2023	Provide a technical report detailing all work completed during this stage of the work programme in conjunction with QAQC information and data sufficient to demonstrate levels of accuracy and precision to be submitted to the chief executive in accordance with the regulations.

### 3.5 Land Access

The granting of an EP/PP does not automatically award the right of access to the land, subject to the permit. Land access must be arranged with the owner and occupier of the land prior to the commencement of any exploration activities for minerals on or below the surface other than minimum impact activities as defined in the New Zealand Crown Minerals Act 1991 (CMA).

The entirety of both the BRP and ARP are situated over land administered by the DoC. The RSP is largely comprised of DoC land but does contain areas of private land. DoC administers approximately half of the land covered by the BHP PPA, with the remainder being privately owned. Siren has been granted authority to undertake Minimum Impact Activities (MIA) on public conservation land pursuant to section 49 of the CMA in respect of EP 60446 (ARP) and EP 60448 (BRP) land. These MIA consents have been granted for approximately five years, from 7 August 2018 to 19 June 2023 (for EP 60446 [ARP] and 9 May 2023 for EP 60448 [BRP]) and are subject to various conditions. The MIA consent for the RSP (PP 60465) has now expired as it was granted from 15 April 2020 to 6 August 2020 to coincide with expiry of the permit (Table 11).

**Table 11: MIA consent details**

Permit	Granted From	Granted To	Duration
EP 60446 (ARP)	07/08/2018	19/06/2023	4 years 10 months.
EP 60448 (BRP)	07/08/2018	09/05/2023	4 years 9 months.
PP 60465 (RSP)	15/04/2020	06/08/2020	Expired.

Siren has also entered into access arrangement agreements pursuant to section 61 of the CMA with the Minister of Conservation as follows:

- (a) Agreement for an Access Arrangement (AA) dated 24 May 2019 for EP 60446 – Granting the Company access to 0.13 ha of land in Victoria Forest Park, contained within EP 60446 and specifically to 13 drill pads, one campsite and one helicopter landing site for the term of the EP; and
- (b) Agreement for an AA dated 24 May 2019 for EP 60448 – Granting the Company access to 0.15 ha of land in Victoria Forest Park, Deep Creek Amenity Area and Big River Ecological Area contained within EP 60448 and specifically to 12 drill pads and one campsite for the term of the EP (Quigg 2019).

On 13 August 2020, Siren received a written AEO for EP 60446, that is subject to all conditions set out in the AA dated 24 May 2019.

On 24 August 2020, Siren received a written AEO for EP 60448, that is subject to all conditions set out in the AA dated 24 May 2019.

The AEO permits Siren to enter in or on the land to commence exploration and exploration operations for a period of 12 months, unless the EP has a lesser term remaining. Siren must comply with the special conditions in the Second Schedule, which are in addition to the conditions set out in the main body of the AA agreement. No Minimum Impact Activities (MIA) agreements or full AA agreements have been granted in respect of EP 60479 (LP) or PP 60465 (RSP) land. Siren has advised that they will apply for access arrangements in respect of EP 60479 and PP 60465 (subject to the EoD being granted) land at some time during 2020 (Quigg 2019).

### 3.6 Resource Consents

Under New Zealand's Resource Management Act (1991) [RMA], Resource Consents are required for all activities carried out under mining privileges and/or mineral permits (inclusive of prospecting, exploration and mining permits). New Zealand territorial authorities have responsibility for governing the effects of use of land in their district and for planning its future use. Regional councils are principally concerned with effects of activities relating to water (including land use issues that are directly related to water) and effects of discharges (to water, air or land).

The BRP, ARP, LP, BHP and RSP are under the jurisdiction of West Coast Regional Council (WCRC) with approximately 14% (750 ha of 5424 ha) of EP 60479 (LP) falling under the jurisdiction of the Tasman District Council (TDC), which is the unitary local authority for the Tasman District of New Zealand.

EP 60448 (BRP), EP 60446 (ARP) and EP 60479 (LP), PP 60465 [RSP] (expired), EPA 60648.01 (GPP), PPA (60632.01 (BHP) and EP 60479 (LP) include conditions that the permit holder must obtain any necessary consents under, and otherwise comply with, the RMA.

Compliance involves:

- (a) Conforming with relevant National Environmental Standards (NES), district and regional plans.
- (b) Obtaining Resource Consents for land use, water use, discharges into air and water not allowed by the relevant NES, district plan and/or regional plan.
- (c) Compliance with other instruments such as NES and Heritage Orders (Quigg 2019).

Siren has advised that the WCRC and Buller District Council (BDC) have both notified the Company that Resource Consents are not generally required for exploration activities within EP 60446 and EP 60448 land as it is a permitted activity in those regions. However, Siren has advised that a Land Use Consent (LUC) is required to undertake earthworks on slopes >25° associated with exploratory drill pad construction, and that Siren will apply for consents if required once drill hole planning is completed.

The Ministry for the Environment has notified the Proposed NES for Freshwater (September 2019) for consultation. The NES will establish the activity status and criteria for any earthworks activity near a wetland and for infilling the bed of a river.

### 3.7 Royalties for Minerals

The Crown Minerals Regulations 2013 set out rates and provisions for the payment of royalties on mineral production. These regulations also set out royalty statement and royalty return requirements for all minerals permit holders required to pay royalties.

### 3.7.1 Crown Mineral (Royalties for Minerals Other than Petroleum) Regulations 2013

According to the Crown Mineral Regulations (2013), a permit holder must calculate and pay to the Crown, royalties (in accordance with the relevant provisions of regulations 13 to 15) in respect of all minerals obtained under the permit that are (New Zealand CMA 1991):

- a) Sold.
- b) Used in the production process.
- c) Are otherwise exchanged or removed from the permit without sale.
- d) Remain unsold on the surrender, expiry or revocation of the permit.

According to the Crown Mineral Regulations (2013), royalties for Tier 1 permits for gold are generally calculated and payable at the following rates (New Zealand CMA 1991):

- 1) The holder of a Tier 1 exploration or mining permit for gold must pay an *ad valorem* royalty of 2% of the net sales revenue of the gold obtained under the permit if the accounting profits of the permit holder for the gold for the reporting period are less than or equal to NZ\$ 2 million.
- 2) If the reporting period accounting profits are more than NZ\$ 2 million, the holder of a Tier 1 exploration or mining permit must pay the higher of:
  - I. an *ad valorem* royalty of 2% of the net sales revenue of the minerals obtained under the permit; and
  - II. an accounting profits royalty of 10% of the accounting profits, or provisional accounting profits, as the case may be, of the minerals obtained under the permit.
- 3) A royalty payable under this regulation is payable for each reporting period.

According to the Crown Mineral Regulations (2013), royalties for Tier 2 permits are generally calculated and payable at the following rates (New Zealand CMA 1991):

- 1) The holder of a Tier 2 exploration or mining permit for a mineral specified in Schedule 2 must pay a royalty for the minerals obtained under the permit
  - a) for the reporting period ending 31 December 2013, at the rate specified in Schedule 2; and
  - b) for the reporting period ending 31 December 2014, at the rate specified in Schedule 2; and
  - c) for each subsequent reporting period, at the rate specified in Schedule 2 as adjusted in accordance with regulation 15.
- 2) In any other case, the holder of a Tier 2 exploration or mining permit must pay an *ad valorem* royalty of 1% of the net sales revenues of the minerals obtained under the permit.
- 3) A royalty payable under this regulation is payable for each reporting period.

## 3.8 New Zealand Economic and Political Background

Section 3.8 contains a summary of relevant information from The Economist (2017).

New Zealand has a stable political environment and a well-established Mining Act and mining culture, with significant foreign investment in mineral exploration by, among others, Canadian and Australian mining companies.

New Zealand is one of the smallest Organisation for Economic Co-operation and Development (OECD) economies and it is heavily reliant on agricultural production. New Zealand has close trade links with China,

Australia and the United States of America (USA), while other countries in East and Southeast Asia are also significant trading partners.

Mining contributed approximately 1.0% of New Zealand's Gross Domestic Product (GDP) in 2018. New Zealand exports quantities of gold, iron sands and coal. High quality coking coals are mined on the West Coast of the South Island and exported through the Port of Lyttelton on the East Coast. Gold is mined from numerous alluvial operations around the South Island as well as from two larger hard rock deposits near Palmerston in Otago and at Waihi on the North Island.

In 2017, a new coalition government was elected, which comprises the New Zealand Labour Party and New Zealand First with confidence and supply from the Green Party of Aotearoa. In early November 2017, the new government announced their opposition to the development of new mining projects on the conservation estate (land owned and administered by the DoC). The Ministry of Business, Innovation and Employment (MBIE) are in favour of continuing to develop the mineral resources of New Zealand, which are largely situated on and accessed via land owned and administered by the DoC. This situation has resulted in some uncertainty within the mining and associated industries.

Since 2017, a total of 21 mining applications have been approved on DoC land, of which 14 are for land that has never been mined before (NZB 2020).

On 19 December 2019, the government, via the Provincial Growth Fund (PGF) approved a NZ\$15 million loan to help re-establish a gold mining operation at Blackwater Gold Mine, near Reefton (Tasman Mining 2019). The PGF loan was conditional on Tasman Mining (now trading as Federation Mining Pty Ltd [Federation]) securing co-funding. On 7 August 2020, Federation announced it had secured the funds from AustralianSuper, the largest superannuation fund in Australia. The investment by AustralianSuper in Federation Mining was approved by New Zealand's Overseas Investment Office in late July 2020 (Federation Mining 2020).

On 11 February 2020, in an interview with the Otago Daily Times (ODT), West Coast-Tasman Member of Parliament (MP) Damien O'Connor stated that the "no new mines" policy for DoC land has been parked before the general election in September 2020 (ODT 2020).

## 4.0 GEOLOGY

### 4.1 Geological Setting

The Reefton Goldfield is situated in late Cambrian to early Ordovician Greenland Group sedimentary rocks (Figure 4). These rocks consist of interbedded, massive to thinly-bedded, quartz rich sediments comprising gradational psammitic (greywacke) and pelitic (argillite) rock types. These are interpreted to be a proximal turbidite succession derived from the erosion of a mature continental landmass, which lay to the east and southeast (Blakemore 2016).

The Greenland Group sediments are moderately deformed and have undergone a late Silurian to mid Devonian, low grade metamorphic event. Metamorphism is to sub/low greenschist facies, with illite clay facies predominating. Widespread folding was probably synchronous with metamorphism, and this deformation predates granitoid emplacement. Deformation due to east-west compression resulted in the formation of close to tight, upright, north south trending fold axes with a single pervasive and penetrative steeply dipping, axial-planar cleavage. As deformation progressed, fold hinges were commonly sheared out by high angle reverse faults and bedding concordant quartz veins formed between discrete bedding planes. These discordant shear zones now host the bulk of the gold mineralisation in the Reefton Goldfield and are thought to have formed as a late stage, partially strike-slip, event at the culmination of the deformation. The Lyell goldfield can be thought of as a northern extension of the Reefton Goldfield (Blakemore 2016).

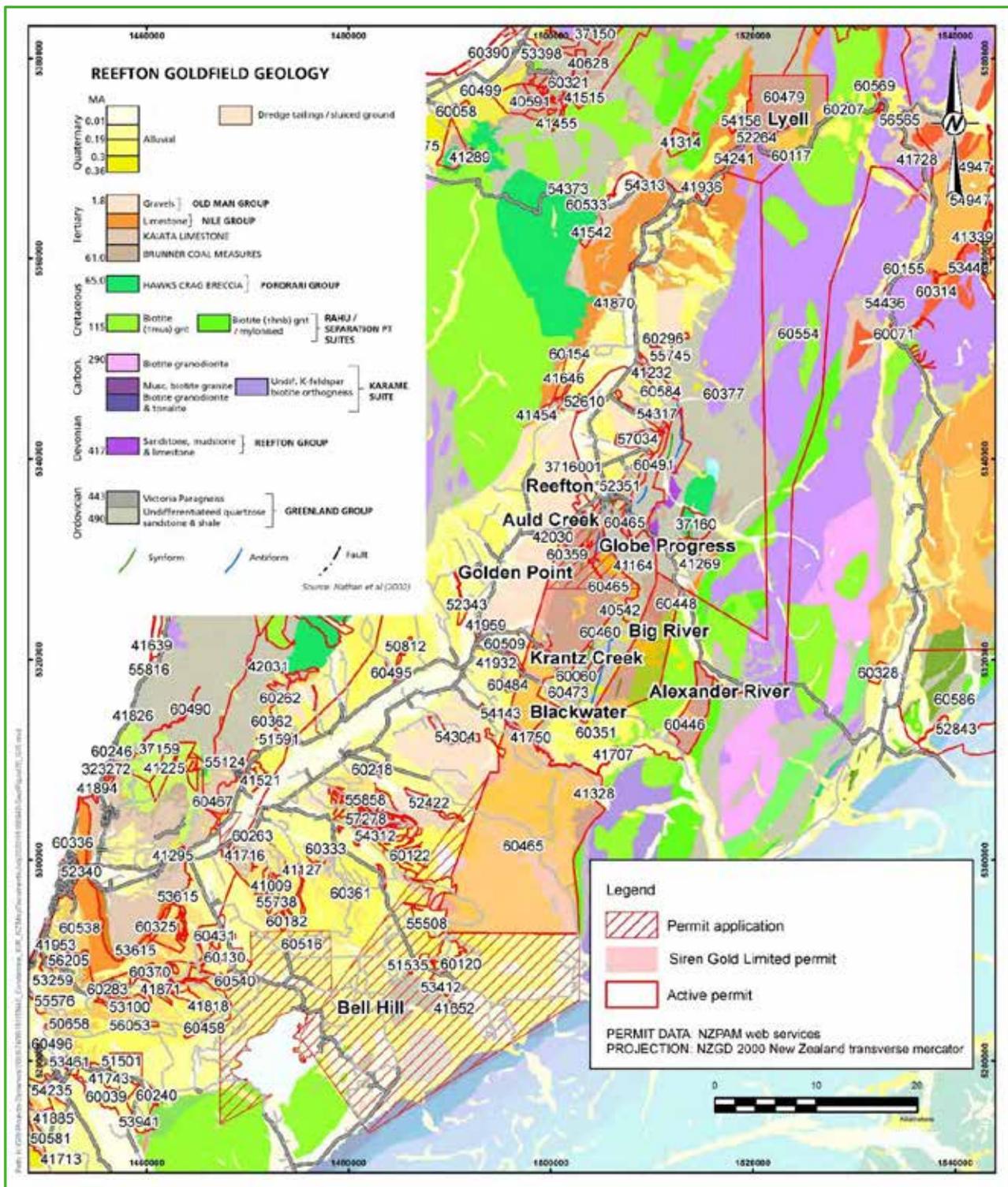


Figure 4: 1:250 000 scale Reefton Goldfield geology (GNS Qmap 2002 – Greymouth sheet)

**Note:** PP 60465 [RSP] currently expired, with EoD application pending.

Igneous activity followed the deformation with the emplacement of the widespread Karamea Suite of I and S-type granitoids at 375 +/- 5 Ma, with a second minor period of granitoid intrusion also occurring at 350 Ma. These two intrusive events are assigned to the Tuhua Phase. A third intrusive granitoid event, comprising relatively small plutons occurred at 120-110 Ma and is assigned to the Rangitata Phase (Blakemore 2016).

Several basic magmatic events are recognised, including the Kirwan's Intrusive dolerite at 151-172 Ma. Mafic rocks in the Murray Creek and Waiuta areas are metamorphosed to greenschist facies, implying that they were emplaced prior to the Silurian/Devonian metamorphism. Numerous other, unmetamorphosed, lamprophyres and basalts have also been mapped, although these have not yet been dated in the Reefton area. However, basic rocks from the Paparoa Range have been dated at 78-90 Ma and lamprophyres from the Victoria Range have been dated at 129-98 Ma (Blakemore 2016).

Devonian, Triassic, Cretaceous and Tertiary sedimentary sequences locally overlie the Greenland Group rocks in the Reefton area. These sedimentary rocks occur in a belt along the western margin of the Reefton Goldfield and as downthrown fault bounded basins on the basement rocks. These basins are Tertiary in age and formed in response to Alpine block faulting. Deposits of Pleistocene fluvioglacial gravels are also extensively developed along the western margin of the Greenland Group basement (Blakemore 2016).

## 4.2 Reefton Goldfield Structure

Gold mineralisation in the Reefton Goldfield is structurally controlled; the formation of the different deposit types is interpreted to be due to focussing of the same hydrothermal fluid into different structural settings during a single gold mineralisation event, however, some of the deposits (e.g. Globe-Progress, Big River) appear to have been re-worked, with gold and sulphide mineral remobilisation having occurred during a later phase of brittle deformation (Blakemore 2016).

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 mineralisation (Blakemore 2016).

Three main structural deposit types appear to occur in the Reefton Goldfield. The Globe-Progress deposit occupies a distinct structural setting, where there is a clear break in the continuity and tightness of early folding. This break defines the east-west striking Globe-Progress shear zone. The fault splays off the Oriental-General Gordon shear zone. The geometry of the fault structure has allowed dilation and quartz vein deposition more or less contemporaneously with shearing, hydrothermal alteration and low-grade mineralisation of the wall rocks. The broad disseminated mineralisation that now surrounds the Globe-Progress ore body is thought to have been formed by later movement on fault planes, in the presence of fluids, which led to some mobilisation and recrystallisation of metals and formed the halo of mineralised country rock. The Big River deposit shows similar paragenesis to Globe-Progress, except for the fact that the disseminated halo is not as extensive (Blakemore 2016).

The second structural deposit type hosts the majority of 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 (Blakemore 2016).

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 (Blakemore 2016).

### 4.3 Reefton Goldfield Alteration and Mineralisation

There are many similarities in the geology of gold mineralisation in the Reefton Goldfield with those of the mesothermal gold deposits of Victoria (Australia) and these areas are interpreted to have been contiguous. In Victoria, where more data has been collected and research conducted, mineralisation is widely accepted as being associated with the later stages of folding and thrust faulting. It is inferred that fluid flow in narrow, highly deformed corridors took place along fold, related fractures generated by high fluid pressures associated with regional deformation and metamorphism, possibly augmented by high heat flow from emplacement of Devonian granitoids (Blakemore 2016).

In the Reefton Goldfield, gold mineralisation is also interpreted to have occurred towards the end of the folding and low-grade metamorphic event. The gold mineralisation is structurally controlled in transgressive, steeply dipping, north to north-northeast trending shear-zones within turbidites. These mineralised shear-zones clearly cut across the hinges of the earlier folds in many of the deposits. Most of the deposits in the Reefton Goldfield, including all the known large deposits, are arranged along a linear belt, which runs north to south through the Greenland Group sequence (Figure 5). This suggests the presence of a deep-seated major structure, which has tapped a large reservoir of mineralising fluid. Fluid stability data from inclusions in quartz veins and the low salinity of the fluids suggests that the mineralisation may have been derived from metamorphic devolatilisation of the sedimentary pile, although the possibility of an igneous source cannot be entirely discounted (Blakemore 2016).

There are two styles of gold mineralisation in the Reefton Goldfield, the first and historically most important, is native gold with minor sulphides in quartz veins, whilst the second comprises refractory gold within disseminated sulphides in the sheared sediments and clay alteration (pug) zones. The similar mineralogy of the lodes and rock wall alteration in the two styles suggest that the gold-pyrite-arsenopyrite-stibnite mineralisation was deposited from the same hydrothermal fluids as the quartz vein hosted mineralisation, which formed through repeated vein opening and deposition. Most of the gold deposits host both mineralisation styles, with varying proportions dependent on local structure, lithology and orientation of the deposit (Blakemore 2016).

The presence of northwest to west striking faults associated with significant gold deposits is becoming ubiquitous within the Reefton Goldfield. Examples are Crushington, Big River, Globe-Progress and Blackwater. The distribution of gold at Blackwater indicates that these northwest striking faults are critical in the deposition of economic quantities of gold. Another key learning from OGL work conducted between 2010 and 2016 is that economic ore shoots tend to be hosted within moderate to steeply (<75°) west dipping beds and strike subparallel to pervasive cleavage (Blakemore 2016).



## 4.4 Deposit Geology

### 4.4.1 Big River Project

The BRP area is predominantly underlain by a basement sequence of monotonous, inter-bedded quartzose sandstone (greywacke) and shale (argillite) of the Ordovician Greenland Group. These rocks are weakly metamorphosed and variably deformed and are the primary host rock for gold mineralisation. Two fold hinges have been mapped with a reasonable degree of confidence throughout the project area. These folds are thought to have played a critical role in the distribution of mineralisation (Blakemore 2016).

In the southeast corner of the project area, granitic igneous rocks correlated with the Cretaceous Separation Point Suite are juxtaposed against the Greenland Group rocks along a major, northeast trending fault. In the north, fault-bounded units of the Late-Cretaceous Hawks Crag Breccia lie to the east.

Sandstone, mudstone and limestone sedimentary units correlated with the Devonian Reefton Group and coal measures of the Tertiary Brunner Coal Measures, locally occur within the project area, overlying the Greenland Group basement. Younger (Quaternary) glacial and fluvio-glacial deposits are also locally preserved. These are often termed 'cover rock'.

The historical Big River Mine was thought to be hosted in a sheared northeast plunging anticline hinge zone, however, re-interpretation by OGL in 2014 indicated that the ore shoots are hosted within the steeper dipping mineralised faults that either intercept or splay off from the anticline hinge zone, answering why the deposit dips more steeply than the plunging sheared northeast plunging anticline hinge zone. With the importance of northwest striking faults in terms of controlling mineralisation, both the Big River South and St George deposits have been re-interpreted to be more favourable to host significant mineralisation, similar to the high-grade Blackwater style deposits (Blakemore 2016).

### 4.4.2 Alexander River Project

The ARP lies in a separate fault bounded block of the Ordovician Greenland Group metasedimentary rocks some 5 km southeast of the main belt. These rocks are weakly metamorphosed, variably deformed and are the primary host rock for gold mineralisation. The block, measuring 2 km by 7 km is virtually surrounded by Karamea Batholith granitoid rocks. It has been suggested the proximity to the granites has resulted in some thermal metamorphic effects (Kent 2010a).

The presence of granitic outcrop to the southeast of the main mine workings area has been confirmed by geological mapping, however, no contact with Greenland Group rocks has been observed.

The quartz lodes at the ARP are fissure reefs hosted by a northeast trending shear zone. The shear has been interpreted by past operators to be near-vertical or dipping steeply east and disrupted by later faulting. The historically mined quartz lodes plunge shallowly to the northeast within this shear. Gold mineralisation shows a close, but not linear relationship with arsenopyrite and to a lesser degree, pyrite.

### 4.4.3 Reefton South Project

Much of the southern section of the RSP area is covered by a complex suite of Quaternary alluvial and glacial deposits, which represent successive glacial advances and retreats (Bull 2018c).

Along much of the western side of the RSP area, the Quaternary sediments overlie Pliocene-age weathered gravel of the Old Man Group, which formed during the rapid uplift of the Southern Alps. The conglomerate consists of clasts of greywacke and schist sourced entirely from Rakaia Terrane rocks (Bull 2018c).

The northern section of the RSP area is dominated by the Cambrian–Ordovician sediments of the Greenland Group, comprised of arenites and argillites. The Greenland Group is exposed as a fault-bounded block, with

the uplifted Karamea granitoids to the east and the Grey–Inangahua Depression to the west. The western faulted contact is obscured by the Tertiary and Quaternary sediments that fill the Depression (Bull 2018c).

The Reefton “*Line of Lode*” structures (NNE-SSW trending anticlines and synclines) are mapped southwards to the contact of the Greenland Group with overlying gravel on the south side of the Snowy River. The structures are inferred to extend further to the south, beneath the Quaternary cover. There is potential for these structures to host gold mineralisation beneath gravel cover in the RSP area (Bull 2018c).

In April 2020, Velseis Processing Pty Ltd (Velseis) was engaged by Siren to re-process a single historical 2D seismic line.

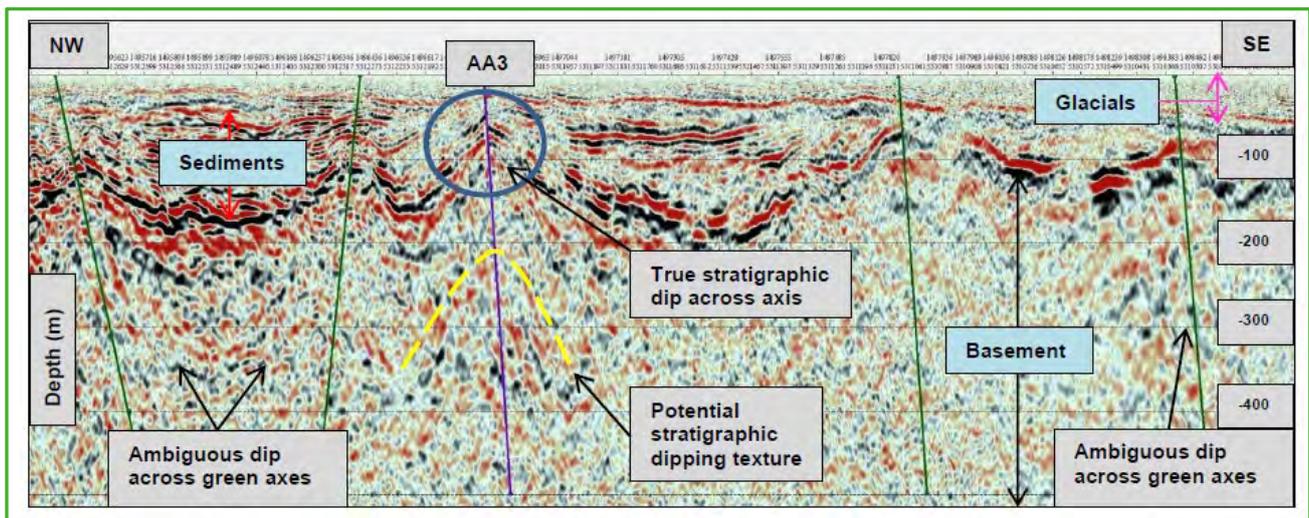
A depth converted seismic section was generated with a view to produce a broad scale seismic interpretation of the line, acquired in the Reefton South area. The scope of the interpretation completed was somewhat less detailed than regular interpretations undertaken by Velseis, given that no drill hole data was available. Instead, a general interpretation based on the known geology of the area was undertaken (Velseis 2020).

The above approach allowed for the interpretation of two distinct horizons across the seismic line, representing two geological boundaries with a near surface and deeper interface mapped. The near surface interface was interpreted to represent the base of glacial sedimentation, with the deeper interface interpreted to represent the base of Cenozoic sediments. Beneath, the deeper interface basement rocks of the Greenland Group form a seismically more opaque zone, which approaches the surface at various locations along the seismic line (Velseis 2020).

The base of sediments horizon picked across the seismic line displays distinct level changes in its reflection event, allowing for the interpretation of structure across the seismic line. Further to the structural evaluation, potential anticlinal fold axes were interpreted, although it is unclear whether the dipping events in the basement which aid in the positioning of these anticlinal axes are representative of stratigraphic dips or simply due to diffraction and other noise events in the data. As such, the majority of the interpreted anticlinal axes remain lower in interpretational confidence (Velseis 2020).

The principal purpose of interpreting this seismic line was to extract the maximum geological information across the line, focusing on identifying not only the two geological interfaces defined by the interpreted horizons, but also potential faults and anticlinal axes. In terms of faulting, structural planes likely associated with faulting were identified across section and were classified in terms of their structural style, confidence level and displacement (Velseis 2020).

Velseis concluded that in terms of identifying anticlinal axes, whilst the basement rocks display hints of stratigraphic texture, it remains unclear whether the basement package displayed on the seismic section contains genuine texture related to deformation or if the observed patterns are caused by other means such as diffractions and/or noise. Nonetheless, an attempt was made to delineate potential anticlinal axes across section and assign confidence levels to each. Lower and higher confidence anticlines were identified. In the case of the higher confidence anticline (AA3), there is additional information within the sedimentary package where variable dips are observed to support its interpretation (Figure 6) [Velseis 2020].



**Figure 6: Potential anticlinal axes across the re-interpreted 2D seismic line (Velseis 2020)**

The seismic re-interpretation has provided additional geological data which may be used for further exploration in the area.

Two interpreted horizons were picked across section and these were output as depth horizons. The upper most horizon was interpreted to represent the base of Glacial deposition, and the seismic event representing this interface is a continuous high frequency trough and was able to be interpolated across section. A second deeper horizon was also interpreted, representing the base of Cenozoic sedimentation. This is a broader lower frequency seismic event but a clear marker horizon separating basement rocks from the sedimentary cover (Velseis 2020).

In addition, structures have been identified, and estimates of their style, position and displacements made at the interpreted base of sedimentation horizon (Velseis 2020).

Finally, a series of anticlinal axes were interpreted across section, albeit with some degree of ambiguity. The ambiguity arises from a lack of confidence in the seismic events present within the basement package. It is unclear whether these represent true stratigraphic dips, or are in fact data artefacts caused by diffractions or noise trains. However, one anticlinal axis was assigned a higher confidence level on the basis that the dipping event seen in the basement rocks were also replicated in the shallower parts of the section, within the sedimentary cover (Velseis 2020).

No drill hole data was available to Velseis to aid in interpretation. Velseis suggested that the seismic interpretation be validated against any newly acquired drill hole data that may be acquired in the future and that the results of this validation programme be reconciled against the current interpretation and if required the interpretation should be modified on the basis of this new geological information.

Additionally, Velseis added that the horizon elevation data resulting from any drilling could be reconciled with the horizon elevations derived from the seismic. By comparing the horizon elevation in this manner, an understanding of the errors in the seismic derived elevation for the target layers may be obtained.

The main gold deposits within the RSP include the Golden Point and Morning Star mines, which are situated approximately 3 km west of Globe-Progress.

The mineralisation at the GPP appears to be a continuation of the line of mineralisation north of the Globe-Progress Mine. The gold mineralisation of the Fraternal lode is interpreted to be a steeply plunging shoot within a north-south striking shear zone of an antiformal structure (Gardner 2013).

#### 4.4.4 Bell Hill Project

As with the RSP, much of the BHP PPA area is covered by a complex suite of Quaternary alluvial and glacial deposits, which represent successive glacial advances and retreats. The successive glacial till deposits cannot be distinguished from one another based on lithology, which consists of sub-rounded to sub-angular clasts of greywacke and minor granitoids in a tight clay matrix. Instead, the tills are mapped and categorised by their elevation, dissection and relative position to outwash gravels. The alluvial gravels typically consist of rounded boulders of greywacke and granitoids in a sandy matrix (Reefton Resources 2020).

These recent deposits mask the underlying Greenland Group basement rocks, which contain the gold bearing quartz reefs further to the north. The thickness of the recent sediments is unknown, but is likely to range from a few metres to hundreds of metres. There are three isolated outcrops of Greenland Group rocks within the PPA (Figure 7). It is unknown at this stage if any evidence of gold mineralisation is present, however; they do broadly lie on the Reefton mineralisation trend that extends from the Globe-Progress Mine through to the Blackwater and Homer mines approximately 25 km to the north (Reefton Resources 2020).

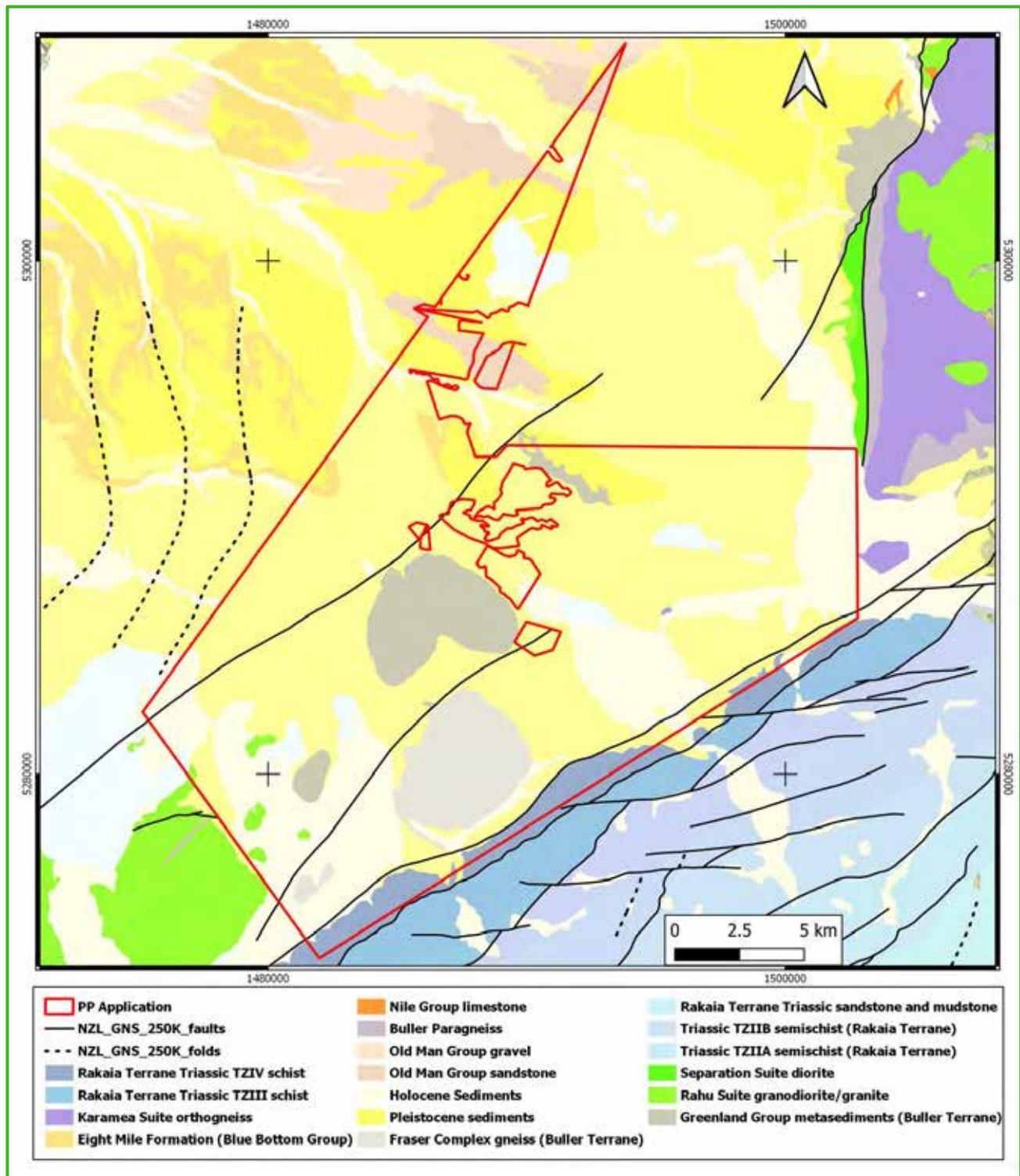


Figure 7: Geology of the BHP PPA area (Reefton Resources 2020)

#### 4.4.5 Lyell Project

The LP is the northern extension of the Reefton Goldfield and is underlain by Ordovician Greenland Group metasediments, intruded by or in fault contact with granites and diorites of the Cretaceous Rahu/Separation Point Suites and Carboniferous to Cretaceous Karamea Suite, which outcrop immediately to the east of the main channel of the Lyell Creek outside the exploration prospect (Auzex 2010).

The main gold deposits within the LP include the Alpine United, Tichborne and Break of Day mines. Within these mines gold tends to occur primarily in narrow high-grade quartz veins controlled by fold-related high-angle shears and faults within the Greenland Group. Recorded structural measurements from the most significant mine, the Alpine United Mine, indicate metasediments form a tight anticlinal structure within the broader syncline (informally Lyell Synclinorium). Mined gold-bearing quartz veins from the Alpine United Mine are believed to have been deposited within the sheared steeply-dipping axial plane of the anticline, plunging approximately 40-45° to the north (McLelland 2014b).

## 5.0 MINING AND EXPLORATION HISTORY

Historically, the Reefton Goldfield has been explored and mined for both hard rock and alluvial gold, as well as coal. Alluvial gold was first discovered in 1866 in Redmans Creek at the height of the West Coast gold rush. Further discoveries were soon made throughout the area. There has been a total of four cycles of alluvial gold mining in the region (Gardner 2013).

The first discovery of auriferous quartz in the Reefton area was made in 1870 in the headwaters of Murray Creek. During 1874 and 1875 several lodes went into production. After 12 years of poor economic prosperity from 1880, the gold mining industry was revived by CGNZ. CGNZ operated in the Reefton area for the next 55 years, when the last of their operations, the Blackwater Mine, closed in 1954 (Gardner 2013).

Total recorded historical quartz lode production to 1954 was approximately 2 million ounces (Moz) of gold (OGL 2013) as presented in Table 12.

**Table 12: Reefton Goldfield major historical gold producers (OGL 2013 and Wopereis 1987)**

Rank	Mine	Production Tonnes (t)	Production Ounces (oz)	Recovered Au Grade (g/t)	Percentage of Total Au (oz)
1	Blackwater	1 603 157	740 403	14.2	35.9
2	Globe-Progress	1 062 727	418 345	12.2	20.3
3	Wealth of Nations	458 038	208 980	14.2	10.1
4	Keep-It-Dark	333 780	182 616	17.0	8.8
5	Big River	124 060	135 965	34.1	6.6
6	Ajax/Golden Fleece	136 642	89 636	20.4	4.3
7	Welcome/Hopeful	44 867	88 607	61.4	4.3
8	Alpine United*	146 640	80 510	15.6	3.9
9	Alexander	48 492	41 089	26.4	2.0
10	Murray Creek Mines	52 943	33 887	19.9	1.6
11	Fiery Cross	24 956	27 843	34.8	1.3
12	Just-In-Time	13 755	17 168	38.8	0.8

Rank	Mine	Production Tonnes (t)	Production Ounces (oz)	Recovered Au Grade (g/t)	Percentage of Total Au (oz)
<b>Total Production</b>		<b>4 050 053</b>	<b>2 065 149</b>		<b>100</b>

**Note:** Due to rounding, numbers presented may not add up precisely to the totals provided (Auzex 2006)

Figure 8 presents historical gold production from the Reefion Goldfield and the location of EP 60448 (BRP), EP 60446 (ARP), PP 60465 [RSP] (expired EoD application pending) and EP 60479 (LP). Figure 8 does not include recent open pit mining at the Globe-Progress Mine, where a total of approximately 620 000 oz of gold was produced. The Globe-Progress Mine was an open cut mine that targeted mineralisation left behind by historical mining. The Globe-Progress Mine closed in 2015.

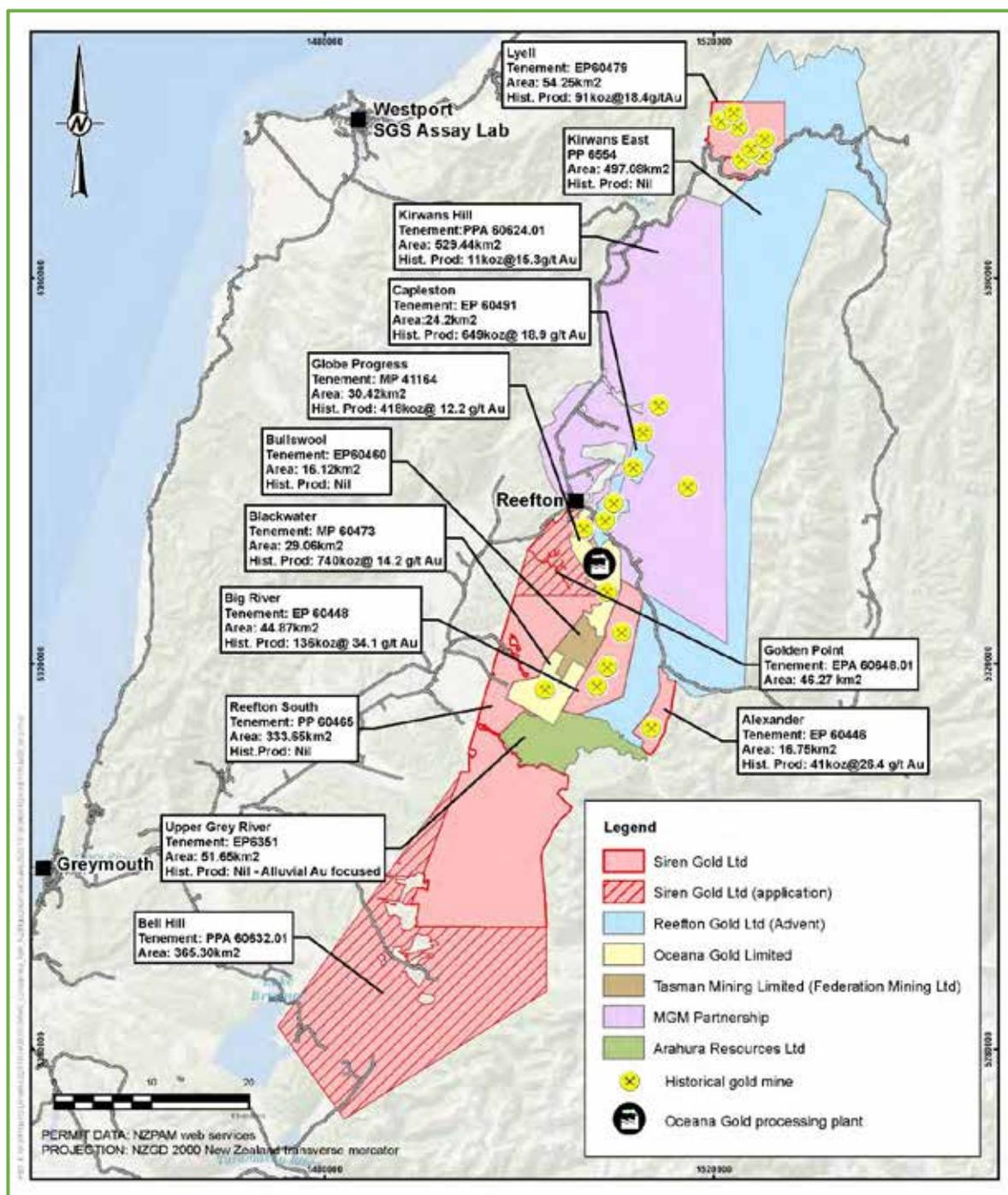


Figure 8: Reefton Goldfield historical gold production and the location of EP 60448 (BRP), EP 60446 (ARP), PP 60465 [RSP] (expired EoD application pending) and EP 60479 (LP)

Historical mining focused on free gold within the quartz lodes due to stamper battery and extractive technology limitations of the era. The gold within the sulphides contained in the host rock and pug zones was often left behind as this material could not be processed in the processing plants of the time. Reefton was the first place in the world to use cyanide systems to begin to extract gold from this material, however, processing techniques were in their infancy. Recent mining and processing undertaken by OGL at the Globe-Progress Mine, where they successfully targeted gold contained in the disseminated sulphide halo around the historical workings demonstrated that this gold is recoverable using modern processing techniques.

## 5.1 Big River Project

### 5.1.1 Mining History

Gold bearing quartz was first discovered in the BRP area in 1880. Due to poor access, it was not until 1887 that a 10-stamp battery was erected. The first adits sunk only targeted small blocks of ore, however, No.2 level located a higher tonnage of less broken high-grade ore. Over the years the mine was progressively deepened (Corner 1990).

In 1907, a more substantial body of ore was discovered on No.9 level at a depth of 430 m, making the Big River Mining Company (BRMC) one of the most profitable miners in the Reefion Goldfield. This ore was worked out by 1927 and operations were suspended after finding no continuation on the No.12 level (Corner 1990).

A new company, Big River Gold Mines Limited (BRGM), began reconditioning the plant and mine in 1932. BRGM then prospected the upper levels for new ore shoots. Mining recommenced between No.2 and No.3 levels, working down to No.7 level. The mine closed in 1942, chiefly due to a shortage of skilled labour when many of the regular miners went off to fight in the Second World War (Corner 1990).

The total mine production was approximately 135 965 oz of gold from approximately 124 060 tonnes (t) of ore, for a mean recovered grade of 34.1 grams per tonne (g/t) Au (Corner 1990).

Several smaller mines were also worked in the area including Big River North, Big River South, Prima Donna and St George (Corner 1990).

### 5.1.2 Exploration History

Stream sediment sampling and field sampling was completed by CRAE over the major stream tributaries during a light impact and reconnaissance program in the late 1980s, with the last work completed in 1989 (Corner 1990).

CRAE also completed mapping and trenching along road outcrops and stream beds, completing and sampling a total of 11 trenches. Several soil sampling traverses were completed with samples taken at 25 m intervals over lines approximately 200 m in length. CRAE concluded that their surface investigations made it difficult to fully assess the exploration potential of the BRP and further intensive exploration was warranted due to the substantial historical production of high grade ore from the Big River Mine (Corner 1990).

#### 5.1.2.1 OGL Exploration Programs

In the 1990s OGL completed some light reconnaissance exploration activities of mapping and rock chip sampling mostly re-testing CRAE previous work (Knight 1995).

In 2005, OGL compiled all historical exploration data and information into Geographic Information System (GIS) format (Reynold and James 2005).

During 2010/2011 OGL commenced an extensive field mapping and geochemical sampling program in the BRP area. OGL started by completing analysis of existing data and mapping, which targeted areas for further investigation. OGL collected a total of 477 wacker (a wacker is a hand portable drill that was used to penetrate cover rock or float to sample the targeted Greenland Group rocks) samples on a number of different patterns at Big River, to the southeast of Big River Mine as well as at Big River South. Field mapping was completed, with a total of 385 structural measurements taken. A total of 115 samples of rock chip, mullock and float were taken and analysed. Two trenches were sampled at Big River (Hood Hills 2011).

OGL followed this program up between 2011 and 2013, with two drilling programs and geochemical wacker sampling. A total of 533 wacker samples were collected in a wider area surrounding the Big River Mine (Gardner 2013).

A total of 19 drill holes for 4 106 m were drilled near the Big River Mine underground workings. Drilling defined a moderately northeast dipping structure of variable mineralisation abundance with a strike length of at least 260 m and an unknown depth. Drilling identified the two common styles of mineralisation, these being free gold hosted in grey-white quartz and gold associated with disseminated fine-grained sulphides. Big River Mine is interpreted to be hosted in the sheared-out hinge of an anticline (Hood Hills 2012).

A total of seven drill holes were completed at Big River South and St George for a total of 926 m, with the same styles of mineralisation encountered at Big River being intersected. Four drill holes targeted Big River South and three drill holes targeted St George. Drilling found that the mineralisation was hosted in the northeast dipping anticline hinges (Gardner 2013). Drill hole locations within the BRP are presented in Figure 9.

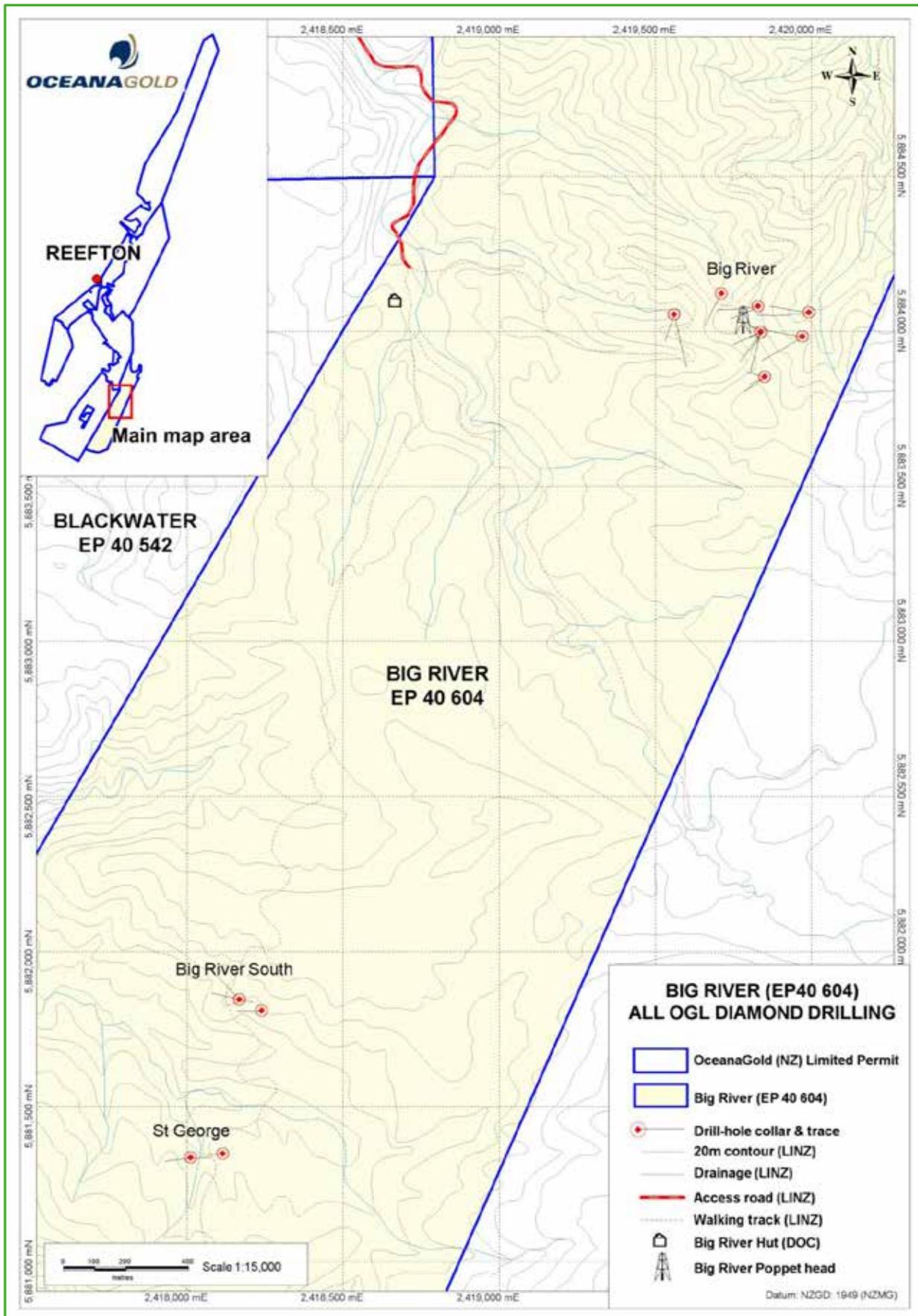


Figure 9: OGL BRP drill hole locations (Gardner 2013)

Table 13 presents significant historical OGL drilling results for the BRP.

**Table 13: BRP significant historical OGL drilling results (Gardner 2013 and Hood Hills 2011)**

Hole ID	Azi (°) <sup>1</sup>	Dip (°)	Total Depth (m)	From (m)	To (m)	Apparent/True Thickness (m)	Au Grade (ppm)
<b>BR0001</b>	<b>199</b>	<b>-57</b>	<b>160.9</b>	<b>36.0</b>	<b>39.0</b>	<b>3.0</b>	<b>2.9</b>
<b>BR0003</b>	<b>301</b>	<b>-61</b>	<b>172.5</b>	<b>99.0</b>	<b>101.0</b>	<b>2.0/1.2</b>	<b>12.1</b>
<i>Including</i>				99.5	100.2	0.7/0.4	26.6
<b>BR0004</b>	<b>215</b>	<b>-55</b>	<b>200.5</b>	<b>127.0</b>	<b>147.0</b>	<b>20.0/15.1</b>	<b>8.1</b>
<i>Including</i>				136.4	143.0	6.6/5.0	21.4
<i>Including</i>				137.4	138.2	0.8/0.6	71.5
<i>Including</i>				141.6	142.3	0.7/0.6	54.5
<b>BR0005</b>	<b>246</b>	<b>-59</b>	<b>187.0</b>	<b>112.1</b>	<b>117.1</b>	<b>5.0/4.0</b>	<b>3.2</b>
<i>Including</i>				112.1	114.9	2.8/2.2	3.2
<i>Including</i>				116.1	117.1	1.0/0.8	6.6
<b>BR0006</b>	<b>194</b>	<b>-55</b>	<b>235.2</b>	<b>132.7</b>	<b>135.1</b>	<b>2.4/1.7</b>	<b>1.5</b>
<i>Including</i>				188.0	190.0	2.0/1.4	0.8
<i>Including</i>				193.0	194.0	1.0/0.7	1.5
<b>BR0007</b>	<b>209</b>	<b>-70</b>	<b>201.0</b>	<b>153.0</b>	<b>154.0</b>	<b>1.0/0.7</b>	<b>0.7</b>
<i>Including</i>				156.1	157.0	0.9/0.6	0.9
<i>Including</i>				169.5	171.0	1.5/1.0	1.0
<i>Including</i>				174.0	175.9	1.9/1.3	1.2
<b>BR0008</b>	<b>245</b>	<b>-56</b>	<b>175.0</b>	<b>119.0</b>	<b>120.3</b>	<b>1.3/1.2</b>	<b>1.2</b>
<b>BR0009</b>	<b>250</b>	<b>-77</b>	<b>180.0</b>	<b>147.0</b>	<b>150.0</b>	<b>3.0/2.0</b>	<b>18.5</b>
<i>Including</i>				148.0	149.0	1.0/0.7	45.2
				158.0	159.5	1.5/1.0	17.4
<i>Including</i>				159.0	159.5	0.5/0.3	50.4

Hole ID	Azi (°) <sup>1</sup>	Dip (°)	Total Depth (m)	From (m)	To (m)	Apparent/True Thickness (m)	Au Grade (ppm)
				160.5	162.0	1.5/1.0	3.3
<i>Including</i>				161.5	162.0	0.5/0.3	8.3
<b>BR0011</b>	<b>265</b>	<b>-50</b>	<b>205.4</b>	<b>128.0</b>	<b>128.7</b>	<b>0.7/0.6</b>	<b>4.8</b>
				139.0	141.5	2.5/2.1	8.5
<i>Including</i>				141.0	141.5	0.5/0.4	22.7
				173.0	175.0	2.0/1.7	0.8
				184.0	186.0	2.0/1.7	1.5
<b>BR0012</b>	<b>201</b>	<b>-80</b>	<b>230.5</b>	<b>160.0</b>	<b>161.0</b>	<b>1.0/0.6</b>	<b>1.2</b>
				<b>170.0</b>	<b>174.0</b>	<b>4.0/2.4</b>	<b>4.5</b>
				<b>202.0</b>	<b>208.0</b>	<b>6.0/3.6</b>	<b>1.2</b>
				<b>205.0</b>	<b>208.0</b>	<b>3.0/1.8</b>	<b>2.0</b>
<b>BR0013</b>	<b>281</b>	<b>-50</b>	<b>255.0</b>	<b>236.0</b>	<b>237.0</b>	<b>1.0/0.9</b>	<b>0.5</b>
				<b>252.0</b>	<b>253.0</b>	<b>1.0/0.9</b>	<b>0.8</b>
<b>BR0014</b>	<b>240</b>	<b>-54</b>	<b>257.2</b>	<b>187.0</b>	<b>188.0</b>	<b>1.0/0.9</b>	<b>0.6</b>
<b>BR0015</b>	<b>289</b>	<b>-60</b>	<b>117.0</b>	<b>77.9</b>	<b>79.9</b>	<b>2.0/1.6</b>	<b>0.6</b>
				<b>82.0</b>	<b>86.0</b>	<b>4.0/3.3</b>	<b>0.7</b>
				<b>98.0</b>	<b>100.0</b>	<b>2.0/1.6</b>	<b>1.2</b>
				<b>103.0</b>	<b>106.0</b>	<b>3.0/2.5</b>	<b>0.5</b>
<b>BR0016</b>	<b>235</b>	<b>-55</b>	<b>136.3</b>	<b>100.9</b>	<b>104.9</b>	<b>4.0/3.4</b>	<b>1.2</b>
				<b>107.0</b>	<b>108.0</b>	<b>1.0/0.9</b>	<b>0.8</b>
<b>BR0017</b>	<b>244</b>	<b>-72</b>	<b>165.0</b>	<b>130.0</b>	<b>136.0</b>	<b>6.0/3.9</b>	<b>1.1</b>
<b>BR0018</b>	<b>268</b>	<b>-63</b>	<b>363.0</b>	<b>295.0</b>	<b>296.0</b>	<b>1.0/0.8</b>	<b>0.6</b>
				<b>298.0</b>	<b>230.0</b>	<b>2.0/1.5</b>	<b>1.5</b>

Hole ID	Azi (°) <sup>1</sup>	Dip (°)	Total Depth (m)	From (m)	To (m)	Apparent/True Thickness (m)	Au Grade (ppm)
BRS002	88	-54	115.7	3.0	4.0	1.0	0.8
				5.0	10.0	5.0	1.0
				83.0	84.0	1.0	0.6
				111.0	112.0	1.0	0.6
BRS003	269	-53	112.1	10.0	12.0	2.0	0.6
				44.0	45.0	1.0	1.8
				56.0	57.0	1.0	2.9
				80.0	81.0	1.0	1.2
				89.6	90.4	0.8	1.0
BRS004	285	-54	158.6	1.0	2.0	1.0	1.9
				5.0	6.0	1.0	0.6
				72.0	76.0	4.0	2.1
				86.0	89.0	3.0	0.5
				135.0	136.0	1.0	1.0
BRS005	100	-50	68.6	14.0	17.0	3.0	0.7
BRS006	317	-52	210.1	7.0	8.0	1.0	1.0
				66.0	67.0	1.0	1.9
				84.0	85.0	1.0	5.5
				103.0	106.0	3.0	0.9
BRS007	270	-50	121.0	12.0	13.0	1.0	1.1
				28.0	34.0	6.0	0.9
				37.0	39.0	2.0	0.8
				71.0	72.0	1.0	2.6

Hole ID	Azi (°) <sup>1</sup>	Dip (°)	Total Depth (m)	From (m)	To (m)	Apparent/True Thickness (m)	Au Grade (ppm)
				80.0	87.0	7.0	0.6
				109.0	110.0	1.0	2.9

**Note:** 1: Azi = Grid azimuth.

In 2014, OGL designed a drilling program aimed at investigating the remaining ore blocks and mineralisation halo at the Big River Mine that were thought to have the potential to help feed the Globe-Progress processing plant. A six-drill hole program was planned, targeting the historical workings. The focus then moved to Blackwater in late 2014, with the Globe-Progress Mine nearing the end of its life and a re-assessment of the Reefion Exploration Strategy being undertaken (Blakemore 2016).

With the focus turned to Blackwater style mineralisation (high grade narrow quartz vein gold deposits) and the knowledge gained from the Globe-Progress open pit, the BRP area and the rest of the Reefion Goldfield was re-interpreted using all data and information collected to date. This exercise increased the understanding of structural controls on mineralisation and therefore changed the geological model of areas such as Big River, Big River North, Big River South and St George (Blakemore 2016). This re-interpretation resulted in the generation of additional conceptual exploration targets, many of which were located beneath cover rock. An investigation into methods to “*look under cover*” where many of these new potential mineralisation targets were situated was undertaken. OGL relinquished the BRP permits without following up these targets.

Figure 10 presents BRP historical production, the location of historical mine workings, OGL drilling results, wacker soil geochemistry results for arsenic (As) and the location of vein outcrop and major structures.

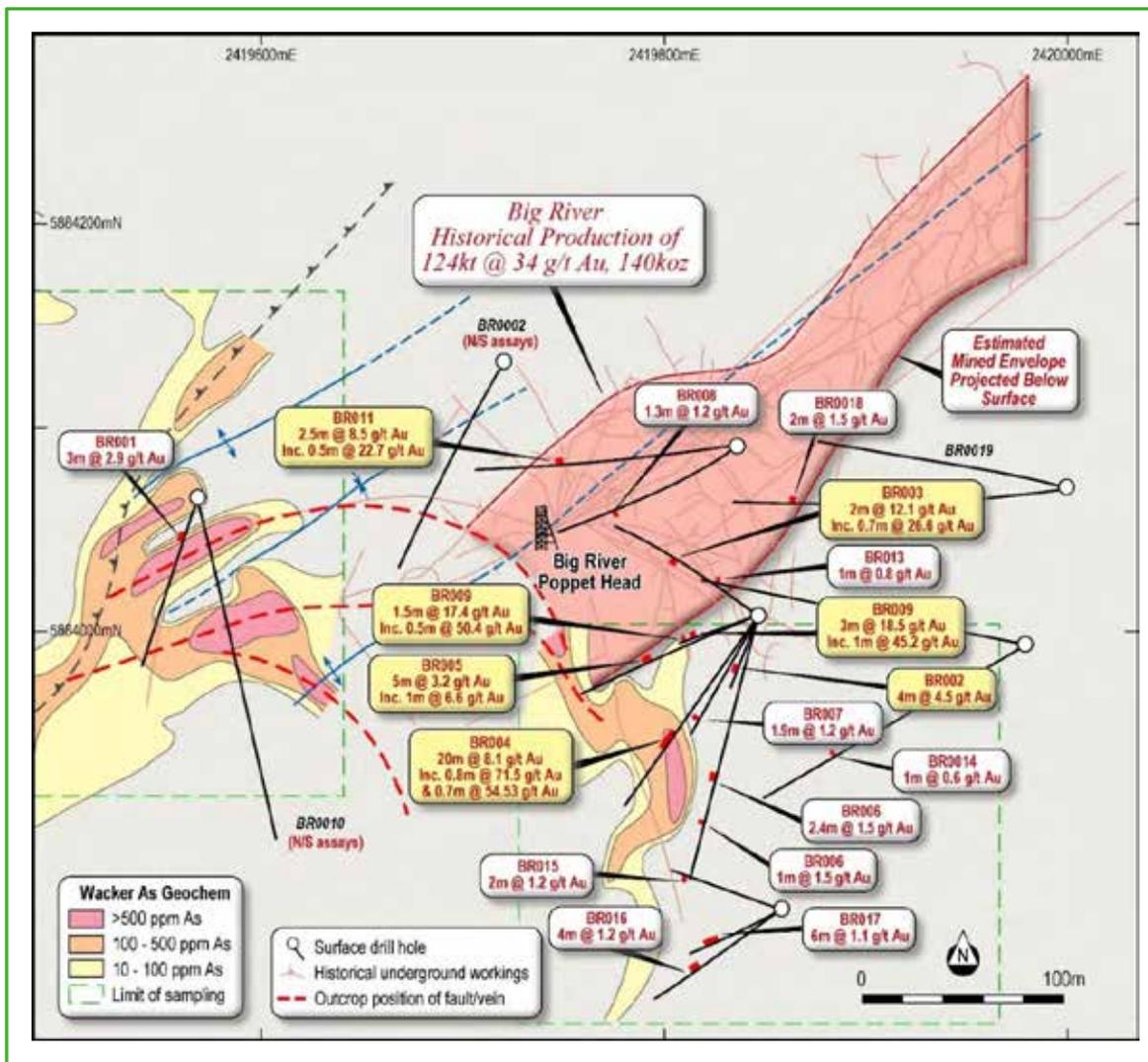


Figure 10: Plan view of the BRP, showing historical production, the location of historical mine workings, OGL drilling results, wacker soil geochemistry results for As, the location of vein outcrop and major structures (Siren)

Figure 11 presents a long-section of the BRP showing the down-dip extents of the historical Big River Mine, the location of historical mine workings, interpreted bedding and structure and OGL drilling results.

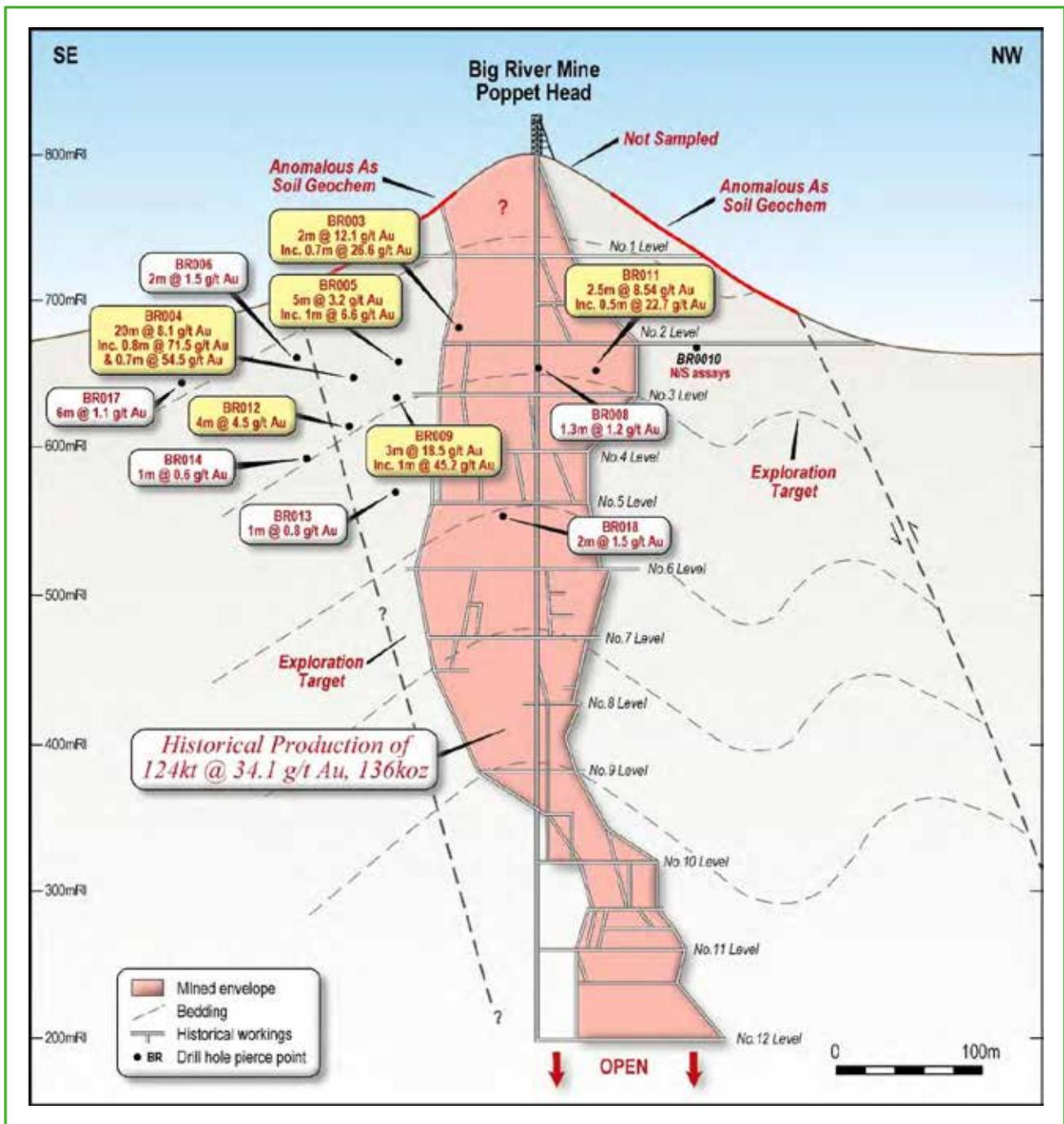


Figure 11: Long-section of the BRP, showing the down-dip extents of the historical Big River Mine, the location of historical mine workings, interpreted bedding and structure and OGL drilling results (Siren)

Figure 12 presents a simplified geological map showing the location of the historical mines and cover rock, consisting largely of recent glacial gravels and moraine.

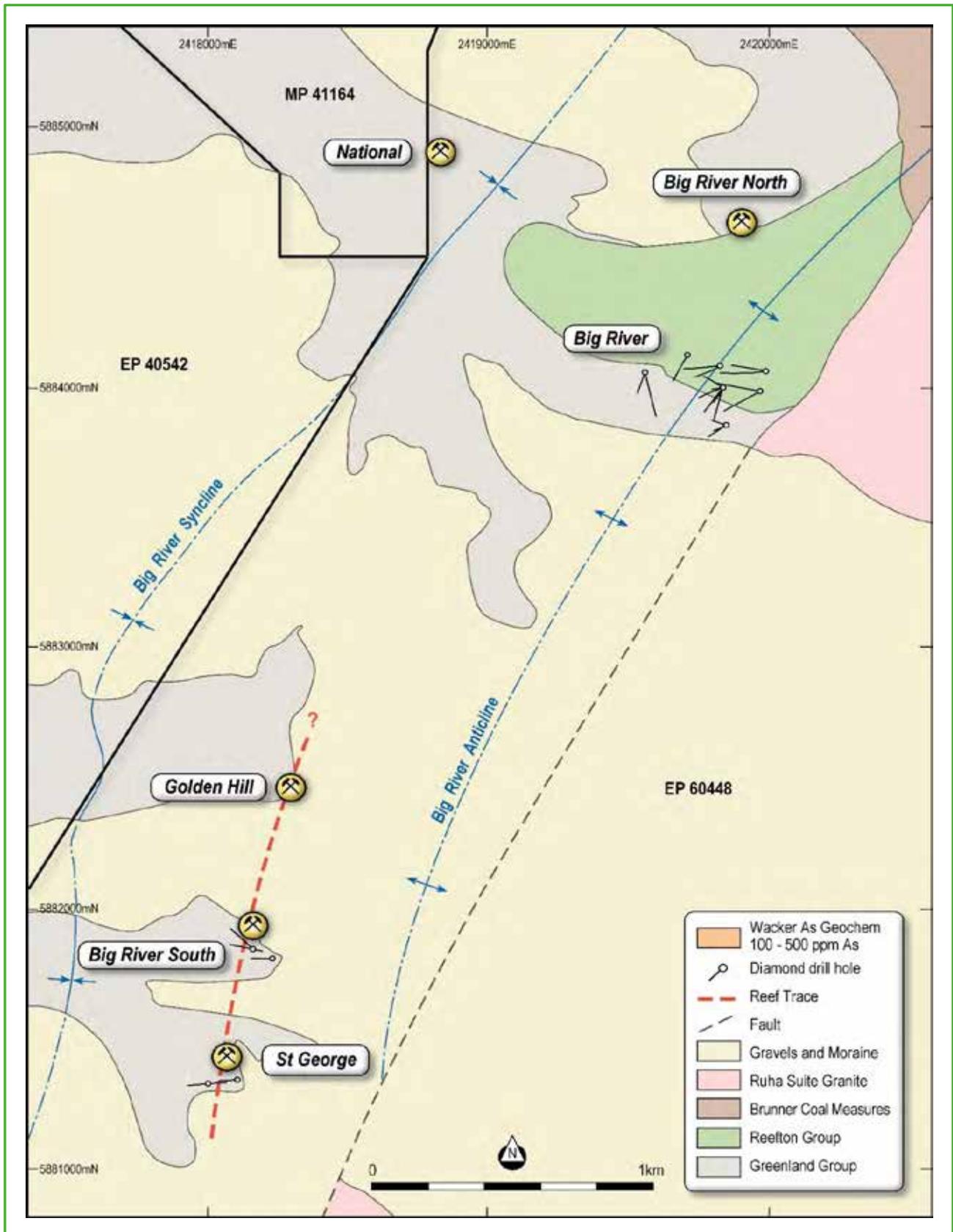


Figure 12: Simplified geological map illustrating the distribution of lithologies and mines within the BRP area and those areas covered by Greenland Group rocks (Shand 2015)

## 5.2 Alexander River Project

### 5.2.1 Mining History

The Alexander River Mine is in reality a group of mines along a series of ore shoots or lodes. The discovery of quartz float in the Alexander River in 1920 led to the development of the last quartz mining area in the Reefion Goldfield. Up until closure of the mine in 1943 it produced a total of 41 089 oz of gold from 48 492 t of quartz lode, with a mean recovered grade of approximately 26.4 g/t Au (Kent 2010a).

The field consists of a series of shallow plunging quartz shoots along a north-northeast trending reef-track or shear zone some 1.2 km in length. In detail, the shoots are complex and composed of steep to shallow attitudes, which have been interpreted to be a series of '*ramps*' and '*flats*' within the structure (Dunphy and Barry 1997). The shoots from southwest to northeast were named the Bull, Firmiston, McVicar, Bruno, McKay, Loftus and Mullocky. Most of the production came from McVicar, which was developed down to the No.6 adit level, some 260 m below surface. The remainder were only prospected or developed on one or two adit levels (Kent 2010a).

Due to the lack of outcrop and the shallow plunge of the ore shoots, rugged topography and the site isolation at the time, it took some time and significant underground development before sufficient ore was located to justify construction of a stamper battery (Reynolds 2003a). Early development of the lodes was hampered by the complex faulting and unrecorded shallow plunge of the shoots. The hardness of the lode material in the Loftus and Mullocky shoots prevented their full development and most of the focus and development went into the McVicar shoot, which was heavily faulted at the No.6 level. Extensive work was necessary on this level before ore could be located and stoped to the level above. The mine finally closed in late 1943 after all the ore on the No.6 level had been extracted and no further portions of the lode had been developed (Kent 2010a).

### 5.2.2 Exploration History

Exploration post mine closure has been undertaken by three main companies, these being CRAE, OGL and Kent. Details of the exploration work by each company are presented in the subsequent sections.

#### 5.2.2.1 CRAE

CRAE concentrated on low impact exploration around the historical workings and their immediate extensions for two years from 1986. Work completed by CRAE included:

- -80# (190 µm) stream sediment and pan concentrate sampling on an approximate density of one sample per square km (km<sup>2</sup>).
- Rock chip sampling.
- 730 hand auger soil samples of 'C' horizon along a 100 m by 12.5 m grid over the historical workings.
- Cleaning out and re-sampling of historical trenches.
- A trial magnetic survey to define the deposition of the dolerite outcrop.
- Geological mapping over the soil sampling grid as well as stream traverses.

CRAE's work delineated an encouraging auriferous halo of sulphide hosted mineralisation around the early mined quartz reefs. Trenches confirmed the surface distribution of the historical lode structure and returned maximum values of 7.8 m at 14.4 g/t Au (Trench A), 9 m at 5.2 g/t Au (Trench G), 5 m at 8.2 g/t Au (Trench K) and 12 m at 5.0 g/t Au (Trench M) (Dunphy and Barry 1997).

Figure 15 and Figure 16 present further details relating to trenching assay results.

Figure 13 presents CRAE gold soil sampling contours, sample lines and the location of historical workings.

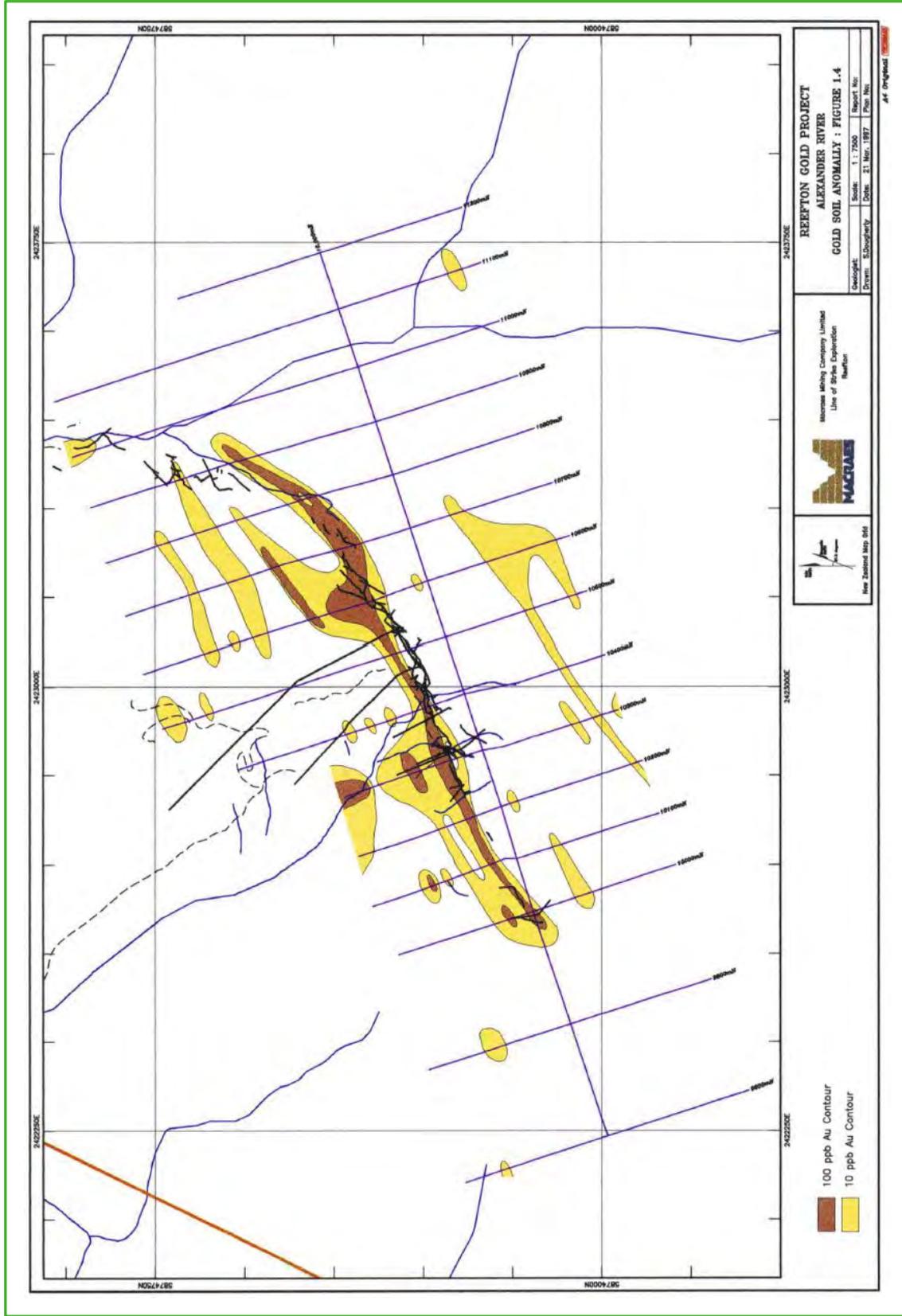


Figure 13: CRAE gold soil sampling contours, sample lines and the location of historical workings (Dunphy and Barry 1997)

### 5.2.2.2 OGL

OGL (then operating as GRD Macraes Mining Ltd [GRDMM]) first compiled all CRAE data and converted it from hardcopy to digital format.

OGL refurbished the No.6 level in the McVicar workings in 1993, where they mapped and sampled the mineralisation at depth. Channel sampling undertaken did not intercept any significant results, however, three channel samples taken up-dip from drill hole A6\_3 returned Au grades of 7.78 g/t, 2.64 g/t and 7.46 g/t. OGL also undertook 328 m of underground diamond drilling, drilling a total of three drill holes. No significant results were intercepted in the first two drill holes (A6\_1 and A6\_2); however, the last drill hole (A6\_3) intercepted a 9 m zone grading 3.85 g/t Au from 130 to 139 m down hole including 5.4m at 5.3 g/t Au (Dunphy and Barry 1997).

In mid-1996, OGL completed four more drill holes totalling 153.4 m from the surface (AX4 to AX6), targeting down-plunge of the Bruno lode and one drill hole (AX7) to test the down-plunge extent of the Bull shoot. No economic mineralisation was intercepted in AX7, whilst the three drill holes into the Bruno lode intercepted gold mineralisation (Dunphy and Barry 1997).

OGL also sampled, mapped and re-trenched along the historical workings in 1996. Summarised findings are as follows (Dunphy and Barry 1997):

- Bull – Two historical trenches were resampled; however, no significant gold mineralisation was encountered. Mapping of the Bull No.1 level discovered complex geology, faulting and no significant gold results.
- Firmiston block – Mapping and channel sampling collected around the portal failed to duplicate CRAE results in Trench C, however, within the adit, the gold content in the footwall and hanging wall metasediments appeared significant. A pug sample returned 4.04 g/t Au.
- McVicar sampling at No.1 level of metasediments, pug and laminated quartz only returning sub-economic gold values.
- Bruno block – Re-sampling of high grade parts of the CRAE trenches with similar results. A 3 m section at No 1. Level of Bruno reef exposed quartz blocks sitting in mineralised fault gouge. This section indicated a grade of 19 g/t Au over the 3 m. This supported other mapping and sampling of the Bruno reef, where the high grade was located within the mineralised host rock and fault gouge.
- Above McKay adit, a thin northeast dipping quartz vein returned crops out over a strike length of 4.5 m. Samples taken from this vein by CRAE returned gold values of 57.5 g/t Au and 80.1 g/t Au. Re-sampling of this outcrop by OGL also returned 8.95 g/t Au, while repeat analyses of the original pulp returned 72 g/t Au and 64 g/t Au. The adjacent mineralised wall rocks were also sampled and assayed and returned 4.4 g/t Au decreasing to 0.01 g/t Au outside of the sulphide rich zone.
- Underground sampling of the quartz lode of Loftus-Mackay exposed intermittently over 125 m averaged 0.6m @ 15.1g/t Au (Figure 3.5 in Dunphy and Barry 1996).
- Loftus block sampling occurred in No.1 level, where a 0.5 m quartz vein returned 10.9 g/t Au. Faulting in the adit appeared to dislocate the quartz reef.
- A total of 42 surface samples were collected to the North of the McKay cross-cut where there is almost continuous outcrop of a discontinuous northwest dipping quartz vein up to 0.6 m thick in a sulphide altered meta-sediments. The average grade of the 10 quartz vein samples was 8.9g/t Au and average grade of the sulphide meta-sediments was 3.6 g/t Au.

OGL concluded that gold mineralisation was present over a 1.2 km distance and that the gold was hosted by complex structurally controlled quartz reefs and mineralised host rock and fault gouge. The latter sometimes contained higher gold grades than the adjacent quartz lodes. Drilling indicated that the shoots may be thin at depth. OGL concluded that the work completed did not upgrade the resource potential of the area, however, they listed several recommendations for further work (Dunphy and Barry 1997).

OGL took out another EP after the 1996 program but surrendered the tenement in 2008 after completing only desktop studies and limited geological mapping since 1996.

Table 14 presents significant historical drilling results from the ARP.

**Table 14: Significant historical ARP drilling results (Dunphy and Barry 1997 and O'Neill 2011)**

Hole ID	Company	Azi (°) <sup>1</sup>	Dip	Total Depth (m)	From (m)	To (m)	Apparent Thickness (m)	Average Au Grade (ppm)	Max Au Grade (ppm)
AX4 <sup>2</sup>	OGL	330	-60	52.5	36.0	37.0	1.0	2.3	-
AX5	OGL	330	-50	34.1	26.0	27.9	1.9	9.8	1.5 m @ 13.4
AX6	OGL	165	-65	37.1	13.2	14.8	1.6	2.5	-
A6/3	OGL	-	-	-	130.0	139.0	9.0	3.9	5.4 m @ 5.3
AX005	Kent	272	-65	274	227.7	232.2	4.5	0.9	0.7 m @ 3.7
AX005	Kent	272	-65	274	251.3	254.3	3.0	0.9	0.8 m @ 2.1

**Note:** <sup>1</sup>: Azi = azimuth. <sup>2</sup>: Dunphy and Barry (1997) reported AX4 at 1.3 m at 3.2 g/t Au, however, calculated weighted average raw results has AX4 reporting 1 m at 2.3 g/t Au.

### 5.2.2.3 Kent

Kent was granted a Prospecting Permit (PP) in 2009. Kent undertook a compilation exercise of historical data, including digitisation and data entry of data from past reports. Digital Elevation Model (DEM), Landsat7 and topographic data was compiled and entered into GIS format. A ground Induced Polarisation (IP) survey was completed (Kent 2010a).

In their first year, Kent undertook geological mapping and sampling, with 163 trench and adit samples collected as well as 20 rock chip samples. A small stream sediment sampling program was completed with a total of five pan concentrates taken as well as three stream sediment samples from the Snowy Creek area (Kent 2010a).

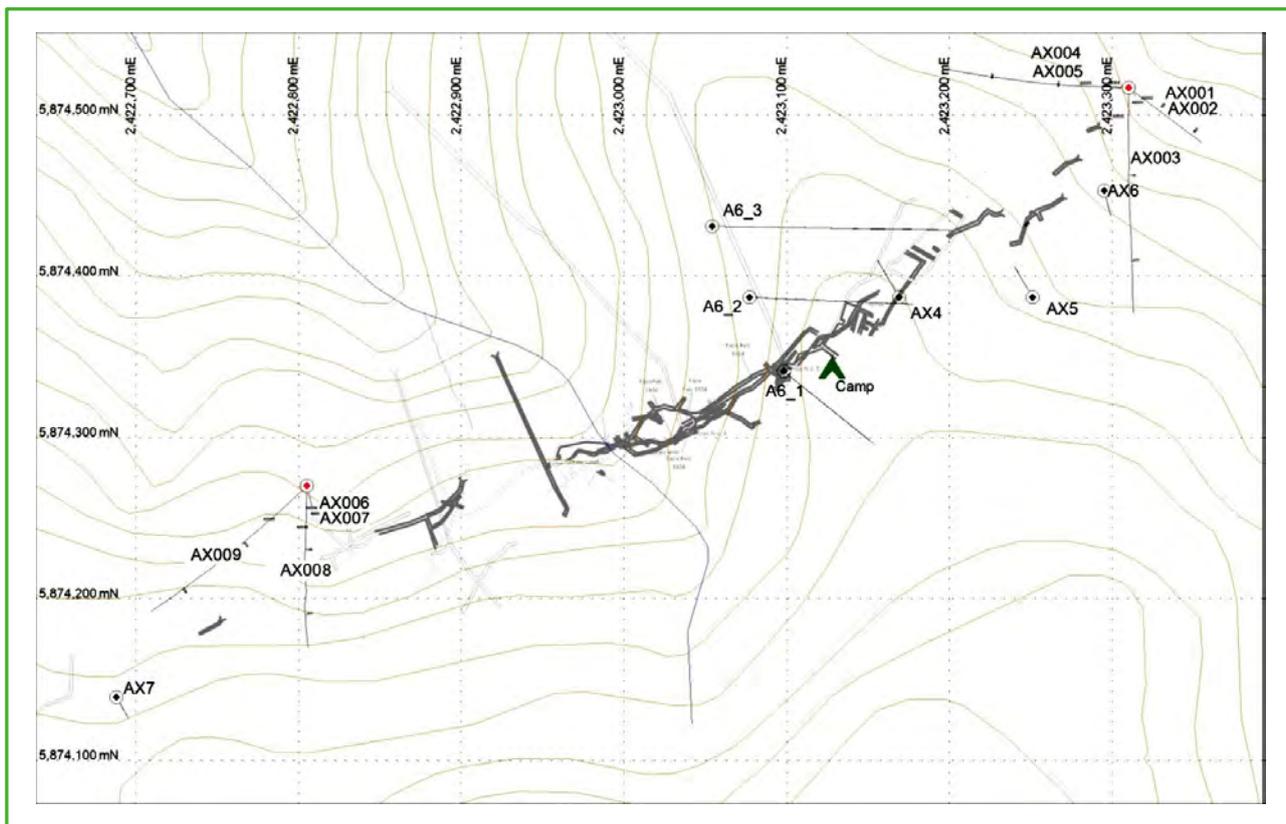
During 2010/2011, Kent continued geological mapping and geochemical sampling, with a total of 40 grab samples collected. They also excavated six additional trenches, with 130 trench and rock face samples collected. Most of the trenches and adits sampled by CRAE and Kent returned similar results, with only very high-grade samples showing a high variation in results (O'Neill 2011).

Siren provided a comparison of the CRAE (1980's) and Kent (2011) trench sampling assay results for a 0.7 g/t Au grade cut-off and a 3.0 g/t Au grade cut-off. The two datasets show a reasonable comparison. A summary is presented in Table D1 and Figure D1 (APPENDIX D), together with the trenches assay datasets for (CRAE Table D2 and Kent, Table D3).

Kent also took a water sample from the water exiting No.6 level and sent it to a commercial laboratory for analysis (Kent 2010a).

Kent drilled nine diamond drill holes during 2010/2011, based on targeting from trench, soil and IP anomalies, with the aim of testing for lode extensions. Due to both errors in the IP survey and drilling difficulties, four (AX001, AX004, AX006 and AX007) of the planned nine drill holes were abandoned. The planned drilling also allowed for a 50 m buffer around historical underground workings due to potential inaccuracies in survey data (O'Neill 2011).

Figure 14 presents a plan of the Kent drill holes (AX001 to AX009) and OGL (GRDMM) drill holes (AX4, AX5, AX6 and the A6 series).



**Figure 14: Drilling plan showing Kent drill holes (AX001 to AX009) and OGL/GRDMM drill holes (AX4, AX5, AX6 and the A6 series) [O'Neill 2011]**

AX001, AX002 and AX003 targeted the assumed steep shear zone beneath the mineralised lode of the Bruno workings. AX004 and AX005 were drilled west targeting both an IP anomaly and gold results returned from trenching. AX005 returned some mineralisation, with 0.7 m at 3.7 g/t Au between 227 and 232 m and 0.8 m at 2.1 g/t Au between 251 and 254 m. Drill holes AX006 and AX007 attempted to target the area beneath the Bull workings, however, both were abandoned due to drilling difficulties. AX008 was turned into the hill slope more but significant core loss occurred between 105 and 140 m down hole. No significant intercepts resulted from AX008. AX009 attempted to drill the down-dip extent of Au anomalies in trenching. No significant assays were reported by Kent (O'Neill 2011).

Kent discontinued exploration at the ARP after completion of their 2011 program.

Paul Angus from Angus Resource Consulting Ltd (ARC) on behalf of Siren summarised the ARP exploration results (Figure 15 and Figure 16). These figures present the CRAE trenching and rock chip sampling, OGL/GRDMM drilling and sampling and the Kent drilling, in long-section and plan view respectively.

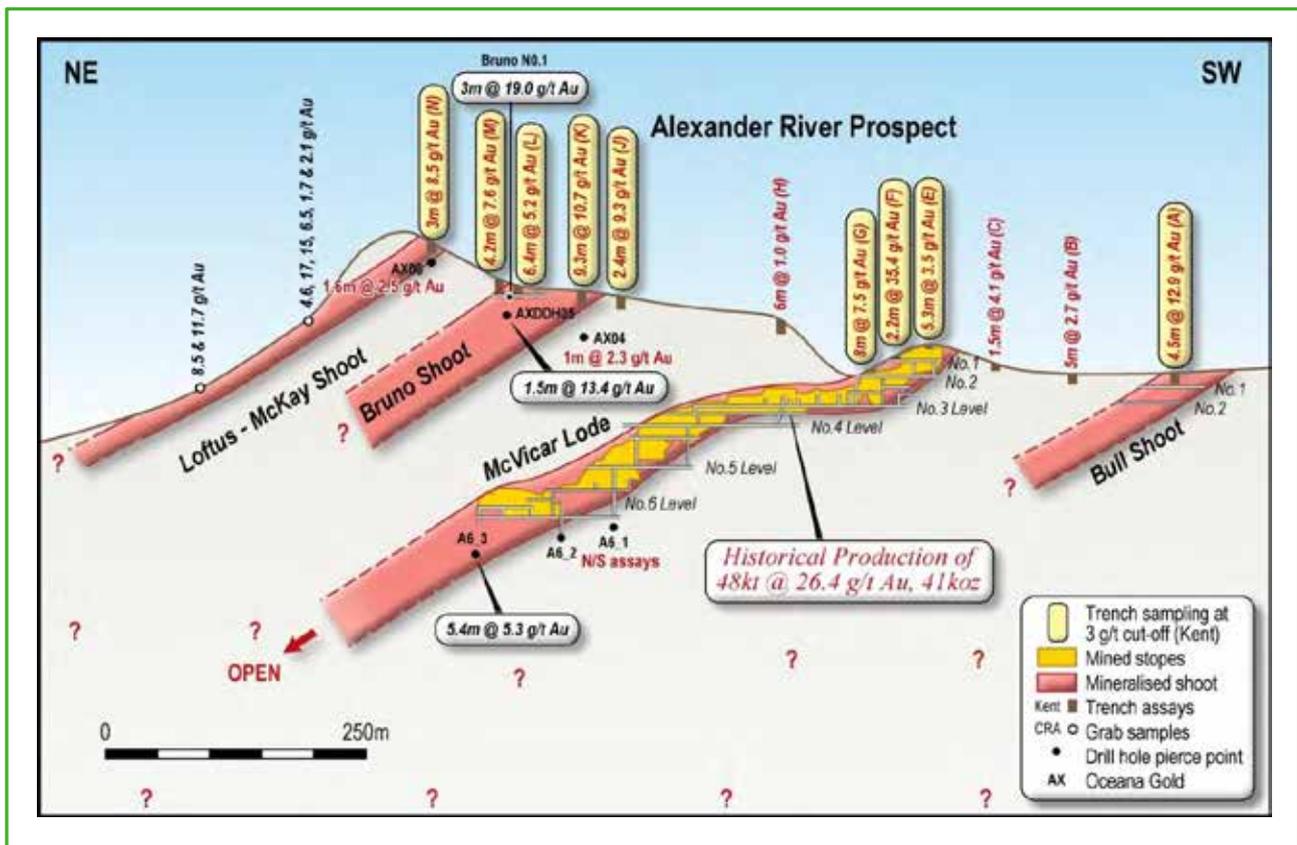


Figure 15: Long-section of the ARP with drilling and trenching results, AX drill holes are surface drilling from OGL/GRDMM and the A6 series drilling is from OGL/GRDMM underground drilling from the No.6 level in the McVicar workings. Trench results are from Kent re-sampling with a 3 g/t Au cut-off applied (Siren)

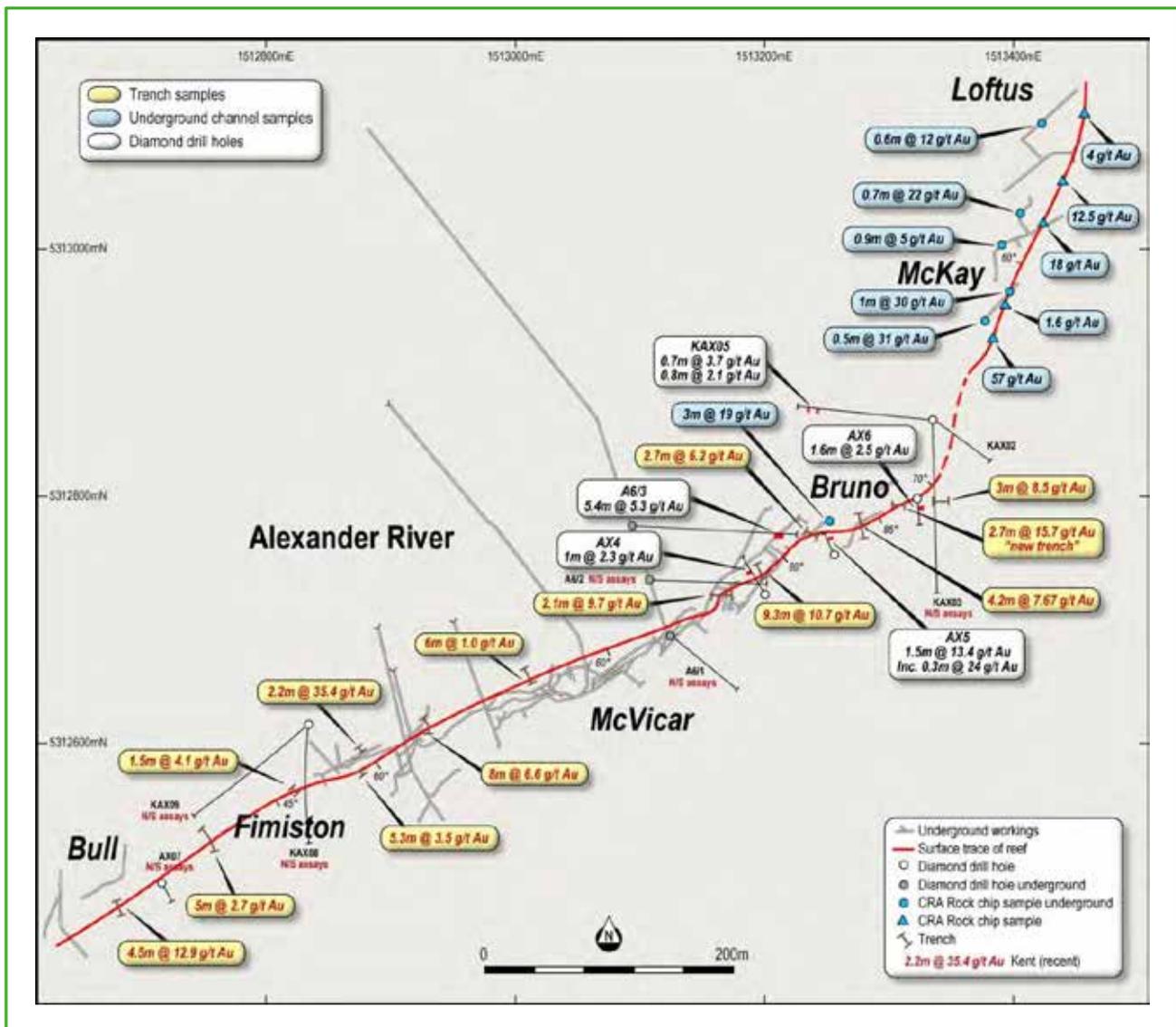


Figure 16: Plan view (line of strike) of the ARP with drilling and trenching results and underground workings (Siren)

### 5.3 Reefton South Project

#### 5.3.1 Mining History

Two hard rock gold mines (the Morning Star and Golden Point mines) lie within the expired PP 60465 (RSP), near the northern boundary and another (the Globe-Progress Mine) lies to the northeast of the PP boundary. The Morning Star Mine was subsequently renamed the New Discovery Mine and although it was worked intermittently over a period of around 50 years, recorded gold production is negligible (<100 oz) (Youngson 2009).

From the late 1800s to the early 1930s, the antimony (Sb) rich Bonanza gold lode was mined. Both drives and shafts were excavated for the purposes of testing for smaller zones of mineralisation on both the Fraternal and Cross-Cut shear zones. Both Siren and GANZL have been unable to locate records relating to the quantity of gold production for the area, however, the gold grade of the lodes was reported to be around 20 g/t Au (Lawrence 1988). Exploration was minimal in the Auld Creek area due to the high Sb content of the ore, which posed metallurgical problems in gold recovery. Also, Auld Creek was the water supply source for the Reefton town and ligation prohibited mining or ore treatment (McCulloch and Timms 2007).

Significant quantities of alluvial gold have been produced from within and immediately east of the PP area e.g. Slab Hut Creek (>10 000 oz), Antonio's Creek (>36 000 oz), Blackwater River (>18 000 oz), Snowy River (>56 000 oz) and Mossy Creek (>10 000 oz) amongst others. In the central parts of the PP, some of this alluvial gold has been recycled from glacial outwash. In the northern parts of the PP area, much of it is first-cycle and derived from as yet undiscovered or unexploited primary sources (Youngson 2009).

### 5.3.2 Exploration History

The exploration history of the RSP can be split into two main areas, these being the exploration work completed across the greater RSP area undertaken by two main companies, CRAE and Golden Fern Resources Ltd (GFR) and the GPP, which has largely been explored (more intensely) by both CRAE and OGL. Details of the exploration work conducted by each company are presented in the subsequent sections.

#### 5.3.2.1 Reefton South

##### 5.3.2.1.1 CRAE

In 1986 CRAE undertook air photo interpretation and limited geochemical reconnaissance in the northern part of the PP area and in 1988 they undertook an airborne geophysical survey (magnetics and radiometrics) in the northern half of the PP area (Youngson 2012).

A total of 47 spot rock samples were taken by CRAE in the northeastern corner of the PP area at approximately 30 m intervals. A further two samples were taken to the north (Price 2007).

A line of 196 soil samples was taken by CRAE near Quigley's Track at 25 m intervals, of which approximately 130 to 140 samples were taken from within the PP area (Price 2007).

The CRAE tenements were later sold to OGL with no significant exploration work undertaken until GFR began examining the area in the 2000s.

##### 5.3.2.1.2 GFR

GFR undertook geological mapping and sampling, with 75 soil samples and 62 rock chip samples collected between 2010 and 2013.

The early CRAE airborne magnetic survey data was also ground-truthed with a Scintrex Magnetometer, with reasonable correlation resulting.

After relinquishing the southern and western areas of their permit, GFR concentrated their resources on mapping and sampling the area around the Morning Star Mine. 65 soil samples trench, 21 rock chip samples and 12 bulk rock sample were collected (Youngson 2012).

##### 5.3.2.1.3 FMG Pacific Ltd

In 2009, FMG Pacific Ltd (FMG) undertook geological mapping in the southeastern of the PP area as well as in three areas to the west. Rock chip samples were collected for assay (+/- petrographic analysis) where outcrops displayed either pervasive alteration or evidence of sulphide mineralisation, which were in locations outside of the PP area (L'Herpinier 2010).

#### 5.3.2.2 Golden Point Prospect

Historical exploration has focused on the Auld Creek area and is covered below.

##### 5.3.2.3 Auld Creek

Auld Creek was first prospected for gold in the 1880s, with various shafts, adits and cross-cuts completed. In 1970-1971, Lime & Marble Ltd (L&M) evaluated the area for antimony (Riley 1972). CRAE and then OGL have completed the most recent and thorough exploration of Auld Creek (Lawrence 1988).

### 5.3.2.3.1 CRAE

In 1987 CRAE completed a program of soil sampling, stream sediment sampling, rock outcrop sampling and mapping and float sampling (Wotherspoon 1987). Follow-up grid soil sampling and trenching around the old workings was completed in 1988 (Lawrence 1988).

### 5.3.2.3.2 OGL

In 1996, OGL completed stream sediment sampling, mapping, rock chip sampling, trenching and wacker soil sampling, with samples collected on a grid of 25 m intervals along lines 100 m apart (Silversmith 1997).

A drilling program consisting of three diamond drill holes totalling 324.6 m targeting exploration results in the Bonanza and Fraternal shear zones was completed in 1996 (Silversmith 1997).

Further trenching and mapping has been completed by OGL during small programs of wacker sampling, mapping and rock chip sampling in the PP area in 2005 and 2011 (Gardner 2013 and McLelland 2013).

OGL undertook two helicopter supported diamond drill programs in 2007 and 2011, with a total of 11 drill holes completed (Gardner 2013). Three diamond drill holes completed in 2007, which totalled 228.6 m were drilled to test for mineralised extensions of the Globe-Progress deposit that were highlighted by soil sampling anomalies (McCulloch and Timms 2007). The 2011 drilling included eight drill holes with a total of 892.8 m of diamond drilling that targeted the Fraternal lode as well as exploration targets generated by mapping, rock chip and wacker sampling (Hood Hills 2011).

Three diamond drill holes for a total of 513.1 m were completed in 2013 at the Fraternal shear zone, following on from the 2011 drill program (Gardner 2013).

Figure 17 and Table 15 present significant OGL drilling results from the GPP.

**Table 15: Fraternal lode significant drilling results (Hood Hills and Doyle 2011 and Gardner 2013)**

Hole ID	Company	Azi (°) <sup>1</sup>	Dip	Total Depth (m)	From (m)	To (m)	Apparent Thickness (m)/True Thickness (m)	Average Au Grade (ppm)	Max Au Grade (ppm) and True Thickness
96DDAC1	OGL	70	-60	70.1	61	63	2.0	1.2	
96DDAC2	OGL	70	-75	84.0	109.0	111.0	2.0	2.9	
96DDAC3	OGL	70	-65	170.5	34.0	36.0	2.0	2.4	
RDD0081	OGL	35	-60	75.9	45.0	51.0	6.0/1.50	1.73	
					55.0	67.0	12.0/2.90	2.11	
RDD0081A	OGL	35	-60	151.5	57.0	68.0	11.0/2.6	1.63	Including 1.4 m @ 2.19
RDD0084	OGL	110	-60	148.1	77.0	78.0	1.0	2.54	
RDD0085	OGL	110	-60	79.0	30.0	66.0	36.0/13.2	1.56	Including 3 m @ 2.73, 3.7 m @

Hole ID	Company	Azi (°) <sup>1</sup>	Dip	Total Depth (m)	From (m)	To (m)	Apparent Thickness (m)/True Thickness (m)	Average Au Grade (ppm)	Max Au Grade (ppm) and True Thickness
									2.19 and 2.6 m @ 1.34
RDD0086	OGL	150	-60	141.5	90.0	96.0	6.0/0.80	4.14	
RDD0087	OGL	75	-75	132.5	63.0	98.0	35.0/6.0	4.11	Including 3.1 m @ 5.74
RDD0088	OGL	270	-60	159.5	125.0	127.0	2.0/1.30	1.27	
					34.0	35.0	1.0/0.70	1.43	
RDD0089	OGL	90	-52	61.8	45.0	47.0	2.0/1.14	1.02	
RDD0091	OGL	230	-52	166.5	137.0	138.0	1.0	1.28	

**Note:** 1: Azi = azimuth.

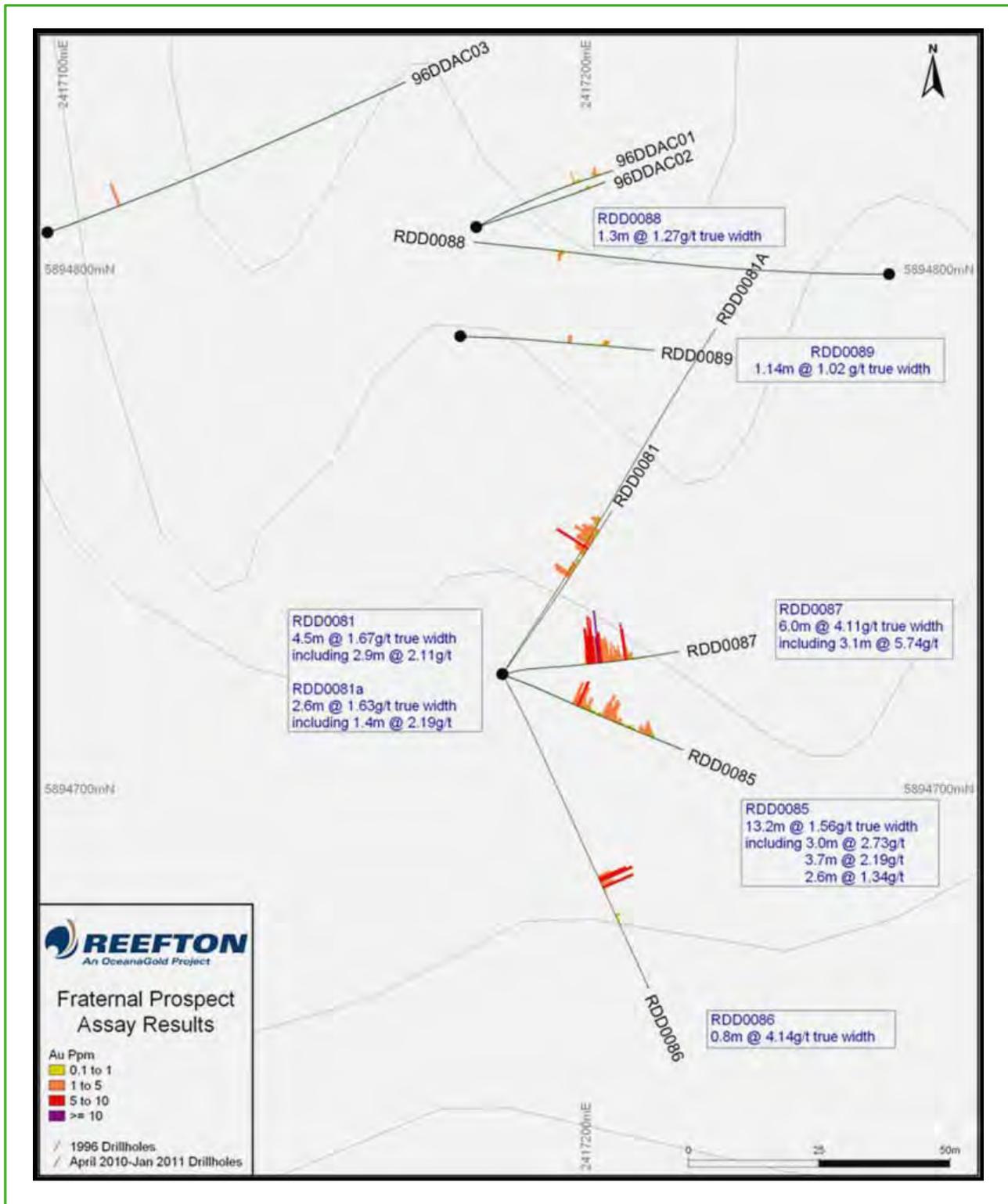


Figure 17: Location of diamond drill holes and gold mineralisation intersections at the Fraternal lode (Doyle and Hood Hills 2011)

## 5.4 Bell Hill Project

### 5.4.1 Mining History

#### 5.4.1.1 Alluvial Mining

There has been historical alluvial mining in creek beds of gold shedding from the Greenland Group. The PPA surrounds and excludes alluvial gold Exploration Permits EP 55508 (Alistair Davidson), EP 60120 (Belborough Holdings) and Mining Permits MP 53412 and MP 41652 held by Birchfield Coal Mines Ltd (Birchfield Coal) [Reefton Resources 2020].

FMG Pacific Limited (FMGP) [MR4880] held a PP (PP 50995) for alluvial gold and coal over the northern portion of the PPA between 2010 and 2012. Whilst FMGP's main focus was coal, they concluded that the potential for economically extractable deposits of alluvial gold existed within the permit area. The deposit type was not a high priority for FMGP and as such, a subsequent Exploration Permit for metallic minerals was not sought (Reefton Resources 2020).

#### 5.4.1.2 Hard Rock Mining

There is no known history of hard rock mining in the immediate permit area. The nearest historic hard rock mines were the South Blackwater Mine including the Empire adit on the south bank of the Snowy River, and the Homer Mine, plus a battery in Quartz Creek, which are all located approximately 20 km north of the PPA area (Reefton Resources 2020).

### 5.4.2 Exploration History

Modern exploration/prospecting/mining activity in the BHP area includes work by various companies, including:

- Titan Resources Ltd (Titan) 1986-present.
- Eureka Mining Ltd (Eureka) 1987-1997.
- South Pacific Mines Ltd (South Pacific Mines) 1987.
- Sugar Anne Partnersip (SAP) 1989.
- Perkins, G.N. and J.W.N. (Perkins) 1989.
- Birchfield Minerals Ltd (Birchfield) 2000.
- Strategic Materials Pty Ltd (Strategic Materials) 2012-2014.

#### 5.4.2.1 Titan

During 1987 and 1988, Titan undertook a program of field work comprising:

- Geological mapping.
- Stream sediment sampling.
- Limited examination of historical gold workings.
- Chip sampling of any quartz leaders or other mineralised rocks encountered.
- Assay of selected rock and pan concentrate samples (Utting 1988).

In 1995, Titan excavated a total of five bulk samples and six panned samples from the Deep Creek and Jones Creek areas. In this area, initial tests returned 1.5 to 2.5 grains/yd<sup>3</sup>. Average sample depth was 3 to 4 m (Cowan 1998).

### **5.4.2.2 Eureka**

In 1991, Eureka also undertook a program of field work in the Deep Creek area, between two historical sluicing claims. This program included reconnaissance pan sampling, channel and bulk sampling and test pitting (Anon 1991). Gold grades were estimated at approximately 170 mg/m<sup>3</sup> at the downstream end and 350 mg/m<sup>3</sup> at the upstream end.

### **5.4.2.3 Strategic Materials**

Strategic Materials held a PP over the northern portion of the PPA between 2012 and 2014, Strategic Materials were exploring for hard rock gold reef under recent cover. Strategic Materials based their assessment on regional magnetics data released by the NZ Government. Strategic Materials assessed this data for anomalies or structures that could be seen flowing from the Blackwater Mine area and continuing south into the PP area (Reefton Resources 2020).

## **5.5 Lyell Project**

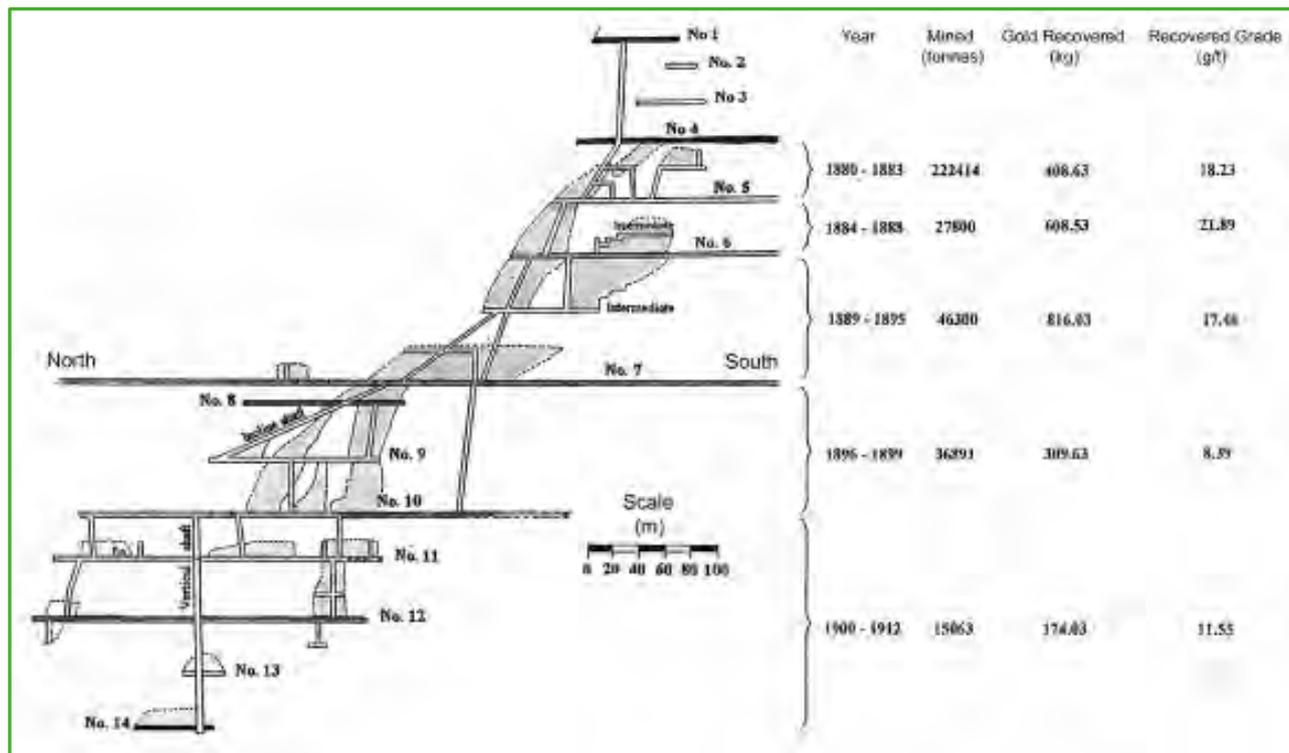
### **5.5.1 Mining History**

#### **5.5.1.1 Alluvial Mining**

The initial discovery of rich alluvial ground in Lyell Creek was in 1862, where at least 10 000 oz of gold were mined during the first gold rush, with the biggest nugget weighing 90 oz apparently reported from Irishman's Creek (McLelland 2014b).

#### **5.5.1.2 Hard Rock Mining**

The LP and surrounding Lyell District contains approximately 21 historic mines, with a total historic underground production of approximately 95 000 oz gold from narrow high-grade quartz veins. The most significant and profitable of these mines being the Alpine United Mine, which operated between 1874 and 1912. Total production from the Alpine United Mine is estimated at 80 510 oz gold at a grade of 16.8 g/t gold (Barry 1993). The Alpine United Mine is located in the headwaters of Irishman's Creek and was worked by adit and underground shaft from outcrop down to the No 9 level. The vein is reported to be up to 15 m in width, with two 45° north plunging ore shoots worked along a maximum strike length of approximately 120 m. Below the No 6 level, cross-faulting disrupted the main vein, and despite some indication on the nature of the throw displacement, this richer zone was not re-discovered (Bull 2018d). A cross-section through the Alpine United Mine is presented in Figure 18.



**Figure 18: Cross-section through the Alpine United Mine (Bull 2018d)**

The Lyell Creek Extended Mine had driven a long adit to the line of the veining in what was to become the No 10 level of the amalgamated Alpine Extended Mine. Work continued, with the sinking of an underground shaft from the No 10 level, with four levels down to the No 14 level opened up. In 1905, the mine became unprofitable due to the vein becoming disrupted by faulting and diminishing continuity and grade. A further attempt to reinvigorate the mine was undertaken by New Alpine between 1907 and 1912, when it was finally abandoned at a total vertical depth of approximately 490 m below surface (Bull 2018d).

Other mines within the LP area include Break of Day and Tyrconnel, which produced 4610 and 1660 oz of gold respectively (Wopereis 1987).

## 5.5.2 Exploration History

Modern exploration/prospecting activity in the LP area includes work by various companies, including:

- Otter Minerals Exploration Ltd (Otter) 1972-1980.
- Auzex Resources (NZ) Pty Ltd (Auzex) 2005-2013.
- Kent 2008-2013.
- OGL 2012-2014.
- Tectonex Ltd (Tectonex) 2016-2018.

### 5.5.2.1 Otter

Otter began an initial period of exploration in 1972, when they took 68 reconnaissance stream sediment and 47 soil geochemical samples over the historical Lyell Goldfield area. This delineated a zone of anomalous Au and As, coinciding with the extents of known historic workings between Eight Mile Stream and Irishman's Creek, and anomalous Cu further north (Auzex 2010).

In 1973, follow up work comprised the collection of an additional 32 soil and 130 rock geochemical samples over the zone, however not all were assayed. Gold anomalies from the initial work were not repeated, suggesting a coarse gold sampling problem.

Otter concluded that the gold mineralisation at Lyell was essentially restricted to irregularly developed minor quartz veining and that (at that time) there was insufficient encouragement to continue gold exploration (Auzex 2010).

#### **5.5.2.2 Auzex**

Auzex was granted an EP in 2005. Auzex undertook a compilation exercise of historical data into a GIS database containing cultural, topographical, geological, geochemical and mineral themes. Besides confirming the areas of known mineralisation, the prospectivity map put the Lyell EP area in line with the Reefton Goldfield in terms of prospectivity for mesothermal gold deposits, defining a significant part of the Lyell EP as highly prospective (Auzex 2010). The database developed contained data from a total of 291 rock chip samples, 755 stream sediment samples and 560 soil sediment samples obtained from historical exploration (Figure 19) [Hill 2010].

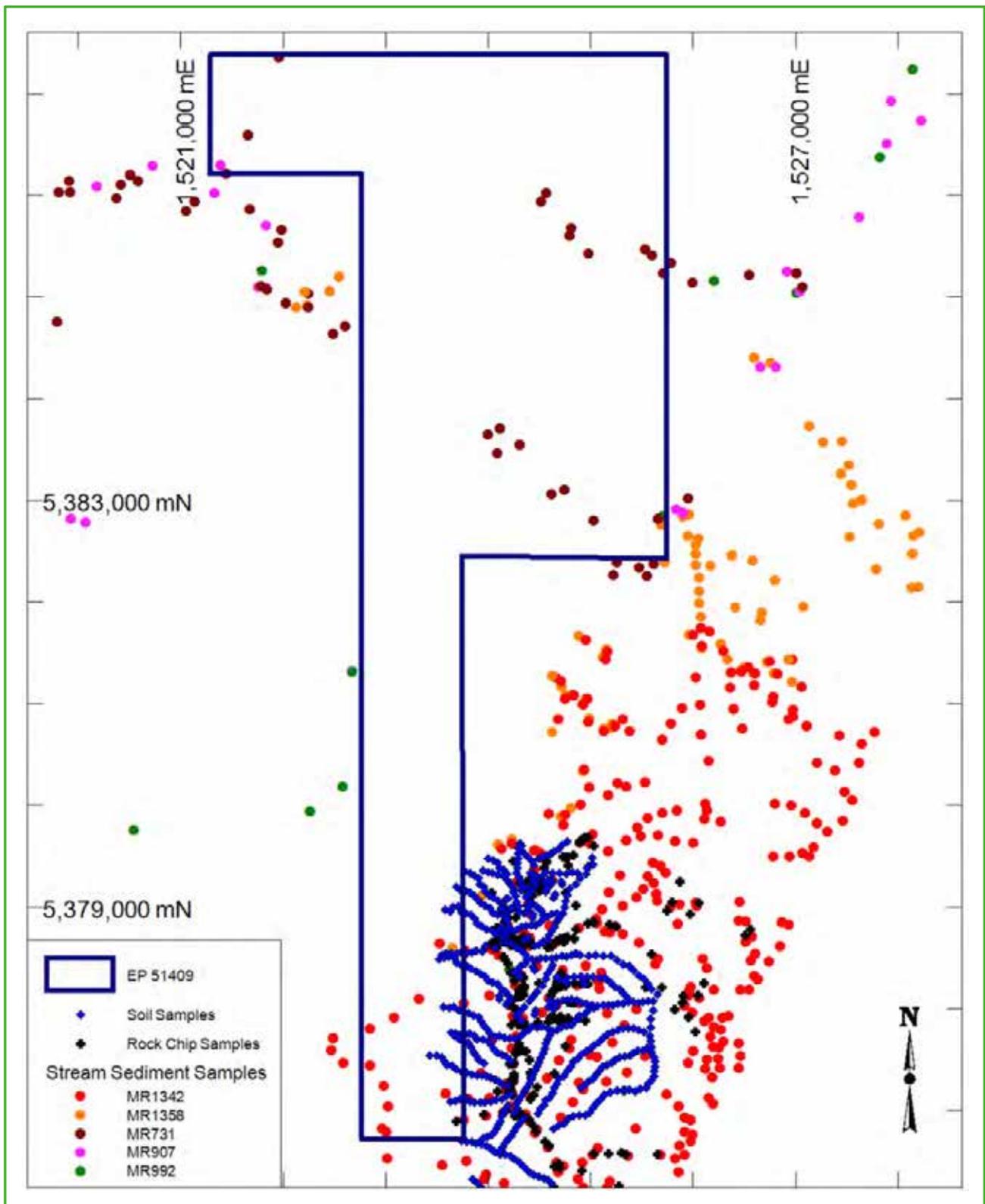


Figure 19: Historical sample locations from Crown Minerals exploration reports (Hill 2010)

Work during 2007-2008 field season focused on grid soil sampling and follow-up prospecting and mapping of gold soil anomalies to determine source and define bounds to mineralisation and alteration with provision to plan a program of drill-testing to define a potential resource.

An intensive program of soil sampling was undertaken over a 1.2 km x 3 km area (881 samples in total), as presented in Figure 20, straddling the projected trend of the Alpine lode veins from the Irishman Creek and surface diggings on the Alpine lode extending north to Mt Lyell (Auzex 2010).

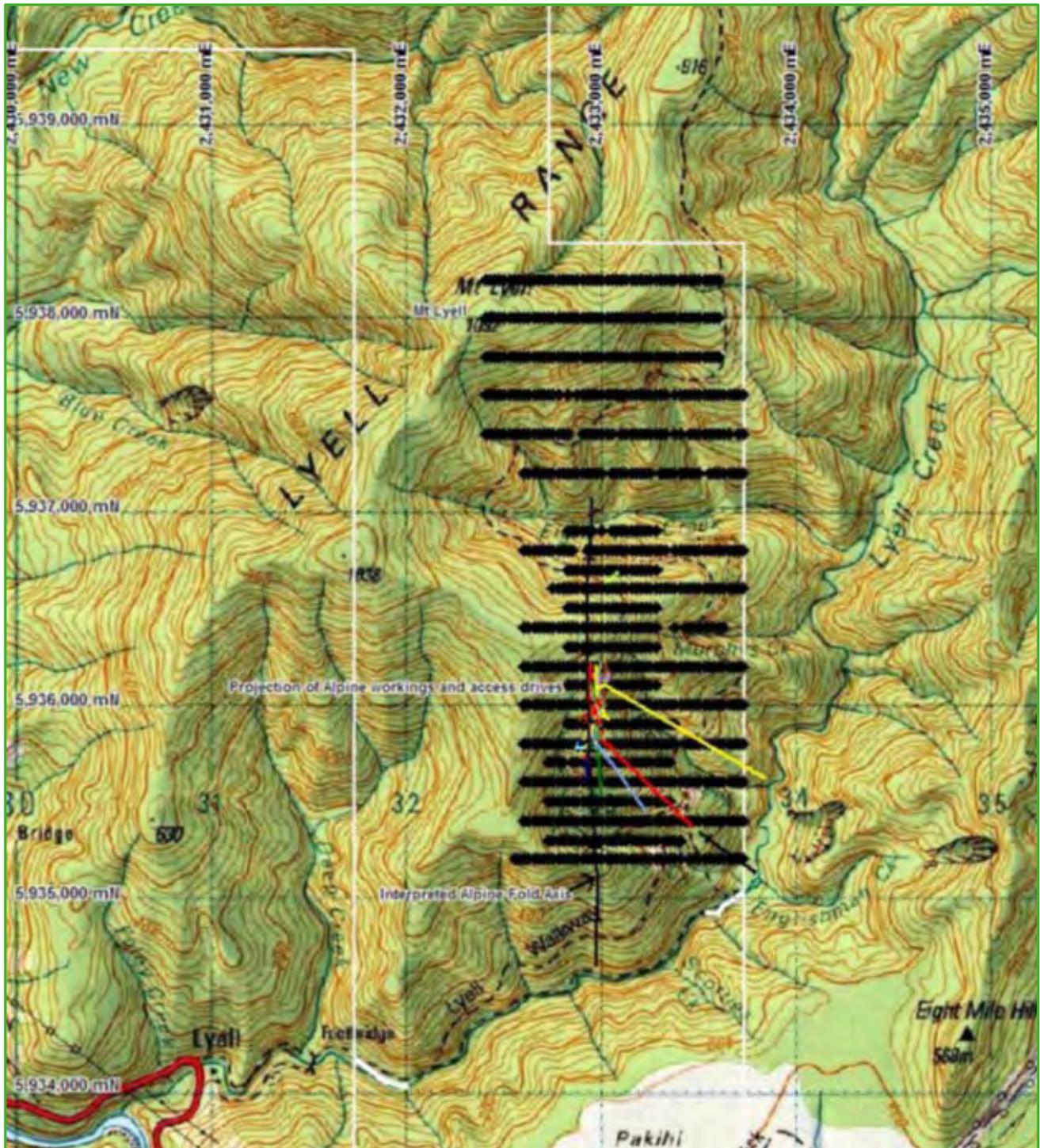
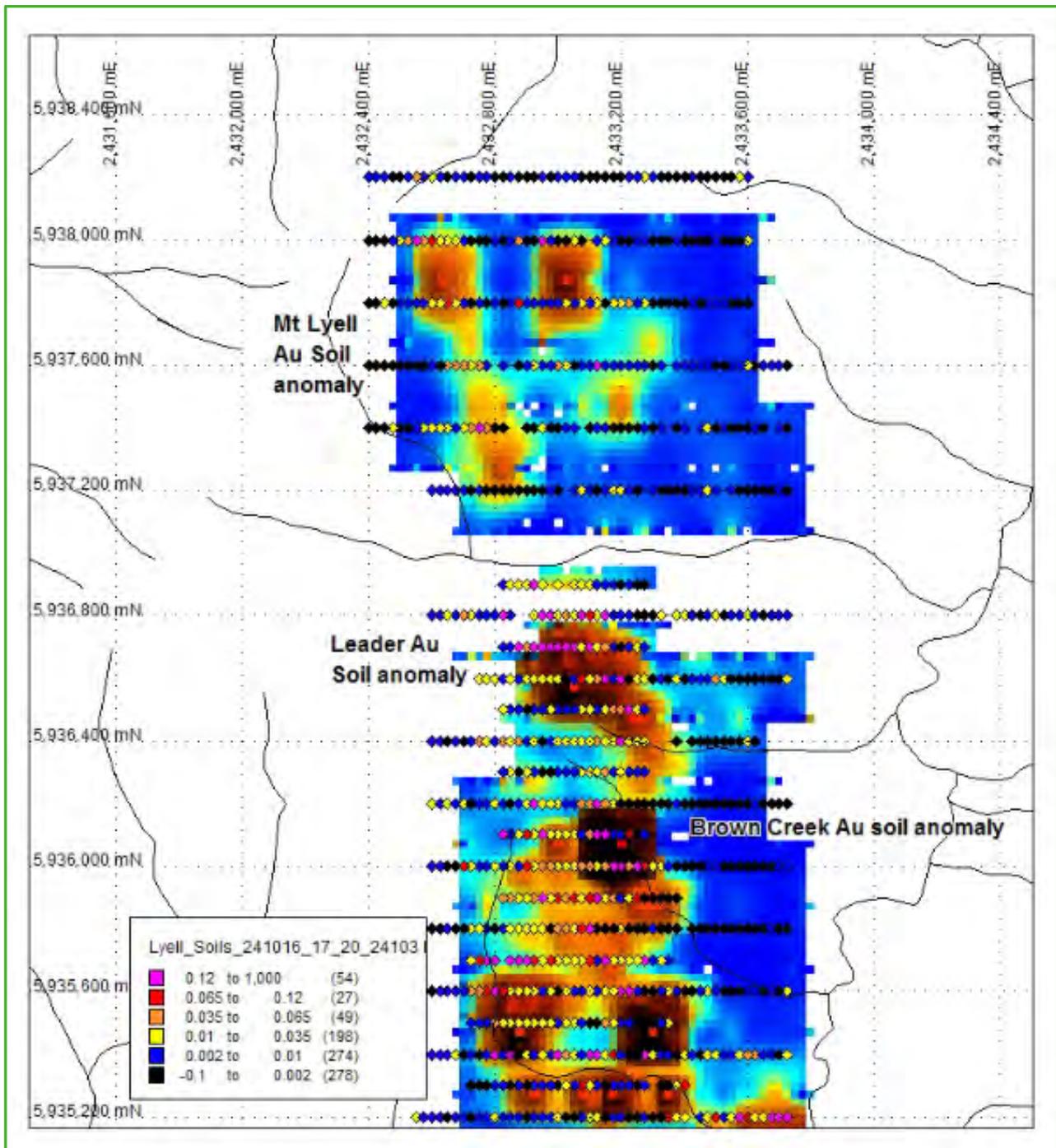


Figure 20: Auzex soil sampling program (Auzex 2010)

Figure 21 presents sample and gridded Au (ppm) assays from the soil sampling program presented in Figure 20.



**Figure 21: Au in soils and gridded Au (Auzex 2010)**

Results of the soil sampling program were encouraging, with maximum assay results received including 39.4 ppm Au, 6750 ppm As, 0.6 ppm Ag, and 249 ppm Pb. A total of 59 soil samples returned >0.1 ppm Au and five samples assayed  $\geq 1.0$  ppm Au (including 39.4 ppm, 10.05 ppm, 2.17 ppm, 1.26 ppm, and 1.00 ppm) [Auzex 2010].

A plot of Au in soil results indicated that a continuous belt of gold in soil anomalism (>30 ppb Au) extends from Irishmans Creek to Eight Mile Creek, over 1.8 km and straddles the interpreted trace of the anticline axis that

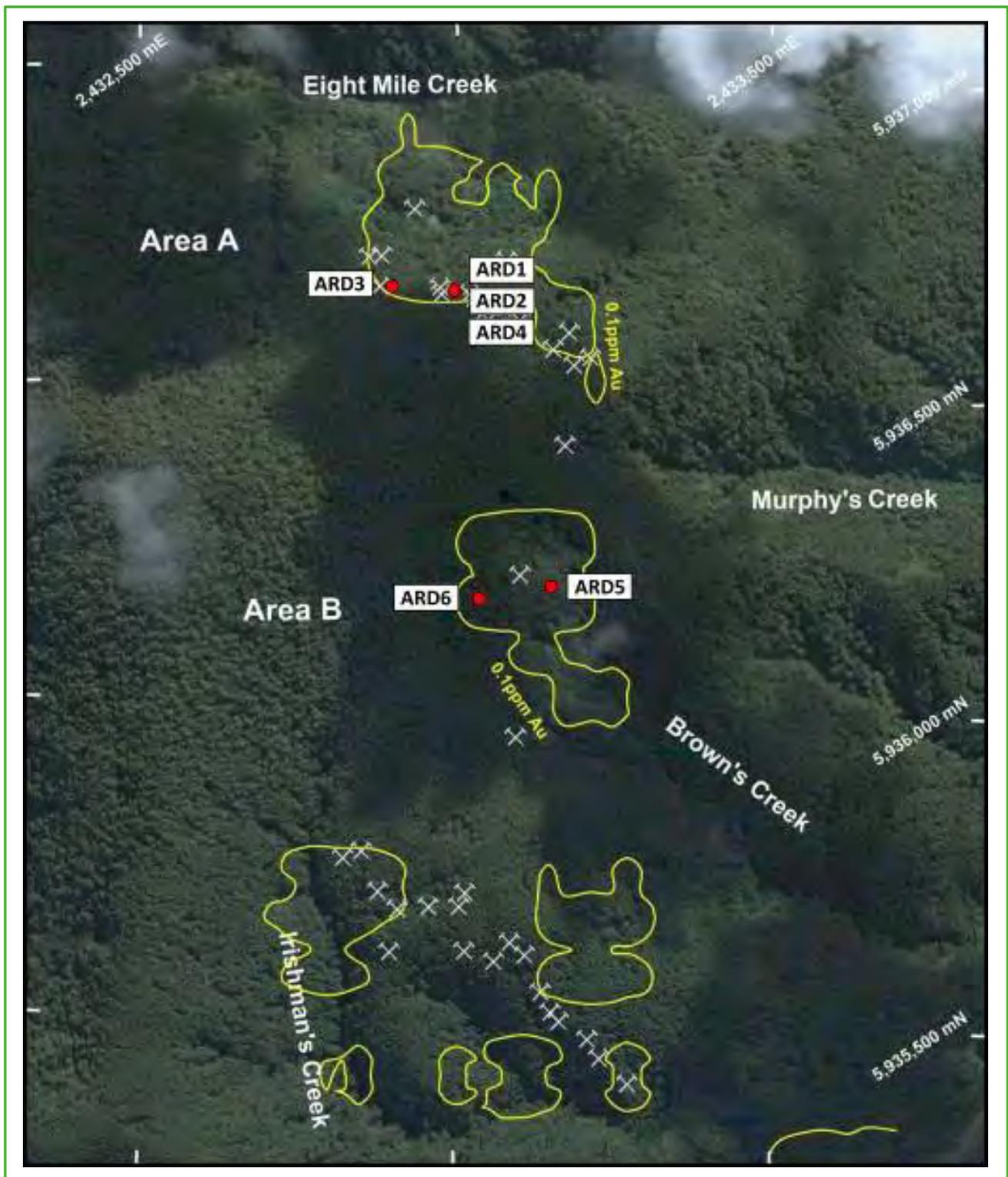
hosts the historical Alpine gold quartz reefs. The stronger and more coherent anomalism occurs in two localities in the upper Brown Creek and true left bank of Eight Mile Creek (respectively Brown Creek and Leader Soil anomalies). Soil results for gold confirm strong soil anomalism in the Eight Mile Leader Mines area. Three >1.0 ppm Au assays occur within a 100 m interval associated with several large mullock dumps in the Eight Mile Creek. There appears to be a break at (or north of) Eight Mile Creek, with anomalies reappearing in the northwest of the grid where a 900 m NNW trending zone of >30 ppb Au is open to the northwest (Mt Lyell Au soil anomaly). A wide zone of anomalism extending from the Alpine surface diggings to the southeast corner may be attributable to mullock and associated debris, as the old stamp battery was located immediately below this position (Auzex 2010).

A review of the As in soil data indicated an almost continuous north-south trending >100 ppm As in soil anomaly over a 3 km strike length. The Au and As anomalies correlate reasonably well. Locally however, the Mt Lyell gold in soil anomaly located in the northwest grid does not have a corresponding strong As anomaly (Auzex 2010).

Results for Sb were also encouraging with a strong >3.4 ppm Sb northwest trending anomaly 400 m x 200 m (max) in extent associated with the Mt Lyell gold in soil anomaly below Mt Lyell (Auzex 2010).

Rock chip geochemical analyses were carried out on samples acquired during geological mapping. Seventeen samples were tested for Ag, As, Au, Bi, Cu, Mo, Pb, Sb, Sn, W, and Zn which yielded maximum values of 1.19 ppm for Au, 9.98 ppm for Cu, and 36.6 ppm for W (Hill 2010).

Six diamond core drill holes were completed within the LP by Auzex targeting geochemical anomalies identified from previous Auzex exploration programmes. These drill holes totalled 748.1 metres in length and were completed in the autumn exploration season of 2011. These drill holes were ARD01 to ARD06 (Figure 22). These diamond cores were sampled for geochemistry and logged for lithology, vein type and orientation, alteration types, mineral types, and structures. Geochemical results returned maximum Au grades of 4.6 ppm, As grades of 0.5% and Sb grades of 4.7 ppm (Kenex 2012).



**Figure 22: Final drill hole collar locations with 0.1 ppm Au contour (soils) and historical mine workings (Kenex 2012)**

Economic gold grades were not intersected during the above drilling programme; however, a promising and direct intersection was made on a highly mineralised structure in Area A, which was interpreted to possibly represent a high As, low Au distal extension of a significant reef. Based on the observations from this programme, data from previous exploration efforts by Auzex and on the application of Cox's model for

mineralisation at Blackwater and the Caplestone group of mines to the south of Lyell, there was deemed to be a significant chance of encountering economic gold mineralisation in the area (Kenex 2012).

Thin, high-grade quartz stringers in the hanging wall shear of Area A confirmed the presence of gold in the local system. Only minor zones of Au grade were intersected in Area B; however, a significant As anomaly and intensified quartz veining in the lower section of ARD5 were interpreted as potentially pointing to a grade-carrying lode beyond the current end of hole (EOH). A conclusion was made that by using the patterns in lithology, alteration, mineralisation, veining and structure observed during this drilling programme, and applying models presented in the existing literature of the Lyell and Reefton goldfields, follow-up exploration programmes could be planned efficiently and more accurately (Kenex 2012).

Table 16 presents summary Auzex drilling results for the LP.

**Table 16: Significant drilling results for the LP (Kenex 2012)**

Hole ID	Company	Azi (°) <sup>1</sup>	Dip	Total Depth (m)	From (m)	To (m)	Apparent Thickness (m)	Average Au Grade (ppm)
ARD2	Auzex	90	-60	149.9	62.0	63.0	1.0	1.7
					73.0	74.0	1.0	1.2
ARD4	Auzex	60	-55	99.1	62.0	64.0	2.0	4.6

**Note:** 1: Azi = azimuth.

### 5.5.2.3 Kent

Kent began exploration in the Lyell area in 2010. The exploration programme was mainly concentrated in an area outside the current EP, but a stream sediment sampling programme was undertaken along and in Foley Creek and Deep Creek (Figure 23). A total of 79 stream sediment samples were taken in and around Foley Creek and Deep Creek. Gold was primarily below detection limits (0.01ppm Au). The highest gold result obtained was 0.39 ppm Au (Sample 4067) [Kent 2010b].

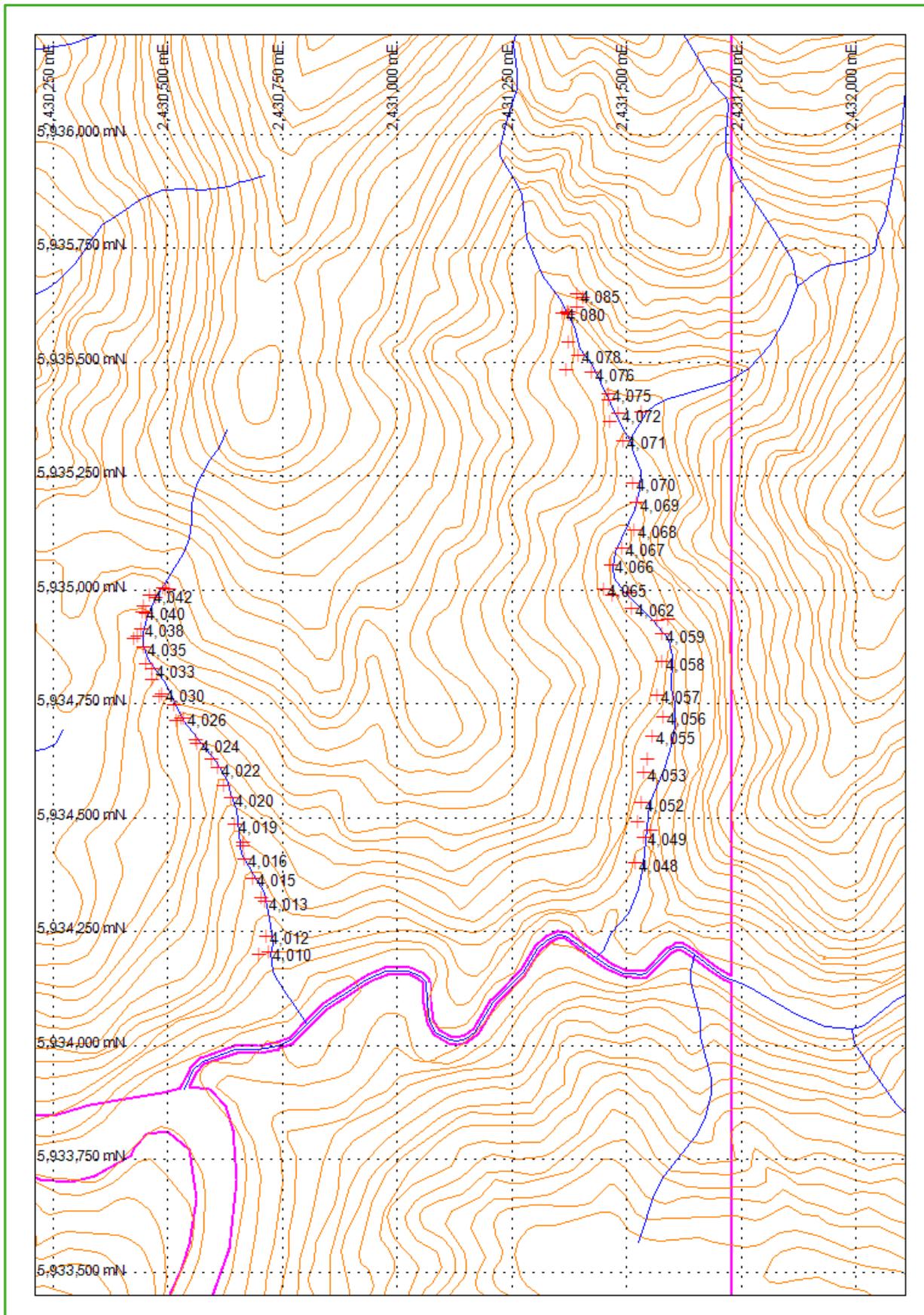


Figure 23: Foley Creek and Deep Creek sample locations (Kent 2010b)

### 5.5.2.4 OGL

Between November 2012 and November 2013 GIS data was compiled by OGL over PP 54 446. Geological literature relevant to the Lyell district was also acquired and reviewed. Data compilation included the digitization of geology maps and plans which extended over the PP area (Gardner 2013).

In March 2014, 13 rock chip and float samples were collected by OGL within PP 54 446 in order to try and identify any mineralised structures, lithologies or leading samples within the tenement (McLelland 2014b). Of the 13 geochemical samples which were obtained from the tenement, 0 assayed higher than 0.05g/t. Only 5 of these rock chip sample fall within the current EP for the LP.

### 5.5.2.5 Tectonex

From July 2016 to April 2018, two untested and strongly altered porphyry Mo-Cu-Ag systems in the LP area were targeted by Tectonex (PP 60072) as potential gold-associated porphyries. Both lie within the gold-productive Lyell Fault Zone. During this exploration programme, 28 stream sediment samples, 2 panned concentrate samples and 46 rock chip samples were collected (Nichols 2018). Of these samples, three stream sediment and seven rock chip samples lie outside the bounds of the current LP EP.

## 6.0 DATA COLLECTION

This section of the IGR presents a summary of relevant information located by GANZL on the NZP&M website and online exploration database.

Siren has informed GANZL that a request was made to OGL for their internal dataset and reports relating to the projects, however: at the time of writing this IGR, the information had not been received.

The data collection section has been split into the greater RSP area and the GPP, which have been separated in certain sections of this IGR due to their differing exploration histories.

OGL (Reynolds and James 2005), Auzex (Auzex 2010) and Kent (Kent 2010a) compiled previous exploration work into updated databases and GIS systems. In the mid-1990s, OGL converted all historical data to digital format, which was then updated in 2005.

Throughout the duration of exploration work across the BRP, ARP, RSP, GPP, BHP and LP, a number of sample positioning systems have been utilised, details of these are as follows:

- CRAE created and used a local grid, where drill collars were surveyed from control points using this grid.
- GFR used CRAE local grid and NZMG. GFR did not disclose the survey technique utilised.
- Otter used the South Island National Grid (yards). Otter did not disclose the survey technique utilised.
- Auzex used NZMG and NZTM datum. Auzex did not disclose the survey technique utilised.
- Kent used CRAE local grid, NZMG and New Zealand Transverse Mercator 2000 (NZTM) datum. Kent did not disclose their survey technique.
- OGL used both local grid and handheld Global Positioning System (GPS), utilising New Zealand Map Grid (NZMG) datum during their programs and compasses to survey trenches. Drill holes at the BRP were surveyed by Chris J Cole Surveying Ltd (CJCS) or by handheld GPS.
- Tectonex used NZTM datum. Tectonex did not disclose the survey technique utilised.
- FMG used a handheld Garmin GPS unit, utilising NZMG datum during their work programs.

It should be noted that no information relating to the specific sample positioning systems utilised by the following companies has been located by either Siren or GANZL:

- Titan.
- Eureka.
- South Pacific Mines.
- SAP.
- Perkins.
- Birchfield.
- Strategic Materials.

All drill holes completed during exploration programs (excluding those of which Siren or GANZL has been unable to locate information relating to the specific sample positioning systems utilised) across all the project areas were surveyed for easting, northing and elevation.

GANZL recommends NZTM be the survey datum for all future work as it is the preferred projection of NZP&M as specified in the NZP&M Mineral and Coal Digital Data Submission Standards & Reporting Guidelines (NZP&M 2017).

## **6.1 Aerial Topographic Surveying**

### **6.1.1 Big River Project**

No aerial topographic data has been submitted to NZP&M or been made available by either CRAE or OGL for the BRP.

### **6.1.2 Alexander River Project**

Kent acquired and compiled georeferenced orthoimagery, DEM, landsat7 and topographic data and entered this information into MapInfo™.

### **6.1.3 Reefton South Project**

No aerial topographic data has been submitted to NZP&M or been made available by either CRAE, OGL or GFR for the RSP.

### **6.1.4 Golden Point Prospect**

No aerial topographic data has been submitted to NZP&M or been made available by either CRAE, OGL or GFR for the GPP.

### **6.1.5 Bell Hill Project**

No aerial topographic data has been submitted to NZP&M or been made available by either Titan, Eureka, or Strategic Materials for the BHP.

### **6.1.6 Lyell Project**

No aerial topographic data has been submitted to NZP&M or been made available by either Kent, OGL, Auzex or Tectonex for the LP.

## **6.2 Geophysical Surveying**

NZP&M flew a regional airborne magnetic survey over the entire West Coast of the South Island of New Zealand between April 2011 and March 2013. The survey was conducted in two blocks totalling 86 763 km<sup>2</sup> (Vidanovich 2013). The resultant data is available by way of NZP&M's online exploration database.

CRAE exploration activity in the late 1980s included an airborne geophysical survey of the Reefton Goldfield area (Figure 24).

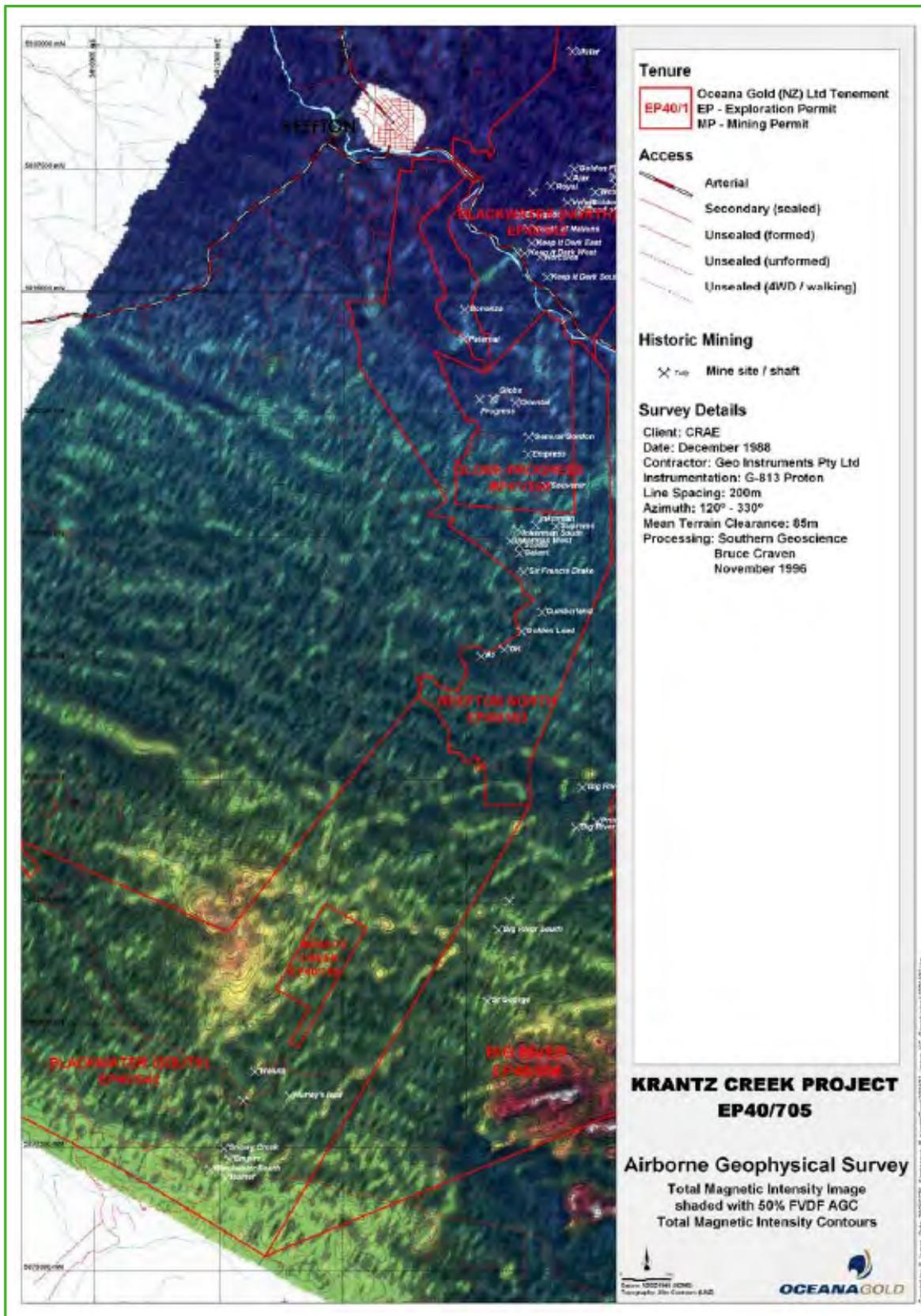


Figure 24: Airborne geophysical survey flown for CRAE in 1988 (Reynolds and James 2005)

### **6.2.1 Big River Project**

No reported geophysical surveys have been undertaken over the BRP.

### **6.2.2 Alexander River Project**

CRAE completed a trial magnetic survey to define the edge of the dolerite outcrop. The survey was successful in delineating the strike extent of the magnetic mafic dyke (Dunphy and Barry 1997).

In 2010, Kent used Zonge Engineering and Research Organisation (Australia) Pty Ltd (Zonge) to conduct a ground dipole-dipole resistivity and IP survey (Figure 25). The survey was carried out using time domain IP equipment consisting of a GDD GRX-32 receiver with a TXII-1800 transmitter. Dipole-dipole with 50 m dipole was used for detail and depth (cross-section information). Gradient array was impractical due to the terrain. A full report by Zonge was submitted to NZP&M as report MR4711. The IP map was to be found to be misleading, owing to errors in the projection of IP stations. Kent concluded that the anomalies presented in Figure 26 should not be used for exploration planning (O'Neill 2011).

Kent also acquired the CRAE magnetic data from Southern Geoscience.

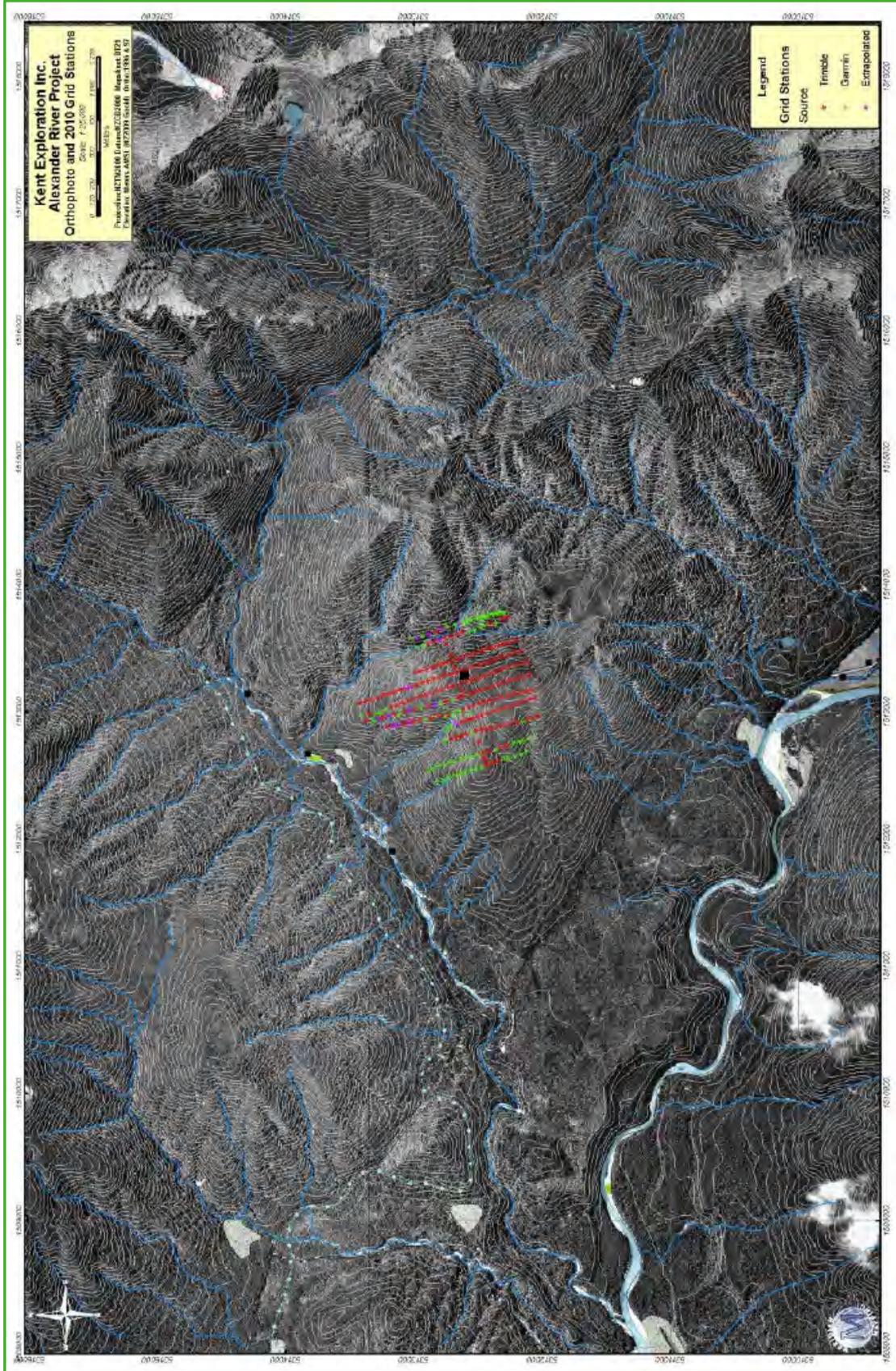


Figure 25: Location of the IP survey stations and their source (Kent 2010a)

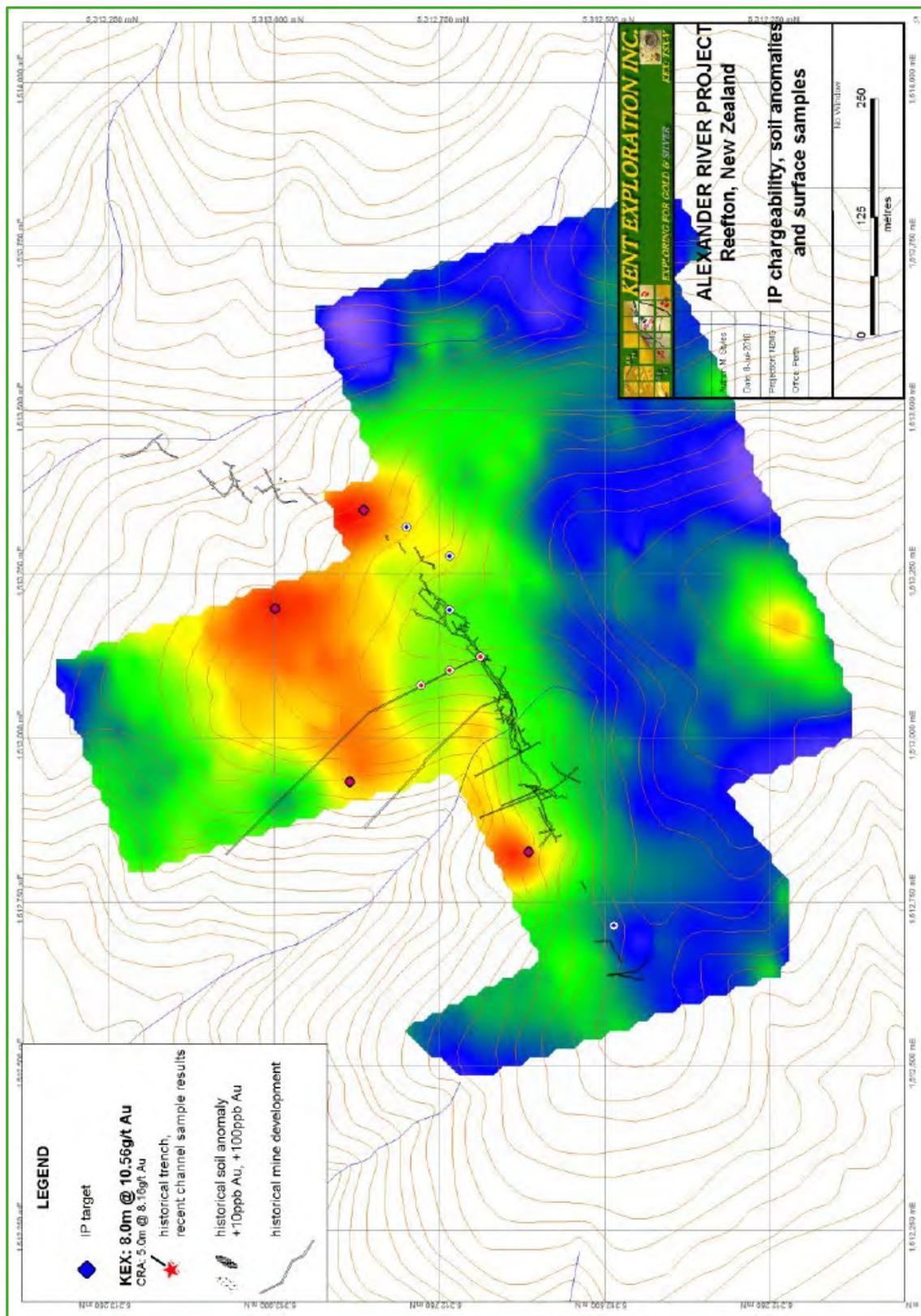


Figure 26: IP anomalies overlain on topography and historical mine workings (Kent 2010a)

### 6.2.3 Reefton South Project

GFR reprocessed the CRAE airborne geophysical survey and used a Scintrex Magnetometer to ground-truth the airborne magnetic survey data and determine the nature of selected magnetic anomalies. Overall, there was good correlation between ground magnetic and airborne magnetic data, with perhaps more detail showing up in the ground data. This is encouraging for future work and provides a level of confidence in the airborne data (Youngson 2009).

### 6.2.4 Golden Point Prospect

The Department of Scientific and Industrial Research (DSIR) conducted a potential drop ratio IP survey during 1937/1938 in an attempt to trace the Bonanza and Fraternal lodes (Lawrence 1988).

The survey indicated two parallel conductive features approximately 100 m apart, trending north-south. The eastern feature includes the Bonanza lode (Lawrence 1988).

No ground follow-up of the survey was conducted (Lawrence 1988).

In 1988, CRAE conducted orientation ground magnetics over two traverse lines in an area of anomalous soil geochemistry. The magnetic relief was reasonably quiet although weak lows appeared to correlate with anomalous geochemistry (Lawrence 1988).

### 6.2.5 Bell Hill Project

Strategic Materials reviewed regional magnetic data released by the NZ Government. Strategic Materials assessed this data for anomalies or structures that could be seen flowing from the Blackwater Mine area and continuing south into the PP area. No obvious targets were identified, leading to the decision to relinquish the PP (Reefton Resources 2020).

### 6.2.6 Lyell Project

In 2011, Kent conducted a small ground-based magnetic survey in the area outside the current EP.

OGI reviewed magnetic data from the west coast regional geophysical dataset (Vidanovich 2013) in MapInfo™. The analytic signal magnetics layer best defined the boundaries of granite and possibly felsic and/or mafic dykes within PP 54446 (Figure 27). The survey however was not sufficiently detailed to make inferences on target areas for follow up exploration (McLelland 2014b).

A magnetic susceptibility (MS) study was carried out on the two most prospective drill holes from the Auzex diamond drilling programme (ARD2 and ARD4). These drill holes, drilled from the same platform, intersected an As-rich mineralised zone and several high Au grades (up to 2 m at 4.6 g/t Au). The study was aimed at identifying any downhole trends in MS in the context of mineralisation and grade, and to determine whether an airborne MS survey could be a useful tool for identifying drilling targets (Kenex 2012).

Tectonex also completed an in-house GIS compilation using government regional geophysics datasets in conjunction with the Otter Geology North geological map Figure 28 (Nichols 2018).

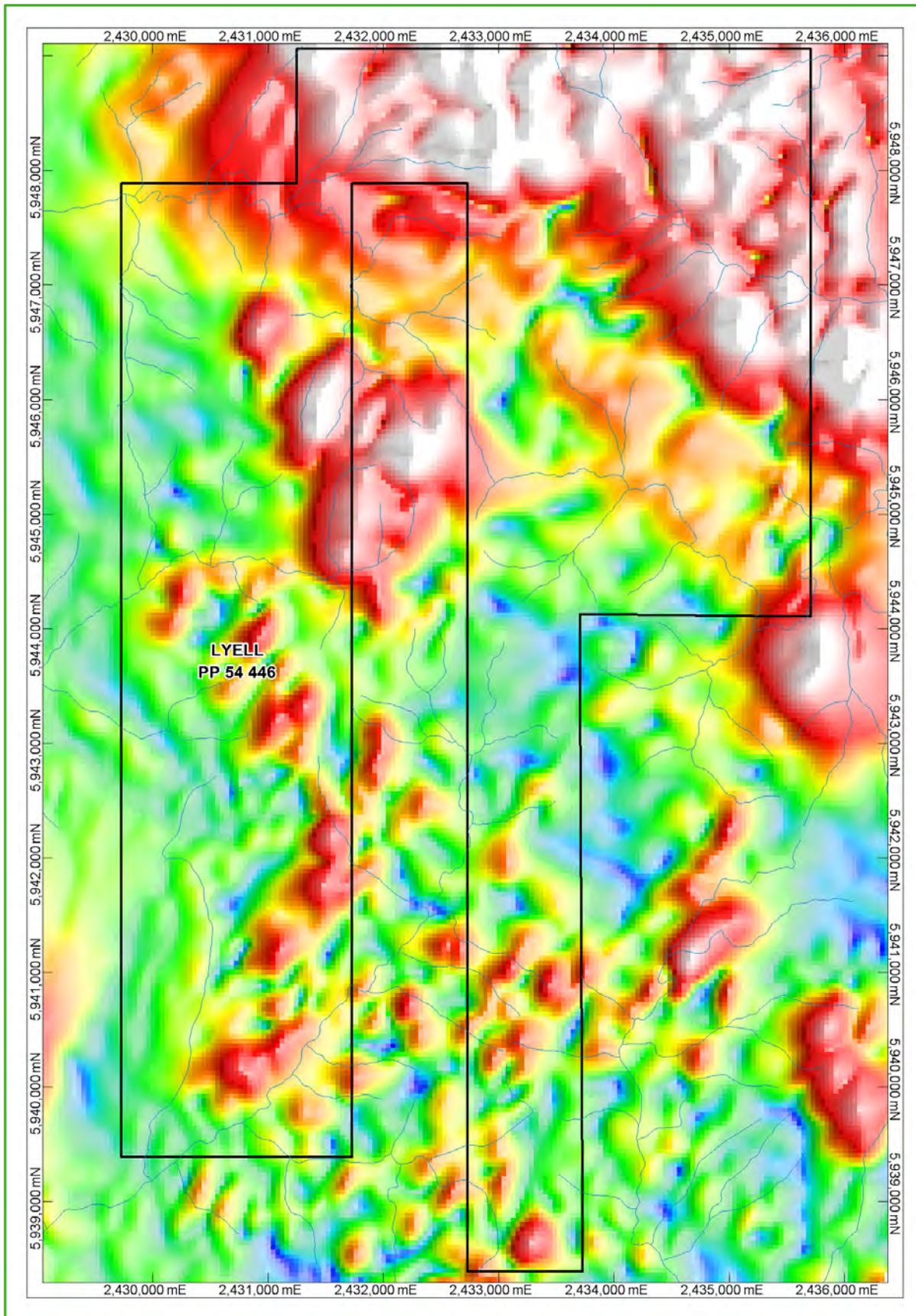


Figure 27: Analytic signal magnetics displayed for Lyell PP 54446 (McLelland 2014b)



## 6.3 Geological Mapping

### 6.3.1 Big River Project

CRAE undertook geological mapping at a scale of 1:1000 in 1989. The historic adits were found to be in poor condition, therefore no underground investigations were made (Corner 1990).

OGL followed up with several visits during 1995 to undertake geological mapping and rock chip sampling.

During 2010 and 2011 OGL completed extensive geological mapping and interpretation programs across the BRP and BKCP, collecting both structural and geochemical data. Field geological mapping resulted in the collection of a total of 385 structural measurements. All data was entered into OGL's acQuire™ database from handheld devices or field notes (Hood Hills 2011).

Upon completion of their 2014 exploration programs, OGL completed a geological re-interpretation of the Reefton Goldfield, using findings from Blackwater exploration and mining at Globe-Progress to generate an updated geological and structural models and interpretations of the controls on mineralisation (Blakemore 2016).

### 6.3.2 Alexander River Project

In 1988, CRAE completed geological mapping of the ARP. Mapping was conducted over the soil sample grid as well as stream traverses and adits (Hazeldene 1993).

OGL completed a detailed geological mapping of the outcrop and adits exposures within the mined area. In 1993 to 1995 (Dunphy and Barry 1997).

In 2010, Kent undertook geological mapping on a scale of 1:20 000, noting alteration, mineralisation and quartz veining. Mapping was then placed into MapInfo™. Kent also mapped trenches and adits at scales of 1:50 and 1:100 (O'Neill 2011).

### 6.3.3 Reefton South Project

In 2009, GFR completed detailed geological mapping, mainly focused on Greenland Group bedrock in the following areas (Youngston and McCann 2012):

- North of the Slab Hut Creek and Maori Creek.
- Big River to Blackwater River.
- South of Snowy River.

In 2009, FMG undertook geological mapping in the south eastern part of the PP area as well as in three areas to the west.

### 6.3.4 Golden Point Prospect

In 1970, L&M geologically mapped the Auld Creek area. CRAE in 1987 and 1988 and OGL in 1997, 2005 and 2011 to 2013, completed a number of structural mapping programs in support of other exploration activities and drilling. OGL mapping information was entered in to an acQuire™ database (Lawrence 1988 and Gardner 2013).

### 6.3.5 Bell Hill Project

Between 1987 and 1988, Titan conducted a program of geological mapping. Results from this geological mapping and associated field work indicated that a large portion of the area, including the majority of Bell Hill itself, and all of the gneissic rocks of Granite Hill, which is geologically separated from the remainder of the

area by a major thrust fault, was not shedding gold, nor were there any direct indications that it was prospective for gold mineralisation (Utting 1988).

### 6.3.6 Lyell Project

From 1972 to 1982, Otter completed detailed geological mapping of the Lyell area and created a comprehensive geological map, which was used by Tectonex in 2018 for exploration purposes (Nichols 2018).

During 2007 and 2008, Auzex completed some geological mapping. Mapping was focused on grid soil sampling and follow-up prospecting and mapping of gold soil anomalies to determine source and define bounds to mineralisation and alteration (Pilcher 2009).

Between 2012 and 2014, OGL completed reconnaissance mapping was completed over much of their tenement area, including New Creek, and on Old Ghost Road. Field geological mapping resulted in the collection of a total of 385 structural measurements and observations (McLelland 2014b).

## 6.4 Surface and Underground Sampling

### 6.4.1 General

Numerous soil, trenching and rock chip sampling programs have been undertaken over the RGP area. Siren compiled and provided Golder a database of all available historical geochemical soil sampling results for the BRP, ARP, RSP, GPP, BHP and LP areas. Golder did not validate these results; however, cited the data and performed spot checks that found the data to be representative of values summarised (by project) in this section of the IGR. Reporting of all geochemical soil sampling results in this IGR is not practicable due to the large size of the dataset. This section of the IGR provides a summary of results.

### 6.4.2 Big River Project

Between 1987 and 2013, CRAE and OGL completed numerous programs of soil, trenching and rock chip sampling programs.

Corner (1990) reported that CRAE exploration programs consisted of the following:

- 206 soil samples from auger holes were collected at 25 m intervals generally targeted the C soil horizon. Grid lines were run both in east-west and north-south directions to intersect at high angles the probable mineralised trends.
- Collection of 84 rock chip samples.
- 11 trenches and traverses with 1 m continuous samples being taken along two trenches around the Big River historical workings.

In 1995, OGL collected 32 rock chip samples during a brief geological mapping and re-sampling program aimed at reproducing the previous CRAE exploration results (Knight 1995). OGL also produced 12 petrological samples, which were analysed by N Mortimer from GNS. This report is attached as Appendix 2 of MR3341 (Knight 1995).

Between 2011 and 2014, OGL completed the following:

- Rock chip sampling during geological mapping programs of outcrop, mullock and float. 115 field samples were taken in 2010 and sent for multi-element analysis.
- Wacker soil sampling: 477 wacker samples were taken during the 2010 program on two grids with sample lines spaced 25 to 35 m apart and samples taken at 12.5 m spacing. Three areas were sampled at Big River South, with two sample lines each at 50, 100 and 150 m spacing (Hood Hills 2011). The average sample depth was 2.7 m.
- Between 2011 and 2012, OGL completed 533 more wacker soil samples. The soil lines were extended northwest from previous wacker lines near the historical Big River Mine. A further seven soil lines were

completed northeast and southeast from the previous grid, with lines 150 m apart and 430 to 780 m long. Samples were collected at an approximate 15 m spacing along these lines. A further nine lines were used to infill in the south. The average sample depth was 2.5 m.

- In 2010, two surface trenches were sampled for a total of 19 m, with 1 m samples taken along the trench length.

### 6.4.3 Alexander River Project

CRAE collected a series of -80# (190 µm) stream sediment and pan concentrate samples as part of their regional stream sediment sampling program. CRAE completed a 100 m by 12.5 m soil sampling grid over the Alexander River historical workings, taking a total of 730 hand auger samples of the 'C' horizon (Dunphy and Barry 1997).

CRAE also completed a trench program, cleaning out and sampling previously excavated trenches. OGL and Kent did not report the quantity of trenching completed by CRAE as no CRAE reports have been supplied by Siren or located by GANZL. Kent re-sampled a total of 24 CRAE trenches during their 2010 exploration program.

OGL re-sampled many of the CRAE trenches as well as the adits. OGL then rehabilitated the deepest part of the McVicar mine. The adit was in good condition, providing a suitable area for location of a portal and surfaces for geological mapping and sampling. The adit recovery carried out by Doug Hood Ltd (DHL) took just over seven months to complete in late 1992. 500 m of No.6 level was recovered with the historical workings being 1.8 m wide by 2 m high. Equipment and logistics were by helicopter and a camp was constructed on site. A back up 4WD access was cleared to the start of the old pack track intersection (Hazeldene 1993).

OGL channel sampled 5 m lengths, generally on the west wall. Spot 1 m samples were also taken where the 5 m channel samples were anomalous. 5 m samples were tested for Au and 1 m anomalous samples were tested for Au, As and Sb (Hazeldene 1993).

Kent re-sampled both trenches and adits. Photographs were taken of all the trenches. A total of 163 (including eight duplicates) samples were taken from 18 trenches/adits. These samples were assayed by Société Générale de Surveillance New Zealand Minerals Ltd (SGS NZ) for Au, Ag, As, Bi, Cu, Mo, Pb, Sb and Zn. A total of 60 Rock chip samples were taken over two years as a panel, chip or grab and typically weighed a minimum of 2 kg. Stream sediment samples were collected by wet sieving material to 80 mesh. Pan concentrates samples were also wet sieved to -80 mesh (190 µm) [Kent 2010a].

The CRAE and Kent trench assay results are presented as APPENDIX D.

### 6.4.4 Reefton South Project

A total of 47 spot rock samples were taken by CRAE along a vehicle track at the head of Carton Creek in the northeastern corner of the PP area at approximately 30 m intervals. A further two samples were taken to the north. All samples returned gold assays below detection limit (0.05 ppm). As values were also low (Price 2007).

A line of 196 soil samples was taken by CRAE near Quigley's Track at 25 m intervals, of which approximately 130 to 140 samples were taken from within the PP area. Virtually all samples returned gold assays below detection limits (0.02 ppm) [Price 2007].

GFR completed soil and rock chip sampling over the northern half of the PP area, taking a total of 75 soil samples and 62 rock chip samples (Youngson 2009). After relinquishing the southern and western areas of their permit, GFR concentrated their resources on mapping and sampling of the area around the Morning Star

Mine. A total of 65 soil samples trench, 21 rock chip samples and 12 bulk rock sample were collected (Youngson 2012).

#### **6.4.5 Golden Point Prospect**

During exploration works conducted in 1970/1971, L&M carried out stream sediment sampling and soil sampling on a pattern of 100 feet (ft) by 100 ft (approximately 33 m), outcrop cleaning and excavation of three trenches targeting Sb (Riley 1972).

In 1987, CRAE collected 155 'A' Horizon samples from soil sampling traverses and along ridge, two stream sediment samples and 29 rock chip samples from geological mapping (Wotherspoon 1987).

In 1988, CRAE collected 553 soil samples on 12.5 m intervals on lines 100 m apart, with sample depth ranges from 0 -100 cm. CRAE noted features in the soil geochemistry, these being the presence of two parallel zones observed in As and to a lesser extent Au and Sb results, which were associated with the Bonanza lode in the west and a puggy shear zone in the east. A total of 12 anomalous soil locations were followed up by shallow trenching and channel chip sampling, with five of the trenches intercepting a sulphidic shear zone. Grab samples from historical prospect pits, ore dumps and mullock heaps were also collected (Lawrence 1988).

During 1996/1997 OGL collected 55 stream sediment samples in Auld Creek and its tributaries. A total of 150 soil samples and 13 rock chip samples were taken. A total of 105 m of trenching from nine trenches was completed prior to drilling, with 50 trench samples being collected. In total, 173 wacker sample were taken over a nominal 100 x 25 m grid spacing, delineating several anomalous Au and As trends (Silversmith 1997).

2011 exploration by OGL collected 273 wacker samples and 23 rock chip samples of outcrop, float and mullock material (McLelland 2011 and Hood Hills 2011).

As part of the minimum work programme obligations for PP 60465 (RSP), Siren collected 140 soil samples and 22 rock chip samples around the area of the Golden Point, Morning Star and New Discovery mines (Figure 29).

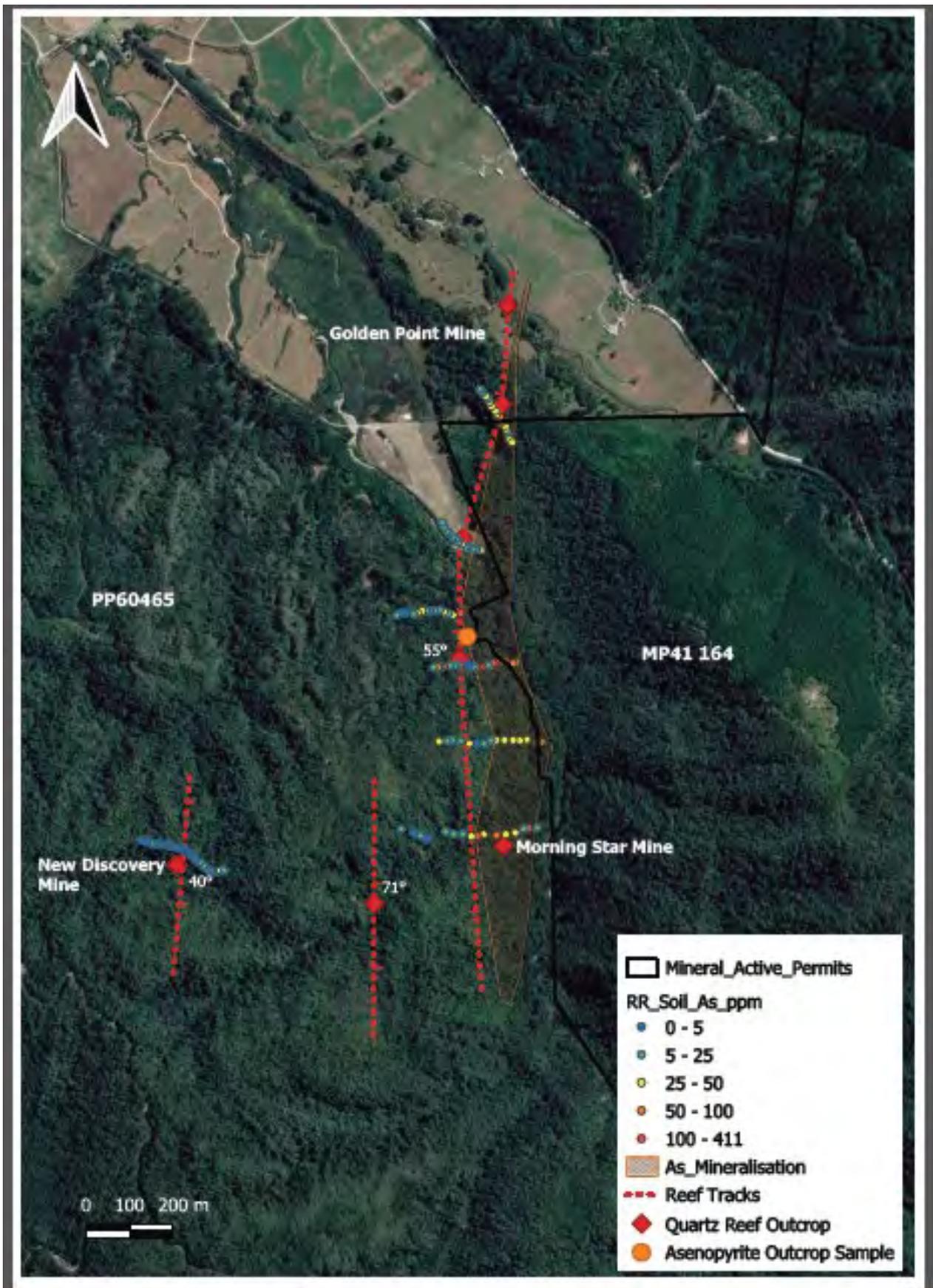


Figure 29: Soil and rock chip sampling across the GPP (Bull 2020)

### 6.4.6 Bell Hill Project

Between 1987 and 1988, Titan conducted a field program across the BHP area and collected a total of 68 pan-concentrate and 74 rock chip samples (Utting 1988). In 1995, Titan took five bulk samples and six panned samples from the Deep Creek and Jones Creek areas. The initial tests produced between 1.5 and 2.5 grains/yd<sup>3</sup>. Average sample depth was 3 to 4 m (Cowan 1998).

In 1989, SAP excavated eight bulk samples (10 m<sup>3</sup>) from the Deep Creek area.

In 1990, Eureka also undertook a field program in the Deep Creek area, between two historical sluicing claims. This field program included reconnaissance pan sampling and channel and bulk sampling. A total of 21 x 30 litre grab samples and 31 channel samples were collected (Anon 1991).

In 1998, Birchfield conducted bulk sampling in a gully on the eastern lower end of Bell Hill, using an excavator and rotary screen plant. This bulk sample produced a gold grade of 90 milligrams per cubic meter (mg/m<sup>3</sup>). In December 1999, further bulk sampling was conducted lower down, on the eastern end of Bell Hill, close to Granite Creek. A gold grade of 360 mg/m<sup>3</sup> was returned (Birchfield 2000).

### 6.4.7 Lyell Project

In 1972, Otter took a total of 68 reconnaissance stream sediment and 47 soil geochemical samples over the historical Lyell Goldfield area. This delineated a zone of anomalous Au and As, coinciding with the extents of known historical workings between Eight Mile Stream and Irishman's Creek, and anomalous Cu further north (Auzex 2010).

In 1973, follow up work comprised the collection of an additional 32 soil and 130 rock geochemical samples over the zone, however not all were assayed. Gold anomalies from the initial work were not repeated, suggesting a coarse gold sampling problem (Auzex 2010).

Between 2007 and 2008, Auzex undertook an intensive program of soil sampling over a 1.2 km x 3 km area (881 samples) [Figure 20], straddling the projected trend of the Alpine veins from Irishman Creek and surface diggings on the Alpine lode extending north to Mt Lyell. Bulk (1-1.5 kg) soil samples were collected from 24 east-west lines spaced 100 to 200 m apart, with samples on each line spaced 25 m apart. East-west lines were located between 5 935 200N to 5 938 200N, with samples collected between 243 2400E and 243 3725E (Auzex 2010).

Rock chip geochemical analysis was carried out on 17 samples acquired during geological mapping by Auzex, however, these lie outside the bounds of the current EP.

Kent completed a stream sediment sampling programme undertaken along and in Foley Creek and Deep Creek (Figure 23). A total of 79 stream sediment samples were taken in and around Foley Creek and Deep Creek. Gold was primarily below detection limits (0.01ppm Au). The highest gold assay result was obtained was 0.39 ppm Au (Sample 4067) [Kent 2010b].

In March 2014, a total of 13 rock chip and float samples were collected by OGL within PP 54 446 in order to try and identify any mineralised structures, lithologies or leading samples within the tenement (McLelland 2014b). Of the 13 geochemical samples obtained, zero returned assays higher than 0.05 g/t Au. Only five of these rock chip sample fall within the bounds of the current EP.

During a work program in late 2016, a total of 28 stream sediment samples, two panned concentrate samples and 46 rock chip samples were collected by Tectonex (Nichols 2018). Of these, three stream sediment and seven rock chip samples locations are located outside the bounds of the current EP.

## 6.5 Drilling

### 6.5.1 Big River Project

OGI completed 19 drill holes within the vicinity of the historical Big River Mine, testing 260 m along strike and up to 450 m down dip, where they completed 4106.4 m of helicopter supported diamond drilling.

Seven helicopter supported drill holes were completed at Big River South and St George for a total of 926.2 m. Both were testing mineralisation near the historical workings as well as anomalous geochemical results from the 2010 wacker soil lines.

Both areas used CS1000 or CS500 drill rigs operated by Horizon Drilling Ltd (HDL). All core was orientated using a Reflex ATC II RD orientation tool.

Downhole surveys were taken every 30 m or at the geologist's discretion. Collar locations for BR001 to BR0016 were surveyed by Chris J Coll Surveying Ltd. Collar locations for BR0017, BR0018 and BRS001 to BRS007 were surveyed using a handheld GPS. BRS001 had an incorrect downhole survey tool which was replaced, and one downhole survey was taken that was similar to collar orientation (Gardner 2013).

All drill core was flown out by helicopter and transported by road to the Reefton core shed, where it was washed, measured and photographed. Geological and geotechnical logs from diamond core were entered into acQuire™ database from comma-separated value (CSV) files created during logging on a laptop computer (Gardner 2013).

### 6.5.2 Alexander River Project

OGI underground drilling at No.6 level completed three drill holes for 328 m. All drill holes were drilled using HQ triple tube (core diameter 63.5 mm) at between 9° and 15° downwards to avoid historical stoping. All core was logged via a HUSKY Hunter datalogger using a computer logging format (Hazeldene 1993).

OGI drilled four drill holes from the surface in 1996 to test down plunge continuity of the Bruno and Bulls lodes. No drilling details were reported in (Dunphy and Barry 1997).

Kent drilled nine helicopter-support diamond drill holes in 2011 for a total of 1315 m. Kent drilled multiple drill holes off a single drill pad. Four drill holes (AX001, AX004, AX006 and AX007) were abandoned due to loss of circulation, loose material or no penetration into the bedrock. The remaining five drill holes were 226 m to 274 m in depth. Drill core was flown out by helicopter to Reefton. The core was logged, sampled and placed in storage. The drill program targeted IP anomalies and AX003 confirmed doubts that the IP could be used to indicate the presence of gold mineralisation (O'Neill 2011).

Kent did not report core recovery except for substantial core loss occurring between 105 and 140 m in drill hole AX008. Kent also did not report the name of the drilling company, the equipment size or logistical details. Downhole surveys were taken on 10 to 20 m intervals.

### 6.5.3 Reefton South Project

No evidence of exploration drilling conducted within the greater area of the PP has been located by either Siren or GANZL.

### 6.5.4 Golden Point Prospect

OGI completed four drilling programs in 1996, 2007, 2011 and 2013.

In 1996, a program consisting of three diamond drill holes totalling 324.6m targeting exploration results in the Bonanza and Fraternal shear zones was completed with (Silversmith 1997).

Three diamond drillholes completed in 2007, totalling 228.6 m were drilled to test for mineralised extensions north from the Globe-Progress Mine that were highlighted by soil sampling anomalies. Boart Longyear (BL), using a CS1000 helicopter supported drill rig with HQ triple tube was used. Downhole surveys were taken every 50 m. The Ezimark orientation core system was attempted, however, the quality of these measurements was poor due to tool malfunction and operator error (McCulloch and Timms 2007).

The 2011 drilling included eight drill holes with a total of 892.8 m of diamond drilling that targeted the Fraternal lode as well as an exploration target drilling was completed by helicopter supported CS1000 or CS500 drill rigs. Three different drilling contractors were used for this work, namely BL, CW Drilling Ltd (CWD) and Horizon Drilling Ltd (HDL). Downhole surveys were taken every 30 m (Hood Hills 2011).

Three diamond drill holes for 513.1m were completed in 2013 at the Fraternal shear zone, following on from the 2011 drill program (Gardner 2013). These drill holes were drilled from an existing drill pad created during the 2011 program. All drill holes were completed by HDL using a helicopter supported CS1000 drill rig with foot access by marked walking tracks. Downhole surveys were taken at 30 m intervals or at the geologist's discretion.

All core was flown out by helicopter and logged, processed and sampled at the OGL Reefton core shed for the 2007, 2011 and 2013 programs. All geological logs, survey data and assay data were imported into the Reefton project acQuire™ database.

### **6.5.5 Bell Hill Project**

In 1997, Birchfield drilled a total of six drill holes on top of the eastern end of Bell Hill to a depth of 30 m, exploring for alluvial gold. These drill holes yielded no gold grades (Birchfield 2000).

### **6.5.6 Lyell Project**

Auzex Resources carried out a drilling program within EP 40732 at Lyell in 2011. Six diamond drill holes totalling 748.1 m tested soil geochemical anomalies highlighted by sampling during previous exploration programmes.

Horizon Drilling Limited (Horizon) was contracted to conduct drilling operations. All drill holes were drilled using a modified Atlas Copco CS1000 P4, previously known as a Christensen 1000, helicopter-transportable diamond drilling rig, capable of collecting PQ and oriented HQ and NQ core. Drillers indicated the bottom of oriented core using a combined ACE survey and orientation tool. Drill hole orientation surveys were conducted at regular intervals (every ~30 m) downhole (Kenex 2012).

Economic gold grades were not intersected during this drilling program; however, a promising and direct intersection was made on a highly mineralised structure, which may represent a high As/low Au distal extension of a significant reef. Thin, high-grade quartz stringers in a hanging wall shear confirm the presence of gold in the local system (Figure 22) [Bull 2018d].

APPENDIX C presents a table of historical drilling details for the BRP, ARP, greater RSP, GPP and LP.

## **6.6 Test Pitting**

### **6.6.1 Bell Hill Project**

In 1987, South Pacific Mines undertook test pitting for alluvial gold in the BHP area. The results of this test pitting are presented in Table 17.

**Table 17: South Pacific Mines test pitting results (South Pacific Mines 1987)**

Test Pit	Total Depth (ft)	Total Depth (m)	Sample Depth (m)	Au Grade (mg/m <sup>3</sup> )
1	22	6.7	Not specified	50
2	20	6.1	Not specified	60
3	26	7.9	Not specified	0
4	20	6.1	0.6 – 4.3	700
			4.3 – 6.1	150
5	23	7.0	1.2 – 6.1	700
6	22	6.7	0.6 – 3.7	150
			3.7 – 6.7	450
7	22	6.7	1.8 – 5.5	470
8	20	6.1	Not specified	60
9	20	6.1	0.0 – 6.1	350

In 1989, Perkins excavated a total of four test pits. The results of this test pitting are presented in Table 18.

**Table 18: Perkins test pitting results (Anon 1989)**

Test Pit	Total Depth (m)	Sample Depth (m)	Au Grade (grain/yd <sup>3</sup> )
1	3	1.0 – 3.0	0
2	2.5	1.0 – 2.5	5
3	2	1.5 – 2.0	2
4	4	0.5 – 4.0	5

In 1991, Eureka undertook a program of field work in the Deep Creek area, between two historical sluicing claims. This program included reconnaissance pan sampling, channel and bulk sampling and test pitting (Anon 1991). Gold grades were estimated at approximately 170 mg/m<sup>3</sup> at the downstream end and 350 mg/m<sup>3</sup> at the upstream end. These test pits were not bottomed and accordingly could have potentially contained higher gold grades at a deeper level. Eureka estimated a mineable resource of approximately 50-75 000 m<sup>3</sup> to a depth of 5 m in the area (Cowan 1998).

## 6.7 Sampling and Assay

As sampling and assay work has taken place across three decades and by three different entities across the different projects, the description of sample preparation methodologies used by each entity has been reported by entity as opposed to by project.

### 6.7.1 CRAE

The assay technique detailed for CRAE soils and trench samples at the BRP was sourced from Corner (1990). The samples were grounded, dried and assayed by Analabs Auckland for Au by fire assay with As and Sb by AAS. No CRAE reports were found for the ARP and OGL and Kent reports did not record sampling and analysis details for CRAE soil, rock chip and trenching samples. No evidence of the CRAE sampling procedures utilised at the RSP has been located by either Siren or GANZL. CRAE sent their soil samples collected at the GPP to ISL, Richmond New Zealand where 100 to 300 g samples were dried and rig milled to a nominal -200 mesh. A 30 g split was then assayed for Au, Cu, Pb, Zn and As by flame AAS. Soil samples collected late in the program were despatched to Analabs, Auckland. A 30 g split was assayed for Au by fire assay with a carbon rod finish and As was determined using AAS (Lawrence 1988). Neither Siren or GANZL have been able to locate any information regarding rock chip, stream sediment and trench sample analytical methods.

### 6.7.2 OGL

ARP adit channel samples taken in 1993 were dried at 70°C for 12 hours, then crushed to 10 mm, then despatched for analysis. The cut drill core samples from the underground drill program at the ARP were assayed for Au, As and Sb. The sections of core that were not cut, were ground at 2 m intervals and assayed for Au and As. The core samples were dried at 70°C for 12 hours, then crushed to 10 mm, then sent for analysis. The analysis was carried out by Graysons Associates at Macraes Flat Laboratory. Au analysis was on 50 g charge for fire assay giving a lower detection limit of 0.01 g/t. Analysis for As and Sb was by AAS with wet digest for As and low temperature digest for Sb. The lower detection limit for As was 0.01% and 5ppm for Sb (Hazeldene 1993).

The four-hole drill hole drill program from the surface in 1996 did not report any details on sampling and analysis.

Rock chip sampling by OGL in 1995 at the BRP were analysed by Australian Laboratory Services (ALS) in Mt Maunganui with Au by Fire Assay and AAS finish, As, Ag, Cd, Cu, Bu, Mo, Sb, Pb, Zn, Ba, Ca, Co, Fe and Mn by ICP-OES. Cr, Ni, Sn, V and W was by ICP-MS (Knight 1995).

Core samples from drilling in 2007 at the GPP were sent to Amdel Laboratories at the OGL Mine at Macraes Flat and tested for Au, As and S (Table 19).

**Table 19: Amdel analytical detail for the 2007 drilling at the GPP (McCulloch and Timms 2007)**

Element	Units	Analysis Code	Detection limit
Au	ppm	1033	0.01
As	ppm	1006	100
S	%	1050	0.01

Field samples for the 2010 to 2012 programs were assayed by ALS Brisbane and SGS Waihi (a total of three rock samples were analysed by SGS Waihi). All wacker samples were assayed for Au, As and Sb. As and Sb being the pathfinder elements. Rock chip samples were analysed for Ag, Au, As, Bi, Mo, Sb, Te and W.

Table 20 presents analytical details of OGL field samples.

**Table 20: Analytical details of OGL field samples (Hood Hills 2011)**

Laboratory	Element	Units	Analysis Code	Detection Limits
ALS Brisbane	Au	ppm	Au_AA22	0.001
	Ag	ppm	Ag_MS62	0.02
	As	ppm	As_MS62	0.20
	Bi	ppm	Bi_MS62	0.01
	Mo	ppm	Mo_MS62	0.05
	Sb	ppm	Sb_MS62	0.05
	Te	ppm	Te_MS62	0.085
	W	ppm	W_MS62	0.10
SGS Waihi	Au	ppm	FAA515	0.02
	As	ppm	XRF75V	3
	Sb	ppm	XRF75V	3

Wacker sampling involves a 4-person team, including one geologist. A sampler was driven into the ground using a wacker drill. 1 m rods were then added until refusal. The rod string was jacked out manually with the sample collected from the sampler. The sample was logged, sample location was taken using a handheld GPS and the sample was placed into a plastic bag.

BRP and GPP drill core was sampled on 1m lengths. The half-cut diamond drill core samples was then dispatched for analysis. Strongly mineralised zones were often sampled based on geological contacts rather than by metre. The core samples were sent to ALS Brisbane, ALS Townsville or SGS in Westport. All samples were tested for Au and majority were also tested for As and Sb. Selected samples and/or drillholes were analysed by ICP for an additional 33 elements at ALS Brisbane or Townsville (Hood Hills 2011).

Samples were predominantly prepped in a separate SGS lab in Westport with some prepped at Waihi. Samples were fire assayed for Au by SGS in Waihi or at the SGS laboratory at Reefton mine site. XRF analysis for As and Sb was completed at the Westport laboratory.

All samples with visible Au were dispatched to ALS Townsville where they were assayed by 1 kg screen fire assay. Table 21 presents analytical details for OGL diamond core samples collected from the BRP and GPP.

**Table 21: Analytical details for OGL diamond core samples collected from the BRP (Hood Hills 2012)**

Laboratory	Element	Units	Analysis Code	Detection Limits
SGS Waihi	Au	ppm	FAA515	0.01
SGS Reefton 50 g	Au	ppm	FAA505	0.01

Laboratory	Element	Units	Analysis Code	Detection Limits
SGS Reefton 30 g	Au	ppm	FAA303	0.01
SGS Westport	As	ppm	XRF75V	3
SGS Westport	Sb	ppm	XRF75V	3
ALS Townsville (1 kg screen fire)	Au	ppm	Au-SCR22AA	0.002
ALS Brisbane and Townsville	AU	ppm	Au-AA26	0.01

Table 22 presents ALS analytical details for ICP analysis (ME-ICP61) OGL diamond core samples collected from the BRP.

**Table 22: Analytical details for ALS ICP analysis (ME-ICP61) – OGL diamond core samples collected from the BRP (Hood Hills 2012)**

Element	Detection Limits	Units	Element	Detection Limits	Units	Element	Detection Limits	Units
As	5	ppm	K	0.01	%	Sc	1	ppm
Ba	10	ppm	La	10	ppm	Sr	1	ppm
Be	0.5	ppm	Mg	0.01	%	Th	20	ppm
Bi	2	ppm	Mn	5	ppm	Ti	0.01	%
Ca	0.1	%	Mo	1	ppm	Tl	10	ppm
Cd	0.5	ppm	Na	0.01	%	U	10	ppm
Co	1	ppm	Ni	1	ppm	V	1	ppm
Cr	1	ppm	P	10	ppm	W	10	ppm
Cu	1	ppm	Pb	2	ppm	Zn	2	ppm
Fe	0.01	%	S	0.01	%			

Drill core, returned coarse rejects and pulp rejects are stored at Reefton core shed. No reported independent laboratory inspections or audits were carried out during OGL drilling, sampling and analysis.

### 6.7.3 Kent

Kent used SGS laboratories, who carry a full Quality Assurance and Quality Control (QAQC) program and are ISO 19011 certified. Sample preparation by SGS comprises of drying, crushing, splitting (if required), crushed to 75% passing 2 mm, split to 250 g and pulverised to >85% passing 75 µm.

Au was analysed by 50 g fire assay and Atomic Absorption Spectrometry (AAS), composite grinds while As, Ag, Bi, Cu, Mo, Pb and Zn by Inductively Coupled Plasma Mass Spectrometry (ICP-MS) after Aqua Regia Digest (10 g - 200 ml). Kent drill sample assay techniques are presented in Table 23.

**Table 23: Analytical details for Kent drill sample assay analysis – SGS (NZ) Ltd (O’Neill 2011)**

Element	Digest	Analysis	Analysis Code	Lower Detection Limits (ppm)
Au	Fire Assay 50 g	AAS	FAA505	0.01
As	Aqua-Regia 10 g-200 ml	ICP-MS	ARM133	1
Ag	Aqua-Regia 10 g-200 ml	ICP-MS	ARM133	0.1
Bi	Aqua-Regia 10 g-200 ml	ICP-MS	ARM133	0.1
Cu	Aqua-Regia 10 g-200 ml	ICP-MS	ARM133	2
Mo	Aqua-Regia 10 g-200 ml	ICP-MS	ARM133	0.1
Sb	Aqua-Regia 10 g-200 ml	ICP-MS	ARM133	0.1
Pb	Aqua-Regia 10 g-200 ml	ICP-MS	ARM133	1
Zn	Aqua-Regia 10 g-200 ml	ICP-MS	ARM133	5

The core was measured, converted from feet into metres, logged collecting lithology, colour, grain-size and mineralogy. Structural and alteration logging was also completed. Close-up and microscope photos of the core were taken then it was marked up for sampling. The core was photographed. Core was cut in half; the sample half being placed into sample bags with unique identification tags. The other half was placed in the core boxes and archived. There was a sampling chain of custody recorded on paper and in a spreadsheet.

Sample lengths for AX001 to AX004 were continuous 1 m lengths. From AX005 onwards the core was sampled according to geological sections ranging from 0.5 to 1.5 m lengths. Full core was sampled from AX001 to AX005, whilst the later drill holes were sampled based on sample prospectiveness (O’Neill 2011).

For rock samples, Kent dried and crushed to 75% passing 2 mm, split to 250 g and pulverized to 85% passing 75 µm. Preparation by aqua regia digestion and analysis by ICP-MS for Ag, As, Bi, Cu, Mo, Pb, Sb, Zn. Gold was assayed by fire assay 30 g, with a gravimetric finish (Kent 2010b).

Stream sediment samples were dried and screened to -120 mesh (report weight) split if necessary. Preparation by aqua regia digestion and analysis by ICP-MS for 32 elements. Gold was assayed by fire assay 30 g, with a gravimetric finish (Kent 2010b).

No independent laboratory inspections were carried out during Kent’s drilling, sampling and analysis.

#### 6.7.4 GFR

Soil samples were air dried and submitted along with rock chip samples to Amdel’s Macraes Flat laboratory in East Otago for gold analysis using the NZFA2 method, by fire assay and solvent extraction. Amdel prepared and freighted a split from each sample to the Ultra Trace laboratory in Perth, Western Australia for multi-

element analysis. These splits were digested with aqua regia, and Ag, As, Bi, Cu, Hg, Mo, Pd, Pb, Pt, Sb, Sn, Te, W, Zn were determined by ICP-MS (Youngson 2012).

### 6.7.5 Otter

All stream sediment samples were wet sieved in the field through a -44BSI sieve and some 50 to 300 g of fines were retained as sample. After drying, these samples were resieved through the same size mesh to remove extraneous material such as grit, twigs, leaves etc. which it had been found impractical to exclude from the sample under normal field conditions. This -44 mesh material was then analysed. All samples were analysed for Mo, Cu, Zinc and Ag and a total of 58 selected samples were analysed for Sn, W and Au (Bates 1980).

All samples collected in 1978, (a total of 215 samples), were analysed by L&M at Port Mapua. The remaining 39 samples collected by Otter in 1976-1977 were analysed by Geomin in Perth (Bates 1980).

### 6.7.6 Auzex

For soil sampling, bulk samples (1-1.5 kg) were collected from the B-horizon with a proportion of coarse rock material hand-picked out. Preliminary preparation at the ALS Brisbane involved drying and sieving to -2 mm. All samples were crushed, pulverised and subsequently assayed using the following techniques (Auzex 2010):

- Multi-element mass spectroscopy ME-MS62s Analytes, showing the lower detection limits in ppm: Ag (0.02), As (2.00), Bi (0.01), Sb (0.05), Mo (0.05), Cu (0.20), Pb (0.50), Zn (0.50) Sn and W (0.10).
- Fire Assay Au-AA21 (Townsville laboratory): Analyte, showing the lower detection limit in ppm: Au (0.001).

Drill core was logged and sampled at the coreshed on the outskirts of Reefton. Core was logged for recovery percentage and Rock Quality Designation (RQD), lithology, alteration, mineralisation, veining and structure. Macro photos of interesting sections and full core tray shots were attained in natural light prior to sampling. Core sample spacing rarely exceeded 2 m (except in zones of exceptionally poor recovery, such as at the top of drill hole ARD4). Sample spacing reduced to less than 1 m in prospective (mineralised) zones and sample boundaries were adjusted to coincide with lithological boundaries when possible (Kenex 2012).

Samples from drill holes ARD1 and ARD2 were processed and analysed at SGS Waihi. Sample preparation was moved to SGS Ngakawau (north of Westport) for drill hole ARD3 onwards, to cut down on shipping times and costs. The laboratory process at Ngakawau was as follows (Kenex 2012):

- Half core samples reduced to 2 mm in jaw crusher.
- 1/3 split reduced to 75 µm in LM1 ring mill.
- 120 g split sent to Waihi for fire assay – plenty for repeats if necessary.
- Facility cleaned with a barren wash between batches.

Table 24 presents analytical details for Auzex drill sample assay analysis.

**Table 24: Analytical details for Auzex drill sample assay analysis – SGS (NZ) Ltd (Kenex 2012)**

Element	Digest	Analysis	Analysis Code	Lower Detection Limits (ppm)
Au	Fire Assay 50 g	AAS	FAA343	0.05
As	Aqua-Regia 10 g-200 ml	ICP-MS	ARM111	1

Element	Digest	Analysis	Analysis Code	Lower Detection Limits (ppm)
Sb	Aqua-Regia 10 g-200 ml	ICP-MS	ARM111	0.1

Analyses (Waihi) for all samples included Au by fire assay and As by acid digest. Samples from the mineralised zones of drill holes ARD2 and ARD4 were also tested for Sb (Kenex 2012).

A MS study was carried out on the two most prospective drill holes from the ARD drilling programme, using a KT-9 kappameter. The KT-9 kappameter is a hand-held MS meter (sensitive to  $1 \times 10^{-5}$  SI units), which measures the true MS of rock core, hand samples or outcrop. The device uses a 10 kHz LC oscillator and an inductive coil to measure magnetic susceptibility. It has a core logging mode, where a core diameter can be specified. Typically, MS measurements would be taken on whole core during geotechnical logging (e.g. one measurement per metre), however; since the ARD core is archived, half core and the unit's 'pin' mode had to be used instead, essentially treating half core as hand samples (Kenex 2012).

Large sections of the archived core have been reduced to gravely rubble, either by original fracturing or from disturbance while passing through the core saw. Since time was not a limiting factor, MS measurements were taken on all appropriate pieces of core (half core pieces longer than 6 cm – the width of the kappameter head and approximately the diameter of HQ core). Readings were taken from the flat face of the cut half core. Measurements were taken by pressing the kappameter perpendicularly against the flat face of the half core. Ten measurements were taken at each point and were averaged (Kenex 2012).

Since the kappameter measurements partly depend on the volume of rock sampled, it is likely that the results from equivalent PQ and HQ core are not strictly comparable, however; for the purposes of this study the difference was assumed to be negligible. There is also likely to be a lithological bias i.e. certain rock types may be predisposed to fracturing, while others remain cohesive. All of the major lithologies were represented in the cohesive core (Kenex 2012).

### 6.7.7 Tectonex

Stream sediments samples were assayed by SGS Townsville for Au (low level of detection) with two tailings panned concentrate samples re-assayed at a higher level of detection. All rock chips were assayed by SGS Waihi (using fire assay/AAS finish, 30 g charges). All pulverised splits and pulps were then scanned by a certified Olympus XRF for the following elements: As, Cu, Nb, Pb, Rb, Sr, Y, Mo, Sn, Zn, Zr, Cr, Sb, Se, Th, U, Ag, Cd, Co, Ni, V, Bi, Hg, Te, W, Mn, Fe, K, P, Ca, S, Ti and Cl (Nichols 2018).

Table 25 presents analytical details for Tectonex sample analysis.

**Table 25: Analytical details for Tectonex sample analysis – SGS (NZ) Ltd (Nichols 2018)**

Element	Digest	Analysis	Analysis Code	Lower Detection Limits (ppm)
Au	Fire Assay 30 g	AAS	FAA303	0.01
Au	Fire Assay 30 g	AAS	FAI303	0.001

### 6.7.8 Titan

Pan concentrates were obtained in the field by removing the heavy mineral tail from the pan (typically <1 g), with the aid of an eye dropper and transferring the sample to a small plastic bag. Samples were therefore a genuine gravity concentration of the heavy minerals present in the pan (e.g. garnet, zircon, magnetite, ilmenite, gold etc.) [Utting 1988].

The wet pan concentrate samples obtained were examined by Dr. A.M, Taylor (a Titan Director and geochemist) using a binocular microscope to ascertain their general nature and presence of any obvious gold. They were dried and repackaged to be sent to Analabs in Perth for activation analysis. Initially, only good representative samples from a watershed were sent for assay, due to budgetary constraints. However, the final batch of pan concentrates were all sent to Analabs for assay by nuclear activation (Utting 1988). The following elements were analysed for: Sc, Cr, Fe%, Co, Zn, As, Br, Ag, Sb, Cs, Ba, La, Ce, Sm, Eu, Yb, Lu, Hf, Ta W, Au, Th and U.

The batch of rock and pan concentrate samples obtained from the three week field work conducted after Christmas 1987 were sent to ISL Nelson for assay, however; ISL Nelson were unable to process the pan concentrates, which were sent on to Analabs in Perth for processing. ISL assayed a total of 18 quartz reef/float samples for Au, Ag, As and Sb using AA but found no detectable gold or silver in any of the samples submitted (Au <0.05 ppm and Ag <0.5 ppm). Analabs analysed the samples for the following elements: Sc, Cr, Fe%, Co, Zn, As, Br, Ag, Rb, Sb, Cs, Ba, La, Ce, Sm, Eu, Yb, Lu, Hf, Ta W, Au, Th and U.

The 16 rock samples sent to Analabs for assay by nuclear activation were assayed for gold and 26 other elements, however; these samples were similarly found to be barren of precious metals (Utting 1988).

### 6.7.9 Eureka

Channel samples were taken to investigate the occurrence of gold in gravels. The samples were screeded to -1.5 mm in a tank, water settled and the entire fine sample was amalgamated. A split of 0.43 litres was taken from each sample and sent to SGS (location unknown) for fire assay (Au). The remainder was wilfley tabled and gold was recovered from concentrates by amalgamation and nitric acid. Concentrate tailings and light tailings were also sent to SGS (location unknown) for fire assay (Anon 1991).

A bulk sample of an 8 m interval was collected using a Hitachi UH143 excavator. This 8 m interval was processed through a vibrating screen, with gold recovered over hydraulic riffles (Anon 1991).

The test pits were not screened and two panners pan sampled continuously from the pits during excavation. Grades were estimated from this panning (Anon 1991).

## 6.8 QAQC

### 6.8.1 Big River Project

No QAQC protocols, documentation or results relating to CRAE exploration programs or the first OGL exploration program have been located by either Siren or GANZL.

For field programs conducted between 2007 and 2014, OGL included at least two certified standards, one blank and one low detection standard for each wacker sample batch sent to ALS Brisbane. If both standards from the same batch failed i.e. results fell outside two standard deviations of the actual value, the laboratory would be requested to re-assay the job. A total of 35 standards and blanks were submitted during the wacker program (Hood Hills 2012).

For OGL drill programs at the BRP, two coarse blanks (basalt) for the first two samples were submitted. Each submission would have at least three certified standards and at least three laboratory duplicates would be requested. Screen fire assay submission would include at least one coarse blank and 1 kg quartz flushes

were requested after samples with visible Au. Failed standards, that is, standard results falling outside two standard deviations of the certified standard value were noted. It was determined on a case by case basis if re-assay was required. A total of 109 standards and blanks were submitted with 13 failing (Hood Hills 2012). All assay data was imported into the Reefton Project acQuire™ database directly from laboratory reports.

No QAQC analysis or comments were made by OGL.

SGS was ISO 19011 certified at the time of the BRP and GPP drilling by OGL and both SGS and ALS carry full internal QAQC systems. ALS is currently ISO/IEC 17025 (2005) accredited, however, GANZL has been unable to confirm whether or not they were accredited at the time the sample analysis associated with the OGL exploration programs was completed.

### 6.8.2 Alexander River Project

No QAQC results have been reported for CRAE and OGL sampling and drilling programs conducted at the ARP.

Kent trench sampling included one duplicate and one blank for every 20 samples. For all other samples such as rock chip, a blank was inserted at a frequency of one for every 20 samples.

During drilling, four Rocklab standards or 'blank' rock were randomly picked to be placed after every 20 samples. It is unknown whether duplicates and/or lab repeats were used as well. Table 26 presents details of the standards used by Kent (O'Neill 2011).

**Table 26: Rock standards used by Kent (O'Neill 2011)**

Standard	Reference	Matrix Type	Au (µg/g)	95% Confidence Interval (µg/g)
1	OxD87	Oxide	0.417	0.004
2	OxH66	Oxide	1.285	0.012
3	OxK69	Oxide	3.583	0.033
4	OxP76	Oxide	14.98	0.08
Blank		Blank Greenland Group	0.00	0.00

Kent submitted a total of 10 blanks, four duplicates and 36 standards during their drilling program (Kent 2010a). Kent did not submit any QAQC analysis or comment on the behaviour or results of their QAQC.

### 6.8.3 Reefton South Project

GFR submitted an unknown number of limestone blanks with rock chip samples. Five repeat analyses of soil samples yielded consistent results (Youngson 2012).

### 6.8.4 Golden Point Prospect

No information relating to QAQC results or methodologies for CRAE or OGL exploration programs completed during 1996/1997 has been located by either Siren or GANZL.

From the 2007 drilling program, two certified Rocklab Au standards and one blank were included with each sample dispatch. If more than one standard from the same drill hole returned assay values outside two standard deviations of the actual value, the laboratory was requested to re-assay the dispatch. A total of six standards and three blanks were submitted (McCulloch and Timms 2007).

From the 2011 drilling program at least two certified standards and two blanks were submitted. At least two lab duplicates were requested with each drill hole submission. If more than one standard from the same drill hole returned assay values outside two standard deviations of the actual value, the laboratory was requested to re-assay the dispatch. A total of 25 blanks and 29 standards were submitted. For wacker samples taken in 2011, at least two certified standards, one blank and one low detection standard were submitted for each wacker sample batch sent to ALS Brisbane (Hood Hills 2011).

During the 2013 drilling, at least one certified standard, two blank samples and two lab duplicates were sent and requested for each drill hole sample submission. If more than two standards from the same drill hole returned assay values outside two standard deviations of the actual value, the laboratory was requested to re-assay the dispatch. A total of eight blanks and five standards were submitted (Gardner 2013).

### 6.8.5 Bell Hill Project

No QAQC protocols, documentation or results relating to Titan, Eureka, South Pacific Mines, SAP, Birchfield, Strategic Materials or Perkins have been located by either Siren or GANZL.

### 6.8.6 Lyell Project

No QAQC protocols, documentation or results relating to Otter exploration have been located by either Siren or GANZL.

From the 2011 Auzex drilling program, at least one certified standard, two blank samples and two lab duplicates were sent for assay for each drill hole. Auzex did not submit any QAQC analysis or comment on the behaviour or results of their QAQC measures.

During the 2014 OGL field program, at least three certified standards and three lab duplicates were sent for assay along with the grab and float samples. OGL did not submit any QAQC analysis or comment on the behaviour or results of their QAQC measures.

During the Tectonex field program at least six lab duplicate analyses were performed by SGS. Tectonex did not submit any QAQC analysis or comment on the behaviour or results of their QAQC measures.

## 7.0 TECHNICAL STUDIES

No Mineral Resource estimates reported in accordance with the guiding principles and minimum standards set out in the JORC Code have been made available to GANZL for the BRP, ARP, RSP, GPP, BHP or LP.

Technical studies previously reported in-situ resource estimates for the BRP (McLelland 2014a) and GP (Doyle and Hood Hills 2011) areas, which are not reported in this IGR as they have not been reported in accordance with the JORC Code. The author considers these in-situ resource estimates cannot be relied on and therefore not material for inclusion in this IGR.

## 8.0 REVIEW OF EXPLORATION ACTIVITIES

It is GANZL's opinion that the exploration activities completed to date have generally been conducted according to industry standards. After review of all available relevant exploration activities completed to date, GANZL considers some aspects offer opportunities for improvement, these being:

- **Database Management:** The current geological databases for the projects consist of a series of Microsoft Excel™ spreadsheets that have been submitted to NZP&M. It is recommended that a central data management system be implemented. A geological database or geological databases (compatible with a 3D mining software package e.g. Vulcan™, Datamine™ or Surpac™) should be developed.
- **GIS Management:** All exploration data and information should be compiled and centralised into GIS format and imported into a 3D mining software package e.g. Vulcan™, Datamine™ or Surpac™ for future design and visualisation.

- **QAQC Protocols:** Whilst the QAQC database is relatively small for each project, QAQC analysis should be compiled. It appears that no laboratory audits have been conducted or independent re-analysis of assay results. It is recommended that prior to any future samples being submitted to a laboratory for analysis, a thorough laboratory audit be conducted.

## 9.0 RECOMMENDATIONS FOR FURTHER WORK

### 9.1 Exploration

- Ensure that all drill hole collars have been accurately surveyed using Differential Global Positioning System (DGPS).
- Compile all data into GIS and 3D mining software package e.g. Vulcan™, Datamine™ or Surpac™.
- Look into the feasibility of acquiring LiDAR data and/or high resolution aerial photography over both the BRP and ARP.
- Using the Blakemore (2016) re-interpretation of the Reefton Goldfield, follow up exploration targets generated at the BRP.
- Investigate down dip from the No. 7 level of the Big River Mine since mining activities ceased in 1942 due to a lack of man power not a lack of ore. Before mining was conducted in the 1940s, high grades were intercepted on the No.9 level; post-1940s mining did not reach the No.9 level again.
- Investigate suitable techniques that may be able to assist in '*looking under cover*' in the BRP. To date the only gold found in the Reefton area has been exposed at the surface, yet most of the Greenland Group rocks, especially in the south of Reefton Goldfield, are sitting beneath cover rock and therefore could be concealing new deposits.
- Conduct further research into the potential of both the Mackay-Loftus, Bruno and Mullock lodes at the ARP, as historically they were too difficult to mine. High grade samples have been obtained from both lodes during trenching and sampling.
- Investigate the feasibility of re-entering McVicar's No.6 level to map and test for down-dip continuity.
- Re-map and re-interpret the ARP, with the insights into controls on mineralisation gained from OGL during both exploration and mining.
- Investigate further the two geochemical/geological targets noted by Tectonex, the South Lyell Porphyry target and the North Lyell Porphyry target.
- Infill soil geochemical sampling on GPP reef tracks (Figure 29) and trench any anomalies to expose the reef.
- In the RSP area, further research into the disappearance of the mineralisation corridor under cover may lead to additional discoveries.

### 9.2 Technical Studies

As well as the work required to fulfil minimum future work obligations, GANZL recommends the following work be completed:

- Development of a comprehensive geological database (upon completion of planned exploration works), 3D geological model and subsequent Mineral Resource estimate reported in accordance with the guiding principles and minimum standards set out in the JORC Code.
- A scoping study, with the aim of establishing the economic potential of the BRP, ARP and LP and subsequent development of conceptual mine plans for the purposes of prioritising future exploration and

other technical investigations focusing on the mineralisation halo potentials left behind in the historical workings.

- Investigate geotechnical issues and mining solutions around working in close proximity to historical underground mine workings.

## 10.0 EXPLORATION PROGRAMS AND BUDGETS

### 10.1 Big River Project

Siren has proposed a staged program of exploration for the BRP over the next two years, following their listing on the ASX. Siren's program going forward will focus on the following:

- Literature review.
- Development of an updated digital database of historical information.
- Target identification and exploration design.
- Geochemical (including wacker sampling) and mapping programs in two stages.
- Completion of a programme of exploration drilling.
- If results warrant, completion of a Mineral Resource estimate.

### 10.2 Alexander River Project

Siren has proposed a staged program of exploration for the ARP over the next two years, following their listing on the ASX. Siren's program going forward will focus on the following:

- Literature review.
- Development of an updated digital database of historical information and planned exploration.
- Target identification and exploration design.
- Geochemical and mapping programs.
- Trench sampling.
- Completion of a programme of exploration drilling.
- If results warrant, completion of a Mineral Resource estimate.

### 10.3 Reefton South Project

Siren has proposed a prospecting program for the RSP over the next two years, following their listing on the ASX. Siren's program going forward will focus on the following:

- Literature review.
- Review of all available water bore holes, testing for bedrock intersection.
- Development of an updated digital and GIS database of historical information and planned exploration.
- Geochemical and mapping programs.
- Geophysical review, interpretation and ground geophysical survey.
- DoC access agreement.
- Target identification and exploration design for further exploration.

## 10.4 Golden Point Project

Siren has proposed a prospecting program for the GPP over the next two years, following their listing on the ASX. Siren's program going forward will focus on the following:

- Literature review.
- Development of an updated digital and GIS database of historical information and planned exploration.
- Geochemical and mapping programs.
- Trench sampling.
- Target identification and exploration design for further exploration.
- Completion of a programme of exploration drilling.
- If results warrant, completion of a Mineral Resource estimate.

## 10.5 Bell Hill Project

Siren has proposed a prospecting program for the BHP over the next two years, following their listing on the ASX. Siren's program going forward will focus on the following:

- Literature review.
- Geological mapping.
- Geochemical sampling.
- Development of an updated digital database of historical information and planned exploration.
- Geophysical ground survey.
- Target identification and exploration design for further exploration.

## 10.6 Lyell Project

Siren has proposed a staged program of exploration for the LP over the next two years, following their listing on the ASX. Siren's program going forward will focus on the following:

- Literature review.
- Development of an updated digital and GIS database of historical information and planned exploration.
- DoC access agreement.
- Geophysical review, interpretation and ground geophysical survey.
- Target identification and exploration design.
- Geochemical and mapping programs.
- Completion of a programme of exploration drilling.

## 10.7 Expenditure

Siren's planned expenditure is split across six separate projects, namely the BRP, ARP, RSP, GPP, BHP and LP.

The RSP and BHP prospecting activities are proposed to be undertaken over the next two years as opposed to the proposed BRP, ARP, GPP and LP exploration works, which are proposed to be undertaken over the next five years.

The proposed budgets for the BRP, ARP, RSP, GPP, BHP and LP exploration works over the next two years are presented in Table 27.

**Table 27: Proposed budgets for BRP, ARP, RSP, GP, BHP and LP exploration works over the next two years in AU\$**

	Subscription (AU\$10.0M)		Percentage of Funds
	Year 1	Year 2	
<b>Source of Funds</b>			
Funds Raised from Offer	\$10 000 000		87.0%
Working Capital	\$1 500 000		13.0%
<b>TOTAL</b>	<b>\$11 500 000</b>		<b>100.0%</b>
<b>Costs of Offer</b>			<b>\$850 000</b>
<b>TOTAL AVAILABLE FUNDS</b>			<b>\$10 650 000</b>
<b>Allocation of Funds</b>			
Big River Mapping and Sampling	\$100 000	-	1.0%
Big River Geophysics	\$150 000	\$150 000	2.9%
Big River Drilling	\$1 000 000	\$1 500 000	23.9%
Alexander River Mapping and Sampling	\$100 000	-	1.0%
Alexander River Geophysics	\$50 000	\$25 000	0.7%
Alexander River Drilling	\$1 000 000	\$1 500 000	23.9%
Reefton South Mapping and Sampling	\$50 000	-	0.5%
Reefton South Geophysics	\$200 000	\$100 000	2.9%
Reefton South Drilling	\$700 000	\$1 500 000	21.0%
Lyell Mapping and Sampling	\$50 000	\$25 000	0.7%
Lyell Geophysics	\$25 000	\$50 000	0.7%
Corporate	\$1 100 000	\$1 100 000	21.0%
<b>TOTAL</b>	<b>\$4 525 000</b>	<b>\$5 950 000</b>	<b>100.0%</b>
<b>TOTAL (Year 1 + Year 2)</b>	<b>\$10 475 000</b>		<b>100.0%</b>

GANZL considers that the programs of exploration proposed by Siren for the BRP, ARP, RSP, GPP, BHP and LP are well thought out and sufficient to meet the minimum work programme requirements over the period of the next two years. The quantities of money allocated to each of the proposed activities appear reasonable and once completed, the projects should improve the understanding in terms of a possibility of the estimation and reporting of a Mineral Resource for both the BRP and ARP and the generation of exploration drilling targets for the LP, GPP, BHP and RSP.

## 11.0 ECONOMIC ASSESSMENT OF THE REEFTON GOLD PROJECT

GANZL has reviewed the previous exploration work undertaken by various parties. GANZL concludes that the work has generally been carried out to a standard consistent with international industry practice.

The guidelines of the 2015 Edition of the VALMIN Code, specifically Sections 8.4 and 8.5, state that an economical evaluation of a project cannot be disclosed ignoring appropriate Modifying Factors (studies are required to be at a minimum of PFS level) or using *in situ* Mineral Resources/Ore Reserves. As per the JORC Code, Modifying Factors are considerations used to convert Mineral Resources to Ore Reserves. These include, but are not restricted to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors.

To date, no Mineral Resources have been estimated and reported for the BRP, ARP, RSP, GPP, BHP and LP.

GANZL was not provided with any information that conveys appropriate Modifying Factor studies at this time and to date, no Ore/Mineral Reserves have been estimated and reported for the BRP, ARP, RSP, GPP, BHP or LP. Accordingly, from the perspective of conformance with both the JORC and VALMIN Codes, in GANZL's view there is insufficient basis to undertake an economic assessment of the BRP, ARP, RSP, GPP, BHP or LP at this time.

Notwithstanding the above, it is GANZL's opinion that the work completed to date warrants further exploration and project development expenditure.

## 12.0 REPORT LIMITATIONS

Your attention is drawn to the document, "*Report Limitations*", which is attached as APPENDIX E. The statements presented in that document are intended to advise you of what your realistic expectations of this report should be and to present you with recommendations on how to minimise the risks to which this report relates which are associated with this project. The document is not intended to exclude or otherwise limit the obligations necessarily imposed by law on Golder Associates (NZ) Limited, but rather to ensure that all parties who may rely on this report are aware of the responsibilities each assumes in so doing.

## 13.0 REFERENCES

Allibone, A. H., 2009. *Mineralised structures and geology around the Globe-Progress Mine*. Unpublished report to OceanaGold Ltd. 52p.

Barry, J., 1993. *The History and Mineral Resources of the Reefton Goldfield*. Resource Information Unit Report 15. Ministry of Commerce.

Bull, V., 2018a. *Exploration permit application by Reefton Resources Pty Limited, Big River*. NZP&M application report for Reefton Resources Ltd.

Bull, V., 2018b. *Exploration permit application by Reefton Resources Pty Limited, Alexander River*. NZP&M application report for Reefton Resources Ltd.

Bull, V., 2018c. *Exploration permit application by Reefton Resources Pty Limited, Reefton South*. NZP&M application report for Reefton Resources Ltd.

Bull, V., 2018d. *Exploration permit application by Reefton Resources Pty Limited, Lyell*. NZP&M application report for Reefton Resources Ltd.

Bull, V., 2020. *Exploration permit application by Reefton Resources Pty Limited, Golden Point*. NZP&M application report for Reefton Resources Ltd.

Crown Minerals Act, 1991. No. 70. 1991 [online]. Available at <<http://www.legislation.govt.nz/act/public/1991/0070/latest/DLM242536.html>> [Accessed 4 May 2018].

Federation Mining Pty Ltd (Federation), 2020. *Funding secured to progress Blackwater Gold Project* [online]. Available at: <<https://www.federationmining.com.au/wp-content/uploads/2020/08/FED-Media-Release-Funding-update-August-2020-1.pdf>> [Accessed 20 August 2020].

Gage, M, 1948. *The geology of the Reefton Quartz Lodes*. New Zealand Geological Survey, Bulletin 42.

GNS Greymouth Qmap [online]. Available at <<http://shop.gns.cri.nz/qgreymouth-zip/>> [Accessed 8 August 2018].

Henderson, J, 1917. *The geology and mineral resources of the Reefton Subdivision*. . New Zealand Geological Survey, Bulletin 18.

Hood Hills, S B, Mustard R, Blakemore H, McLelland R, Allibone A.H., Scott J. 2011: *The structural setting and paragenesis of gold mineralisation at the Big River prospect, Reefton Goldfields, West Coast, New Zealand*. NZ branch AusIMM 2011 conference volume.

Macara, G, 2106. *The Climate and Weather of the West Coast*. NIWA Science and Technology Series Number 72.

Moore, J, 2013. *Technical Report for the Reefton Project*. NI 43-101 Technical Report for OceanaGold Ltd.

Nathan, S, Rattenbury, M S, Suggate, R P, 2002: *Geology of the Greymouth Area*. Institute of Geological & Nuclear Sciences Qmap series map 12.

NewstalkZB (NZB), 2020. Greens urged to act over regulations about mining applications [online]. Available at: <<https://www.newstalkzb.co.nz/on-air/heather-du-plessis-allan-drive/audio/catherine-delahunty-21-mining-applications-on-conservation-land-approved-since-2017/>> [Accessed 15 June 2020].

New Zealand Petroleum & Mineral (NZP&M) Minerals and Coal Digital Data Submission Standards & Reporting Guidelines, 2017 (online). Available at: <<https://www.nzpam.govt.nz/assets/Uploads/our-industry/rules-regulations/mineral-coal-digital-data-submission-standards-reporting-guidelines.pdf>> [Accessed 24 May 2020].

NZP&M Minerals Programme (Minerals Programmes for Minerals Excluding Petroleum) 2013 [online]. Available at: <<https://www.nzpam.govt.nz/assets/Uploads/our-industry/rules-regulations/minerals-programme-2013.pdf>> [Accessed 5 May 2020].

NZP&M Minerals Permit Webmaps [online]. Available at <<http://data.nzpam.govt.nz/permitwebmaps?commodity=minerals>> [Accessed 11 May 2020].

Otago Daily Times (ODT), 2020. Coalition concedes green economy relies on mining resources [online]. Available at: <<https://www.odt.co.nz/business/coalition-concedes-green-economy-relies-mining-resources>> [Accessed 3 June 2020].

Quigg (Quigg Partners Barristers and Solicitors) 2019. *Solicitor's Tenement Report*. Prepared for Reefton Resources Pty Limited, Submitted November 2019, 26 pp.

Reefton Resources Pty Limited, 2020. *Bell Hill Prospecting Permit Application Supporting Information*. Submitted April 2020.

Shand, F, 2015. *Structural controls and paragenesis of the Big River South – St George deposits, Reefton Goldfield*. Otago University Thesis.

Tasman Mining Limited (Tasman Mining), 2019. Tasman Mining Secures NZ\$15M in Funding for the Blackwater Gold Project [online]. Available at: <<https://www.federationmining.com.au/wp-content/uploads/2019/12/PGF-Blackwater-Gold-Project-Funding-Media-Release.pdf>> [Accessed 15 June 2020].

The Economist, 2017. New Zealand Summary Fact Sheet [online]. Available at: <<http://country.eiu.com/article.aspx?articleid=1755521559&Country=New%20Zealand&topic=Summary&subtopic=Fact+sheet>> [Accessed July 6, 2017].

Velseis Processing Pty Ltd (Velseis), 2020. *2020 Reefton South 2D Seismic Interpretation*. Prepared for Condamine Resources Limited, Submitted May 2020, 26 pp.

Vidanovich, P, 2013. *Summary Report on the West Coast Airborne Geophysical Survey 2011-2013*. Prepared for New Zealand Petroleum and Minerals.

NZP&M Reports providing details on CRAE, Kent and OGL exploration programs, resource models and scoping studies:

**Big River Project:** MR2836 (Corner 1990), MR3341 (Knight 1995), MR4092 (Reynolds and James 2005), MR4720 (Hood Hills 2011), MR4817 (Hood Hills 2012), M4958 (Gardner 2013), MR5107 (McLelland 2014a) and MR5343 (Blakemore 2016).

**Alexander River Project:** MR3242 (Hazeldene 1993), MR3591 (Dunphy and Barry 1997), MR3965 (Reynolds 2003a), MR4713 (Kent 2010a) and MR4762 (O'Neill 2011).

**Lyell Project:** MR1348 (Bates 1980), MR3902 (Wopereis 1987), MR4170 (Auzex 2006), MR4462 (Pilcher 2009), MR4556 (Auzex 2010), MR4701 (Hill 2010), MR4709 (Kent 2010b), MR4845 (Kenex 2012), MR5051 (Gardner 2013), MR5157 (McLelland 2014b), MR5558 (Nichols 2018).

**Reefton South Project:** MR4304 (Price 2007), MR4479 (Youngson 2009), MR4580 (L'Herpinriere 2010) and MR4824 (Youngson 2012).

**Golden Point Prospect:** MR1294 (Riley 1972), MR1470 (Wotherspoon 1987), MR1541 (Lawrence 1988), MR3483 (Silversmith 1997), MR4451 and MR4517 (McCulloch and Timms 2007), MR4749 (McLelland 2011), MR4790 (Hood Hills 2011), MR4808 (Hood Hills and Doyle 2011), MR4997 (McLelland 2013) and MR5053 (Gardner 2013).

**Bell Hill Project:** MR1509, (South Pacific Mines Ltd 1987), MR1524 (Utting 1988), MR2587 (Anon 1989), MR3220 (Anon 1991), MR3624 (Cowan 1998), MR3778 (Birchfield 2000),

**APPENDIX A**

**JORC 2012 Competent Person's  
Consent Form**

# Consent and Compliance Statement of Competent Person

---

1. I, Aaron Radonich, confirm that I am the Competent Person (as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (**JORC Code**)) for the prospectus which has been prepared by Siren Gold Limited (ACN 619 211 826) (**Siren**) and which is proposed to be lodged with the Australian Securities and Investment Commission on or about 27 August 2020 pursuant to Part 6D.2 of the *Corporations Act 2001* (Cth) (**Corporations Act**) (**Prospectus**).
2. I have read and understood the requirements of the JORC Code.
3. I am a Competent Person as defined by the JORC Code, having five years experience that is relevant to the style of mineralisation and type of Project described in the Prospectus and to the activity for which I am accepting responsibility.
4. I am a Member and Chartered Professional (in the discipline of Geology) of The Australasian Institute of Mining and Metallurgy and a member of the Australian Institute of Geoscientists.
5. I have reviewed the Prospectus to which this Consent and Compliance Statement applies.
6. I am an employee of Golder Associates Pty Ltd and have been engaged by Siren to prepare the documentation in respect of the Reefton Gold Project (**Project**) which is included in the Prospectus.
7. The information contained within the Prospectus at Annexure A (Independent Geologist's Report) that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves (as those terms are defined in the JORC Code) in respect to the Project (**Information**) is based on information compiled by me (**My Information**).
8. I hereby declare that, other than as set out in this Consent and Compliance Statement, there is no relationship between Siren and myself that could be perceived by investors as a conflict of interest.
9. I verify that the Prospectus is based on and fairly and accurately reflects in the form and context in which it appears, the information in my supporting documentation relating to Exploration Targets, Exploration Results, Mineral Resources and/or Ore Reserves.
10. I consent to the inclusion in the Prospectus of the Information in the form and context in which it appears, being based on My Information
11. In accordance with section 716(2) of the Corporations Act and for all other purposes, I consent to:
  - (a) being named as a competent person in the Prospectus;
  - (b) the inclusion, to the extent that it relates to myself, of the statements in Annexure A (Independent Geologist's Report) of the Prospectus; and
  - (c) the distribution of electronic and paper copies of the Prospectus.

12. I have not authorised or caused the issue of the Prospectus and to the maximum extent permitted by law, expressly disclaim and take no responsibility for any other part of the Prospectus.
13. I have not withdrawn this consent prior to the signing of the Prospectus.

**SIGNED** by **AARON RADONICH** in the )  
presence of: )



\_\_\_\_\_  
Signature of Competent Person

27 August 2020

\_\_\_\_\_  
Date

AusIMM

\_\_\_\_\_  
Professional membership  
(insert organisation name)

221172

\_\_\_\_\_  
Membership number



\_\_\_\_\_  
Signature of witness

Mahdi Zoorabadi - Newcastle

\_\_\_\_\_  
Print witness name and residence  
(eg town/suburb)

**APPENDIX B**

**JORC 2012 Table 1: Check List  
of Assessment and Reporting  
Criteria**

# 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>	<p>CRAE Exploration Limited (CRAE), Otter Minerals Exploration Ltd (Otter), OceanaGold Limited (OGL), Auzex Resources (NZ) Pty Ltd (Auzex), Kent Exploration NZ Ltd (Kent), Golden Fern Resources Ltd (GFR), Titan Resources Ltd (Titan), Eureka Mining Ltd (Eureka), South Pacific Mines Ltd (South Pacific Mines), Strategic Materials Pty Ltd (Strategic Materials), Perkins, G.N. &amp; J.W.N. (Perkins), and Tectonex Ltd (Tectonex) utilised various sampling techniques across their projects. Some information relating to sampling techniques is unknown, as this information was not supplied by Siren or located by Golder Associates (NZ) Ltd. (GANZL) during open file information searches. The following information has been located:</p> <ul style="list-style-type: none"> <li>CRAE collected Big River Project (BRP), Alexander River Project (ARP) and Golden Point Project (GPP) soil samples using hand augers to test the 'C' Horizon.</li> <li>CRAE soil sampled the 'A' Horizon along the ridges and traverses at the GPP.</li> <li>CRAE trenches and traverses at the BRP were generally sampled in 1 m continuous intervals.</li> <li>CRAE collected a series of -80# (190 micron [µm]) stream sediment and pan concentrates samples on an approximate density of one sample per square km (km<sup>2</sup>).</li> <li>Lime and Marble Limited (L&amp;M) carried out stream sediment sampling, soil sampling and outcrop cleaning and trenching near Auld Creek in the GPP.</li> <li>Carpentaria Exploration Co Pty Ltd (Carpentaria) carried out reconnaissance stream sediment geochemical and minor rock geochemical sampling programmes at the Lyell Project (LP).</li> <li>Otter collected LP soil samples from the top of the B horizon except where not present in which case the bottom of the A horizon was sampled.</li> <li>Otter collected a series of stream sediment samples at the LP. These were wet sieved in the field through a -44BSI sieve and some 50 to 300 g of fines were retained as sample.</li> <li>OGL channelled sampled along 5 m lengths in the historical workings at the GPP. Spot 1 m samples were taken where anomalous 5 m results were encountered.</li> </ul>

- OGL re-sampled CRAE trenches at the GPP and ARP on 1 m sample lengths.
- OGL soil samples were collect by Wacker drilling or by auger at both the BRP and GPP.
- OGL undertook stream sediment sampling using a 12-mesh and 4-mesh sieve.
- Kent rock chip and trench samples were >2 kg in weight.
- Kent stream sediment sampling and pan concentrates were collected by wet sieving material to 80-mesh.
- Auzex collected bulk (1 to 1.5 kg) soil samples from the B horizon in the LP.
- GRF did not report soil and stream sediment sampling methodologies utilised at the Reefion South Prospect (RSP).
- Rock chip sampling undertaken by CRAE, OGL, GFR, Kent, Auzex and Tectonex was from outcrop, float and mullock dumps.
- OGL ARP underground diamond (DC) drill cores were cut and assayed for Au, As and Sb. The sections of core that were not cut, were ground at 2 m intervals, and assayed for Au and As. The four-hole drilling program from the surface in 1996 did not report any details on sampling and analysis.
- OGL BRP and GPP drill core was sampled on 1 m lengths. The half-cut diamond drill core samples were then dispatched for analysis. Strongly mineralised zones were often sampled based on geological contacts rather than by metre.
- OGL also completed 2-5 m grinds of the non-mineralised host rock. If any anomalous gold results were returned, that 2-5 m section was re-sampled as core cut on 1 m lengths.
- Kent ARP diamond drill core was halved; with half the sample being analysed and half placed in the core boxes and archived. There was a sampling chain of custody recorded on paper and in a Microsoft Excel™ spreadsheet. Sample lengths for AX001 to AX004 were continuous 1 m lengths. From AX005 onwards the core was sampled according to geological sections ranging from 0.5 to 1.5 m lengths. Full core was sampled from AX001 to AX005, whilst the later drill holes were sampled based on sample prospectiveness.
- Auzex LP core sample spacing rarely exceeded 2 m (except in zones of exceptionally poor recovery such as the in the top of drill hole ARD4). Sample spacing reduced to less than 1 m in prospective (mineralised) zones and sample boundaries were adjusted to coincide with lithological boundaries when possible.
- Downhole geophysical logging was not undertaken by any of the Exploration

Criteria	JORC Code Explanation	Commentary
<p><b>Drilling techniques</b></p>	<ul style="list-style-type: none"> <li>• <i>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).</i></li> </ul>	<p>companies. Auzex undertook magnetic susceptibility (MS) logging at the LP, with a handheld MS meter in pin mode. Measurements were taken on all appropriate pieces of core (half core pieces longer than 6 cm – the width of the kappameter head and the diameter of HQ core). Readings were taken from the flat face of the cut half core.</p> <ul style="list-style-type: none"> <li>• Various multi-element analyses were also undertaken from the projects with Au, As and Sb being the primary elements assayed.</li> </ul>
		<p>A large quantity of information relating to drilling techniques is unknown as this information was not supplied by Siren or located by GANZL during open file information searches. The following is what has been located:</p> <ul style="list-style-type: none"> <li>• All drilling conducted across the various projects with the exception of the BHP, has been DC.</li> <li>• For the BRP, OGL did not report drilling diameters for their drilling programs, however, PQ (85 mm core diameter), HQ (63.5 mm core diameter) and NQ (47.6 mm core diameter) drill hole sizes were noted in drill logs.</li> <li>• Recent OGL (&gt;2005) drilling programs generally collared with PQ then reduced to HQ when ground conditions improved and only reduced to NQ if difficulties were encountered.</li> <li>• All Auzex drill holes at the LP were started using PQ equipment and reduced to HQ, with one drill hole (ARD2) being reduced to NQ.</li> <li>• All drilling DC was completed by helicopter supported drill rigs except OGL drilled three DC holes using an underground drill rig at ARP using HQ triple tube.</li> <li>• OGL orientated all core drilled at Big River using a Reflex ATC II RD orientation tool, and downhole surveys were taken every 30 m or at the geologist's discretion. BRS001 had an incorrect downhole survey tool which was replaced.</li> <li>• OGL drilling at the GPP in 2007 experienced difficulties in recovering orientated core using the Ezimark core system due to tool malfunction and operator error.</li> <li>• During Auzex drilling at the LP, drillers indicated the bottom of orientated core using a combined ACE survey and orientation tool. Drill hole orientation surveys were conducted at regular intervals (every ~30 m) downhole.</li> <li>• OGL used triple tube drilling equipment during their GPP drilling programs.</li> <li>• OGL drilled multiple drill holes from single drill pads at both the BRP and GPP.</li> </ul>

Criteria	JORC Code Explanation	Commentary
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>DC sample recovery for OGL (both BRP and GPP) drilling was recorded by measuring the length of recovered core and comparing this with the drilled interval.</li> <li>Auzex core was logged for recovery percentage and Rock Quality Designation (RQD).</li> <li>OGL and Auzex did not report core recovery in the open source datasets.</li> <li>Kent recorded core recovery in their drill logs by drill runs. Kent had substantial core loss occurring between 105 and 140 m in drill hole AX008.</li> <li>No core recovery data has been located to date for the OGL ARP drilling or the Auzex LP drilling.</li> <li>The mean core recovery information and analysis has not been reported and no analysis has been completed by GANZL to date.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<p>In depth examination into OGL, Kent and Auzex logging procedures is yet to be undertaken, however, GANZLs initial findings are:</p> <ul style="list-style-type: none"> <li>All OGL DC drill holes completed at the BRP and GPP were logged for lithology, weathering, bedding, structure, alteration, mineralisation, and colour using a standard set of in-house logging codes. The logging method used was quantitative.</li> <li>OGL logged using a standard Microsoft Excel logging spreadsheet template, which were then imported into their Reefion acQuire™ database.</li> <li>All OGL core trays were photographed prior to core being sampled.</li> <li>OGL core from ARP was logged using a HUSKY Hunter datalogger. GAZL did not assess the logging data from these programs.</li> <li>Kent core was measured, converted from feet into metres, logged collecting lithology, colour, grain size, and mineralogy. Structural and alteration logging was also completed. Close-up and microscope photos of the core were taken then it was marked up for sampling. The core was photographed.</li> <li>Auzex core was logged for lithology, alteration, mineralisation, veining, and structure. Macro photos of sections of interest and full tray photos were collected in natural light prior to sampling.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and</li> </ul>	<p>OGL and Kent used various sub-sampling techniques and Quality Assurance and Quality Control (QAQC) measures for their projects. Some information relating to sample techniques is unknown as this information was not found to date or included in the Siren data package or in open source databases. The following is what has been found:</p>

**Criteria****JORC Code Explanation**

- 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.*

**Commentary**

- CRAE soils and trench samples at the Big River Project (BRP) were ground, dried and assayed for Au by fire assay and As and Sb by AAS.
- CRAE sent their soil samples collected at the GPP to ISL, Richmond, New Zealand where 100 to 300 g samples were dried, and rig milled to a nominal -200 mesh. A 30 g split was then assayed for Au, Cu, Pb, Zn and As by flame AAS. Soil samples collected late in the program were despatched to Analabs, Auckland. A 30 g split was assayed for Au by fire assay with a carbon rod finish and As was determined by normal AAS.
- Stream sediment samples collected by Otter in 1978 were analysed by L&M at Port Mapua. Samples collected in 1976-1977 were analysed by Geomin in Perth. All samples were analysed for Mo, Cu, Zn and Ag. Selected samples were analysed for Sn, W and Au.
- Rock chip samples collected by OGL in 1995 at the BRP were analysed by Australian Laboratory Services (ALS) in Mt Maunganui for Au by fire assay and AAS finish, As, Ag, Cd, Cu, Bu, Mo, Sb, Pb, Zn, Ba, Ca, Co, Fe and Mn by ICP-OES. Cr, Ni, Sn, V and W analysis was conducted by ICP-MS.
- OGL ARP adit channel samples taken in 1993 were dried at 70°C for 12 hours, then crushed to 10 mm, then dispatched for analysis.
- OGL ARP DC samples were dried at 70°C for 12 hours, then crushed to 10 mm, then sent for analysis. Au analysis was on 50 g charge for fire assay.
- OGL ARP adit channel and underground drill core samples assayed for Au, As and Sb. The analysis was carried out by Graysons Associates at Macraes Flat Laboratory. Au analysis was on 50 g charge for fire assay.
- OGL surface samples collected from the BRP and GPP (wacker, soil and rock chip) were assayed by ALS Brisbane and SGS Waihi.
- OGL surface samples collected from the LP (float, grab and rock chip) were assayed by SGS Reefion for Au and SGS Westport for As and Sb.
- OGL BRP and GPP half core samples were analysed for Au, As and Sb. Samples were dried at 105 degrees, coarse crushed to a nominal 6 mm, rotary split and then pulverized in Cr steel grinding head to 75 µm.
- OGL - One 50 g pulp split was sent to SGS Reefion and analysed for gold by fire assay. A second 50 g sub-sample was retained and used to make pressed powder pellets for X-ray Fluorescence (XRF) spectrometry analyses for As and Sb.
- OGL used separate prep lab at Westport for sample preparation.

- Auzex rock samples were dispatched to ALS Brisbane for assay. All samples were crushed, pulverized, and subsequently assayed using the following techniques:
  - ME-ICP61 (ALS Brisbane laboratory) lower detection limit in ppm: Ag (0.50), As (5.00), Bi (2.00), Sb (5.00), Mo (1.00), Cu (1.00), Pb (2.00), Zn (2.00), W (1.00), Sn (1.00).
  - Au-AA21 (ALS Townsville laboratory) lower detection limit in ppm: Au (0.001).
- Auzex soil samples were dispatched to ALS laboratory in Brisbane. Preliminary preparation at the laboratory involved drying and sieving to -2 mm. All samples were crushed, pulverized, and subsequently assayed using the following techniques:
  - ME-ICP61 (ALS Brisbane laboratory) lower detection limits in ppm: Ag (0.50), As (5.00), Bi (2.00), Sb (5.00), Mo (1.00), Cu (1.00), Pb (2.00), Zn (2.00), W (1.00), Sn (1.00).
  - Au-AA21 (ALS Townsville laboratory) lower detection limit in ppm: Au (0.001).
- Auzex drill core samples were processed at SGS (Ngakawau, New Zealand) as follows:
  - Half core samples reduced to 2 mm in jaw crusher.
  - 1/3 split reduced to 75 µm in LM1 ring mill.
  - 120 g split sent to Waihi for fire assay – plenty for repeats if necessary.
  - Facility cleaned with a barren wash between batches.
- Kent drill core samples were dried, crushed, split (if required), crushed to 75% passing 2 mm, split to 250 g, and pulverised to >85% passing 75 µm.
- Au was analysed using a 50 g fire assay and Atomic Absorption Spectrometry (AAS).
- Kent rock samples from the LP were dispatched to SGS (Ngakawau, New Zealand), where they were dried and crushed to 75% passing 2 mm, split to 250 g and pulverized to 85% passing 75 µm. Preparation by aqua regia digestion and analysis by ICP-MS for Ag, As, Bi, Cu, Mo, Pb, Sb and Zn. Au was assayed using a 30 g fire assay with a gravimetric finish.
- Kent stream sediment samples from the LP were dispatched to SGS (Ngakawau, New Zealand), where they were dried and screened to -120 mesh (report weight) and split if necessary. Preparation by aqua regia digestion and analysis by ICP-MS for a total of 32 elements. Au was assayed using a 30 g with a gravimetric finish.
- GFR soil samples were air dried and submitted along with rock chip samples to the

Amdel laboratory at OGLs mining operation at Macraes Flat, NZ for gold analysis using the NZFA2 method, by fire assay and solvent extraction.

- GFR had Amdel prepare and freight a split from each sample to the Ultra Trace laboratory in Perth, Western Australia for multi-element analysis.
- Tectonex stream sediments samples were dispatched to SGS Townsville for Au assay.
- Tectonex rock chips were dispatched to SGS Waihi for Au assay (using a 30 g fire assay and AAS finish). All pulverised splits and pulps were then scanned by a certified Olympus XRF for the following elements: As, Cu, Nb, Pb, Rb, Sr, Y, Mo, Sn, Zn, Zr, Cr, Sb, Se, Th, U, Ag, Cd, Co, Ni, V, Bi, Hg, Te, W, Mn, Fe, K, P, Ca, S, Ti and Cl.
- Sample sizes are considered appropriate to the grain size of the material being sampled.
- No QAQC measures, laboratory documentation or results relating to CRAE, Titan, Eureka, South Pacific Mines, Perkins, and Otter exploration programs have been located by GANZL. For field programs conducted between 2007 and 2014, OGL included at least two certified standards, one blank and one low detection standard for each wacker sample submission. OGL BRP drill programs, two coarse blanks, at least three certified standards and three laboratory duplicates were submitted or requested. At the GPP, OGL submitted at least two certified standards, one to two blanks and requested lab duplicates.
- During the 2014 OGL LP field program, at least three certified standards and three laboratory duplicates were sent for assay along with the grab and float samples. OGL did not submit any QAQC analysis or comment on the behaviour or results of their QAQC measures.
- Tabled QAQC analysis of standards and blanks for OGL and Kent exploration has been reported at BRP and ARP but no analysis or comment on the results.
- OGL used a case by case basis to determine outcome from failed standards, that is, standards that fell outside two standard deviations of the certified standard value.
- The assay technique detailed for CRAE soils and trench samples at the BRP were grounded, dried, and assayed by Analabs Auckland for Au by fire assay with As and Sb by AAS.
- Rock chip sampling conducted by OGL in 1995 at the BRP was analysed with Au

**Quality of assay data and laboratory tests**

- *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*
- *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.*

using fire assay and AAS finish. As, Ag, Cd, Cu, Bu, Mo, Sb, Pb, Zn, Ba, Ca, Co, Fe and Mn were assayed using ICP-OES. Cr, Ni, Sn, V and W were assayed using ICP-MS.

- OGL Rock chip samples collected between 2010 and 2013 were analysed for Au, Sb, As, Ag, Bi, Mo, Te, and W.
- All OGL wacker samples were assayed for Au, As and Sb. As and Sb being the pathfinder elements.
- All OGL BRP and GPP samples were tested for Au and the majority were also tested for As and Sb. Selected samples and/or drill holes were analysed by ICP for an additional 33 elements.
- OGL ARP Analysis for As and Sb was by AAS with wet digest for As and low temperature digest for Sb. The lower detection limit for As was 0.01% and 5 ppm for Sb.
- OGL BRP CDC samples were tested for Au, As and Sb.
- No QAQC protocols, documentation or results relating to the first OGL exploration programs at ARP have been located by GANZL.
- OGL ARP adit channel and underground drill core samples assayed for Au, As and Sb. Analysis for As and Sb was by AAS with wet digest for As and low temperature. The lower detection limit for As was 0.01% and 5 ppm for Sb.
- OGL LP rock samples were analysed for Au, As and Sb. Kent trench sampling and rock ship sampling included 1 duplicate and 1 blank for every 20 samples.
- Kent submitted a total of 10 blanks and 36 standards during their drilling program. Kent did not comment on any QAQC analysis or the behaviour or results of their QAQC measures.
- For the 2011 Auzex LP drilling program, at least one certified standard, two blank samples and two laboratory duplicates were sent for assay with each drill hole. Auzex did not submit any QAQC analysis or comment on the behaviour or results of their QAQC measures.
- Auzex LP drill core samples were analysed at SGS Waihi. Analyses for all samples included Au by fire assay and As by acid digest. Samples from the mineralized zones of drill holes ARD2 and ARD4 were also tested for Sb.
- The four-hole OGL drilling program from the surface in 1996 did not report any details on sampling and analysis.
- Rock chip sampling by OGL in 1995 at the BRP were analysed by ALS in Mt

<p>Maunganui with Au by Fire Assay and AAS finish, As, Ag, Cd, Cu, Bu, Mo, Sb, Pb, Zn, Ba, Ca, Co, Fe and Mn by ICP-OES. Cr, Ni, Sn, V and W was by ICP-MS.</p> <ul style="list-style-type: none"> <li>• Most field samples for the OGL 2010 to 2012 programs were assayed by ALS Brisbane. All wacker samples were assayed for Au, As and Sb. As and Sb being the pathfinder elements. Rock chip samples were analysed for Au, Sb, As, Ag, Bi, Mo, Te, and W.</li> <li>• GFR samples were tested for multi-element analysis for Ag, As, Bi, Cu, Hg, Mo, Pd, Pb, Pt, Sb, Sn, Te, W, Zn and Au by fire assay.</li> <li>• GFR submitted an unknown number of limestone blanks with rock chip samples. A total of five repeat analyses of soil samples were completed.</li> <li>• During the Tectonex LP field program, at least six laboratory duplicate analyses were analysed by SGS. Tectonex did not submit any QAQC analysis or comment on the behaviour or results of their QAQC measures.</li> <li>• All Tectonex rock chip samples were assayed by SGS Waihi using 30 g fire assay and AAS finish. All pulverised splits and pulps were then scanned by a certified Olympus XRF for the following elements: As, Cu, Nb, Pb, Rb, Sr, Y, Mo, Sn, Zn, Zr, Cr, Sb, Se, Th, U, Ag, Cd, Co, Ni, V, Bi, Hg, Te, W, Mn, Fe, K, P, Ca, S, Ti and Cl.</li> <li>• Titan sent pan concentrate to Analabs in Perth for activation analysis for the following elements; Sc, Cr, Fe%, Co, Zn, As, Br, Ag, Sb, Cs, Ba, La, Ce, Sm, Eu, Yb, Lu, Hf, Ta W, Au, Th and U</li> <li>• Titan sent rock samples to Analabs in Perth for activation analysis for the following elements; Sc, Cr, Fe%, Co, Zn, As, Br, Ag, Sb, Cs, Ba, La, Ce, Sm, Eu, Yb, Lu, Hf, Ta W, Au, Th and U</li> <li>• Titan also sent rock and pan concentrate samples to ISL in Nelson who tested for Au (&lt;0.05 ppm) and Ag (&lt;0.5 ppm)</li> <li>• Eureka channel samples were assayed by SGS using 30 g fire assay with lead collection.</li> <li>• Eureka bulk sample was processed through a vibrating screen, with gold recovered over hydraulic riffles</li> <li>• Eureka test pits were not screened and two panners pan sampled continuously from the pits during excavation and the grades were estimated from this panning.</li> </ul>	<ul style="list-style-type: none"> <li>• All laboratory assay results were received by OGL and Kent and stored in both CSV and laboratory signed PDF lab certificates.</li> <li>• No drill holes have been twinned yet.</li> <li>• All historical exploration data has been compiled to MapInfo GIS format by both OGL, Auzex and Kent.</li> </ul>
<p><i>Verification of sampling and assaying</i></p> <ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> </ul>	

Criteria	JORC Code Explanation	Commentary
	<ul style="list-style-type: none"> <li>• Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>• For the RSP, GFR compiled relevant data into a digital database and constructed a MapInfo™ project.</li> <li>• OGL drilling and assay data was imported into the Reefion Project acQuire™ database directly from laboratory reports or logging templates.</li> <li>• Kent and OGL both reported to find that the CRAE results from trenching at ARP to be repeatable except for very high grade where the nugget effect may be influencing the repeatability.</li> <li>• Kent reported full logging and sample storage protocols to NZP&amp;M.</li> <li>• It is recommended that the data is collected and put on a secure commercial database with inbuilt validation protocols in the future.</li> </ul>
<p><i>Location of data points</i></p> <ul style="list-style-type: none"> <li>• Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>• Specification of the grid system used.</li> <li>• Quality and adequacy of topographic control.</li> </ul>		<ul style="list-style-type: none"> <li>• CRAE created and used a local grid, where drill hole collars were surveyed from control points using this grid.</li> <li>• GFR used CRAE local grid and NZMG. GFR did not disclose the survey technique utilised.</li> <li>• Otter used the South Island National Grid (yards). Otter did not disclose their survey technique.</li> <li>• Auzex used NZMG and NZTM datum. Auzex did not disclose the survey technique utilised.</li> <li>• Kent used CRAE local grid, NZMG and New Zealand Transverse Mercator 2000 (NZTM) datum. Kent did not disclose their survey technique.</li> <li>• OGL used both local grid and handheld Global Positioning System (GPS) utilising New Zealand Map Grid (NZMG) datum during their programs and compasses to survey trenches. The drill holes at the BRP were surveyed by Chris J Cole Surveying Ltd (CJCS) or by handheld GPS.</li> <li>• Tectonex used NZTM datum. Tectonex did not disclose the survey technique utilised.</li> <li>• FMG used a handheld Garmin GPS unit, utilising NZMG datum during their work programs.</li> <li>• It should be noted that no information relating to the specific sample positioning systems utilised by the following companies has been located by either Siren or GANZL: <ul style="list-style-type: none"> <li>○ Titan.</li> <li>○ Eureka.</li> <li>○ South Pacific Mines.</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>○ SAP.</li> <li>○ Perkins.</li> <li>○ Birchfield.</li> <li>○ Strategic Materials.</li> </ul> <ul style="list-style-type: none"> <li>● All drill holes completed during exploration programs (excluding those of which Siren or GANZL has been unable to locate information relating to the specific sample positioning systems utilised) across all the project areas were surveyed for easting, northing and elevation.</li> <li>● It is recommended that NZTM be the survey datum for all future work as it is the preferred projection of NZP&amp;M as specified in the NZP&amp;M Mineral and Coal Digital Data Submission Standards &amp; Reporting Guidelines (NZP&amp;M 2017).</li> <li>● Downhole surveys were taken at 50 m intervals during OGL drilling at the GPP in 2007.</li> <li>● On the OGL BRP and GPP drilling projects, downhole surveys were taken every 30 m or at the geologist's discretion. BRS001 had an incorrect downhole survey tool which was replaced.</li> <li>● Auzex downhole surveys were taken on approximately 30 m intervals.</li> <li>● Kent downhole surveys were taken on approximately 10 to 20 m intervals.</li> <li>● It is recommended that all drill hole collars be resurveyed before more exploration targets are finalised.</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>● Due to the relatively small number of drill holes completed across the projects, no Mineral Resource or Ore Reserve estimates have been undertaken.</li> <li>● In 2012, an <i>in-situ</i> resource estimate was completed for the BRP and a 2013 <i>in-situ</i> resource estimate was completed for the GPP; these are included under Section 2 'Other substantive exploration data' in this document.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>● Whether sample compositing has been applied.</li> <li>● Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>● If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>

Criteria	JORC Code Explanation	Commentary
		<ul style="list-style-type: none"> <li>At the ARP, Kent based drill holes targets on information gained from trench, soil, and IP anomalies, with the aim of testing for lode extensions, however, no drill holes intercepted main mineralisation zones delineated by historical workings and previous exploration.</li> <li>No sampling bias has been reported by CRAE, OGL and Kent.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>Kent Core samples taken for the purposes of laboratory analysis were securely packaged on site and transported to the relevant laboratories by courier with “chain of custody” documentation.</li> <li>OGL did not report their measures taken to ensure sample security.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>No evidence of an independent review of sampling techniques and data has been located by GANZL.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code Explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li><i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i></li> <li><i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i></li> </ul>	<ul style="list-style-type: none"> <li>EP 60448 (BRP) is 4847.114 hectares (ha) in area, was granted on 20 June 2018, expires on 19 June 2023, is a Tier 2 permit and the minerals sought are gold and silver only.</li> <li>EP 60446 (ARP) is 1657.459 ha in area, was granted on 10 May 2018, expires on 9 May 2023, is a Tier 2 permit and the minerals sought are gold and silver only.</li> <li>EP 60479 (LP) is 5424.592 ha in area, was granted on 13 December 2018, expires on 12 December 2023, is a Tier 2 permit and the minerals sought are Aluminium, antimony, bismuth, copper, gold, ilmenite, iron, iron sand, lead, magnesium, magnetite, manganese, molybdenum, nickel, platinum group metals, rare earth elements, rutile, silver, tantalum, tin, titanium, tungsten, vanadium and zinc.</li> <li>PP 60465 (RSP) is 333.652 km<sup>2</sup> in area , was granted on 7 August 2018, expired on 6 August 2020, was a Tier 1 permit and the minerals sought were aluminium, antimony, bismuth, copper, gold, ilmenite, iron, iron sand, lead, magnesium, magnetite, manganese, molybdenum, nickel, platinum group metals, rare earth elements, rutile, silver, tantalum, tin, titanium, tungsten, vanadium and zinc.</li> <li>On 6 May 2020, Siren applied for a 2 year Extension of Duration (EoD) over approximately 90% of the permit area. This application is currently being</li> </ul>

- processed by NZP&M.
- EPA 60648.01 (GPP) is 4623 ha in area and was applied for on 11 June 2020. The EPA is for a Tier 2 permit and the minerals sought are gold and silver. This application is currently being processed by NZP&M.
  - PPA 60632.01 (BHP) is 365.295 km<sup>2</sup> in area and was applied for on 3 April 2020. The PPA is for a Tier 1 permit and the minerals sought are gold and silver. This application is currently being processed by NZP&M.
  - The granting of an EP/PP does not automatically award the right of access to the land, subject to the permit. Land access must be arranged with the owner and occupier of the land prior to the commencement of any exploration activities for minerals on or below the surface other than minimum impact activities as defined in the New Zealand Crown Minerals Act 1991 (CMA).
  - The entirety of both the BRP and ARP are situated over land administered by the DoC. The RSP is largely comprised of DoC land but does contain areas of private land. Siren has been granted authority to undertake Minimum Impact Activities (MIA) on public conservation land pursuant to section 49 of the CMA in respect of EP 60446 (ARP), and EP 60448 (BRP) land. These MIA consents have been granted for approximately five years, from 7 August 2018 to 19 June 2023 (for EP 60446 [ARP] and 9 May 2023 for EP 60448 [BRP]) and are subject to various conditions. A MIA consent for the expired PP 60465 (RSP) was granted to on 7 August 2020 to coincide with expiry of the permit.
  - Siren has also entered into Access Arrangement (AA) agreements pursuant to section 61 of the CMA with the Minister of Conservation as follows:
    - (a) Agreement for an AA dated 24 May 2019 for EP 60446 – Granting the Company access to 0.13 ha of land in Victoria Forest Park contained within EP 60446 and specifically to 13 drill pads, one campsite and one helicopter landing site for the term of the EP; and
    - (b) Agreement for an AA dated 24 May 2019 for EP 60448 – Granting the Company access to 0.15 ha of land in Victoria Forest Park, Deep Creek Amenity Area and Big River Ecological Area contained within EP 60448 and specifically to 12 drill pads and one campsite, for the term of the EP.
  - No access to EP 60446 or EP 60448 land is permitted until the Company has received a written Authority to Enter and Operate (AEO) from the Minister in accordance with the AA agreements. On 13 August 2020, Siren received a written

AEO for EP 60446, that is subject to all conditions set out in the AA dated 24 May 2019. On 24 August 2020, Siren received a written AEO for EP 60448, that is subject to all conditions set out in the AA dated 24 May 2019. The AEO permits the Company to enter in or on the land to commence exploration and exploration operations for a period of 12 months, unless the EP has a lesser term remaining. The Company must comply with the special conditions in the Second Schedule, which are in addition to the conditions set out in the main body of the AA Agreement.

- No MIA agreements or full AA agreements have been granted in respect to EP 60479 (LP) or the expired PP 60465 (RSP) land. Siren has advised that they will apply for AA in respect of EP 60479 and PP 60465 (subject to granting of the EoD) land at some time during 2020.
- The BRP, ARP, LP and RSP are under the jurisdiction of West Coast Regional Council (WCRC) with approximately 14% (750 ha of 5424 ha) of EP 60479 (LP) falling under the jurisdiction of the Tasman District Council (TDC), a unitary authority.
- Siren has advised that the WCRC and Buller District Council have both notified the Company that Resource Consents are not generally required for exploration activities within EP 60446 and EP 60448 land as it is a permitted activity in those regions. However, Siren has advised that a Land Use Consent (LUC) is required to undertake earthworks on slopes >25° associated with exploratory drill pad construction, and that Siren will apply for consents if required once drill hole planning is completed.
- The Ministry for the Environment has notified the Proposed NES for Freshwater (September 2019) for consultation. The National Environmental Standards (NES) will establish the activity status and criteria for any earthworks activity near a wetland and for infilling the bed of a river.
- The Crown Minerals Regulations 2013 set out rates and provisions for the payment of royalties on mineral production. These regulations also set out royalty statement and royalty return requirements for all minerals permit holders required to pay royalties.
- Further information regarding material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings can be found in Section 3.0

of the IGR.

*Exploration done by other parties*

- *Acknowledgment and appraisal of exploration by other parties.*

**BRP**

- Stream sediment sampling and field sampling was completed by CRAE over the major stream tributaries during a light impact and reconnaissance program in the late 1980s, with the last work completed in 1989.
- CRAE also completed mapping and trenching along road outcrops and stream beds, completing, and sampling a total of 11 trenches. Several soil sampling traverses were completed with samples taken at 25 m intervals over lines approximately 200 m in length. CRAE concluded that their surface investigations made it difficult to fully assess the exploration potential of the BRP and further intensive exploration was warranted due to the substantial historical production of high-grade ore from the Big River Mine.
- In 2005, OGL compiled all historical exploration data and information into Geographic Information System (GIS) format.
- During 2010/2011 OGL commenced an extensive field mapping and geochemical sampling program in the BRP area. OGL started by completing analysis of existing data and mapping, which targeted areas for further investigation. OGL collected a total of 477 wacker samples on several different patterns at BRP, southeast of Big River Mine and Big River South. Field mapping was completed, with a total of 385 structural measurements taken. A total of 115 samples of rock chip, mullock and float were taken and analysed. Two trenches were sampled at Big River.
- OGL followed this program up between 2011 and 2013, with two drilling programs and geochemical wacker sampling. A total of 533 wacker samples were collected in a wider area surrounding the Big River Mine.
- A total of 19 drill holes for 4,106 m were drilled approximal to the Big River Mine underground workings. Drilling defined a moderately northeast dipping structure of variable mineralisation abundance with a strike length of at least 260 m and an unknown depth. Drilling identified the two common styles of mineralisation, these being free gold hosted in grey-white quartz and gold associated with disseminated fine-grained sulphides. Big River Mine is interpreted to be hosted in the sheared-out hinge of an anticline.
- A total of seven drill holes were completed at Big River South and St George for a total of 926 m, with the same styles of mineralisation encountered at Big River

being intersected. Four drill holes targeted Big River South and three drill holes targeted St George. Drilling found that the mineralisation was hosted in the northeast dipping anticline hinges.

#### ARP

- CRAE concentrated on low impact exploration around the historical workings and their immediate extensions for two years from 1986. Work completed by CRAE included:
  - 80 mesh (190 µm) stream sediment sampling on an approximate density of one sample per km<sup>2</sup>.
  - Rock chip sampling.
  - 730 hand auger soil samples of 'C' horizon along a 100 m by 12.5 m grid over the historical workings.
  - Cleaning out and re-sampling of old trenches.
  - A trial magnetic survey to define the deposition of the dolerite outcrop.
  - Geological mapping over the soil sampling grid as well as stream traverses.
- CRAE's work delineated an encouraging auriferous halo of sulphide hosted mineralisation around the early mined quartz reefs. Trenches confirmed the surface distribution of the historical lode structure and returned maximum values of 7.8 m at 14.4 g/t Au (Trench A), 9 m at 5.2 g/t Au (Trench G), 5 m at 8.2 g/t Au (Trench K) and 12 m at 5.0 g/t Au (Trench M).
- OGL compiled all CRAE data and converted it from hardcopy to digital format.
- OGL refurbished the No. 6 level in the McVicar workings in 1993, where they mapped and sampled the mineralisation at depth. Channel sampling did not intercept any significant results, however three channel samples taken up-dip from drill hole A6\_3 returned Au grades of 7.78 g/t, 2.64 g/t and 7.46 g/t. OGL also completed 328 m of underground diamond drilling, drilling a total of three drill holes. No significant results were intercepted in the first two drill holes (A6\_1 and A6\_2), however, the last drill hole (A6\_3) intercepted a 9 m zone grading 3.85 g/t Au from 130 to 139 m down hole.
- In mid-1996, OGL completed four more drill holes totalling 153.4 m from the surface (AX4 to AX6), targeting down-plunge of the Bruno Lode and one drill hole (AX7) to test the down-plunge extent of the Bull shoot. No economic mineralisation

was intercepted in AX7, whilst the three drill holes into the Bruno Lode intercepted gold mineralisation.

- OGL also sampled, mapped, and re-trenched along the historical workings in 1996. Summarised findings are as follows:
  - Bull – Two historical trenches were resampled; however, no significant gold mineralisation was encountered. Mapping of the Bull No.1 level discovered complex geology, faulting, and no significant gold results
  - Firmiston block – Mapping and channel sampling collected around the portal failed to duplicate CRAE results in Trench C, however, within the adit, the gold content in the footwall and hanging wall metasediments appeared significant. A pug sample returned 4.04 g/t Au
  - McVicar sampling at No. 1 level of metasediments, pug and laminated quartz only returning sub-economic gold values
  - Bruno block – Re-sampling of high grade parts of the CRAE trenches with similar results. A 3 m section at No 1. Level of Bruno reef exposed quartz blocks sitting in mineralised fault gouge. This section indicated a grade of 19 g/t Au over the 3 m. This supported other mapping and sampling of the Bruno reef, where the high grade was located within the mineralised host rock and fault gouge
  - Above McKay adit, a thin northeast dipping quartz vein crops out over a strike length of 4.5 m. Samples taken from this vein by CRAE returned gold values of 57.5 g/t Au and 80.1 g/t Au. Re-sampling of this outcrop by OGL also returned 8.95 g/t Au, while repeat analyses of the original pulp returned 72 g/t Au and 64 g/t Au. The adjacent mineralised wall rocks were also sampled and assayed and returned 4.4 g/t Au decreasing to 0.01 g/t Au outside of the sulphide rich zone
  - Loftus block sampling occurred in No. 1 level, where a 0.5 m quartz vein returned 10.9 g/t Au. Faulting in the adit appeared to dislocate the quartz reef.
  - OGL concluded that gold mineralisation was present over a 1.2 km distance and that gold was hosted by a complex of structurally controlled quartz reefs, mineralised host rock and fault gouge. The latter sometimes contained higher gold grades than the adjacent quartz lodes. Drilling indicated that the shoots may be thin at depth. OGL concluded that the work completed did not upgrade the

resource potential of the area, however, they listed several recommendations for further work.

- OGL took out another EP after the 1996 program but surrendered the tenement in 2008 after completing only desktop studies and limited geological mapping since 1996.
- Kent was granted a Prospecting Permit (PP) in 2009. Kent undertook a compilation exercise of historical data, including digitisation and data entry of data from past reports. Digital Elevation Model (DEM), Landsat7 and topographic data was compiled and entered into GIS format. A ground Induced Polarisation (IP) survey was completed.
- In their first year, Kent undertook geological mapping and sampling, with 163 trench and adit samples collected as well as 20 rock chip samples. A small stream sediment sampling program was completed with a total of five pan concentrates taken as well as three stream sediment samples from the Snowy Creek area.
- During 2010/2011, Kent continued geological mapping and geochemical sampling, with a total of 40 grab samples collected. They also excavated six additional trenches, with 130 trench and rock face samples collected. Most of the trenches and adits sampled by CRAE and Kent returned similar results, with only very high-grade samples showing a high variation in results. The CRAE and Kent trench assay results, including a summary comparison at a 0.7 g/t Au and 3.0 g/t Au cut-off grade are included as APPENDIX D of the IGR.
- Kent also took a water sample from the water exiting No.6 level and sent it to a commercial laboratory for analysis.
- Kent drilled nine diamond drill holes during 2010/2011, based on targeting from trench, soil, and IP anomalies, with the aim of testing for lode extensions. Due to both errors in the IP survey and drilling difficulties, four (AX001, AX004, AX006 and AX007) of the planned nine drill holes were abandoned.
- AX001, AX002 and AX003 targeted the assumed steep shear zone beneath the mineralised lode of the Bruno workings. AX004 and AX005 were drilled west targeting both an IP anomaly and gold results returned from trenching. AX005 returned some mineralisation, with 0.7 m at 3.7 g/t Au between 227 and 232 m and 0.8 m at 2.1 g/t Au between 251 and 254 m. Drill holes AX006 and AX007 attempted to target the area beneath the Bull workings, however, both were abandoned due to drilling difficulties. AX008 was turned into the hill slope more but

significant core loss occurred between 105 and 140 m down hole. No significant intercepts resulted from AX008. AX009 attempted to drill the down-dip extent of Au anomalies in trenching. No significant assays were reported by Kent.

- Kent discontinued exploration at the ARP after completion of their 2011 program.

### **RSP**

- The exploration history of the RSP can be split into two main areas, these being the exploration work completed across the greater RSP area undertaken by two main companies, CRAE and Golden Fern Resources Ltd (GFR) and the GPP, which has largely been explored (more intensely) by both CRAE and OGL.
- In 1986, CRAE undertook air photo interpretation and limited geochemical reconnaissance in the northern part of the PPA area and in 1988 they undertook an airborne geophysical survey (magnetics and radiometrics) in the northern half of the PPA area
- A total of 47 spot rock samples were taken by CRAE in the north eastern corner of the PPA area at approximately 30 m intervals. A further two samples were taken to the north.
- A line of 196 soil samples was taken by CRAE near Quigley's Track at 25 m intervals, of which approximately 130 to 140 samples were taken from within the PPA area.
- The CRAE tenements were later sold to OGL with no significant exploration work undertaken until GFR began examining the area in the 2000s.
- GFR undertook geological mapping and sampling, with 75 soil samples and 62 rock chip samples collected between 2010 and 2013.
- The early CRAE airborne magnetic survey data was also ground-truthed with a Scintrex Magnetometer, with reasonable correlation resulting.
- After relinquishing the southern and western areas of their permit, GFR concentrated their resources on mapping and sampling the area around the Morning Star Mine. 65 soil samples trench, 21 rock chip samples and 12 bulk rock sample were collected.
- In 2009, FMG Pacific Ltd (FMG) undertook geological mapping in the southeastern of the PPA area as well as in three areas to the west. Rock chip samples were collected for assay (+/- petrographic analysis) where outcrops displayed either pervasive alteration or evidence of sulphide mineralisation, which were in locations

outside of the PPA area.

### GPP

- The Auld Creek area of the GPP was first prospected for gold in the 1880s, with various shafts, adits and crosscuts completed. In 1970-1971, Lime & Marble Ltd (L&M) evaluated the area for antimony (Riley 1972). CRAE and then OGL have completed the most recent and thorough exploration of Auld Creek.
- L&M carried out stream sediment sampling and soil sampling on a pattern of 100 feet (ft) by 100 ft (approximately 33 m), outcrop cleaning and excavation of three trenches targeting Sb in 1970 to 1971.
- In 1987 CRAE completed a program of soil sampling (155 samples), stream sediment sampling (two samples), rock outcrop sampling (29 samples) as well as geological mapping and float sampling.
- CRAE followed-up with grid soil sampling and trenching around the historical workings in 1988. CRAE collected 553 soil samples and excavated and sampled 12 trenches.
- During 1996/1997 OGL collected 55 stream sediment samples in Auld Creek and its tributaries. A total of 150 soil samples and 13 rock chip samples were also taken. A total of 105 m of trenching from nine trenches was completed prior to drilling, with 50 trench samples being collected. In total, 173 wacker samples were taken over a nominal 100 x 25 m grid spacing.
- A drilling program consisting of three diamond drill holes totaling 324.6 m targeting exploration results in the Bonanza and Fraternal shear zones was completed by OGL in 1996.
- OGL completed three diamond drill holes in 2007, which totaled 228.6 m. Drilling was aimed at testing for mineralized extensions of the Globe Progress deposit that were highlighted by soil sampling anomalies.
- OGL's 2011 diamond drilling included eight drill holes totaling 892.8 m that targeted the Fraternal lode as well as exploration targets generated by geological mapping, rock chip and wacker sampling.
- OGL completed three diamond drill holes for a total of 513.1 m in 2013 at the Fraternal shear zone, following on from the 2011 drill program.

**BHP**

- In 1987, South Pacific Mines undertook test pitting for alluvial gold in the BHP area. The results of this test pitting are presented in Table 20 of the IGR.
- Between 1987 and 1988, Titan undertook a field program comprising:
  - Geological mapping.
  - Stream sediment sampling.
  - Limited examination of historical gold workings.
  - Chip sampling of any quartz leaders or other mineralised rocks encountered.
  - Assay of selected rock and pan concentrate samples.
- In 1989, Perkins excavated a total of four test pits. The results of this test pitting are presented in Table 21 of the IGR.
- In 1991, Eureka undertook a program of field work in the Deep Creek area, between two historical sluicing claims. This program included reconnaissance pan sampling, channel and bulk sampling and test pitting (Anon 1991). Gold grades were estimated at approximately 170 mg/m<sup>3</sup> at the downstream end and 350 mg/m<sup>3</sup> at the upstream end.
- In 1995, Titan excavated a total of five bulk samples and six panned samples from the Deep Creek and Jones Creek areas. In this area, initial tests returned 1.5 to 2.5 grains/yd<sup>3</sup>. Average sample depth was 3 to 4 m.
- Strategic Materials held a PP over the northern portion of the PPA between 2012 and 2014, Strategic Materials were exploring for hard rock gold reef under recent cover. Strategic Materials based their assessment on regional magnetics data released by the NZ Government. Strategic Materials assessed this data for anomalies or structures that could be seen flowing from the Blackwater Mine area and continuing south into the PP area.

**LP**

- Carpentaria sampled the area in 1972 during a regional multi-element stream sediment sampling program and found anomalous tungsten results ranging from 25 to 220 ppm in samples taken from the Mokihinui area. Where anomalous values were obtained, follow up stream sediment sampling was undertaken.
- An initial period of exploration in 1972, when Otter Minerals took 68 reconnaissance stream sediment and 47 soil geochemical samples over the old

- Lyell goldfield area. This delineated a zone of anomalous Au and As, coinciding with the extent of the known historic workings between Eight Mile Stream and Irishman's Creek, and anomalous Cu further north. In 1973, follow up work comprised the collection of an additional 32 soil and 130 rock geochemical samples over the zone, however not all were assayed. Gold anomalies from the initial work were not repeated, suggesting a coarse gold sampling problem.
- In 2005, Auzex undertook a compilation exercise of historical data into a GIS database containing cultural, topographical, geological, geochemical, and mineral themes. The database developed contained data from a total of 291 rock chip samples, 755 stream sediment samples and 560 soil sediment samples obtained from historical exploration. It put the Lyell EP area in line with the Reefton Goldfield in terms of prospectivity for mesothermal gold deposits, defining a significant part of the Lyell EP as highly prospective.
  - In 2007-2008 Auzex focused on grid soil sampling and follow-up prospecting and mapping of gold soil anomalies. Over a 1.2 km x 3.0 km area 881 soil samples were taken.
  - Results of the soil sampling program were encouraging, with maximum assay results received including 39.4 ppm Au, 6750 ppm As, 0.6 ppm Ag, and 249 ppm Pb. A total of 59 soil samples returned >0.1 ppm Au and five samples assayed  $\geq 1.0$  ppm Au (including 39.4, 10.05, 2.17, 1.26, and 1.00).
  - A plot of Au in soil results indicated that a continuous belt of gold in soil anomalism (>30 ppb Au) extends from Irishmans Creek to Eight Mile Creek, over 1.8 km and straddles the interpreted trace of the anticline axis that hosts the historical Alpine gold quartz reefs. The stronger and more coherent anomalism occurs in two localities in the upper Brown Creek and true left bank of Eight Mile Creek (respectively Brown Creek and Leader Soil anomalies). Soil results for gold confirm strong soil anomalism in the Eight Mile Leader Mines area. Three >1.0 ppm Au assays occur within a 100 m interval associated with several large mullock dumps in the Eight Mile Creek. There appears to be a break at (or north of) Eight Mile Creek, with anomalies reappearing in the northwest of the grid where a 900 m NNW trending zone of >30 ppb Au is open to the northwest (Mt Lyell Au soil anomaly). A wide zone of anomalism extending from the Alpine surface diggings to the southeast corner may be attributable to mullock and associated debris, as the old stamp battery was located immediately below this position.

- A review of the As in soil data indicated an almost continuous north-south trending >100 ppm As in soil anomaly over a 3 km strike length. The Au and As anomalies correlate reasonably well. Locally however, the Mt Lyell gold in soil anomaly located in the northwest grid does not have a corresponding strong As anomaly.
- Results for Sb were also encouraging with a strong >3.4 ppm Sb northwest trending anomaly 400 m x 200 m (max) in extent associated with the Mt Lyell gold in soil anomaly below Mt Lyell.
- Rock chip geochemical analyses were carried out on samples acquired during Auzex geological mapping. Seventeen samples were tested for Ag, As, Au, Bi, Cu, Mo, Pb, Sb, Sn, W, and Zn which yielded maximum values of 1.19 ppm for Au, 9.98 ppm for Cu, and 36.6 ppm for W.
- Six diamond core drill holes were completed within the LP by Auzex targeting geochemical anomalies identified from previous Auzex exploration programmes. These drill holes totalled 748.1 metres in length and were completed in the autumn exploration season of 2011. These drill holes were ARD01 to ARD06.
- Economic gold grades were not intersected during the above drilling programme; however, a promising and direct intersection was made on a highly mineralized structure in Area A, which was interpreted to possibly represent a high As, low Au distal extension of a significant reef. Based on the observations from this programme, data from previous exploration efforts by Auzex and on the application of Cox's model for mineralisation at Blackwater and the Caplestone group of mines to the south of Lyell, there was deemed to be a significant chance of encountering economic gold mineralisation in the area.
- Thin, high-grade quartz stringers in the hanging wall shear of Area A confirmed the presence of gold in the local system. Only minor zones of Au grade were intersected in Area B; however, a significant As anomaly and intensified quartz veining in the lower section of ARD5 were interpreted as potentially pointing to a grade-carrying lode beyond the current end of hole (EOH). A conclusion was made that by using the patterns in lithology, alteration, mineralisation, veining and structure observed during this drilling programme, and applying models presented in the existing literature of the Lyell and Reefton goldfields, follow-up exploration programmes could be planned efficiently and more accurately.
- Kent began exploration in the Lyell area in 2010. The exploration programme was mainly concentrated in an area outside the current EP, but a stream sediment

sampling program was undertaken along and in Foley Creek and Deep Creek. 79 stream sediment samples were taken in this area.

- Between November 2012 and November 2013, GIS data was compiled by OGL over the Lyell area. Geological literature relevant to the Lyell district was also acquired and reviewed. Data compilation included the digitization of geology maps and plans which extended over the area.
- In March 2014, 13 rock chip and float samples were collected by OGL from the Lyell area to try and identify any mineralized structures, lithologies or leading samples within the tenement. Of the 13 geochemical samples, only 5 fall within the LP bounds of the EP.
- From July 2016 to April 2018, two untested and strongly altered porphyry Mo-Cu-Ag systems in the LP area were targeted by Tectonex as potential gold-associated porphyries. Both lie within the gold-productive Lyell Fault Zone. During this exploration program, 28 stream sediment samples, two panned concentrate samples and 46 rock chip samples were collected. Of these samples, three stream sediment and seven rock chip samples lie outside the bounds of the current LP EP.

#### Geology

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

- Gold mineralisation in the Reefton Goldfield is structurally controlled; the formation of the different deposit types is interpreted to be due to focussing of the same hydrothermal fluid into different structural settings during a single gold mineralisation event, however, some of the deposits (e.g. Globe-Progress, Big River) appear to have been re-worked, with gold and sulphide mineral remobilisation having occurred during a later phase of brittle deformation.
- 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 Reefton Goldfield. The Globe-Progress deposit occupies a distinct structural setting, where there is a clear break in the continuity and tightness of early folding. This break defines the east-west striking Globe-Progress shear zone. The fault splays off the Oriental-General Gordon shear zone. The geometry of the fault structure has allowed dilation and quartz vein deposition more or less contemporaneously with shearing, hydrothermal alteration, and low-grade mineralisation of the wall rocks. The broad

disseminated mineralisation that now surrounds the Globe-Progress ore body is thought to have been formed by later movement on fault planes, in the presence of fluids, which led to some mobilisation and recrystallisation of metals and formed the halo of mineralised country rock. The Big River deposit shows similar paragenesis to Globe-Progress, except for the fact that the disseminated sulphide halo is not as extensive.

- 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.

#### 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.

The table below presents historical ARP drilling results (downhole thickness not true thickness):

File ID	Project	Company	Easting (MUTM)	Northing (MUTM)	Elevation (NGVD)	SC (m)	Dip (Deg)	Az (Deg)	TD (m)	Thickness (m)	From (m)	To (m)	Average Grade (g/t Au)
A154	ARP	SL	2 424 789	5 874 397	-58	52.4	158.0	-	1.0	18.0	16.0	17.0	2.6
A155	ARP	COL	2 422 251	5 874 397	-58	34	230.0	-	1.0	26.0	25.0	27.0	0.8
A156	ARP	COL	2 422 296	5 874 453	-58	37.1	155.0	-	1.5	11.3	11.8	11.8	2.5
A157	ARP	COL	2 422 088	5 874 139	-58	25.7	158.0	-	-	9.0	139.3	139.3	3.5
A158	ARP	<S/NF	2 422 310	5 874 517	675	-55	12.8	138.0	-	-	-	-	-
A159	ARP	<S/NF	2 422 310	5 874 517	675	-75	226.8	138.0	-	-	-	-	-
A160	ARP	<S/NF	2 422 310	5 874 517	675	-65	262.8	138.0	-	-	-	-	-
A161	ARP	<S/NF	2 422 310	5 874 517	675	-84	116.4	272.0	-	-	-	-	-
A162	ARP	<S/NF	2 422 310	5 874 517	675	-65	274.6	272.0	-	4.5	207.7	203.2	0.9
A163	ARP	<S/NF	2 422 805	5 874 270	688	-68	20.8	165.0	-	3.0	251.3	254.3	0.9
A164	ARP	<S/NF	2 422 805	5 874 270	688	-65	13	165.0	-	-	-	-	-
A165	ARP	<S/NF	2 422 805	5 874 270	688	-55	25.3	139.0	-	-	-	-	-
A166	ARP	<S/NF	2 422 805	5 874 270	688	-55	240.8	239.0	-	-	-	-	-

The tables below presents historical OGL drilling results from the BRP (downhole thickness not true thickness):

Hole ID	Project	Company	Easting (MGM)	Northing (MGM)	Easting (NAD83) (m)	Northing (NAD83) (m)	Dip (Deg)	Au (g/t)	Tl (g/t)	Thickness (m)	From (m)	To (m)	Average Grade (Au g/t)
BR0001	BRP	DGL	2,415,560	5,004,052	743	-57	160.9	199.0	3.0	36.0	-29.0	-	2.5
BR0002	BRP	DGL	2,415,712	5,004,111	787	-52	207.0	189.9	-	-	-	-	-
BR0003	BRP	DGL	2,419,820	5,003,996	784	-51	172.5	201.0	2.0	99.0	107.0	-	12.1
BR0004	BRP	DGL	2,415,828	5,003,996	784	-55	200.5	215.0	20.0	127.0	147.0	-	8.1
BR0005	BRP	DGL	2,415,828	5,003,996	784	-59	107.0	242.0	5.0	112.0	117.0	-	3.2
BR0006	BRP	DGL	2,415,828	5,003,996	784	-55	225.2	194.0	2.4	132.7	135.1	-	1.4
BR0007	BRP	DGL	2,419,828	5,004,996	784	-70	201.0	209.0	-	-	-	-	-
BR0008	BRP	DGL	2,415,828	5,004,086	773	-56	175.0	245.0	1.3	119.0	120.3	-	1.2
BR0009	BRP	DGL	2,415,828	5,003,996	784	-71	180.0	250.0	3.0	147.0	150.0	-	16.5
BR0010	BRP	DGL	2,415,560	5,004,052	743	-64	167.0	291.6	-	-	-	-	3.3
BR0011	BRP	DGL	2,419,828	5,004,080	773	-50	205.4	265.0	2.5	139.0	141.6	-	8.0
BR0012	BRP	DGL	2,419,828	5,003,996	784	-80	220.5	201.0	-	-	-	-	-
BR0013	BRP	DGL	2,419,971	5,003,982	757	-50	255.0	281.0	1.0	226.0	227.0	-	0.5
BR0014	BRP	DGL	2,415,971	5,003,942	757	-54	257.2	242.0	1.0	187.0	188.0	-	0.6
BR0015	BRP	DGL	2,419,856	5,003,852	800	-50	117.0	289.0	4.0	82.0	86.0	-	0.7
BR0016	BRP	DGL	2,419,856	5,003,852	800	-55	136.3	235.0	3.0	183.0	186.0	-	0.3
BR0017	BRP	DGL	2,415,840	5,003,852	808	-72	165.0	244.0	6.0	197.0	198.0	-	1.2
BR0018	BRP	DGL	2,419,991	5,004,059	742	-63	363.0	286.0	1.0	295.0	296.0	-	0.8
BR0019	BRP	DGL	2,415,961	5,004,016	747	-71	281.0	284.5	2.0	246.0	250.0	-	1.6

Hole ID	Project	Company	Easting (MGM)	Northing (MGM)	Easting (NAD83) (m)	Northing (NAD83) (m)	Dip (Deg)	Au (g/t)	Tl (g/t)	Thickness (m)	From (m)	To (m)	Average Grade (Au g/t)
BR0020	BRP	DGL	2,415,811	5,004,332	698	-55	140.1	252.0	-	-	-	-	-
BR0021	BRP	DGL	2,419,011	5,004,330	690	-64	115.7	88.0	-	-	-	-	-
BR0022	BRP	DGL	2,415,828	5,003,996	784	-51	172.5	201.0	2.0	99.0	107.0	-	12.1
BR0023	BRP	DGL	2,415,828	5,003,996	784	-55	200.5	215.0	20.0	127.0	147.0	-	8.1
BR0024	BRP	DGL	2,415,828	5,003,996	784	-59	107.0	242.0	5.0	112.0	117.0	-	3.2
BR0025	BRP	DGL	2,415,828	5,003,996	784	-55	225.2	194.0	2.4	132.7	135.1	-	1.4
BR0026	BRP	DGL	2,419,828	5,004,996	784	-70	201.0	209.0	-	-	-	-	-
BR0027	BRP	DGL	2,415,828	5,004,086	773	-56	175.0	245.0	1.3	119.0	120.3	-	1.2
BR0028	BRP	DGL	2,415,828	5,003,996	784	-71	180.0	250.0	3.0	147.0	150.0	-	16.5
BR0029	BRP	DGL	2,415,560	5,004,052	743	-64	167.0	291.6	-	-	-	-	3.3
BR0030	BRP	DGL	2,419,828	5,004,080	773	-50	205.4	265.0	2.5	139.0	141.6	-	8.0
BR0031	BRP	DGL	2,419,828	5,003,996	784	-80	220.5	201.0	-	-	-	-	-
BR0032	BRP	DGL	2,419,971	5,003,982	757	-50	255.0	281.0	1.0	226.0	227.0	-	0.5
BR0033	BRP	DGL	2,415,971	5,003,942	757	-54	257.2	242.0	1.0	187.0	188.0	-	0.6
BR0034	BRP	DGL	2,419,856	5,003,852	800	-50	117.0	289.0	4.0	82.0	86.0	-	0.7
BR0035	BRP	DGL	2,419,856	5,003,852	800	-55	136.3	235.0	3.0	183.0	186.0	-	0.3
BR0036	BRP	DGL	2,415,840	5,003,852	808	-72	165.0	244.0	6.0	197.0	198.0	-	1.2
BR0037	BRP	DGL	2,419,991	5,004,059	742	-63	363.0	286.0	1.0	295.0	296.0	-	0.8
BR0038	BRP	DGL	2,415,961	5,004,016	747	-71	281.0	284.5	2.0	246.0	250.0	-	1.6

The table below presents historical OGL drilling results from the GPP (downhole thickness not true thickness):

Block ID	Project	Company	Ending (MCE)	Start (MCE)	Depth (m)	Recovery (%)	True Thickness (m)	Downhole Thickness (m)	True Grade (g/t)	Downhole Grade (g/t)
REC0001	ACIP	OGL	2417177	5894818	-50	70	73.1	2.3	51.0	63.0
REC0002	ACIP	OGL	2417177	5894818	-75	70	54.3	2.3	105.0	111.0
REC0003	ACIP	OGL	2417095	5894818	-57	45	70	175.5	2.3	34.0
REC0004	ACIP	OGL	2417795	5893632	611.7	40	90	55.5	-	-
REC0005	ACIP	OGL	2417653	5893787	607.7	40	90	67.7	-	-
REC0006	ACIP	OGL	2417507	5893829	527.5	40	90	157.2	1.3	34.0
REC0007	ACIP	OGL	2417095	5893489	565.2	40	90	336.8	1.3	23.0
REC0008	ACIP	OGL	2417532	5893713	532.1	40	90	136.5	1.3	97.0
REC0009	ACIP	OGL	2417509	5893829	527.7	40	270	181.3	-	-
REC0010	ACIP	OGL	2417621	5893837	567.6	40	90	336.3	-	-
REC0011	ACIP	OGL	2417192	5894724	581	40	35	75.9	6.3	45.0
REC0012	ACIP	OGL	2417182	5894724	581	40	35	151.5	13.3	54.0
REC0013	ACIP	OGL	2417748	5894351	577	60	-	148.1	1.3	67.0
REC0014	ACIP	OGL	2417182	5894724	581	40	110	79.3	35.3	77.0
REC0015	ACIP	OGL	2417182	5894724	581	40	150	141.5	6.3	50.0
REC0016	ACIP	OGL	2417295	5894724	581	75	132.5	35.3	63.0	95.0
REC0017	ACIP	OGL	2417174	5894831	554	40	270	155.5	2.3	125.0
REC0018	ACIP	OGL	2417177	5894789	541	50	90	91.3	1.3	34.0
REC0019	ACIP	OGL	2417264	5894526	544	40	230	154.5	1.3	125.0
REC0020	ACIP	OGL	2417255	5894526	544	40	230	151.1	1.3	137.0
REC0021	ACIP	OGL	2417255	5894526	544	55	215	135.5	1.3	140.0

The table below presents historical Auzex drilling results from the LP (downhole thickness not true thickness):

Block ID	Project	Company	Ending (MCE)	Start (MCE)	Depth (m)	Recovery (%)	True Thickness (m)	Downhole Thickness (m)	True Grade (g/t)	Downhole Grade (g/t)
ANB1	LP	Auzex	1322470	5319480	-	782	40	270	127.1	-
ANB2	LP	Auzex	1322470	5319480	-	782	40	90	143.3	-
ANB3	LP	Auzex	1322950	5319480	-	682	40	90	135.0	-
ANB4	LP	Auzex	1322470	5319480	-	782	55	60	95.1	-
ANB5	LP	Auzex	1327180	5319450	-	630	40	270	127.2	-
ANB6	LP	Auzex	1322950	5319450	-	682	40	90	145.0	-

Criteria	JORC Code Explanation	Commentary
Data aggregation methods	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>Across the BRP, ARP, BHP, LP and RSP (inclusive of the GPP), various sampling methodologies have been employed. Commonly, samples have been taken on a 1 m interval whilst also considering lithological and/or mineralisation contacts.</li> <li>Raw sample intervals and results have been reported.</li> <li>Random checks from GANZL have confirmed that drilling results presented have used a weighted average when presenting drilling intercepts, hence, any potential sample length bias has been accounted for.</li> <li>No robust checks have been completed for trench, traverse, or underground adit channel sample results.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</i></li> <li><i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</i></li> </ul>	<ul style="list-style-type: none"> <li>BRP significant historical OGL drilling results have been reported with apparent thicknesses.</li> <li>ARP significant historical OGL and Kent drilling results with only apparent thicknesses reported.</li> <li>GPP (Fraternal lode) significant historical OGL drilling results are reported with apparent thicknesses.</li> <li>LP significant Auzex drilling results have been reported with apparent thicknesses.</li> <li>Any exploration results reported without a true thickness should be taken as down hole lengths as opposed to true lengths i.e. apparent thickness as opposed to true thickness.</li> <li>The reason for true thicknesses not being reported is often because the geometry of mineralisation with respect to drill hole angle is not known or often varied due to the drilling of multiple drill holes from a single drill pad.</li> </ul>
Diagrams	<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>Section 2.5 (Figure 1) of the IGR presents the locations of EP 60448 (BRP), EP 60446 (ARP), PP 60465 (RSP) expired EoD application pending, EPA 60648.01 (GPP), PPA 60632.01 (BHP), and EP 60479 (LP).</li> <li>Section 3.1 (Figure 2) of the IGR presents a location plan of DoC public conservation land and EP 60448 (BRP), EP 60446 (ARP), PP 60465 (RSP) expired, EoD application pending, EPA 60648.01 (GPP), PPA 60632.01 (BHP), and EP 60479 (LP).</li> <li>Section 3.4.5 (Figure 3) of the IGR presents a plan of the PP 60465 2 year EoD area.</li> </ul>

- Section 4.1 (Figure 4) of the IGR presents a plan of 1:250 000 scale Reefton Goldfield geology.
- Section 4.3 (Figure 5) of the IGR presents a plan of the Reefton mineralisation/structural corridor, historical gold production and geology.
- Section 4.4.3 (Figure 6) of the IGR presents potential anticlinal axes across the re-2D seismic line re-interpreted by Velseis.
- Section 4.4.4 (Figure 7) of the IGR presents the geology of the BHP PPA area.
- Section 5.0 (Figure 8) of the IGR presents a plan of Reefton Goldfield historical gold production and the locations of EP 60448 (BRP), EP 60446 (ARP), PP 60465 (RSP) expired EoD application pending, EPA 60648.01 (GPP), PPA 60632.01 (BHP), and EP 60479 (LP).
- Section 5.1.2.1 (Figure 9) of the IGR presents a location plan of the OGL BRP drill hole collars and traces.
- Section 5.1.2.1 (Figures 10 and 11) of the IGR presents both plan and long-section views through the BRP showing historical production, the location of historical workings, OGL drilling results, interpreted geology, wacker soil geochemistry results for arsenic geochemistry and the location of vein outcrop and major structures.
- Section 5.1.2.1 (Figure 12) of the IGR presents a simplified geological map illustrating the distribution of lithologies and mines within the BRP area.
- Section 5.2.2.1 (Figure 13) of the IGR presents CRAE gold soil sampling contours, sample lines and the location of historical workings within the BRP area.
- Section 5.2.2.3 (Figures 14, 15 and 16) of the IGR presents plan and long-section views of drilling and trenching results at the ARP and the location of historical mine workings.
- Section 5.3.2.2.2 (Figure 17) of the IGR presents a plan view of the Fraternal lode drilling conducted by OGL.
- Section 5.5.1.2 (Figure 18) of the IGR presents a cross-section through the Alpine United Mine.
- Section 5.5.2.2 (Figure 19, 20, 21 and 22) of the IGR presents LP historical geochemical sample locations, details of the Auzex LP soil sampling program, soil sampling Au assays and gridded Au and final Auzex drill hole collar locations with 0.1 ppm Au contour (soils) and historical mine workings.
- Section 5.5.2.3 (Figure 23) of the IGR presents the Kent Foley Creek and Deep

Criteria	JORC Code Explanation	Commentary
		<p>Creek sample locations.</p> <ul style="list-style-type: none"> <li>Section 6.2 (Figure 24) of the IGR presents a plan of the airborne geophysical survey flown for CRAE in 1988.</li> <li>Section 6.2.2 (Figure 25) of the IGR presents a location plan of the Kent 2010 IP survey stations and their source.</li> <li>Section 6.2.2 (Figure 26) of the IGR presents a location plan of Kent IP anomalies overlain on topography and historical mine workings.</li> <li>Section 6.2.6 (Figure 27) of the IGR presents analytic signal magnetics for Lyell (PP 54446).</li> <li>Section 6.2.6 (Figure 28) of the IGR presents the Lyell aeromagnetic TMI and the Otter Geology North geological map.</li> <li>Section 6.4.5 (Figure 29) of the IGR presents soil and rock chip sampling across the GPP.</li> </ul>
<p><b>Balanced reporting</b></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 in both the IGR and this document, represent all material results found in information supplied by Siren and during open file information searches conducted by GANZL.</li> <li>Numerous soil, trenching and rock chip sampling programs have been undertaken over the RGP area. The full dataset from these programs are not practical to include in the IGR or this Table 1 document. Siren compiled and provided Golder a database of all available historical geochemical soil sampling results for BRP, ARP, RSP, GPP, BHP and LP. Golder did not validate these results; however, cited the data and performed spot checks that found the data to be representative of values summarised (by project) in Section 6.4 of the IGR.</li> </ul>
<p><b>Other substantive exploration data</b></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>Other substantive exploration data and information is presented under 'Exploration done by other parties' in this document.</li> <li>No Mineral Resource estimates reported in accordance with the guiding principles and minimum standards set out in the JORC Code have been made available to GANZL for the BRP, ARP, RSP, GPP, BHP or LP.</li> <li>Technical studies previously reported in-situ resource estimates for the BRP (McLelland 2014a) and GP (Doyle and Hood Hills 2011) areas, which are not reported in this IGR as they have not been reported in accordance with the JORC Code. The author considers these in-situ resource estimates cannot be relied on and therefore not material for inclusion in this IGR.</li> </ul>

Criteria	JORC Code Explanation	Commentary
Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<p>It is GANZL's opinion that the exploration activities completed to date have generally been conducted according to industry standards. After examination of all available relevant exploration activities and technical studies completed to date, GANZL considers some aspects offer opportunities for improvement, these being:</p> <ul style="list-style-type: none"> <li><b>Database Management:</b> The current geological databases for the BRP and ARP consist of a series of Microsoft Excel™ spreadsheets that have been submitted to NZP&amp;M. It is recommended that a central data management system be implemented. A geological database or geological databases (compatible with a 3D mining software package e.g. Vulcan™, Datamine™ or Surpac™) should be generated.</li> <li><b>GIS Management:</b> All exploration data and information should be compiled and centralized into GIS format and imported into a 3D mining software package e.g. Vulcan™, Datamine™ or Surpac™ for future design and visualization.</li> <li><b>QAQC Protocols:</b> Whilst the QAQC database is relatively small for each project, QAQC analysis should be compiled. It appears that no laboratory audits have been conducted or independent re-analysis of assay results. It is recommended that prior to any future samples being submitted to a laboratory for analysis, a thorough laboratory audit be conducted.</li> </ul> <p>GANZL recommend the following further work:</p> <ul style="list-style-type: none"> <li>Ensure that all drill hole collars have been accurately surveyed using Differential Global Positioning System (DGPS).</li> <li>Compile all data into GIS and 3D mining software package e.g. Vulcan™, Datamine™ or Surpac™.</li> <li>Look into the feasibility of acquiring Light Imaging Detection and Ranging (LIDAR) data and/or high-resolution aerial photography over both the BRP and ARP.</li> <li>Using the Blakemore (2016) re-interpretation of the Reefton Goldfield, follow up exploration targets generated at the BRP.</li> <li>Investigate down dip from the No. 7 level of the Big River Mine since mining activities ceased in 1943 due to a lack of manpower not a lack of ore. Before mining was conducted in the 1940s, high grades were intercepted on the No.9 level; post-1940s mining did not reach the No.9 level again.</li> <li>Investigate suitable techniques that may be able to assist in 'looking under cover' in the BRP. To date the only gold found in the Reefton area has been exposed at</li> </ul>

the surface, yet most of the Greenland Group rocks, especially in the south of Reefton Goldfield, are sitting beneath cover rock and therefore could be concealing new deposits.

- Conduct further research into the potential of both the Mackay-Loftus, Bruno and Mullock lodes at the ARP, as historically they were too difficult to mine. High grade samples have been obtained from both lodes during trenching and sampling.
- Investigate the feasibility of re-entering McVicar's No.6 level to map and test for down-dip continuity.
- Re-map and re-interpret the ARP, with the insights into controls on mineralisation gained from OGL during both exploration and mining.
- In the RSP area, further research into the disappearance of the mineralisation corridor under cover may lead to additional discoveries.

As well as the work required to fulfil the minimum future work obligations for both EPA's, GANZL recommends the following work be completed:

- Development of a comprehensive geological database (upon completion of planned exploration works), 3D geological model and subsequent Mineral Resource estimate reported in accordance with the guiding principles and minimum standards set out in the JORC Code.
- A scoping study, with the aim of establishing the economic potential of the both the BRP and ARP and subsequent development of conceptual mine plans for the purposes of prioritizing future exploration and other technical investigations focusing on the mineralisation halo potentials left behind in the historical workings.
- Investigate geotechnical issues and mining solutions around working near historical underground mine workings.

### **Exploration Program and Budgets**

Siren has proposed a staged program of exploration for the BRP, ARP and LP over a two-year period and prospecting programs for the RSP (including the GPP) and BHP over a two-year period, following their listing on the ASX.

Siren's program going forward will focus on the following:

### **BRP**

- Literature review.
- Development of an updated digital database of historical information.

- Target identification and exploration design.
- Geochemical, trench and mapping programs in two stages.
- Completion of a program of exploration drilling.
- If results warrant, completion of a Mineral Resource estimate.

#### ARP

- Literature review.
- Development of an updated digital database of historical information and planned exploration.
- Target identification and exploration design.
- Geochemical and mapping programs.
- Trench sampling.
- Completion of a program of exploration drilling.
- If results warrant, completion of a Mineral Resource estimate.

#### LP

- Literature review.
- Development of an updated digital and GIS database of historical information and planned exploration.
- DoC access agreement.
- Geophysical review, interpretation, and ground geophysical survey.
- Target identification and exploration design.
- Geochemical and mapping programs.
- Completion of a programme of exploration drilling.

#### RSP

- Literature review.
- Review of all available water bore holes, testing for bedrock intersection.
- Development of an updated digital and GIS database of historical information and planned exploration.
- Geochemical soil sampling and mapping programs.
- Geophysical review, interpretation, and ground geophysical survey.
- DoC access agreement.
- Target identification and exploration design for further exploration.

**GPP**

- Literature review.
  - Development of an updated digital and GIS database of historical information and planned exploration.
  - Geochemical and mapping programs.
  - Trench sampling.
  - Target identification and exploration design for further exploration.
  - Completion of a programme of exploration drilling.
- If results warrant, completion of a Mineral Resource estimate.

**BHP**

- Literature review.
- Geological mapping.
- Geochemical sampling.
- Development of an updated digital database of historical information and planned exploration.
- Geophysical ground survey.
- Target identification and exploration design for further exploration.

Table 27 of the IGR presents proposed budgets for the BRP, ARP, RSP and LP exploration works over the next two years.

- GANZL considers the programs of exploration and prospecting works proposed by Siren for the BRP, ARP LP, and RSP to be well thought out and sufficient to meet the minimum work programme requirements over the period of the next two years.
- The quantities of money allocated to each of the proposed activities appear reasonable and once completed, the projects should improve the understanding in terms of a possibility of the estimation and reporting of a Mineral Resource for both the BRP and ARP and the preparation of exploration drilling targets for the LP, RSP and BHP.

**APPENDIX C**

**Historical Drilling Details for the  
ARP, BRP, GPP and LP**

**Table C1: RGP Drill hole Collars and Intercepts by Project and Company (Downhole Thickness not True Thickness)**

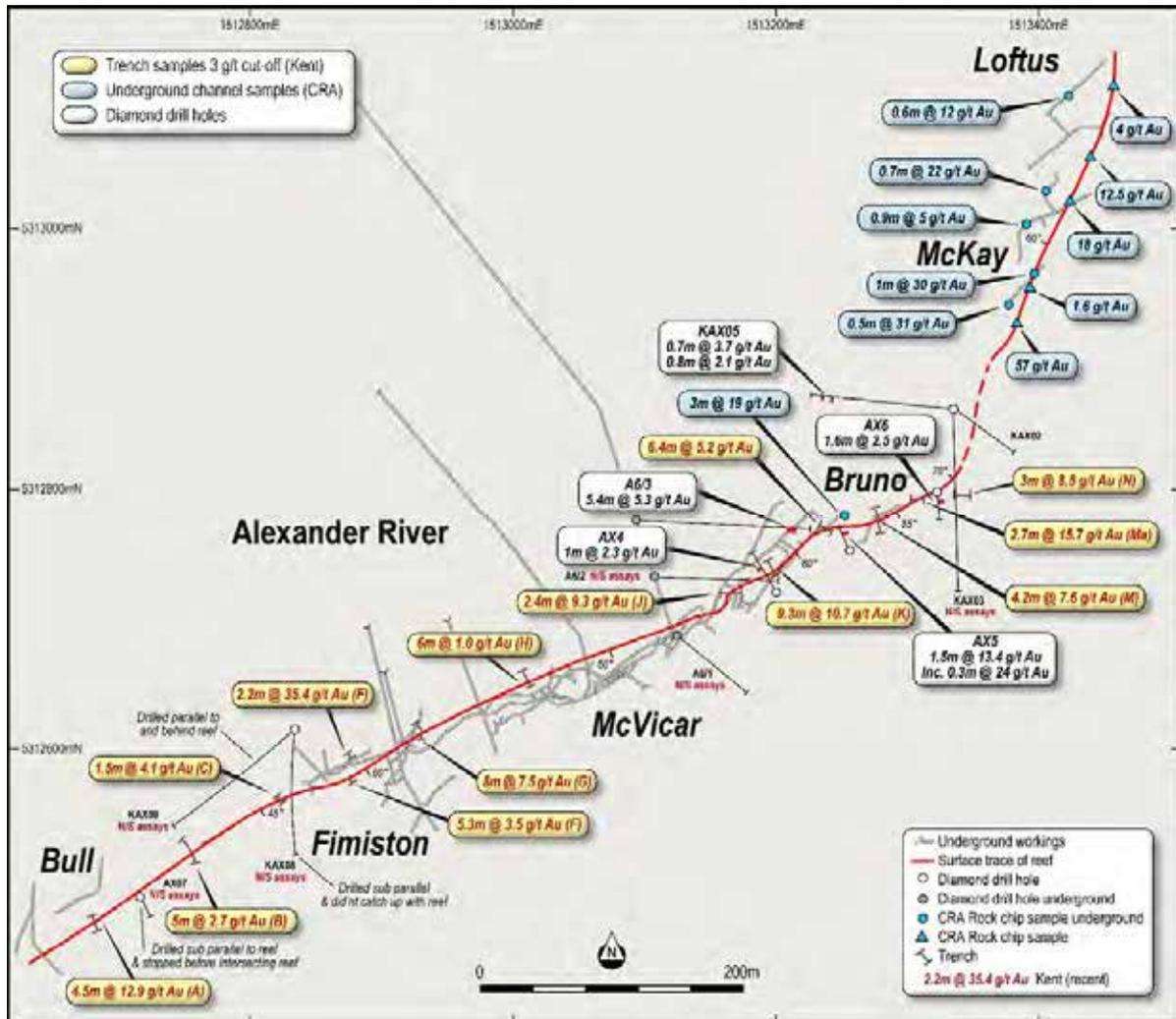
Hole ID	Project	Company	Eastings (NZTM)	Northing (NZTM)	Eastings (NZMG)	Northing (NZMG)	RL (m)	Dip (deg)	Azi (deg)	TD (m)	Thickness (m)	From (m)	To (m)	Average Grade (Au ppm)
96DDAC1	ACP	OGL (MMCL)	2,417,177	-	5,894,810	528	-60	-	70	70.1	2.0	61.0	63.0	1.2
96DDAC2	ACP	OGL (MMCL)	2,417,177	-	5,894,810	528	-75	-	70	84.0	2.0	109.0	111.0	2.9
96DDAC3	ACP	OGL (MMCL)	2,417,095	-	5,894,809	557	-65	-	70	170.5	2.0	34.0	36.0	2.4
RDD0044	ACP	OGL	2,417,736	-	5,893,632	611.7	-60	-	90	60.6	-	-	-	-
RDD0045	ACP	OGL	2,417,653	-	5,893,787	607.7	-60	-	90	67.7	-	-	-	-
RDD0046	ACP	OGL	2,417,507	-	5,893,829	527.5	-60	-	90	161.2	1.0	34.0	35.0	0.5
RDD0056	ACP	OGL	2,417,695	-	5,893,489	565.2	-60	-	90	100.8	1.0	23.0	24.0	0.8
RDD0057	ACP	OGL	2,417,532	-	5,893,713	532.1	-60	-	90	136.6	1.0	97.0	98.0	0.6
RDD0058	ACP	OGL	2,417,509	-	5,893,829	527.7	-60	-	270	141.9	-	-	-	-
RDD0059	ACP	OGL	2,417,671	-	5,893,897	567.8	-60	-	90	100.3	-	-	-	-
RDD0081	ACP	OGL	2,417,182	-	5,894,724	581	-60	-	35	75.9	6.0	45.0	51.0	1.7
RDD0081A	ACP	OGL	2,417,182	-	5,894,724	581	-60	-	35	151.5	11.0	57.0	68.0	2.1
RDD0084	ACP	OGL	2,417,748	-	5,894,361	577	-60	-	148.1	77.0	1.0	77.0	78.0	1.6
RDD0085	ACP	OGL	2,417,182	-	5,894,724	581	-60	-	110	79.0	35.0	30.0	65.0	1.6
RDD0096	ACP	OGL	2,417,192	-	5,894,724	581	-60	-	150	90.0	6.0	90.0	96.0	4.1
RDD0097	ACP	OGL	2,417,256	-	5,894,724	581	-75	-	75	132.5	35.0	63.0	98.0	4.1
RDD0098	ACP	OGL	2,417,174	-	5,894,801	584	-60	-	270	159.5	2.0	125.0	127.0	1.3
RDD0099	ACP	OGL	2,417,177	-	5,894,789	541	-52	-	90	61.8	1.0	34.0	35.0	1.4
RDD0091	ACP	OGL	2,417,256	-	5,894,526	544	-52	-	230	166.5	1.0	125.0	126.0	0.6
RDD0092	ACP	OGL	2,417,256	-	5,894,526	544	-62	-	230	161.1	-	-	-	-
RDD0093	ACP	OGL	2,417,256	-	5,894,526	544	-55	-	215	185.5	-	-	-	-
AX4	ARP	OGL	2,423,169	-	5,874,387	-	-60	-	52.5	330.0	1.0	36.0	37.0	2.3
AX5	ARP	OGL	2,423,251	-	5,874,387	-	-50	-	34.1	330.0	1.9	26.0	27.9	9.8
AX6	ARP	OGL	2,423,295	-	5,874,453	-	-65	-	37.1	165.0	1.6	13.2	14.8	2.5
AX7	ARP	OGL	2,423,688	-	5,874,139	-	-60	-	29.7	150.0	-	-	-	-
AB3	ARP	OGL	-	-	-	-	-	-	-	-	9.0	130.0	139.0	3.9
AX001	ARP	KENT	2,423,310	-	5,874,517	675	-55	-	12.0	130.0	-	-	-	-
AX002	ARP	KENT	2,423,310	-	5,874,517	675	-75	-	26.0	130.0	-	-	-	-
AX003	ARP	KENT	2,423,310	-	5,874,517	675	-55	-	262.0	180.0	-	-	-	-
AX004	ARP	KENT	2,423,310	-	5,874,517	675	-50	-	15.0	272.0	-	-	-	-
AX005	ARP	KENT	2,423,310	-	5,874,517	675	-65	-	274.0	272.0	4.5	227.7	232.2	0.9
AX006	ARP	KENT	2,422,805	-	5,874,270	680	-50	-	20.0	165.0	3.0	251.3	254.3	0.9
AX007	ARP	KENT	2,422,805	-	5,874,270	680	-65	-	13.0	165.0	-	-	-	-
AX008	ARP	KENT	2,422,805	-	5,874,270	680	-65	-	253.0	180.0	-	-	-	-
AX009	ARP	KENT	2,422,805	-	5,874,270	680	-55	-	240.0	230.0	-	-	-	-
BR0001	BRP	OGL	2,419,560	-	5,884,053	743	-57	-	160.9	199.0	3.0	36.0	39.0	2.9
BR0002	BRP	OGL	2,419,712	-	5,884,121	787	-52	-	207.0	186.9	-	-	-	-
BR0003	BRP	OGL	2,419,838	-	5,883,996	784	-61	-	172.5	301.0	2.0	99.0	101.0	1.2
BR0004	BRP	OGL	2,419,838	-	5,883,996	784	-55	-	200.5	215.0	20.0	127.0	147.0	8.1
BR0005	BRP	OGL	2,419,838	-	5,883,996	784	-59	-	187.0	246.0	5.0	117.1	117.1	3.2
BR0006	BRP	OGL	2,419,838	-	5,883,996	784	-55	-	235.2	194.0	2.4	132.7	135.1	1.5
BR0007	BRP	OGL	2,419,838	-	5,883,996	784	-70	-	201.0	209.0	1.0	193.0	194.0	1.5
BR0008	BRP	OGL	2,419,828	-	5,884,080	773	-56	-	175.0	245.0	1.3	119.0	120.3	1.2
BR0009	BRP	OGL	2,419,838	-	5,883,996	784	-77	-	180.0	250.0	3.0	147.0	150.0	18.5
BR0010	BRP	OGL	2,419,560	-	5,884,053	743	-54	-	167.0	291.5	1.5	160.5	162.0	3.3
BR0011	BRP	OGL	2,419,828	-	5,884,080	773	-50	-	205.4	265.0	0.7	128.0	128.7	4.8
BR0012	BRP	OGL	2,419,838	-	5,883,996	784	-80	-	230.5	201.0	2.0	184.0	186.0	1.5
BR0013	BRP	OGL	2,419,971	-	5,883,962	757	-50	-	255.0	281.0	1.0	236.0	237.0	0.5
BR0014	BRP	OGL	2,419,971	-	5,883,962	757	-54	-	257.2	240.0	1.0	187.0	188.0	0.6

Hole ID	Project	Company	Eastings (NZTM)	Northing (NZTM)	Eastings (NZMG)	Northing (NZMG)	RL (m)	Dip (deg)	Azi (deg)	TD (m)	Thickness (m)	From (m)	To (m)	Average Grade (Au ppm)
BR0015	BRP	OGL	-	-	2,419,850	5,883,852	808	-60	117.0	289.0	2.0	77.9	79.9	0.6
											4.0	82.0	86.0	0.7
											2.0	98.0	100.0	1.2
BR0016	BRP	OGL	-	-	2,419,850	5,883,852	808	-55	136.3	235.0	3.0	103.0	106.0	0.5
BR0017	BRP	OGL	-	-	2,419,850	5,883,852	808	-72	165.0	244.0	6.0	100.9	104.9	1.2
BR0018	BRP	OGL	-	-	2,419,991	5,884,059	742	-63	363.0	268.0	1.0	107.0	108.0	0.8
BR0019	BRP	OGL	-	-	2,419,991	5,884,059	742	-71	281.0	384.5	2.0	296.0	296.0	0.6
BRS001	BRP	OGL	-	-	2,418,011	5,881,333	688	-55	140.1	263.0	-	-	-	1.5
BRS002	BRP	OGL	-	-	2,418,011	5,881,333	688	-54	115.7	88.0	1.0	3.0	4.0	0.8
											5.0	5.0	10.0	1.0
											1.0	83.0	84.0	0.6
											1.0	111.0	112.0	0.6
BRS003	BRP	OGL	-	-	2,418,114	5,881,346	677	-53	112.1	269.0	2.0	10.0	12.0	0.6
											1.0	44.0	45.0	1.8
											1.0	56.0	57.0	2.9
											1.0	80.0	81.0	1.2
											0.8	89.6	90.4	1.0
											1.0	1.0	2.0	1.9
BRS004	BRP	OGL	-	-	2,418,168	5,881,843	691	-54	158.6	285.0	1.0	5.0	6.0	0.6
											4.0	72.0	76.0	2.1
											3.0	86.0	89.0	0.5
											1.0	135.0	136.0	1.0
BRS005	BRP	OGL	-	-	2,418,168	5,881,843	691	-50	68.6	100.0	3.0	14.0	17.0	0.7
											1.0	7.0	8.0	1.0
											1.0	66.0	67.0	1.9
BRS006	BRP	OGL	-	-	2,418,168	5,881,843	691	-52	210.1	317.0	1.0	84.0	85.0	5.5
											3.0	103.0	106.0	0.9
											1.0	12.0	13.0	1.1
											6.0	28.0	34.0	0.9
BRS007	BRP	OGL	-	-	2,418,239	5,881,808	705	-50	121	270	2.0	37.0	39.0	0.8
											1.0	71.0	72.0	2.6
											7.0	80.0	87.0	0.6
											1.0	109.0	110.0	2.9
											1.2	3.8	5.0	0.1
											2.0	28.0	30.0	0.1
ARD1	LP	Auzex	1523047.0	5374849.0	-	-	703	-60	270	127.1	1.0	38.0	39.0	0.2
											1.0	81.0	82.0	0.1
											1.0	85.0	86.0	0.1
											1.0	110.0	111.0	0.2
											2.0	4.0	6.0	0.2
											1.0	25.0	26.0	0.1
											1.0	43.0	44.0	0.1
											1.0	45.0	46.0	0.1
ARD2	LP	Auzex	1523047.0	5374949.0	-	-	703	-60	90	149.9	1.0	46.0	47.0	0.2
											1.0	59.0	60.0	0.3
											1.0	61.0	62.0	0.1
											1.0	62.0	63.0	1.7
											1.0	73.0	74.0	1.2
											0.8	8.8	9.6	0.1
											1.4	9.6	11.0	0.1
ARD3	LP	Auzex	1522951.0	5374976.0	-	-	688	-60	90	105.0	1.0	21.0	22.0	0.1
											2.0	64.0	66.0	0.1
											2.0	82.0	84.0	0.1
ARD4	LP	Auzex	1523047.0	5374949.0	-	-	703	-55	60	99.1	2.0	49.0	51.0	0.1
											2.0	62.0	64.0	4.6
ARD5	LP	Auzex	1523189.0	5374501.0	-	-	630	-60	270	127.0	2.0	76.0	78.0	0.1
											2.0	84.0	86.0	0.1
											2.0	46.0	48.0	0.1
											1.5	68.5	70.0	0.2
ARD6	LP	Auzex	1523085.0	5374481.0	-	-	683	-60	90	140.0	1.0	70.0	71.0	0.2
											0.8	100.4	101.2	0.1
											1.5	102.5	104.0	0.3

**APPENDIX D**

**ARP CRAE and Kent Trench  
Assay Results Summary**

Figure D1: Summary Comparison at a 3.0 g/t Au Cut-off of the CRAE (1980's) and Kent (2011) Trench Sampling Results (Siren)



Assay results for CRAE (1980s) and Kent (2011) and are included in Table D2 and D3 below. The rock type legend for the tables is as follows.

**Rock Type**

Slt/Sst	
Slt /Sst+ Apy	
Slt /Sst+ Apy + Qtz	
Qtz Vein	
Qtz Breccia	

Table D1: Summary Trench Intersections

Trench ID	0.7 g/t Au Cut-off Grade		3.0 g/t Au Cut-off Grade		Comments
	CRAE (1980s)	Kent (2011)	CRAE (1980s)	Kent (2011)	
Trench_A	7.8 m @ 14.4 g/t Au	9 m @ 6.9 g/t Au	5.7 m @ 19.0 g/t Au	4.5 m @ 12.9 g/t Au	Last sample at SE end of trench = 8.36 g/t Au so may not be a full intersection
Trench_Ab		No significant results			Short 3.5 m trench with unmineralised siltstone may have missed the reef
Trench_Ac		No significant results			Short 3.5 m trench with weakly mineralised siltstone may have missed the reef
Trench_B	13 m @ 1.9 g/t Au	14 m @ 1.4 g/t Au	2 m @ 7.2 g/t Au	5 m @ 2.7 g/t Au	Full intersection
Trench_Ba		No significant results			8 m trench with low Au and As possible cut to the NW of the reef
Trench_C	3 m @ 2.1 g/t Au	1.5 m @ 4.1 g/t Au	1 m @ 4.9 g/t Au	1.5 m @ 4.1 g/t Au	Last sample at N end of trench = 2.7 g/t Au so may not be a full intersection
Trench_D			2 m @ 4.3 g/t Au		Not resampled by Kent
Trench_E	1.5 m @ 33 g/t Au	5.3 m @ 3.5 g/t Au	1.5 m @ 33.0 g/t Au	5.3 m @ 3.5 g/t Au	Last sample at NW end of trench = 2.7 g/t Au and SE end = 3.3 g/t Au so may not be a full intersection
Trench_Ea		3.2 m @ 3.7 g/t Au		3.2 m @ 3.8 g/t Au	Last sample at W end of trench = 8.0 g/t Au and E end = 1.9 g/t Au so may not be a full intersection
Trench_F	1.5 m @ 12 g/t Au	3.6 m @ 21.73 g/t Au	1.5 m @ 12.0 g/t Au	2.2 m @ 35.4 g/t Au	Last sample at SE end of trench = 36.4 g/t Au so may not be a full intersection
Trench_G	9 m @ 5.2 g/t Au	8 m @ 7.5 g/t Au	8 m @ 6.3 g/t Au	8 m @ 7.5 g/t Au	Full intersection
Trench_H	4 m @ 0.8 g/t Au	6 m @ 1.0 g/t Au	2 m @ 1.2 g/t Au	6 m @ 1.0 g/t Au	Last sample at NW end of trench = 1.2 g/t Au so may not be a full intersection
Trench_J	3 m @ 4.5 g/t Au	0.3 m @ 6.2 g/t Au	1 m @ 9.2 g/t Au	0.3 m @ 6 g/t Au	Full intersection
Trench_Ja		2.1 m @ 9.7 g/t Au		2.1 m @ 9.7 g/t Au	Last sample at E end of trench = 3.0 g/t Au and W end = 2.0 g/t Au so may not be a full intersection
Trench_K	5 m @ 8.2 g/t Au	9.3 m @ 10.7 g/t Au	5 m @ 8.2 g/t Au	9.3 m @ 10.7 g/t Au	Last sample at N end of trench = 20.8 g/t Au and S end = 4.8 g/t Au so may not be a full intersection
Trench_La	3 m @ 5.1 g/t Au	1.7 m @ 3.2 g/t Au	5 m @ 10.4 g/t Au	1.7 m @ 3 g/t Au	Only a 2 m trench with 2 x 1 m samples 2.0 g/t Au and 4.3 g/t Au so may not be a full intersection
Trench_Lc		2.7 m @ 6.2 g/t Au		2.7 m @ 6.2 g/t Au	Only a 2.7 m trench ending in 4.4 g/t Au and 4.1 g/t Au so may not be a full intersection
Trench_Ld		2.0 m @ 5.5 g/t Au		2 m @ 5.5 g/t Au	Only a 2 m trench with 2 x 1 m samples 6.0 g/t Au and 5.1 g/t Au so may not be a full intersection
Trench_M	12 m @ 5.0 g/t Au	13.2 m @ 4.1 g/t Au	6 m @ 7.7 g/t Au	4.2 m @ 7.6 g/t Au	Full intersection
Trench_Ma		4.4 m @ 10.2 g/t Au		2.7 m @ 15.7 g/t Au	Last sample at E end of trench = 2.0 g/t Au so may not be a full intersection
Trench_N	3 m @ 6.1 g/t Au	3 m @ 8.5 g/t Au	3 m @ 5.9 g/t Au	3 m @ 8.5 g/t Au	Full intersection
Trench_Na		0.9 m @ 23.6 g/t Au		0.9 m @ 23.6 g/t Au	Last sample at NE end of trench = 43.5 g/t Au
Trench_O			2.5 m @ 4.1 g/t Au		Not resampled by Kent
<b>Wt Average</b>	<b>5 m @ 6.6 g/t Au</b>	<b>5.2 m @ 6.4 g/t Au</b>	<b>3.3 m @ 9.3 g/t Au</b>	<b>3.8 m @ 8.2 g/t Au</b>	

Table D2: CRAE (1980s) Trench Assays (Siren)

	Trench ID	Sample ID	From (m)	To (m) m	Interval (m)	Sample Type	Rock Type	Au (ppm)	Ag (ppm)	As (ppm)	Sb (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
Footwall of Bull Load	Trench_A	1637581	0.00	1.00	1.00	Chip		1.8	0.0	180	0	13.0	30.0	34
	Trench_A	1637582	1.00	2.10	1.10	Chip		2.5	0.0	190	0	24.0	19.0	59
	Trench_A	1637583	2.10	3.60	1.50	Chip		4.5	0.0	390	0	21.0	27.0	30
	Trench_A	1637584	3.60	4.90	1.30	Chip		35.0	0.0	1300	0	11.0	31.0	18
	Trench_A	1637585	4.90	6.10	1.20	Chip		21.0	0.0	360	0	26.0	55.0	58
	Trench_A	1637586	6.10	7.80	1.70	Chip		18.0	0.0	293	0	31.4	60.5	41
Bull	Trench_B	2147101	0.00	1.00	1.00	Chip		0.1		110				
	Trench_B	2147102	1.00	2.00	1.00	Chip		<0.05		130				
	Trench_B	2147103	2.00	3.00	1.00	Chip		0.3		290				
	Trench_B	2147104	3.00	4.00	1.00	Chip		0.6		510				
	Trench_B	2147105	4.00	5.00	1.00	Chip		12.1		14000				
	Trench_B	2147106	5.00	6.00	1.00	Chip		2.2		2400				
	Trench_B	2147107	6.00	7.00	1.00	Chip		0.1		130				
	Trench_B	2147108	7.00	8.00	1.00	Chip		1.0		780				
	Trench_B	2147109	8.00	9.00	1.00	Chip		3.9		2500				
	Trench_B	2147110	9.00	10.00	1.00	Chip		0.6		570				
	Trench_B	2147111	10.00	11.00	1.00	Chip		0.5		550				
	Trench_B	2147112	11.00	12.00	1.00	Chip		0.1		35				
	Trench_B	2147113	12.00	13.00	1.00	Chip		0.5		250				
	Trench_B	2147114	13.00	14.00	1.00	Chip		0.5		260				
	Trench_B	2147115	14.00	15.00	1.00	Chip		1.7		210				
	Trench_B	2147636	15.00	16.00	1.00	Chip		0.8		180				
	Trench_B	2147637	16.00	17.00	1.00	Chip		0.2		68				
	Trench_B	2147638	17.00	18.00	1.00	Chip		0.1		69				
	Trench_B	2147639	18.00	19.00	1.00	Chip		0.1		110				
	Trench_B	2147640	19.00	20.00	1.00	Chip		0.0		52				
Trench_B	2147641	20.00	21.00	1.00	Chip		0.0		42					
Trench_B	2147642	21.00	22.00	1.00	Chip		<0.05		49					
Trench_B	2147643	22.00	23.00	1.00	Chip		<0.05		61					
Trench_B	2147644	23.00	24.00	1.00	Chip		<0.05		114					
	Trench_C	2147163	2.00	3.00	1.00	Chip		4.9		2900				
	Trench_C	2147162	1.00	2.00	1.00	Chip		0.2		550				
	Trench_C	2147161	0.00	1.00	1.00	Chip		1.3		1200				
	Trench D	2147155	0.00	1.00	1.00	Chip		0.4		210				
	Trench D	2147154	1.00	2.00	1.00	Chip		0.4		100				
	Trench D	2147153	2.00	3.00	1.00	Chip		2.8		220				
	Trench D	1637955	3.00	4.00	1.00	Chip		4.5		4100		5	12	20
	Trench D	1637956	4.00	5.00	1.00	Chip		4.1		2200		4	14	16
	Trench D	1637957	5.00	6.00	1.00	Chip		2.3		1700		19	17	39
	Trench D	1637958	6.00	7.00	1.00	Chip		1.4		690		22	16	32
	Trench D	2147152	7.00	8.00	1.00	Chip		2.1		1000				
Trench D	2147151	8.00	9.00	1.00	Chip		1.5		1300					

	Trench ID	Sample ID	From (m)	To (m) m	Interval (m)	Sample Type	Rock Type	Au (ppm)	Ag (ppm)	As (ppm)	Sb (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
<b>McVicar</b>	Trench_E	1637962	0.00	1.50	1.50	Chip		33.0		24000	27	54.0	20.0	25
<b>McVicar</b>	Trench_F	1637965	0.00	1.50	1.50	Chip		12.0		6500		6.0	11.0	8
<b>McVicar</b>	Trench_G	2147128	0.00	1.00	1.00	Chip		0.1		120				
	Trench_G	2147129	1.00	2.00	1.00	Chip		0.1		110				
	Trench_G	2147130	2.00	3.00	1.00	Chip		0.1		86				
	Trench_G	2147131	3.00	4.00	1.00	Chip		0.1		120				
	Trench_G	2147132	4.00	5.00	1.00	Chip		0.1		250				
	Trench_G	2147133	5.00	6.00	1.00	Chip		0.1		150				
	Trench_G	2147134	6.00	7.00	1.00	Chip		0.1		290				
	Trench_G	2147135	7.00	8.00	1.00	Chip		0.1		230				
	Trench_G	2147136	8.00	9.00	1.00	Chip		0.4		250				
	Trench_G	2147137	9.00	10.00	1.00	Chip		0.2		180				
	Trench_G	2147138	10.00	11.00	1.00	Chip		0.1		110				
	Trench_G	2147139	11.00	12.00	1.00	Chip		0.1		93				
	Trench_G	2147140	12.00	13.00	1.00	Chip		<0.05		91				
	Trench_G	2147141	13.00	14.00	1.00	Chip		<0.05		37				
	Trench_G	2147142	14.00	15.00	1.00	Chip		<0.05		71				
	Trench_G	2147143	15.00	16.00	1.00	Chip		0.1		190				
	Trench_G	2147144	16.00	17.00	1.00	Chip		0.1		44				
	Trench_G	2147145	17.00	18.00	1.00	Chip		<0.05		45				
	Trench_G	2147146	18.00	19.00	1.00	Chip		0.2		360				
	Trench_G	2147147	19.00	20.00	1.00	Chip		1.4		1100				
Trench_G	2147148	20.00	21.00	1.00	Chip		7.4		2700					
Trench_G	2147149	21.00	22.00	1.00	Chip		11.0		3200					
Trench_G	2147150	22.00	23.00	1.00	Chip		9.1		3200					
Trench_G	2147172	23.00	24.00	1.00	Chip		1.6		1300	6	13.0	84.0	31	
Trench_G	2147173	24.00	25.00	1.00	Chip		6.0		2400	4	12.0	14.0	16	
Trench_G	2147174	25.00	26.00	1.00	Chip		5.1		3000	5	9.0	15.0	16	
Trench_G	2147175	26.00	27.00	1.00	Chip		3.9		2500	5	7.0	11.0	20	
Trench_G	2147176	27.00	28.00	1.00	Chip		1.3		880	4	7.0	11.0	18	
<b>Bruno</b>	Trench_H	2147127	0.00	1.00	1.00	Chip		0.5		1100				
	Trench_H	2147126	1.00	2.00	1.00	Chip		0.3		650				
	Trench_H	2147125	2.00	3.00	1.00	Chip		1.0		1700				
	Trench_H	2147116	3.00	4.00	1.00	Chip		<0.01		280				
	Trench_H	2147117	4.00	5.00	1.00	Chip		1.1		1300				
	Trench_H	2147118	5.00	6.00	1.00	Chip		1.3		970				
	Trench_H	2147119	6.00	7.00	1.00	Chip		0.3		470				
	Trench_H	2147120	7.00	8.00	1.00	Chip		0.2		470				
	Trench_H	2147121	8.00	9.00	1.00	Chip		0.1		210				
	Trench_H	2147122	9.00	10.00	1.00	Chip		0.7		1500				
	Trench_H	2147123	10.00	11.00	1.00	Chip		0.5		810				
	Trench_H	2147124	11.00	12.00	1.00	Chip		0.2		260				

	Trench ID	Sample ID	From (m)	To (m) m	Interval (m)	Sample Type	Rock Type	Au (ppm)	Ag (ppm)	As (ppm)	Sb (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
	Trench I	2147180	0.00	1.00	1.00			0.1		180				
	Trench I	2147181	1.00	2.00	1.00			0.1		200				
	Trench I	2147182	2.00	3.00	1.00			0.1		190				
	Trench I	2147183	3.00	4.00	1.00			0.1		240				
	Trench I	2147184	4.00	5.00	1.00			0.1		250				
	Trench I	2147185	5.00	6.00	1.00			0.1		190				
	Trench I	2147186	6.00	7.00	1.00			0.1		230				
	Trench I	2147187	7.00	8.00	1.00			0.1		150				
	Trench I	2147188	8.00	9.00	1.00			0.1		200				
	Trench I	2147189	9.00	10.00	1.00			0.1		300				
	Trench I	2147190	10.00	11.00	1.00			<0.01		220				
	Trench I	2147191	11.00	12.00	1.00			<0.01		300				
	Trench I	2147192	12.00	13.00	1.00			<0.01		250				
	Trench I	2147193	13.00	14.00	1.00			<0.01		39				
	Trench I	2147194	14.00	15.00	1.00			<0.01		19				
	Trench I	2147195	15.00	16.00	1.00			<0.01		76				
	Trench I	2147196	16.00	17.00	1.00			<0.01		58				
	Trench I	2147197	17.00	18.00	1.00			<0.01		23				
	Trench I	2147198	18.00	19.00	1.00			<0.01		20				
	Trench I	2147199	19.00	20.00	1.00			0.1		18				
	Trench I	2147200	20.00	21.00	1.00			0.1		50				
	Trench_J	2147601	0.00	1.00	1.00	Chip		0.0		31		8	9	42
	Trench_J	2147602	1.00	2.00	1.00	Chip		0.0		35		11	9	27
	Trench_J	2147603	2.00	3.00	1.00	Chip		0.0		42		15	10	26
	Trench_J	2147604	3.00	4.00	1.00	Chip		0.0		41		8	7	28
	Trench_J	2147605	4.00	5.00	1.00	Chip		0.0		55		21	11	59
	Trench_J	2147606	5.00	6.00	1.00	Chip		0.0		31		11	11	37
	Trench_J	2147607	6.00	7.00	1.00	Chip		0.0		68		15	17	130
	Trench_J	2147608	7.00	8.00	1.00	Chip		0.1		279		27	18	116
	Trench_J	2147615	8.00	9.00	1.00	Chip		2.2		1200		17	21	93
	Trench_J	2147616	9.00	10.00	1.00	Chip		9.2		4800		7	29	21
	Trench_J	2147617	10.00	11.00	1.00	Chip		2.0		1520		19	28	58
	Trench_J	2147612	11.00	12.00	1.00	Chip		0.2		108		11	15	24
	Trench_J	2147613	12.00	13.00	1.00	Chip		0.0		37		7	8	17
	Trench_J	2147614	13.00	14.00	1.00	Chip		0.97		262		9	9	20
	Trench_K	1644252	0.00	1.00	1.00	Chip		14.0		7500	28	13.0	31.0	31
	Trench_K	1644253	1.00	2.00	1.00	Chip		9.9		5100	33	19.0	25.0	47
	Trench_K	1644254	2.00	3.00	1.00	Chip		12.0		7700	32	11.0	19.0	16
	Trench_K	1644255	3.00	4.00	1.00	Chip		1.2		1200	6	5.0	8.0	9
	Trench_K	1644256	4.00	5.00	1.00	Chip		3.7		2600	13	9.0	5.0	15
	Trench_L	1644257	0.00	1.00	1.00	Chip		5.4		4200	33	8	23	22
	Trench_L	1644258	1.00	2.00	1.00	Chip		5.2		5200	11	6	14	3
	Trench_L	1644259	2.00	3.50	1.50	Chip		4.6		4100	5	29	9	5
	Trench_L	1644260	3.50	5.00	1.50	Chip		23.0		14000	8	10	8	5

	Trench ID	Sample ID	From (m)	To (m) m	Interval (m)	Sample Type	Rock Type	Au (ppm)	Ag (ppm)	As (ppm)	Sb (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
<b>Bruno</b>	Trench_M	2147632	0.00	1.00	1.00	Chip		0.1		111		6	9	18
	Trench_M	2147631	1.00	2.00	1.00	Chip		0.1		138		18	12	41
	Trench_M	2147630	2.00	3.00	1.00	Chip		0.1		251		7	11	26
	Trench_M	2147629	3.00	4.00	1.00	Chip		0.4		411		7	15	13
	Trench_M	2147628	4.00	5.00	1.00	Chip		7.1		5705		8	29	6
	Trench_M	2147627	5.00	6.00	1.00	Chip		6.5		4800	5	7	41	3
	Trench_M	2147626	6.00	7.00	1.00	Chip		6.3		6260	7	9	18	2
	Trench_M	2147625	7.00	8.00	1.00	Chip		12.0		4760		9	17	4
	Trench_M	2147624	8.00	9.00	1.00	Chip		8.7		5620	7	9	11	11
	Trench_M	2147623	9.00	10.00	1.00	Chip		5.2		2640	6	10	11	20
	Trench_M	2147622	10.00	11.00	1.00	Chip		0.4		584		5	4	10
	Trench_M	2147621	11.00	12.00	1.00	Chip		2.1		2510	8	12	13	22
	Trench_M	2147620	12.00	13.00	1.00	Chip		6.1		3510	7	13	11	15
	Trench_M	2147619	13.00	14.00	1.00	Chip		2.3		2510	16	16	12	18
	Trench_M	2147618	14.00	15.00	1.00	Chip		1.9		2080	12	10	16	15
	Trench_M	2147635	15.00	16.00	1.00	Chip		1.7		2720				
	Trench_M	2147634	16.00	17.00	1.00	Chip		0.2		278				
Trench_M	2147633	17.00	18.00	1.00	Chip		0.0		392					
<b>Bruno</b>	Trench_N	2147527	0.00	1.00	1.00	Chip		0.8		213		5	9	21
	Trench_N	2147528	1.00	2.00	1.00	Chip		0.3		609		16	7	16
	Trench_N	2147529	2.00	3.00	1.00	Chip		0.3		737		15	15	21
	Trench_N	2147530	3.00	4.00	1.00	Chip		0.3		703		18	17	29
	Trench_N	2147531	4.00	5.00	1.00	Chip		5.3		3870		11	11	41
	Trench_N	2147532	5.00	6.00	1.00	Chip		2.2		4090		7	8	26
Trench_N	2147533	6.00	7.00	1.00	Chip		10.3		6220		16.7	7.8	27	
<b>Loftus</b>	Trench O	1644275	0.00	1.00	1.00	Chip		0.5		220				
	Trench O	1644274	1.00	2.00	1.00	Chip		0.2		290				
	Trench O	1644273	2.00	3.00	1.00	Chip		0.5		1200				
	Trench O	1644272	3.00	3.50	0.50	Chip		3.8		1200				
	Trench O	1644271	3.50	4.50	1.00	Chip		4.4		3300				
	Trench O	1644270	4.50	5.50	1.00	Chip		3.5		6900				

Table D3: Kent (2011) Re-sampling of CRAE Trenches (Siren)

	Trench ID	Sample ID	From (m)	To (m)	Interval (m)	Sample Type	Rock Type	Au (ppm)	Ag (ppm)	As (ppm)	Bi (ppm)	Cu (ppm)	Mo (ppm)	Pb (ppm)	Sb (ppm)	Zn (ppm)
Bull	Trench_A	G 247226	0.00	1.50	1.50	Chip		0.62	0.05	102	0.21	9.1	2.14	19.2	2.9	17
	Trench_A	G 247227	1.50	3.00	1.50	Chip		1.09	-9999.0	-9999	-9999.0	-9999.0	-9999.0	-9999.0	-9999.0	-9999
	Trench_A	G 247228	3.00	4.50	1.50	Chip		0.81	0.06	114	0.2	17.3	2.98	11.9	2.61	19
	Trench_A	G 247229	4.50	6.00	1.50	Chip		14.21	0.36	2000	0.75	10.4	3.36	24.7	8.62	15
	Trench_A	G 247230	6.00	7.50	1.50	Chip		16.15	0.37	1237	1.07	15.0	3.67	33.8	12.45	43
Trench_A	G 247232	7.50	9.00	1.50	Chip		8.36	0.17	293	0.97	31.4	2.24	60.5	10.32	41	
Bull	Trench_Ab	G 247223	0.00	1.00	1.00	Chip		0.08	0.05	56	0.48	44.1	2.14	9.0	3.51	51
	Trench_Ab	G 247224	1.00	2.00	1.00	Chip		0.17	0.06	66	0.57	45.0	3.17	14.7	3.68	32
	Trench_Ab	G 247225	2.00	3.50	1.50	Chip		0.33	0.04	139	0.54	27.2	2.19	9.3	2.68	23
Bull	Trench_Ac	G 247123	0.00	1.40	1.40	Chip		0.27	-333.1	844	0.1	21	2.6	15	3.6	47
	Trench_Ac	G 247124	1.40	1.90	0.50	Chip		0.23	-333.1	244	0.6	27	4.9	47	4.2	45
	Trench_Ac	G 247125	1.90	3.20	1.30	Chip		0.04	-333.1	52	0.1	12	2.7	8	1.5	32
Bull	Trench_B	G 247135	0.00	1.00	1.00	Chip		<0.01	-333.1	56	0.4	26	2.6	9	1.9	49
	Trench_B	G 247136	1.00	2.00	1.00	Chip		<0.01	-333.1	92	0.4	22	3.1	10	1.8	65
	Trench_B	G 247137	2.00	3.00	1.00	Chip		<0.01	-333.1	67	0.1	11	3.8	7	1.3	39
	Trench_B	G 247138	3.00	4.00	1.00	Chip		<0.01	-333.1	42	0.2	9	2.4	7	1.5	43
	Trench_B	G 247139	4.00	5.00	1.00	Chip		<0.01	-333.1	39	0.2	18	2	10	1.7	61
	Trench_B	G 247141	5.00	6.00	1.00	Chip		0.04	-333.1	27	0.2	7	2.8	10	1.1	37
	Trench_B	G 247205	6.00	7.00	1.00	Chip		0.05	0.05	61	0.16	10.1	3.05	7.9	1.97	34
	Trench_B	G 247206	7.00	8.00	1.00	Chip		0.03	0.04	36	0.1	6.8	3.13	10.3	1.59	20
	Trench_B	G 247207	8.00	9.00	1.00	Chip		0.39	0.03	112	0.47	22.9	1.77	9.3	3.36	53
	Trench_B	G 247208	9.00	10.00	1.00	Chip		1.27	0.1	587	0.83	12.8	2.28	12.3	5.81	15
	Trench_B	G 247209	10.00	11.00	1.00	Chip		0.39	0.07	719	0.42	13.9	3.67	13.0	5.83	21
	Trench_B	G 247211	11.00	12.00	1.00	Chip		0.10	0.04	74	0.21	5.4	2.92	9.4	1.85	15
	Trench_B	G 247212	12.00	13.00	1.00	Chip		0.52	0.1	464	0.31	6.7	2.7	10.2	3.32	12
	Trench_B	G 247213	13.00	14.00	1.00	Chip		0.71	0.1	438	1.27	15.9	3.81	13.0	5.95	13
	Trench_B	G 247214	14.00	15.00	1.00	Chip		4.84	0.08	2623	0.35	7.6	2.97	6.9	7.02	15
	Trench_B	G 247215	15.00	16.00	1.00	Chip		2.45	0.07	1092	0.32	9.9	2.48	7.5	4.24	20
	Trench_B	G 247216	16.00	17.00	1.00	Chip		1.06	0.05	704	0.14	7.7	4.24	8.2	2.95	17
	Trench_B	G 247217	17.00	18.00	1.00	Chip		1.11	0.1	670	0.28	18.1	4.03	5.8	3.78	35
	Trench_B	G 247218	18.00	19.00	1.00	Chip		4.15	0.19	3399	0.32	12.5	4.41	9.0	9.58	27
	Trench_B	G 247219	19.00	20.00	1.00	Chip		0.74	0.07	558	0.23	18.1	5.79	10.2	5.27	49
Trench_B	G 247220	20.00	21.00	1.00	Chip		0.32	0.06	220	0.22	12.7	2.66	10.5	3.24	29	
Trench_B	G 247222	21.00	22.50	1.50	Chip		0.06	0.11	127	0.46	22.2	2.03	12.4	5.19	50	
Bull	Trench_Ba	G 247126	0.00	1.00	1.00	Chip		0.02	-333.1	54	0.2	6	3.5	5	3.1	20
	Trench_Ba	G 247127	1.00	2.00	1.00	Chip		0.02	-333.1	37	0.3	12	1.5	6	1.9	44
	Trench_Ba	G 247128	2.00	3.00	1.00	Chip		0.06	-333.1	28	0.4	10	2.3	10	1.7	15
	Trench_Ba	G 247129	3.00	4.00	1.00	Chip		0.10	-333.1	34	0.6	16	2.4	15	1.7	30
	Trench_Ba	G 247131	4.00	5.00	1.00	Chip		0.05	-333.1	74	0.3	20	1.7	9	2.3	85
	Trench_Ba	G 247132	5.00	6.00	1.00	Chip		0.10	-333.1	53	0.3	9	2.1	7	2.3	35
	Trench_Ba	G 247133	6.00	7.00	1.00	Chip		0.05	-333.1	24	0.2	17	1.8	11	2.8	64
	Trench_Ba	G 247134	7.00	8.00	1.00	Chip		0.09	-333.1	37	0.3	19	2	18	4.6	74
Fimiston	Trench_C	G 247143	0.00	0.75	0.75	Chip		2.70	0.1	493	0.2	17	2.1	15	-333.1	53
	Trench_C	G 247144	0.75	1.50	0.75	Chip		5.42	0.4	2000	0.7	31	4	15	5.6	54
	Trench_C	G 247145	1.50	2.50	1.00	Chip		0.13	-333.1	302	0.1	10	4.8	11	2.3	32
	Trench_C	G 247146	2.50	3.50	1.00	Chip		0.11	-333.1	251	0.2	22	4.9	14	2	40
	Trench_C	G 247147	3.50	4.50	1.00	Chip		0.11	-333.1	572	0.1	12	4.2	12	2.2	61
McVicar	Trench_E	G 247196	0.00	1.00	1.00	Chip		2.65	0.07	936	0.31	7.6	3.93	13.5	4.11	21
	Trench_E	G 247197	1.00	2.00	1.00	Chip		4.59	0.12	2353	0.57	8.0	3.89	18.3	4.85	25
	Trench_E	G 247198	2.00	3.00	1.00	Chip		4.76	0.17	1555	0.24	3.9	3.16	17.8	2.26	29
	Trench_E	G 247199	3.00	4.00	1.00	Chip		2.17	0.21	925	0.16	23.6	2.75	15.2	3.19	26
	Trench_E	G 247200	4.00	5.30	1.30	Chip		3.27	0.39	1367	0.52	21.5	1.58	28.8	4.45	51
McVicar	Trench_Ea	G247182	0.00	1.00	1.00	Chip		1.85	0.13	1254	0.27	14.5	2.88	15.0	8.33	29
	Trench_Ea	G247183	1.00	2.00	1.00	Chip		0.51	0.05	615	0.39	26.7	1.61	25.4	8.64	27
	Trench_Ea	G247184	2.00	3.20	1.20	Chip		7.95	0.12	5353	0.27	11.2	4.34	10.6	10.1	36

	Trench ID	Sample ID	From (m)	To (m)	Interval (m)	Sample Type	Rock Type	Au (ppm)	Ag (ppm)	As (ppm)	Bi (ppm)	Cu (ppm)	Mo (ppm)	Pb (ppm)	Sb (ppm)	Zn (ppm)
McVicar	Trench_F	G 247202	0.00	1.00	1.00	Chip		36.44	0.42	17260	0.44	29.9	4.2	11.1	32.67	22
	Trench_F	G 247203	1.00	2.20	1.20	Chip		34.58	0.5	16356	0.78	36.2	4.27	20.7	30.64	32
	Trench_F	G 247204	2.20	3.60	1.40	Chip		0.22	0.07	233	0.13	15.0	2.9	13.2	3.68	41
McVicar	Trench_G	G 247148	0.00	1.00	1.00	Chip		<0.01	-333.1	24	0.2	4.0	4.4	7.0	1.5	39
	Trench_G	G 247149	1.00	2.00	1.00	Chip		<0.01	0.1	16	0.2	5.0	4.3	10.0	1.4	34
	Trench_G	G 247151	2.00	3.00	1.00	Chip		<0.01	-333.1	14	0.3	5.0	4.3	7.0	1.2	40
	Trench_G	G 247152	3.00	4.30	1.30	Chip		<0.01	-333.1	23	0.2	5.0	3.4	7.0	3.2	36
	Trench_G	G 247186	4.30	5.30	1.00	Chip		6.56	0.11	3122	0.41	7.8	4.79	8.0	7.61	18
	Trench_G	G 247187	5.30	6.30	1.00	Chip		7.91	0.17	5403	0.39	10.0	5.7	12.1	13.42	25
	Trench_G	G 247188	6.30	8.30	2.00	Chip		7.82	0.12	3779	0.53	11.4	5.76	17.8	11.23	24
	Trench_G	G 247189	8.30	9.30	1.00	Chip		11.47	0.15	4606	0.42	8.2	2.17	6.8	12.1	29
	Trench_G	G 247190	9.30	10.30	1.00	Chip		7.27	0.13	4690	0.51	11.9	5.76	11.7	10.09	19
	Trench_G	G 247192	10.30	11.30	1.00	Chip		0.94	0.07	667	0.32	9.0	4.63	6.6	4.17	18
	Trench_G	G 247193	11.30	12.30	1.00	Chip		9.91	0.09	3748	0.29	15.8	6.63	15.4	10.82	27
Trench_G	G 247194	12.30	13.30	1.00	Chip		0.13	0.03	214	0.2	3.8	8.97	8.2	2.56	21	
Trench_G	G 247195	13.30	14.30	1.00	Chip		0.04	0.03	41	0.1	4.5	5.14	4.0	1.09	32	
Bruno	Trench_H	G 247175	0.00	1.00	1.00	Chip		0.01	0.02	29	0.17	4.5	2.84	8.8	8.44	39
	Trench_H	G 247176	1.00	2.00	1.00	Chip		0.02	0.02	26	0.4	14.2	2.28	11.7	4.12	66
	Trench_H	G 247177	2.00	3.20	1.20	Chip		0.02	0.04	59	0.59	23.3	1.04	15.0	6.67	66
	Trench_H	G 247178	4.00	5.00	1.00	Chip		0.07	0.04	25	0.35	13.6	3.95	14.5	3.47	44
	Trench_H	G 247179	5.00	6.00	1.00	Chip		1.65	0.05	1249	0.25	9.9	5.08	15.6	5.18	36
	Trench_H	G 247180	6.00	7.00	1.00	Chip		0.14	0.06	218	0.15	3.7	3.73	19.9	3.27	58
	Trench_H	G 247153	7.00	9.00	2.00	Chip		0.18	-333.1	953	0.6	19.0	1.9	16.0	7.0	73
	Trench_H	G 247154	9.00	10.00	1.00	Chip		0.03	-333.1	122	0.6	20.0	1.7	14.0	6.0	69
	Trench_H	G 247155	10.00	12.00	2.00	Chip		1.25	-333.1	1350	0.3	7.0	4.4	10.0	10.6	35
	Trench_H	G 247156	12.00	14.00	2.00	Chip		0.68	-333.1	619	0.8	17.0	2.6	28.0	8.1	93
Trench_H	G 247157	14.00	16.00	2.00	Chip		1.15	-333.1	1560	0.5	17.0	2.2	25.0	9.8	68	
Bruno	Trench_J	G 247063	0.00	1.00	1.00	Chip		0.06	-333.1	56	0.3	15.0	2.9	7.0	1.7	37
	Trench_J	G 247064	1.00	2.00	1.00	Chip		0.03	-333.1	41	0.3	13.0	3.2	10.0	1.5	51
	Trench_J	G 247065	2.00	3.00	1.00	Chip		0.02	-333.1	55	0.4	18.0	2.1	14.0	1.5	34
	Trench_J	G 247066	3.00	4.00	1.00	Chip		<0.01	-333.1	33	0.4	18.0	2.9	16.0	1.5	51
	Trench_J	G 247067	4.00	5.00	1.00	Chip		0.02	-333.1	36	0.4	13.0	2.4	31.0	1.6	31
	Trench_J	G 247068	5.00	6.00	1.00	Chip		<0.01	-333.1	43	0.2	11.0	3.3	27.0	2.8	61
	Trench_J	G 247069	6.00	7.00	1.00	Chip		0.04	-333.1	61	0.4	20.0	2.4	30.0	1.7	169
	Trench_J	G 247071	7.00	8.00	1.00	Chip		0.12	-333.1	289	0.3	20.0	3.9	23.0	2.1	99
	Trench_J	G 247072	8.00	9.00	1.00	Chip		0.34	-333.1	339	0.3	17.0	3.6	20.0	4.0	55
	Trench_J	G 247073	9.00	10.20	1.20	Chip		<0.01	-333.1	53	0.2	13.0	3.5	11.0	1.6	45
	Trench_J	G 247074						0.36		305						
	Trench_J	G 247075	10.20	10.50	0.30	Chip		6.15	0.5	2001	0.5	20.0	9.4	37.0	10.5	29
	Trench_J	G 247076	10.50	11.50	1.00	Chip		0.06	-333.1	70	0.3	9.0	5.2	20.0	1.7	39
Trench_J	G 247077	11.50	12.50	1.00	Chip		0.03	-333.1	37	0.2	8.0	4.6	10.0	1.8	36	
Trench_J	G 247078	12.50	13.90	1.40	Chip		0.06	-333.1	49	0.2	8.0	4.9	10.0	1.5	33	
Bruno	Trench_Ja	G 247059	0.00	0.70	0.70	Chip		2.98	0.1	1390	0.2	10	3.9	7	3.6	25
	Trench_Ja	G 247061	0.70	1.70	1.00	Chip		17.50	0.7	2001	0.2	5	6.3	12	27.3	14
	Trench_Ja	G 247062	1.70	2.10	0.40	Chip		2.00	0.1	360	0.2	3	15.9	18	2.4	9
Bruno	Trench_Jd	G 247243	0.00	1.00	1.00	Chip		0.02	0.03	28	0.18	7.1	3.85	6.4	1.17	27
	Trench_Jd	G 247244	1.00	2.00	1.00	Chip		0.01	0.05	28	0.27	14.1	3.88	6.6	0.2	27
	Trench_Jd	G 247245	2.00	3.00	1.00	Chip		0.00	-9999.0	-9999	-9999.0	-9999.0	-9999.0	-9999.0	-9999.0	-9999
	Trench_Jd	G 247246	3.00	4.20	1.20	Chip		0.01	0.01	9	0.26	12.4	3.58	15.9	0.5	29
Bruno	Trench_K	G 247233	0.00	1.40	1.40	Chip		20.82	0.55	7264	0.63	15.4	5.37	59.0	74.7	31
	Trench_K	G 247234	1.40	2.40	1.00	Chip		20.90	0.43	8956	0.74	14.4	8.01	49.5	86.51	24
	Trench_K	G 247235	2.40	3.40	1.00	Chip		18.58	0.28	8199	0.92	8.3	9.93	32.5	82.28	17
	Trench_K	G 247236	3.40	4.20	0.80	Chip		3.19	0.11	1798	0.25	13.2	5.33	17.4	25.14	28
	Trench_K	G 247237	4.20	5.30	1.10	Chip		2.32	0.07	1348	0.13	2.5	11.25	3.6	5.73	6
	Trench_K	G 247238	5.30	6.30	1.00	Chip		7.41	0.4	5909	0.4	18.7	7.61	14.1	29.29	16
	Trench_K	G 247239	6.30	7.30	1.00	Chip		6.64	0.19	2675	0.6	15.3	5.42	12.5	23.19	8
	Trench_K	G 247240	7.30	8.30	1.00	Chip		7.28	0.12	5211	0.5	6.7	3.42	17.8	19.91	5
Trench_K	G 247241	8.30	9.30	1.00	Chip		4.76	0.11	5084	0.73	13.0	2.49	18.9	28.1	7	

	Trench ID	Sample ID	From (m)	To (m)	Interval (m)	Sample Type	Rock Type	Au (ppm)	Ag (ppm)	As (ppm)	Bi (ppm)	Cu (ppm)	Mo (ppm)	Pb (ppm)	Sb (ppm)	Zn (ppm)
Bruno	Trench_La	G 247082	0.00	0.80	0.80	Chip		1.95	0.1	1100	0.4	18	3.2	11	33	40
	Trench_La	G 247083	0.80	1.70	0.90	Chip		4.27	0.2	2001	0.2	6	10.9	9	17.6	16
Bruno	Trench_Lc	G 247087	0.00	1.20	1.20	Chip		4.43	0.7	751	0.3	17	7.7	7	14.7	18
	Trench_Lc	G 247088	1.20	1.90	0.70	Chip		11.80	0.5	2001	0.3	7	17.2	9	14.9	15
	Trench_Lc	G 247089	1.90	2.70	0.80	Chip		4.06	0.1	1470	0.2	2	10.8	12	2.9	11
Bruno	Trench_Ld	G 247090	0.00	1.00	1.00	Chip		5.99	0.1	2001	0.1	4	21.2	5	4.2	13
	Trench_Ld	G 247092	1.00	2.00	1.00	Chip		5.07	0.2	2001	0.3	8	19.2	18	10.1	28
Bruno	Trench_M	G 247093	0.00	1.00	1.00	Chip		0.27	-333.1	249	0.2	13	7.5	6	7.2	50
	Trench_M	G 247094	1.00	2.00	1.00	Chip		0.17	-333.1	262	0.2	13	7.2	6	7.5	49
	Trench_M	G 247095	2.00	3.00	1.00	Chip		0.57	-333.1	779	0.4	27	4.9	10	11.7	61
	Trench_M	G 247096	3.00	4.00	1.00	Chip		2.58	-333.1	2001	0.2	4	5	4	6.7	15
	Trench_M	G 247097	4.00	5.00	1.00	Chip		1.17	-333.1	1230	0.4	11	2.2	9	19.8	20
	Trench_M	G 247098	5.00	6.00	1.00	Chip		2.83	-333.1	1210	0.2	8	3.6	7	9.5	20
	Trench_M	G 247099	6.00	7.00	1.00	Chip		1.51	-333.1	586	0.1	6	3.9	4	6.1	22
	Trench_M	G 247101	7.00	8.00	1.00	Chip		0.47	-333.1	325	0.1	4	3.9	4	5.7	19
	Trench_M	G 247102	8.00	9.00	1.00	Chip		2.58	-333.1	774	0.2	9	2.8	6	8.8	24
	Trench_M	G 247103	9.00	10.00	1.00	Chip		6.83	0.1	2001	0.2	7	5.7	9	10.7	15
	Trench_M	G 247104	10.00	10.60	0.60	Chip		11.10	0.3	2001	0.3	8	10.8	13	11.4	11
	Trench_M	G 247105	10.60	11.20	0.60	Chip		9.72	0.5	2001	0.5	9	13.2	23	14.8	24
	Trench_M	G 247106	11.20	12.20	1.00	Chip		14.30	0.3	2001	0.3	6	6.8	57	11.3	24
	Trench_M	G 247107	12.20	13.20	1.00	Chip		4.74	0.3	1080	0.3	8	7	98	6.9	30
	Trench_M	G 247108	13.20	14.20	1.00	Chip		2.14	0.2	1420	0.4	9	7.6	12	7	40
Trench_M	G 247109	14.20	15.20	1.00	Chip		1.82	0.2	1420	0.2	7	5.2	10	6.2	93	
Trench_M	G 247110	15.20	16.20	1.00	Chip		0.89	-333.1	695	0.3	5	11.1	8	5.4	16	
Trench_M	G 247112	16.20	17.20	1.00	Chip		0.30	-333.1	131	0.2	5	4.2	7	3.3	99	
Trench_M	G 247113	17.20	18.00	0.80	Chip		0.09	-333.1	55	0.1	4	7.7	6	5.5	54	
Bruno	Trench_Ma	G 247114	0.00	0.90	0.90	Chip		2.02	0.4	2001	0.4	8	12.1	21	13.5	22
	Trench_Ma	G 247115	0.90	1.70	0.80	Chip		1.01	0.4	2001	0.4	6	7.4	64	12.2	25
	Trench_Ma	G 247116	1.70	2.50	0.80	Chip		9.07	0.3	1200	0.4	9	7.9	110	7.7	34
	Trench_Ma	G 247117	2.50	3.20	0.70	Chip		32.00	0.2	1630	0.4	10	8.8	14	8	46
	Trench_Ma	G 247118	3.20	4.00	0.80	Chip		13.10	26.1	136	0.3	58	2.3	34	25.7	85
	Trench_Ma	G 247119	4.00	4.40	0.40	Chip		5.34	0.2	1530	0.2	7	5.6	11	6.8	99
	Trench_Ma	G 247120	4.70	5.00	0.30	Chip		0.42	-333.1	1390	0.7	24	3.2	30	20.5	80
Bruno	Trench_N	G 247159	0.20	1.00	0.80	Chip		0.56	-333.1	416	0.3	5	2.7	9	18	21
	Trench_N	G 247161	1.00	2.00	1.00	Chip		16.30	-333.1	2001	0.2	16	5.3	7	43.9	16
	Trench_N	G 247162	2.00	3.00	1.00	Chip		3.96	-333.1	2001	0.3	15	4.2	15	46.4	21
	Trench_N	G 247163	3.00	4.00	1.00	Chip		5.28	-333.1	2001	0.3	18	4.1	17	64.6	29
	Trench_N	G 247164	4.00	5.00	1.00	Chip		0.41	-333.1	1370	0.3	11	2.6	11	36	41
	Trench_N	G 247165	5.00	6.00	1.00	Chip		0.38	-333.1	971	0.2	7	4.7	8	26	26
	Trench_N	G 247166	6.00	7.00	1.00	Chip		0.45	0.105136	546	0.344902	16.66207	2.971025	7.844733	31.51398	27
	Trench_N	G 247167	7.00	8.00	1.00	Chip		0.44	0.064731	284	0.405624	16.49798	2.290641	20.9199	36.56701	36
Trench_N	G 247168	8.00	9.00	1.00	Chip		0.25	0.052138	56	0.242643	6.189817	4.04159	14.88286	17.42777	31	
Bruno	Trench_Na	G247172	0.00	1.00	1.00	Chip		0.61		737						
	Trench_Na	G247171	1.00	1.50	0.50	Chip		7.71		1680						
	Trench_Na	G247169	1.50	1.90	0.40	Chip		43.50		2001						

**APPENDIX E**

# Report Limitations

## Report Limitations

This Report/Document has been provided by Golder Associates (NZ) Limited (“Golder”) subject to the following limitations:

- i) This Report/Document has been prepared for the particular purpose outlined in Golder’s proposal and no responsibility is accepted for the use of this Report/Document, in whole or in part, in other contexts or for any other purpose.
- ii) The scope and the period of Golder’s Services are as described in Golder’s proposal, and are subject to restrictions and limitations. Golder did not perform a complete assessment of all possible conditions or circumstances that may exist at the site referenced in the Report/Document. If a service is not expressly indicated, do not assume it has been provided. If a matter is not addressed, do not assume that any determination has been made by Golder in regards to it.
- iii) Conditions may exist which were undetectable given the limited nature of the enquiry Golder was retained to undertake with respect to the site. Variations in conditions may occur between investigatory locations, and there may be special conditions pertaining to the site which have not been revealed by the investigation and which have not therefore been taken into account in the Report/Document. Accordingly, if information in addition to that contained in this report is sought, additional studies and actions may be required.
- iv) The passage of time affects the information and assessment provided in this Report/Document. Golder’s opinions are based upon information that existed at the time of the production of the Report/Document. The Services provided allowed Golder to form no more than an opinion of the actual conditions of the site at the time the site was visited and cannot be used to assess the effect of any subsequent changes in the quality of the site, or its surroundings, or any laws or regulations.
- v) Any assessments, designs and advice made in this Report/Document are based on the conditions indicated from published sources and the investigation described. No warranty is included, either express or implied, that the actual conditions will conform exactly to the assessments contained in this Report/Document.
- vi) Where data supplied by the client or other external sources, including previous site investigation data, have been used, it has been assumed that the information is correct unless otherwise stated. No responsibility is accepted by Golder for incomplete or inaccurate data supplied by others.
- vii) The Client acknowledges that Golder may have retained subconsultants affiliated with Golder to provide Services for the benefit of Golder. Golder will be fully responsible to the Client for the Services and work done by all of its subconsultants and subcontractors. The Client agrees that it will only assert claims against and seek to recover losses, damages or other liabilities from Golder and not Golder’s affiliated companies. To the maximum extent allowed by law, the Client acknowledges and agrees it will not have any legal recourse, and waives any expense, loss, claim, demand, or cause of action, against Golder’s affiliated companies, and their employees, officers and directors.
- viii) This Report/Document is provided for sole use by the Client and is confidential to it. No responsibility whatsoever for the contents of this Report/Document will be accepted to any person other than the Client. Any use which a third party makes of this Report/Document, or any reliance on or decisions to be made based on it, is the responsibility of such third parties. Golder accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this Report/Document.

This page has been intentionally left blank.



## **Annexure B - Solicitor's Report on Title**

# QUIGG PARTNERS

*Level 7, The Bayleys Building, 36 Brandon Street, PO Box 3035, Wellington 6140, New Zealand  
Telephone 64 4 472 7471, Fax 64 4 472 7871*

BARRISTERS & SOLICITORS

28 August 2020

Board of Directors  
Siren Gold Limited  
283 Rokeby Road  
Subiaco WA 6008  
Australia

## SOLICITOR'S TENEMENT REPORT

### 1 INTRODUCTION

This Report has been prepared in response to instructions from Siren Gold Limited (**Company**). The Report will be included in a prospectus for the Company for an initial public offer of shares in the capital of the Company (**Prospectus**).

We have been requested to report on mining tenements in which the Company's wholly-owned New Zealand subsidiary, Reefton Resources Pty Limited (**Reefton**), has an interest in (the **Tenements**). The term "tenements" is not a common legal term under New Zealand law. For the purposes of this Report we have taken the term to include any prospecting, exploration or mining permits granted under the Crown Minerals Act 1991 or any successor mineral legislation.

Searches were conducted on 21 August 2020 and are summarised in Schedule 1 of this Report. As a result of our searches and other enquiries, but subject to the exclusions and qualifications set out below, we are of the view that, as at the date of the relevant Searches this Report provides an accurate statement as to:

- (a) (**Reefton's interest**): Reefton's interests in the Tenements;
- (b) (**Good standing**): the validity and good standing of the Tenements; and
- (c) (**NZ law**): the relevant mining and environmental law as at the date of the Searches.

### 2 SEARCHES

For the purposes of this Report, we have conducted searches and made enquiries in respect of all of the Tenements as follows (**Searches**):

- (i) We have obtained mining permit register searches of the Tenements from the registers maintained by New Zealand Petroleum & Minerals (**Tenement Searches**). These searches were conducted on 21 August 2020.

Key details on the status of the Tenements are set out in Schedule 1 of this Report.

- (ii) We have reviewed all material agreements relating to the Tenements provided to us or registered as dealings against the Tenements as at the date of the Tenement Searches and have summarised the material in the Schedules to this Report.

### 3 EXCLUSIONS

This Report does not consider:

- (i) searches of the certificates of title or other land tenures underlying the Tenements, or the impact of any notices or of any reservations underlying the Tenements;
- (ii) any third-party interests, including encumbrances, in relation to the Tenements that are not apparent from our Searches and the information provided to us;
- (iii) where Ministerial consent is required in relation to the transfer of any Tenement, we express no opinion as to whether such consent will be granted, or the consequences of consent being refused;
- (iv) any environmental searches or other searches relating to any contamination of the Tenement land, or any information held by the West Coast Regional Council about environmental obligations or compliance issues;
- (v) the rules and provisions of the relevant regional and district plans for the permit areas, or express an opinion as to whether any resource consent is required to undertake the activities authorised by the exploration permits;
- (vi) searches of the Waitangi Tribunal register to identify any actual or potential Waitangi Tribunal claims in the areas covered by the Tenements as we are instructed that iwi have been consulted on all permit applications and access arrangements and the Company has instructed that to date nothing has been raised in relation to the active Tenements; and
- (vii) searches of the New Zealand Heritage List/Rārangī Kōrero to identify any historic places, historic areas, wāhi tūpuna, wāhi tapu and wāhi tapu areas relevant to the Tenements. In this respect, Reefton is required to comply with all legislation concerning historic sites as set out in further detail at Section 7(e) of this Report.

Searches were not undertaken for contaminated land because Reefton does not have any interest in the land subject to the Tenements (other than those rights set out in Section 8 of this Report).

### 4 QUALIFICATIONS

In the preparation of this Report we have made the following assumptions:

- (i) Our searches were confined to searches of the registers in accordance with Section 2. This Report is only accurate and complete to the extent that the extracts taken from the registers, and other information or responses which were obtained from the relevant department or authority, are accurate and complete as at the date of the Searches.
- (ii) The agreements provided to us in relation to the Tenements are authentic, were within the powers and capacity of those who executed them, were duly authorised, executed and delivered and are binding on the parties to them.
- (iii) The instructions and information provided to us by the Company or any of its officers, agents and representatives is accurate and complete.
- (iv) There has been due compliance with the requirements necessary to maintain a Tenement in good standing, and comply with its conditions, unless the contrary is apparent from our Searches or the information provided to us.

- (v) References in this Report to any area of land are taken from details shown on searches obtained from the relevant department. It is not possible to verify the accuracy of those areas without conducting a survey.
- (vi) There have been no material changes in respect of the Tenements between the date of the Searches and the date of this Report.

## 5 REVIEW OF TENEMENTS

The Tenements reviewed in this Report are set out in Schedule 1 of this Report. The details in Schedule 1 are those recorded in the New Zealand Petroleum & Minerals (**NZPM**) register.

The Searches have identified three exploration permits (**EP**) that permit the exploration for gold in the Reefton Goldfield in the West Coast Region of the South Island of New Zealand. The EPs each give the holder the exclusive right to explore for gold and silver in the area specified by the permit.

The EPs are:

- (a) EP 60446 – this is held 100% by Reefton. EP 60446 was granted on 10 May 2018 and expires on 9 May 2023;
- (b) EP 60448 – this is held 100% by Reefton. EP 60448 was granted on 20 June 2018 and expires on 19 June 2023; and
- (c) EP 60479 – this is held 100% by Reefton. EP 60479 was granted on 13 December 2018 and expires on 12 December 2023.

The searches have also identified one expired prospecting permit (**PP**) which was held 100% by Reefton. The PP permitted the holder to prospect for all metallic minerals (including gold and silver but excluding uranium) over the Greenland Group rocks to the west of the Globe Progress Gold mine and south of the Blackwater mine.

The PP is:

- (a) PP 60465 – PP 60465 was granted on 7 August 2018 and expired on 6 August 2020. We have been provided with a copy of the Application for Extension of Duration dated May 2020 under which Reefton applied for an extension to PP 60465 for a further 2-year term. NZPM acknowledged receipt of the application for an extension of duration in respect of PP 60465 on 25 May 2020. Our Searches reveal that the record status for PP 60465 is currently “extension pending” and accordingly the extension has not yet been approved as at the date of this Report.

Section 7 provides a description of the nature and key terms of these types of tenements as set out in the Crown Minerals Act 1991 (**CMA**).

## 6 PENDING APPLICATIONS

We have been advised that Reefton submitted applications for additional permits to NZPM in April and June 2020. The applications are as follows:

- (a) a tier 1 minerals PP (application number 60632.01); and
- (b) a tier 2 EP (application number 60648.01). This is a subsequent permit application for gold and silver only in relation to PP 60465.

The applications are both currently under evaluation by NZPM. Full details of the pending applications are set out in Schedule 1.

There is no certainty that these applications will be approved at this time.

## **7 GOVERNING LEGISLATION**

Mining in New Zealand is controlled by two Acts, the CMA and the Resource Management Act 1991 (**RMA**).

The CMA reserves ownership of certain minerals to the New Zealand Crown and establishes a regime for the management and allocation of the Crown owned minerals.

The RMA manages and controls the environmental impacts associated with mining activities.

When the CMA and RMA are read together they establish a regime that regulates the allocation, development, and use of mineral resources. The responsibility for administering this regime lies with the Minister (mineral permits) and the territorial authorities (resource consents).

### **(a) Crown Minerals Act 1991**

The Crown automatically owns all gold (as well as some other resources) in New Zealand (CMA, s 10).

The CMA governs the allocation of rights to prospect, explore and mine Crown owned minerals (such as gold). Any person wanting to prospect, explore or mine for Crown owned minerals must hold the applicable permit for such activity. A permit grants the permit holder the right to prospect, explore or mine the Crown owned mineral in a particular area subject to certain conditions.

Schedule 1 of the CMA provides generally for:

- (i) the management of Crown owned minerals and in particular for the administration of such minerals by the Minister of Energy and Resources;
- (ii) allocation of Crown owned minerals by way of minerals programmes and minerals permits; and
- (iii) access to land to undertake prospecting, exploration or mining.

The Government announced a review of the CMA which opened for submissions in November 2019, with the stated intention to introduce a bill to the house in 2020. The stated purpose of the review is *“to ensure the Act’s settings contribute to mining that responsibly balances environmental, social, and economic considerations and meets the evolving needs of New Zealand’s society.”* Topics for submission include public participation in decisions on permits and iwi engagement. The review is part of a wider process to transition New Zealand to a carbon neutral economy by 2050, and is focused on the petroleum sector. The bill is not presently on the Governments legislation agenda.

The following is a discussion of the nature and terms of prospecting permits (**PP**), exploration permits (**EP**), mining permits (**MP**) and access arrangements (**AA**) as established by the CMA.

#### **Prospecting Permits**

**Rights:** The holder of a PP is granted an exclusive right to prospect for the specified minerals in the permit area (CMA, s 30(1)). The permit does not confer an automatic right of access to

the land, and an access arrangement must be agreed with the landowner prior to undertaking any activity which has a more than minimum impact (CMA, s 47). There is a right of access (with 10 working days' notice) to undertake "*minimum impact activities*" (CMA, s 49). Those rights of access do not apply to land forming part of the conservation estate (CMA, s 50).

**Term:** A permit for prospecting activities can be granted for a maximum of 4 years from the date of grant and cannot be extended (CMA, s 35(1)).

**Scope:** The permit gives the holder a right to undertake low impact activities for the purpose of identifying land likely to contain mineral deposits (CMA, s 2). Such activities include geological, geochemical and geophysical surveying; aerial surveying; and the taking of samples by handheld methods.

**Subsequent Permits:** Unless the permit expressly provides otherwise, and subject to sections 22, 27, 29A and 43 of the CMA, if the holder of a prospecting permit can satisfy the Minister that the results achieved under the PP justify the grant of an exploration permit in respect of any land an mineral to which the PP relates, the permit holder shall have the right, on application before the expiry of the PP, to surrender the PP insofar as it relates to that land and to be granted in exchange an exploration permit for that land (CMA, s 32).

### Exploration Permits

**Rights:** The holder of an EP is granted an exclusive right to explore for the specified minerals in the permit area (CMA, s 30(2)). The permit does not confer an automatic right of access to the land, and an access arrangement must be agreed with the landowner prior to undertaking any activity that has a more than minimum impact (CMA, s 47).

**Term:** An EP is ordinarily granted for a term of 5 years from the date of grant, but may be extended up to 10 years from commencement (subject to a reduction in area) (CMA, s 35(5), (6) and 35A).

**Scope:** The permit authorises any activity undertaken for the purposes of identifying mineral deposits and evaluating the feasibility of mining particular deposits or occurrences (CMA, s 2). The definition of "*exploration*" under s 2 of the CMA includes drilling, dredging or excavators (surface or sub-surface). An EP allows the holder to undertake the activities authorised by that permit as well as the activities that would be permitted by a prospecting permit (CMA, s 30(2)).

**Conditions:** EPs are granted subject to various standard conditions, including conditions related to undertaking a minimum work programme, the payment of royalties and observance of environmental protection and reporting requirements. A failure to comply with these conditions or obtain an exemption from compliance may lead to revocation of the EP.

**Transfer:** All transfers of interest require the consent of the Minister (CMA, s 41). The Minister must be satisfied that the proposed permit holder is likely to be able to comply with the conditions of the permit and give proper effect to the permit. The Minister may request a statement of financial capability and supporting information from the proposed permit holder (CMA, s 41(4)).

**Change in Control of Permit Operator:** A "change in control" is when a person (or a group acting together) obtains the power, directly or indirectly, to exercise, or control the exercise of, 50% or more of the voting rights in a corporate body. Amendments that took effect in April 2019 have changed the timeframes and procedures for Ministerial consent to a change in control for permit operators and permit participants. Every permit must have a "permit

operator” who is responsible, on behalf of the permit holder, for the day-to-day management of activities under the permit (CMA, s 27) For a Tier 1 permit any proposed change in control of the permit operator must be approved by the Minister (CMA, s 41AB). The application for approval must be made at least 3 months before the date on which the proposed change of control takes effect (CMA, s41AC). The Minister may only consent to the change if satisfied that the proposed permit holder has the financial capability to meet its obligations under the permit, can give proper effect to the work programme, will comply with regulations in respect of reporting and paying royalties and has systems in place to meet the Health and Safety at Work Act 2015 (CMA, s 41AE). For Tier 1 or Tier 2 permits any change in control of the permit participants (other than a Tier 1 operator) must be notified to the Minister within three months of the change of control occurring (CMA, s41A). If the Minister is not satisfied that the permit holder is capable of meeting its financial obligations under the permit after the change in control, the Minister may revoke the permit (CMA, s 41A(7)). A permit may be revoked if a change of control is not applied for or notified within the required timeframes (CMA, s 41AF and s 41A(7)). Failure to seek prior Ministerial consent for change of control or to notify of the change (as applicable) is an offence with a maximum fine of \$800,000 for Tier 1 permits and \$50,000 for all other permits (CMA, ss 100(2A) and 101(2A)). Failure to notify the Minister of a contravention of the requirement to obtain the prior consent of the Minister to a change of control of a tier 1 permit operator is also an offence with a maximum fine of \$200,000.

**Determination of Financial Capacity:** When assessing a permit holder’s financial capability the Minister is likely to seek information on:

- (i) the cost of the work programme;
- (ii) financial performance of holder;
- (iii) financial position of holder;
- (iv) cash flow of holder; and
- (v) holder funding streams.

In cases where a holder’s net worth is significantly greater than the costs of the proposed work programme, evidence of that worth will normally provide sufficient evidence that adequate funding will be available to meet anticipated work programme costs.

Where a holder does not itself have sufficient profit, assets or cash flow to fund the work programme, evidence of the ability to fund the work programme from alternate sources is required. For example, by borrowing, stock offerings and capital injections. A parent company or other investor of the permit holder may execute a deed of guarantee.

### **Mining Permits**

**Priority to Apply for Mining Permit:** The holder of an EP has priority to apply for a MP over any of the land subject to the EP. (CMA, s 32(3))

**Mineral Programme:** The Minister is bound in deciding whether to issue a MP by the relevant Minerals Programme (e.g. Minerals Programme for Minerals 2013).

**Application for Mining Permit:** The holder of an EP must satisfy the Minister that it has discovered a mineable mineral resource in the permit area (CMA, s 32(3)) and that it proposes a satisfactory work programme for mining that discovery (CMA, s 43). If those conditions are satisfied the permit holder has the exclusive right to apply to receive an MP. The application

for a MP must be made prior to the expiry of the EP (CMA, s 32(3)). The EP remains in force until the application for the MP is determined (CMA, s 32(8)).

**Royalties:** The permit holder is liable to file returns and pay royalties to the Crown where any minerals obtained under the permit are sold, used in a production process, exchanged or removed from the permit area, or remain unsold on the surrender, expiry or revocation of the MP. The royalties for the Tenements are set out under Section 9 of this Report.

### Access Arrangements

**No Automatic Right of Access:** EPs and MPs do not confer an automatic right of access to land (CMA, s47). The permit holder must reach an agreement for access to land with each owner and occupier of the land (CMA, 54). In the case of Crown land the landowner is the relevant Minister of the Crown-agency administering the land (CMA, s 61).

**Minimum Impact Activities:** An EP and MP do allow a permit holder to enter land to conduct minimum impact activities under section 49 of the CMA provided 10 working days' notice is given to each owner and occupier (except where land is conservation land managed by the Department of Conservation). Permit holders require consent (this differs from an access arrangement, which is stricter) from the Department of Conservation to conduct minimum impact activities on conservation land.

**Access Arrangements:** Access arrangements are required for all activities other than minimum impact activities. Access to Crown land, such as conservation land, is required from the relevant Minister of the Crown with responsibility for the land (CMA, s 61). For conservation land this is the Minister of Conservation. If the minerals permit is Tier 1, applications for access arrangements are considered jointly by the relevant Minister of the Crown and the Minister of Energy and Resources. In considering whether to agree to an access arrangement in respect of Crown land the Ministers must have regard to factors specified in s 61(2) including the objectives of any Act under which the land is administered; any purpose for which the land is held by the Crown; the safeguards against any potential adverse effects of the proposed programme of work; and the direct net economic and other benefits of the proposed activity.

**Access Arrangements for Conservation Land:** In the case of a significant mining activity proposal for conservation land an amendment to the CMA in 2013 introduced new provisions requiring public notification of such applications. If an application is made for an access arrangement for mining on conservation land, the Minister of Conservation must determine whether or not the proposed activities are "significant mining activities" (CMA, s61C(2)). In making that determination the Minister must have regard to (amongst other things) the effects the activities are likely to have on conservation values. If the Minister of Conservation considers that the proposed mining activities are significant, he or she must ensure that the application is publicly notified (CMA, s61C(3)). Following notification, the Director-General of Conservation sends a recommendation and summary of comments received to the Minister of Conservation and to the Minister of Energy and Resources. Those two Ministers jointly decide whether to enter into an access arrangement.

**Schedule 4 Conservation Land:** An amendment to the CMA in 1997 introduced an exception to the Minister's ability to grant access over specified conservation land. Schedule 4 sets out the categories of conservation land which are deemed to be of high conservation value, and in respect of which access arrangements for mining activities cannot be entered into except in limited circumstances (CMA, s61(1A)). The categories of conservation land covered by Schedule 4 include national parks (s 2 of the National Parks Act 1980), nature or scientific reserves (ss 20-21 of the Reserves Act 1977), wilderness or sanctuary areas (ss18(1) or 18AA of the Conservation Act 1987), and any wildlife sanctuary (s 9(1) of the Wildlife Act 1953).

Schedule 4 also covers all land held, managed, or administered under the Conservation Act 1987 and all Crown land under the Conservation Act 1987 as at 1 October 1991.

**Arbitration:** A private landowner or occupier (including the relevant Minister) can decline to grant access. With respect to privately owned land the permit holder may seek arbitration for land access but only with the agreement of the landowner and land occupier or on public interest grounds (CMA, s 63). There is no right to seek arbitration for access to Crown Land.

**Mining on Conservation Land:** In November 2017, the Government announced in the Speech from the Throne that there would be no new mines on conservation land. The announcement was part of the Labour Governments supply and confidence agreement with the Green Party but has not been formally implemented. Until the policy is implemented the status quo applies – meaning that any mining activity can be applied for on conservation land that is not subject to Schedule 4.

(b) **Resource Management Act 1991**

The RMA manages the use, development and protection of resources, and controls the effects of activities. Notwithstanding the grant of an EP for exploration or MP for mining, the CMA requires compliance with the provisions of the RMA (CMA, s9).

The RMA regulates the use of land, water and air, including any discharges to those resources. The District Plan establishes rules for the use of land, and the Regional Plan regulates discharges to air, land and water, and the abstraction of water. National environmental standards are regulations made by Order in Council that prescribe technical standards, for the use of land, air and water including standards for water and soil quality.

The RMA provides that no person may:

- (a) use land in a manner that contravenes a national environmental standard, a district rule or regional rule unless the use is expressly allowed by a resource consent (RMA, s 9);
- (b) take, use, dam or divert any fresh water unless the taking, using, damming, or diverting is expressly allowed by a national environmental standard, a rule in a regional plan or a resource consent (RMA, s 14); or
- (c) discharge any contaminant or water into water; contaminant from any industrial or trade premises into air; or contaminant from any industrial or trade premises onto or into land unless the discharge is expressly allowed by a national environmental standard, a rule in a regional plan or a resource consent (RMA, s 15).

Exploration and mining of minerals require resource consents to manage the effects of a range of activities including:

- (a) **Land use activities:** site preparation, excavation, blasting, overburden removal and disposal, stockpiling, disposal of mine tailings, stream diversions, and development of supporting infrastructure including access roads (RMA, s9).
- (b) **Water related activities:** stream diversions, water abstraction, dewatering of workings, disturbance of the sea, lake or riverbed, and the management of mine and surface waters (RMA ss13-15).

Applications for resource consents will be publicly notified if the consent authority decides that the mining activity will have or is likely to have adverse effects on the environment that

are more than minor (RMA, ss 95A-E). Persons who make a submission on an application have the right to appeal the decision to the Environment Court (RMA, s 120).

Once granted, land use consents run with the land (RMA, s 134). Discharge, water and air permits may be transferred to any owner or occupier of the site in respect of which the permit is granted. An application to transfer the permit must be made to relevant regional council, and will be assessed as if it were an application for resource consent (RMA, ss 136-137).

The period for which a land use is granted is unlimited unless otherwise specified in the consent (RMA, s 123). The term of discharge, water and air permits will be specified in the consent.

It is an offence for any person to undertake an activity that contravenes a rule in a district plan or regional plan, a national environmental standard or ss 9-15 of the RMA (RMA, s338). In relation to exploration and prospecting of minerals this would include any activity that is not permitted by a district or regional rule – such as abstracting water, discharges to water or land, or vegetation removal – unless that activity is expressly authorised by a resource consent. The penalties for an offence under the RMA is a fine of up to \$600,000 for a corporate and, in the case of a natural person (which can include directors and management), imprisonment for a term of up to 2 years or a fine up to \$300,000 (RMA, s339).

The government announced a comprehensive review of the RMA in 2019. The first phase of the review is complete with the passing of the Resource Management Amendment Act 2020 on 30 June 2020. Amendments introduced include new freshwater planning process that applies to any proposed regional plan or regional policy statement that relates to freshwater and a new requirement to consider discharges to air of greenhouse gas emissions in resource management decisions. The second phase of the review is underway with the release of the report of the independent review panel chaired by retired Court of Appeal Judge Tony Randerson QC. The report released in July 2020 recommends replacement of the RMA by two separate pieces of legislation; a Natural and Built Environments Act and a Strategic Planning Act. With national elections in October 2020, these recommendations will be addressed by the next government.

(c) **Health and Safety at Work Act 2015**

The Health and Safety at Work Act 2015 (**HSWA**) establishes the framework to secure the health and safety of workers and workplaces, with a key emphasis on everyone in the workplace being responsible for health and safety.

Applicants for a Tier 1 permit (for exploration or mining) or for a change in control of a Tier 1 permit operator must demonstrate they have the capability and systems in place to meet the health and safety requirements of the HSWA (CMA, s 27 and s 41AE). Under the HSWA the Person Conducting a Business or Undertaking (**PCBU**) has the “primary duty of care” – the primary responsibility for people’s health and safety at work (HSWA, s 36).

The PCBU must, so far as is reasonably practicable, eliminate or reduce the risks to health and safety in the workplace (HSWA, s 30 and s 37). The primary duty of care includes having effective practices in place for providing and maintaining a safe work environment, safe systems at work, and safe plant and structures. The PCBU has primary responsibility for training and supervision to protect people from risks in the workplace.

If there is a failure to put appropriate systems in place to identify potential harm and work collaboratively to keep people safe, then prosecution and penalties may be applied. Offences include reckless conduct in respect of duty and failure to comply with a duty that exposes an

individual to a risk of death or serious injury or illness (HSWA, ss 47-48). Penalties for a corporate PCBU are a maximum fine of \$3 million (for breaches of s 47) and \$1.5 million (for breaches of s 48). Officers of the PCBU (directors and partners) can be prosecuted with penalties of 5 years in prison and a maximum fine of \$600,000 for reckless conduct and a maximum fine of \$300,000 for failure to comply with a duty.

(d) **Conservation Act 1977**

The Conservation Act 1987 (**CA**) aims to promote the conservation of natural and historic resources generally (CA, s 6(b)). To this end the CA enables the declaration of conservation areas, specially protected areas, and stewardship areas (CA, Parts 3-5).

The Department of Conservation (**DoC**) administers conservation lands. DoC was established for the purpose of advocating and promoting the conservation of NZ's natural and historic resources, and has the primary statutory functions set out in s 6 including:

- (a) Managing for conservation purposes all land and other natural and historic resources held under the CA;
- (b) Advocating the conservation of natural and physical resources; and
- (c) Advising the Minister on matters relating to those functions or to conservation generally.

**Concessions**

Part 3B of the CA provides for the granting of concessions in conservation areas. The Minister has the power to grant concessions in the form of leases, licences, permits or easements for activities in conservation areas (CA, ss17O-17ZJ). A concession is required for any secondary activities within the conservation estate not covered by an EP or MP Access Arrangement (e.g. an easement for an access/haul road).

Amendments to the CA, which came into effect on 18 October 2017, have aligned the application process for concessions with the resource consent processes under the RMA. Applications that lack the required information can be returned within 10 working days (CA, s17S). Applications that meet the requirements for public notification (under Part 3B of the CA) will be publicly notified before a decision is made on whether DOC intends to grant the concession. Applications that require public notification include leases and licences for a term of more than 10 years (CMA, s 17SC).

A qualification on the Minister's powers is the provision that "This Act shall be so interpreted and administered to give effect to the principles of the Treaty of Waitangi" (CA, s 4). This provision has created some uncertainty as to the principles and the extent of the duty to consult with local iwi groups. The Minister can decline an application within 30 working days that is obviously inconsistent with the CA or any other relevant statutory planning documents (CMA, s17U).

**Wild Life Authorisations**

A wildlife authorisation is required for any activity that involves interacting with wildlife such as catching, handling, transferring, releasing or killing wildlife. Whether an authorisation is required for the purposes of an EP or MP will depend on the conservation values of the land, and any habitat present thereon.

The special conditions to the Access Arrangements for EP 60446 and EP 60448 reference protected indigenous fauna in the permit areas – falcon and long-tailed bats – setting protocols for the surveying habitat and minimising the impact on the protected species.

(e) **Heritage New Zealand Pouhere Taonga Act 2014**

The Heritage New Zealand Pouhere Taonga Act 2014 (**HNZPTA**) replaced the Historic Places Act 1993, and continues the integrated management regime for historic places and archaeological sites. The HNZPTA is administered by Heritage New Zealand Pouhere Taonga which has the role and functions of protecting archaeological sites, maintaining a list of places of historical and cultural heritage and issuing authorities. Under the definitions, “historic place” is not only limited to buildings and structures but also includes land, including an archaeological site.

By definition an “archaeological site” means any place in NZ that was associated with human activity that occurred before 1900, and that may provide, through investigation by archaeological methods, evidence relating to the history of NZ (HNZPTA, s 43). It is an offence to destroy, damage or modify in whole or part an archaeological site, knowing or having reasonable cause to suspect it is an archaeological site (HNZPTA, s 87).

A person wishing to carry out an investigation or activity on an archaeological site (including any exploratory investigation), or to damage or modify a site must apply for “an authority”. Before applying for an authority to conduct an activity on a site of interest to Maori the applicant must have the consent of the relevant iwi or hapu. Commonly a resource consent for land-use activities such as site clearance and excavation will include a condition setting out “accidental discovery protocol” in the event that archaeological or historic materials are uncovered.

NZPM has provided “accidental discovery protocols” in respect of EP 60 446 and 60 448 land. Reefton must follow these protocols should there be an accidental archaeological discovery during operation, including to cease all works immediately and to advise the site supervisor (or Tiakina te Taiao) and the Historic Places Trust of a find. The relevant protocols are:

- (a) Te Runanga O Ngati Waewae Archaeological Site Accidental Discovery Protocol; and
- (b) Tiakina te Taiao Accidental Discovery Condition – this protocol also requires the consent holder to contact Tiakina te Taiao Limited at least seven days prior to commencing any earthworks.

The Company has advised that it will undertake surveys before undertaking any activities on archaeological sites and apply for an appropriate authority under the HNZPTA.

(f) **Treaty settlements**

The Treaty of Waitangi Act 1975 (**TWA**) established the Waitangi Tribunal to hear claims of Crown breaches of the Treaty of Waitangi. The TWA allowed any Maori to lodge a claim against the Crown for breaches of the Treaty of Waitangi and its principles. The Crown may, as a result of a report of the Waitangi Tribunal, enter into settlement negotiations with the affected Maori iwi or hapu. A settlement agreement reached between the Crown and the affected iwi or hapu will be recorded in a Deed of Settlement.

The TWA does not create any direct obligations on Reefton with respect to its Tenements. However, the projects to which the EPs and PPs held by Reefton relate to (**Projects**) are on Crown land and may therefore be subject to a treaty settlement. Any such treaty settlement

could potentially give rise to rights and obligations that the Crown must enforce in respect of Reefton's Projects.

Te Runanga o Ngāi Tahu is the iwi representing the majority of the Maori hapu groups in the South Island. In 1997 the Crown and Ngāi Tahu signed a Deed of Settlement to give redress for Treaty breaches within Ngāi Tahu's boundaries. The terms of the settlement are given effect to by the Ngāi Tahu Claims Settlement Act 1998 (**NTCSA**), and include provisions for transferring specified assets (including Crown forest land) and settlement properties to Ngāi Tahu, creation of a first right of refusal over Crown land within the claim area, confirmation of Ngāi Tahu's ownership of pounamu (greenstone), the grant of certain rights to sites of significance, and a role in managing conservation estate resources within their boundaries.

In 2014 the Crown passed legislation to give effect to the final Deeds of Settlement for the remaining historical Treaty claims in the South Island. The terms of the settlements with hapū are recorded in: the Ngāti Apa ki te Rā Tō, Ngāti Kuia, Rangitāne o Wairau Claims Settlement Act 2014; the Ngāti Kōata, Ngāti Rārua, Ngāti Tama ki Te Tau Ihu and Te Ātiawa o Te Waka-a-Māui Claims Settlement Act 2014; and the Ngati Toa Rangatira Claims Settlement Act 2014 (collectively with the NTCSA, the **Claims Settlement Acts**). The settlements relate primarily to the upper South Island, extending through to Nelson Lakes National Park and the upper reaches of Buller river. As with the Ngāi Tahu settlement, the settlements with the other South Island hapū include transferring and vesting settlement properties, rights of first refusal, recognition of sites of significance (Statutory Acknowledgements and overlay classifications), and the inclusion of mineral and conservation protocols in mineral programs and conservation plans.

Where any of the land within a Tenement has been vested in, or leased to, Ngāi Tahu or another South Island hapū an access arrangement will need to be entered into with the iwi or hapū as the owner or occupier of the land (CMA, 54).

The Claims Settlement Acts create an obligation for the Crown agencies administering Crown land and minerals to consult with iwi and to have particular regard to their views in relation to the management of the land and minerals. The minerals program must set out or describe how the Minister and the chief executive will have regard to the principles of the Treaty of Waitangi (as required by CMA, s4) for the purposes of the minerals programme (CMA, s14(1)(b)). This includes noting any minerals protocols that have been issued under the Claims Settlement Acts.

Under the RMA, consent authorities must have regard to any Statutory Acknowledgements when deciding whether to notify a resource consent application (RMA, s95E(2)). Any person wishing to carry out an investigation on an archaeological site (including an exploratory investigation), or to damage or modify a site must apply for an authority under the HNZPTA (see section 7(e) above). Regard must be had to any Statutory Authorities in deciding the application, and the application must have the approval of the relevant iwi or hapu. As noted in section 7(e) above, NZPM has provided "accidental discovery protocols" in respect of EP 60446 and 60448 land. Resource consents for land use activities such as site clearance and excavation will usually include conditions setting out "accidental discovery protocol". The Company advises that Reefton has not identified any archaeological sites in its discussions with iwi.

NZPM have an obligation to consult iwi and hapū on proposed permit application areas. The Company has advised that NZPM and DoC have actively liaised with iwi at all times during the process for the grant of the permits making up the Projects and the Access Arrangement Agreements relating thereto and Reefton has not been notified by NZPM or DoC of any concerns raised by iwi. We have been instructed that the Company will continue to liaise with

Ngāi Tahu and other iwi as required during all stages of its exploration programs. As such, the Company has advised us that it is comfortable that the Projects have been established in compliance with the obligations created under the Claims Settlement Acts.

## **8 ACCESS ARRANGEMENTS**

The majority of the land the subject of the Tenements is Crown land. The Crown land is held for conservation purposes and managed by the DoC.

The process for obtaining an access arrangement for conservation land is outlined in Section 7 above. Access to Crown land, such as conservation land, is required from the relevant Minister of the Crown with responsibility for the land. For conservation land this is the Minister of Conservation. If the minerals permit is Tier 1, applications for access arrangements are considered jointly by the relevant Minister of the Crown and the Minister of Energy and Resources. While there is no requirement to publicly notify the access arrangement for an EP there is such a requirement for an access arrangement for 'significant mining activities' (as determined by the Minister of Conservation pursuant to section 61C of the CMA). This publicly contested process will apply if, in the future, a winnable gold resource is proven and a MP granted to mine the gold.

Reefton has also entered into access arrangement agreements pursuant to section 61 of the CMA with the Minister of Conservation as follows:

- (a) Agreement for an Access Arrangement dated 24 May 2019 for EP 60446 – granting Reefton access to 0.13 hectares of land in Victoria Forest Park contained within EP 60 446 and specifically to 13 drill pads, 1 campsite and 1 helicopter landing site for the term of the EP; and
- (b) Agreement for an Access Arrangement dated 24 May 2019 for EP 60448 – granting Reefton access to 0.15 hectares of land in Victoria Forest Park, Deep Creek Amenity Area and Big River Ecological Area contained within EP 60448 and specifically to 12 drill pads and 1 campsite, for the term of the EP.

The Access Arrangement Agreements are subject to special conditions which are summarised in Schedule 1.

No MIA authorities or full access arrangements have been granted in respect to EP 60479 land. No full access arrangement has been granted in respect to PP 60465 land and the MIA for PP 60465 expired on 6 August 2020 when PP 60465 expired. We have been advised that Reefton will apply for a MIA in respect of PP 60465 once the Extension of Duration is granted, and for a MIA and full access arrangement in respect of EP 60479 in 2020. We have also been advised that Reefton will apply for a MIA for both EP 60648.01 and PP 60632.01 as well as a full access arrangement for EP 60648.01 if and when those permits are granted.

### **Schedule 4 land**

The applications for the EP and the PP include details of land ownership that assist with identifying the conservation status:

#### **(a) Alexandra River – EP 60446**

The application states that the permit area is mostly within Victoria Forest Park. Forest parks have the status of a conservation park and are not one of the classes of land listed in Schedule 4 of the CMA. A "small" area of the permit area is within Rahu Scenic Reserve. Schedule 4 lists two scenic reserves – Rahu Scenic Reserve is not one of the reserves listed. Accordingly, none of the permit area is subject to the access restrictions in s 61 of the CMA.

**(b) Big River – EP 60448**

The application, and land schedule, records that the DOC land comprises: Victoria Forest Park; Rahu Scenic Reserve; and Stewardship Areas – Bald Hill, Big River, Progress Water Race. As above, the forest park and scenic reserve are not areas listed in Schedule 4. “Stewardship areas” are to be “managed that its natural and historic resources are protected” (CA, s25) and the minister has powers to dispose of the land (CA, s26). The land schedule and associate plan shows a significant portion of the DOC land is within the Big River Ecological Area. Schedule 4 only applies to conservation land declared to be a wilderness area or a sanctuary area. Land held for ecological purposes under s21 of the CA is not included in Schedule 4.

**(c) Lyll - EP60479**

The application records that the DOC land comprises: Upper Buller Gorge Scenic Reserve; Conservation Areas – Lyell Range-Radiant Range and Newton River. The application confirms “*There is no Schedule 4 land within or abutting the EPA boundary*” (page 8).

**(d) Reefton South – PP60465**

The application confirms “*There is no Schedule 4 land within or abutting the PPA boundary*” (page 8).

We have not commented on conservation status of the land subject to the two applications for EP and PP recently lodged and which have not yet been granted.

**Authority to undertake Minimum Impact Activities**

Reefton has been granted authority to undertake Minimum Impact Activities (**MIA**) on public conservation land pursuant to section 49 of the CMA in respect of EP 60 446, EP 60 448, and PP 60465 land. The MIA authorities in respect of EP 60446 and EP 60448 land have been granted for approximately five years from 7 August 2018 to 19 June 2023 (for EP 60 446) and to 9 May 2023 (for EP 60 448) and are subject to various conditions. The MIA authority in respect of PP 60465 land was granted for a period from 15 April 2020 to 6 August 2022 (or the date of expiry of the PP, whichever occurs earlier) and is subject to various conditions. The PP has expired and therefore the MIA for PP 60465 has also expired.

**Authority to Enter and Operate**

Reefton has received a written Authority to Enter and Operate (**AEO**) from the Minister in accordance with the Access Arrangement Agreements for EP 60446 and EP 60448. The AEO for EP 60446 dated 13 August 2020 is granted pursuant to and subject to all conditions set out in the Access Arrangement dated 24 May 2019. The AEO for EP 60448 dated 24 August 2020 is granted pursuant to and subject to all conditions set out in the Access Arrangement dated 24 May 2019. The AEOs permit Reefton to enter in or on the land to commence exploration and exploration operations for a period of approximately 12 months to 11 August 2021, unless the EP has a lesser term remaining. Reefton must comply with the special conditions in the Second Schedule of each Access Arrangement, which are in addition to the conditions set out in the main body of the Access Arrangement Agreement. The AEOs highlight Special Conditions 80-88, and Schedule 4 (for EP 60446, and Schedule 3, for EP 60448), in regard to protected wildlife (falcons and bats).

**9 RESOURCE CONSENTS**

EP 60446, EP 60448, EP 60479 and PP 60465 include conditions that the permit holder must obtain any necessary consents under, and otherwise comply with, the RMA.

Compliance involves:

- (a) conforming with relevant national environmental standards (**NES**), district and regional plans;
- (b) obtaining resource consents for land use, water use, discharges into air and water not allowed by the relevant NES, district plan and/or regional plan; and
- (c) compliance with other instruments such as national environmental standards, heritage orders.

The Company has advised us that the West Coast Regional Council and Buller District Council have both notified Reefton that resource consents are not generally required for exploration activities within EP 60 446 and 60 448 land as it is a permitted activity in those regions. However, the Company has advised us that a 'land use consent' is required to undertake earthworks on slopes > 25° associated with exploratory drill pad construction, and that the Company will apply for consents if required once drillhole planning is completed.

The Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (**Freshwater NES**) will come into force on 3 September 2020. The Freshwater NES establishes the activity status and criteria for any earthworks activity near a wetland and for infilling the bed of a river. Earthworks within 10 metres of a wetland will require noncomplying activity resource consent, and any reclamation of the bed of a river will require discretionary activity resource consent.

## 10 ROYALTIES

We have identified the following royalties as applying to the Tenements, based on our due diligence investigations. Further details on the royalties are set out in Schedule 2 of this Report.

Tenement	Royalty	Owed by
EP 60446	<p>Tier two gold royalty under the Crown Minerals (Royalties for Minerals Other than Petroleum) Regulations 2013 is an <i>ad valorem royalty</i> of 1% of the net sales revenues of the minerals obtained under the permit. <sup>1</sup> If the mining permit is granted as a Tier one permit the gold royalty is:</p> <ul style="list-style-type: none"> <li>(a) an <i>ad valorem</i> royalty of 2% of the net sales revenue of the gold obtained under the permit if the accounting profits of the permit holder for the gold for the reporting period are less than or equal to \$2 million;<sup>2</sup> and</li> <li>(b) if the accounting profits exceed \$2 million the permit holder pays the higher of:<sup>3</sup> <ul style="list-style-type: none"> <li>(i) an <i>ad valorem</i> royalty of 2% of the net sales revenue of the minerals obtained under the permit; and</li> <li>(ii) an accounting profits royalty of 10% of the accounting profits, or provisional accounting profits, as the case may be, of the minerals obtained under the permit.</li> </ul> </li> </ul>	Reefton Resources Pty Ltd 100%

<sup>1</sup>Crown Minerals (Royalties for Minerals Other than Petroleum) Regulations 2013 (CMR) Regulation 14(3).

<sup>2</sup> CMR Regulation 13(2).

<sup>3</sup> CMR Regulation 13(4).

Tenement	Royalty	Owed by
EP 60448	<p>Tier two gold royalty under the Crown Minerals (Royalties for Minerals Other than Petroleum) Regulations 2013 is an <i>ad valorem</i> royalty of 1% of the net sales revenues of the minerals obtained under the permit.<sup>4</sup> If the mining permit is granted as a Tier one permit the gold royalty is:</p> <p>(a) an <i>ad valorem</i> royalty of 2% of the net sales revenue of the gold obtained under the permit if the accounting profits of the permit holder for the gold for the reporting period are less than or equal to \$2 million;<sup>5</sup> and</p> <p>(b) if the accounting profits exceed \$2 million the permit holder pays the higher of:<sup>6</sup></p> <p>(i) an <i>ad valorem</i> royalty of 2% of the net sales revenue of the minerals obtained under the permit; and</p> <p>(ii) an accounting profits royalty of 10% of the accounting profits, or provisional accounting profits, as the case may be, of the minerals obtained under the permit.</p>	Reefton Resources Pty Ltd 100%
EP 60479	<p>Tier two gold royalty under the Crown Minerals (Royalties for Minerals Other than Petroleum) Regulations 2013 is an <i>ad valorem</i> royalty of 1% of the net sales revenues of the minerals obtained under the permit.<sup>7</sup> If the mining permit is granted as a Tier one permit the gold royalty is:</p> <p>(a) an <i>ad valorem</i> royalty of 2% of the net sales revenue of the gold obtained under the permit if the accounting profits of the permit holder for the gold for the reporting period are less than or equal to \$2 million<sup>8</sup>; and</p> <p>(b) if the accounting profits exceed \$2 million the permit holder pays the higher of<sup>9</sup>:</p> <p>(i) an <i>ad valorem</i> royalty of 2% of the net sales revenue of the minerals obtained under the permit; and</p> <p>(ii) an accounting profits royalty of 10% of the accounting profits, or provisional accounting profits, as the case may be, of the minerals obtained under the permit.</p>	Reefton Resources Pty Ltd 100%

## 11 CONSENT

This report is given for the benefit of the Company and the directors of the Company in connection with the issue of Prospectus and is not to be disclosed to any other person or used for any other purpose or

<sup>4</sup> CMR Regulation 14(3).

<sup>5</sup> CMR Regulation 13(2).

<sup>6</sup> CMR Regulation 13(4).

<sup>7</sup> CMR Regulation 14(3).

<sup>8</sup> CMR Regulation 13(2).

<sup>9</sup> CMR Regulation 13(4).

quoted or referred to in any public document or filed with any government body or other person without our prior consent.

Yours faithfully  
**QUIGG PARTNERS**



David Quigg  
Partner

**SCHEDULE 1 – TENEMENT SCHEDULE**

TENEMENT / STATUS	REGISTERED HOLDER	PERCENTAGE HELD	GRANT DATE (COMMENCEMENT DATE)	EXPIRY DATE	AREA SIZE (Hectares (ha))	TYPE OF PERMIT	ACCESS	ANNUAL FEES (In NZD and including GST)	NOTES
EP 60446 Status: Active	Reefton Resources Pty Limited	100%	10 May 2018	9 May 2023	1675.459 ha	Minerals Exploration Permit	<p>Authority to undertake Minimum Impact Activities (MIA) was granted on 7 August 2018 for approximately 5 years (to 19 June 2023).</p> <p>A DoC Access Arrangement (DoC AA) that, subject to various conditions, allows access to EP 60446 land including for the purposes of trenching and drilling was granted to Reefton on 24 May 2019. This DoC AA allows the drilling of 13 sites, a camp, pump station and helipad. We have been advised by the Company that additional drilling sites can be applied for by a Variation to the DoC AA.</p> <p>Reefton has received a written Authority to Enter and Operate (AEO) from the Minister dated 13 August 2020. The AEO is granted pursuant to and subject to all conditions set out in the Access</p>	<p>As at 21 August 2020, the annual fee for an onshore exploration permit is:</p> <p>(a) \$358.00 per square kilometre or part of a square kilometre; or</p> <p>(b) \$1,610.00, whichever is greater.<sup>10</sup></p> <p>DoC AA annual fee is \$6,000 plus GST per annum with compensation payable for various activities as defined in the Third Schedule of the DoC AA for EP 60446. There is also a management fee of \$500 plus GST per annum.</p>	<p>Conditions to permit are at 1-16 below.</p> <p>Royalties set out in Schedule 2.</p> <p>Minimum Work Programme set out in Schedule 3.</p>

<sup>10</sup> Crown Minerals (Minerals Fees) Regulations 2016, section 9. Please note fees are in NZD and include GST.

EP 60448 Status: Active	Reefton Resources Pty Limited	100%	20 June 2018	19 June 2023	4847.114 ha	Minerals Exploration Permit	Arrangement Agreement dated 24 May 2019	<p>MIA authority was granted on 7 August 2018 for approximately 5 years (to 9 May 2023).</p> <p>A DoC AA that, subject to various conditions, allows access to EP 60448 land including for the purposes of trenching and drilling was granted to Reefton on 24 May 2019. This DoC AA allows the drilling of 12 sites, a camp and helipad. We have been advised by the Company that additional drilling sites can be applied for by a Variation to the DoC AA.</p> <p>Reefton has received a written AEO for EP 60448 dated 24 August 2020. The AEO is granted pursuant to and subject to all conditions set out in the Access Arrangement dated 24 May 2019.</p>	<p>As at 21 August 2020, the annual fee for an onshore exploration permit is:</p> <p>(a) \$358.00 per square kilometre or part of a square kilometre; or</p> <p>(b) \$1,610.00, whichever is greater.<sup>11</sup></p> <p>DoC AA annual fee is \$8,000 plus GST per annum with compensation payable for various activities as defined in section 3 of the DoCAA for EP 60 448. There is also a management fee of \$500 plus GST per annum.</p>	<p>Conditions to permit are at 17-32 below.</p> <p>Royalties set out in Schedule 2.</p> <p>Minimum Work Programme set out in Schedule 3.</p>
-------------------------------	-------------------------------	------	--------------	--------------	-------------	-----------------------------	---	--	--	--

<sup>11</sup> As above.

EP 60479 Status: Active	Reefton Resources Pty Limited	100%	13 December 2018	12 December 2023	5424.592 ha	Minerals Exploration Permit	No access arrangements have been applied for to date.	As at 5 August 2020, the annual fee for an onshore exploration permit is: (a) \$358.00 per square kilometre or part of a square kilometre; or (b) \$1,610.00, whichever is greater. <sup>12</sup>	Conditions to permit are at 42-58 below. Royalties set out in Schedule 2. Minimum Work Programme set out in Schedule 3.
PP 60465 Status: Extension Pending	Reefton Resources Pty Limited	100%	7 August 2018	6 August 2020. The Company has advised that an Extension of Duration for an additional 2-year term was applied for on 6 May 2020. The application is being processed by NZPM.	33,365.2 ha If the Extension of Duration is approved, the area size will be reduced to 30,140 ha.	Minerals Prospecting Permit	MIA authority was granted on 21 April 2020 for a period from 15 April 2020 to 6 August 2022 (or the date of expiry of the PP, whichever occurs earlier) subject to various conditions. PP 60465 has expired and therefore the MIA in relation to PP 60465 land has also expired.	As at 21 August 2020, the annual fee for an onshore prospecting permit is: (a) \$63.02 per square kilometre or part of a square kilometre; or (b) \$1,610.00, whichever is greater. <sup>13</sup>	Conditions to permit are at 33-42 below. Minimum Work Programme set out in Schedule 3.

Royalty overviews are contained in Schedule 2 of this Report. Minimum Work Programmes that are required to be complied with are contained in Schedule 3 of this Report. Reference to the Conditions refers to the table below and the relevant numbered condition.

The Access Arrangements for EP 60446 and EP 60448 are subject to special conditions including in relation to annual work programmes, authorisations, operating conditions, flora, fauna, rehabilitation, helicopter/aircraft use, machinery, water management, environmental matters, heritage matters, and the discovery of pouanamu.

<sup>12</sup> As above.

<sup>13</sup> Crown Minerals (Minerals Fees) Regulations 2016, section 7. Please note fees are in NZD and include GST.

**PENDING PERMIT APPLICATIONS**

PROPOSED PERMIT HOLDER	PERCENTAGE TO BE HELD	PROPOSED PERMIT TYPE	PROPOSED PERMIT TIER	PROPOSED SIZE (Ha)	PROPOSED AREA (Hectares)	LOCATION	PROPOSED OPERATION NAME	PROPOSED DURATION	STATUS APPLICATION	OF	NZPM APPLICATION NUMBER
Reefton Resources Pty Limited (NZCN 6758173)	100%	Minerals Prospecting Permit	1	36,529.5 ha		West Coast Region (Onshore)	Bell Hill	2 years	Under evaluation by NZPM since 14 April 2020		60632.01
Reefton Resources Pty Limited (NZCN 6758173)	100%	Minerals Exploration Permit	2	4623 ha		West Coast Region (Onshore)	Golden Point	5 Years	Under evaluation by NZPM since 4 June 2020		60648.01 This application for a minerals exploration permit is a subsequent permit from PP 60465.

<b>CONDITIONS applicable to EP 60446</b>	
<b>1.</b>	The permit holder has the right to prospect for the specified minerals, in the permit area.
<b>2.</b>	The permit holder has the right to explore for the specified Crown-owned minerals in the permit area.
<b>3.</b>	The permit holder must make all reasonable efforts to explore and delineate the mineral resource potential of the land to which the permit relates in a proactive and efficient manner in accordance with this permit and good industry practice.
<b>4.</b>	In carrying out activities under this permit, the permit holder must: <ul style="list-style-type: none"> <li>(a) comply with the Crown Minerals Act 1991 (Act) and all other relevant legislative requirements;</li> <li>(b) obtain any consents and approvals required under the Resource Management Act 1991, the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012 and any other applicable Acts; and</li> <li>(c) in accordance with section 33A of the Act, obtain confirmation from the chief executive that WorkSafe has given its approval or consent before carrying out an activity under the permit that requires the approval or consent of WorkSafe (in respect of the requirements of the Health and Safety at Work Act 2015 or regulations made under that Act).</li> </ul>
<b>5.</b>	Where the permit holder is required to commit to work pursuant to the permit, the permit holder must satisfy the chief executive that the permit holder can fulfil that commitment.
<b>6.</b>	In addition to any other relinquishment requirement imposed in accordance with the Act, the permit holder must (where required) relinquish an area of the permit determined in accordance with the Act and the Minerals Programme if an extension of duration is granted.
<b>7.</b>	Where the permit holder is required to relinquish part of the permit area, the permit holder must submit to the chief executive a map of the proposed relinquishment area not later than 28 days before the relinquishment obligation is due.
<b>8.</b>	The permit holder is not discharged from any obligation arising under this permit by contracting a third party to perform the relevant obligation.
<b>9.</b>	The permit holder must pay annual fees and any other applicable fees relating to this permit, in accordance with the relevant regulations.
<b>10.</b>	In the event that minerals are produced from the permit area, the permit holder must notify the chief executive as soon as practicable.
<b>11.</b>	The permit holder will be liable for payment of a royalty to the Crown calculated in accordance with the Crown Minerals (Royalties for Minerals Other than Petroleum) Regulations 2013.

12.	In the event that royalties become payable under the permit, the Minister will determine the points of valuation for royalty calculation following consultation with the permit holder.
13.	The permit holder must report and pay any royalties due in accordance with the relevant regulations.
14.	The permit holder must submit reports to the chief executive in accordance with the relevant regulations.
15.	The permit holder must not unreasonably interfere with the activities of any other persons lawfully operating in the permit area.
16.	On completion of activities in the permit area, the permit holder must carry out restoration of the permit area in accordance with all regulatory requirements, consents and good industry practice.
<b>CONDITIONS applicable to EP 60448</b>	
17.	The permit holder has the right to prospect for the specified minerals, in the permit area.
18.	The permit holder has the right to explore for the specified Crown-owned minerals in the permit area.
19.	The permit holder must make all reasonable efforts to explore and delineate the mineral resource potential of the land to which the permit relates in a proactive and efficient manner in accordance with this permit and good industry practice.
20.	In carrying out activities under this permit, the permit holder must: <ul style="list-style-type: none"> <li>(a) comply with the Crown Minerals Act 1991 (Act) and all other relevant legislative requirements;</li> <li>(b) obtain any consents and approvals required under the Resource Management Act 1991, the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012 and any other applicable Acts; and</li> <li>(c) in accordance with section 33A of the Act, obtain confirmation from the chief executive that WorkSafe has given its approval or consent before carrying out an activity under the permit that requires the approval or consent of WorkSafe (in respect of the requirements of the Health and Safety at Work Act 2015 or regulations made under that Act).</li> </ul>
21.	Where the permit holder is required to commit to work pursuant to the permit, the permit holder must satisfy the chief executive that the permit holder can fulfil that commitment.
22.	In addition to any other relinquishment requirement imposed in accordance with the Act, the permit holder must (where required) relinquish an area of the permit determined in accordance with the Act and the Minerals Programme if an extension of duration is granted.
23.	Where the permit holder is required to relinquish part of the permit area, the permit holder must submit to the chief executive a map of the proposed relinquishment area not later than 28 days before the relinquishment obligation is due.
24.	The permit holder is not discharged from any obligation arising under this permit by contracting a third party to perform the relevant obligation.

25.	The permit holder must pay annual fees and any other applicable fees relating to this permit, in accordance with the relevant regulations.
26.	In the event that minerals are produced from the permit area, the permit holder must notify the chief executive as soon as practicable.
27.	The permit holder will be liable for payment of a royalty to the Crown calculated in accordance with the Crown Minerals (Royalties for Minerals Other than Petroleum) Regulations 2013.
28.	In the event that royalties become payable under the permit, the Minister will determine the points of valuation for royalty calculation following consultation with the permit holder.
29.	The permit holder must report and pay any royalties due in accordance with the relevant regulations.
30.	The permit holder must submit reports to the chief executive in accordance with the relevant regulations.
31.	The permit holder must not unreasonably interfere with the activities of any other persons lawfully operating in the permit area.
32.	On completion of activities in the permit area, the permit holder must carry out restoration of the permit area in accordance with all regulatory requirements, consents and good industry practice.
<b>CONDITIONS applicable to PP 60465</b>	
33.	The permit holder has the right to prospect for the specified minerals, in the permit area.
34.	The permit holder must make all reasonable efforts to prospect the land to which the permit relates in a proactive and efficient manner in accordance with this permit and good industry practice.
35.	In carrying out activities under this permit, the permit holder must: <ul style="list-style-type: none"> <li>(a) comply with the Crown Minerals Act 1991 (Act) and all other relevant legislative requirements;</li> <li>(b) obtain any consents and approvals required under the Resource Management Act 1991, the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012 and any other applicable Acts; and</li> <li>(c) in accordance with section 33A of the Act, obtain confirmation from the chief executive that WorkSafe has given its approval or consent before carrying out an activity under the permit that requires the approval or consent of WorkSafe (in respect of the requirements of the Health and Safety at Work Act 2015 or regulations made under that Act).</li> </ul>
36.	Where the permit holder is required to commit to work pursuant to the permit, the permit holder must satisfy the chief executive that the permit holder can fulfil that commitment.
37.	In addition to any other relinquishment requirement imposed in accordance with the Act, the permit holder must (where required) relinquish an area of the permit determined in accordance with the Act and the Minerals Programme if an extension of duration is granted.

38.	Where the permit holder is required to relinquish part of the permit area, the permit holder must submit to the chief executive a map of the proposed relinquishment area not later than 28 days before the relinquishment obligation is due.
39.	The permit holder is not discharged from any obligation arising under this permit by contracting a third party to perform the relevant obligation.
40.	The permit holder must pay annual fees and any other applicable fees relating to this permit, in accordance with the relevant regulations.
41.	The permit holder must submit reports to the chief executive in accordance with the relevant regulations.
42.	The permit holder must not unreasonably interfere with the activities of any other persons lawfully operating in the permit area.
<b>CONDITIONS applicable to EP 60479</b>	
43.	The permit holder has the right to prospect for the specified minerals, in the permit area.
44.	The permit holder has the right to explore for the specified Crown-owned minerals in the permit area.
45.	The permit holder must make all reasonable efforts to explore and delineate the mineral resource potential of the land to which the permit relates in a proactive and efficient manner in accordance with this permit and good industry practice.
46.	In carrying out activities under this permit, the permit holder must: <ul style="list-style-type: none"> <li>(a) comply with the Crown Minerals Act 1991 (Act) and all other relevant legislative requirements;</li> <li>(b) obtain any consents and approvals required under the Resource Management Act 1991, the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012 and any other applicable Acts; and</li> <li>(c) in accordance with section 33A of the Act, obtain confirmation from the chief executive that WorkSafe has given its approval or consent before carrying out an activity under the permit that requires the approval or consent of WorkSafe (in respect of the requirements of the Health and Safety at Work Act 2015 or regulations made under that Act).</li> </ul>
47.	Where the permit holder is required to commit to work pursuant to the permit, the permit holder must satisfy the chief executive that the permit holder can fulfill that commitment
48.	In addition to any other relinquishment requirement imposed in accordance with the Act, the permit holder must (where required) relinquish an area of the permit determined in accordance with the Act and the Minerals Programme if an extension of duration is granted.
49.	Where the permit holder is required to relinquish part of the permit area, the permit holder must submit to the chief executive a map of the proposed relinquishment area not later than 28 days before the relinquishment obligation is due.
50.	The permit holder is not discharged from any obligation arising under this permit by contracting a third party to perform the relevant obligation.

<b>51.</b>	The permit holder must pay annual fees and any other applicable fees relating to this permit, in accordance with the relevant regulations.
<b>52.</b>	In the event that minerals are produced from the permit area, the permit holder must notify the chief executive as soon as practicable.
<b>53.</b>	The permit holder will be liable for payment of a royalty to the Crown calculated in accordance with the Crown Minerals (Royalties for Minerals Other than Petroleum) Regulations 2013.
<b>54.</b>	In the event that royalties become payable under the permit, the Minister will determine the points of valuation for royalty calculation following consultation with the permit holder.
<b>55.</b>	The permit holder must report and pay any royalties due in accordance with the relevant regulations.
<b>56.</b>	The permit holder must submit reports to the chief executive in accordance with the relevant regulations.
<b>57.</b>	The permit holder must not unreasonably interfere with the activities of any other persons lawfully operating in the permit area.
<b>58.</b>	On completion of activities in the permit area, the permit holder must carry out restoration of the permit area in accordance with all regulatory requirements, consents and good industry practice.

## SCHEDULE 2 – ROYALTIES

### 1 ROYALTIES OWED TO THE NEW ZEALAND CROWN

- (a) Under the CMA and the relevant minerals programme in force at the time the permits were granted EP 60 446 and EP 60 448, and any subsequent mining licence, are liable to file returns and pay royalties to the Crown where any minerals obtained under the permit are:
- (i) Sold;
  - (ii) Used in a production process;
  - (iii) Other exchanged or removed from the permit area without sale;
  - (iv) Remain unsold on the surrender, expiry or revocation of the permit.
- (b) Before the Crown Minerals Amendment Act 2013 came into effect, royalty provisions were contained in minerals programmes. Clause 4 of Schedule 1 of the CMA provides that the royalty rates that applied to an initial permit will continue to apply to that permit and any subsequent permit. New permits granted after the 2013 minerals programme came into effect are subject to royalty rates set out in the Crown Minerals (Royalties for Minerals Other than Petroleum) Regulations 2013 (CMR Regulations). The CMR Regulations also set out royalty statement and royalty return requirements for all minerals permit holders required to pay royalties.
- (c) The CMR Regulations set a different royalty for tier one and tier two permits. Tier one permits cover more complex, high risk and return mineral operations and include mining permits that relates to gold if in any permit year in the next 5 years the annual royalty in relation to the permit will be equal to, or more than, \$50,000 per annum (CMA, s 2B and Schedule 5). For those EPs that are tier two permits the status may change for a subsequent mining permit if the threshold for a tier one permit is met.
- (d) For the tier two permits, EP 60 446, EP 60 448 and EP 60 479, the royalty for gold is an ad valorem royalty of 1% of the net sales revenues of the minerals obtained under the permit.<sup>14</sup> If the mining permit is granted as a Tier one permit the gold royalty is:<sup>15</sup>
- (i) an ad valorem royalty of 2% of the net sales revenue of the gold obtained under the permit if the accounting profits of the permit holder for the gold for the reporting period are less than or equal to \$2 million; and
  - (ii) if the accounting profits exceed \$2 million the permit holder pays the higher of:
    - A. an ad valorem royalty of 2% of the net sales revenue of the minerals obtained under the permit; and
    - B. an accounting profits royalty of 10% of the accounting profits, or provisional accounting profits, as the case may be, of the minerals obtained under the permit.

<sup>14</sup> Crown Minerals (Royalties for Minerals Other than Petroleum) Regulations 2013 (CMR) Regulation 14(3).

<sup>15</sup> CMR Regulation 13.

## **SCHEDULE 3 – MINIMUM WORK COMMITMENT**

### **1. EP 60446**

The permit was granted on 10 May 2018 for a 5-year term and is due to expire on 9 May 2023.

The following minimum work programme is required from the date of this report to keep the permit in good standing:

- (a) Within 36 months of the commencement date of the permit (10 May 2021), the permit holder shall (to the satisfaction of the chief executive):
  - (i) Complete a literature review of all relevant geological and geophysical data;
  - (ii) Complete a programme of geological mapping including structural mapping;
  - (iii) Complete a programme of geochemical sampling;
  - (iv) Identify drill targets beyond the known mineralised extent of the Alexander mine; and
  - (v) Prepare a technical report detailing all work completed during this stage of the work programme in conjunction with QAQC information and data sufficient to demonstrate accuracy and precision to be submitted to the chief executive in accordance with the regulations.
- (b) Within 60 months of the commencement date of the permit (10 May 2023), the permit holder shall (to the satisfaction of the chief executive):
  - (i) Complete a programme of trenching;
  - (ii) Complete a programme of drilling;
  - (iii) If results warrant complete a mineral resource estimate; and
  - (iv) Prepare a technical report detailing all work completed during this stage of the work programme in conjunction with QAQC information and data sufficient to demonstrate accuracy and precision to be submitted to the chief executive in accordance with the regulations.

### **2. EP 60448**

The permit was granted on 20 June 2018 for a 5-year term and is due to expire on 19 June 2023.

The following minimum work programme is required from the date of this report to keep the permit in good standing:

- (a) Within 36 months of the commencement date of the permit (20 June 2021), the permit holder shall (to the satisfaction of the chief executive):
  - (i) complete a literature review of all relevant geological and geophysical data and compile into a GIS database;
  - (ii) complete a programme of geological mapping;

- (iii) complete a programme of geochemical sampling including wacker sampling;
  - (iv) complete a programme of drilling or a minimum of 500 metres; and
  - (v) prepare a technical report detailing all work completed during this stage of the work programme in conjunction with QAQC information and data sufficient to demonstrate levels of accuracy and precision to be submitted to the chief executive in accordance with the regulations.
- (b) Within 60 months of the commencement date of the permit (20 June 2023), the permit holder shall (to the satisfaction of the chief executive):
- (i) complete a further programme of geochemical sampling;
  - (ii) complete a further programme of drilling for a minimum of 1,000m, including drilling at the Big River South prospect;
  - (iii) if results warrant, complete a mineral resource estimate to an inferred status; and
  - (iv) prepare a technical report detailing all work completed during this stage of the work programme in conjunction with QAQC information and data sufficient to demonstrate levels of accuracy and precision to be submitted to the chief executive in accordance with the regulations.

### **3. EP 60479**

The permit was granted on 13 December 2018 for a 5-year term. It is due to expire on 12 December 2023.

The following minimum work programme is required from the date of this Report to keep the permit in good standing:

- (a) within 36 months of the commencement date of the permit (13 December 2021), the permit holder shall (to the satisfaction of the chief executive):
- (i) complete a literature review and compile all available geological and geophysical data into a GIS database;
  - (ii) complete a programme of geological and structural mapping to produce a detailed geological map of the permit area;
  - (iii) complete a programme of geochemical sampling for a minimum of 100 samples;
  - (iv) identify potential drill sites for hard rock targets;
  - (v) compile a GIS database of all new data obtained; and
  - (vi) provide a technical report detailing all work completed during this stage of the work programme in conjunction with QAQC information and data sufficient to demonstrate levels of accuracy and precision to be submitted to the chief executive in accordance with the regulations.

- (b) within 60 months of the commencement date of the permit (13 December 2023), the permit holder shall (to the satisfaction of the chief executive):
  - (i) complete a further programme of geochemical sampling for a minimum of 100 samples;
  - (ii) complete a programme of drilling either surface or underground, with a minimum of 1000 m;
  - (iii) update the GIS database with all new data obtained;
  - (iv) define an Inferred Resource in accordance with a recognised resource classification code, and
  - (v) provide a technical report detailing all work completed during this stage of the work programme in conjunction with QAQC information and data sufficient to demonstrate levels of accuracy and precision to be submitted to the chief executive in accordance with the regulations.

#### **4. PP 60 465**

The permit was granted on 7 August 2018 for a 2-year term and expired on 6 August 2020. We have been advised by the Company that an Extension of Duration for an additional 2-year term was applied for on 6 May 2020. This extension is currently pending review by NZPM.

The following minimum work programme was required from the date of this report to keep the permit in good standing:

- (a) Within 24 months of the commencement date of the permit (7 August 2020), the permit holder shall (to the satisfaction of the chief executive):
  - (i) complete a literature review of all relevant data including geophysical data;
  - (ii) complete a programme of geological mapping;
  - (iii) complete a programme of geochemical sampling;
  - (iv) complete a geophysical survey:
    - A. identify exploration target/s: and
    - B. prepare a technical report detailing all work completed during this stage of the work programme in conjunction with QAQC information and data sufficient to demonstrate levels of accuracy and precision to be submitted to the chief executive in accordance with the regulations.

This page has been intentionally left blank.

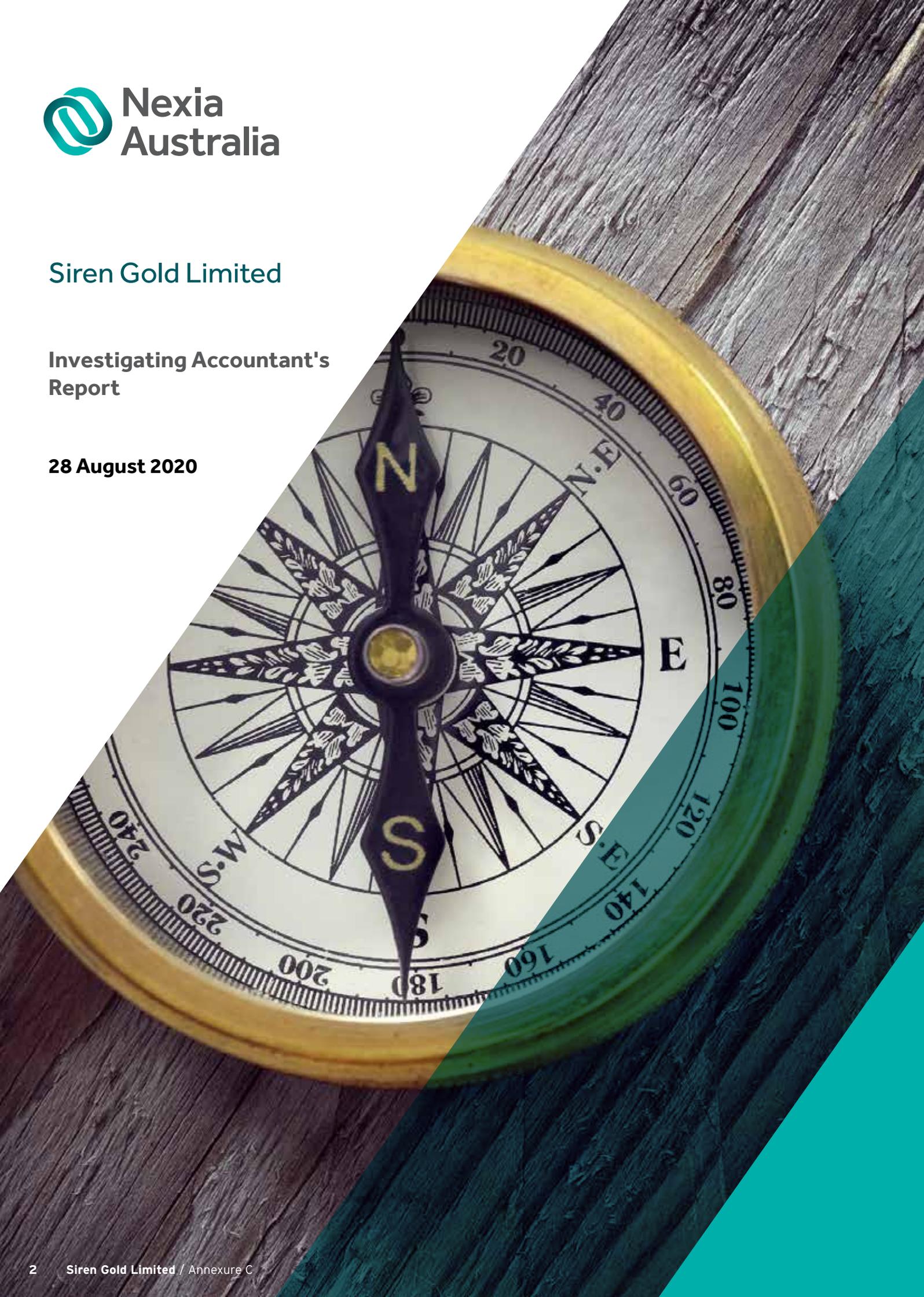


## **Annexure C - Investigating Accountant's Report**

**Siren Gold Limited**

**Investigating Accountant's  
Report**

**28 August 2020**



28 August 2020

The Directors  
Siren Gold Limited  
Suite 1, 295 Rokeby Road  
SUBIACO WA 6008

Dear Directors

## **Independent Limited Assurance Report on Siren Gold Limited historical and pro forma historical financial information**

### **1. Introduction**

We have been engaged by Siren Gold Limited ("Siren" or the "Company") to prepare this Independent Limited Assurance Report ("Report") in relation to certain financial information of Siren Gold Limited, for the Initial Public Offering ("IPO") of shares in Siren, for inclusion in the prospectus, pursuant to which the Company is offering 40,000,000 Shares at an issue price of \$0.25 per Share to raise \$10,000,000 ("Offer").

Expressions and terms defined in the Prospectus have the same meaning in this report.

The nature of this report is such that it can only be issued by an entity which holds an Australian Financial Services License under the Corporations Act 2001. Nexia Perth Corporate Finance Pty Ltd holds the appropriate Australian Financial Service License under the Corporations Act 2001.

### **Background**

The Company was incorporated as an unlisted public company limited by shares on 19 May 2017, for the purpose of acquiring and then proceeding to explore and develop gold projects in New Zealand. Siren is headquartered in Perth, Western Australia.

In March 2018, Reefton Resources Pty Ltd (RRL) was incorporated in New Zealand as a wholly owned subsidiary of the Company. RRL is the holder of the Company's Reefton Gold Project, consisting of the Big River Project, Alexander River Project, Reefton South Project, Bell Hill Project and Lyell Project.

## 2. Scope

### Historical Financial Information

You have requested Nexia Perth Corporate Finance Pty Ltd ("Nexia Perth") to review the following historical financial information of the Company included in the Prospectus at the Appendix to this report.

- The Consolidated Statement of Financial Position of the Company and its controlled entities as at 30 June 2020 (Appendix 1);
- The Consolidated Statement of Financial Performance of the Company and its controlled entities for the half year ended 30 June 2020 and the years ended 31 December 2019 & 31 December 2018 and period ended 31 December 2017 (Appendix 2);and
- The Statement of Cash Flows of the Company and its controlled entities for the half year ended 30 June 2020 and the years ended 31 December 2019 & 31 December 2018 and period ended 31 December 2017 (Appendix 3).

(together the "Historical Financial Information" attached at the Appendix to this report.

The historical financial information has been prepared in accordance with the stated basis of preparation, being the recognition and measurement principles contained in Australian Accounting Standards and the Company's adopted accounting policies.

The historical financial information has been extracted from:

- The financial statements of the Company for the half year ended 30 June 2020, which was reviewed by Nexia Perth in accordance with Australia Auditing Standards. The review report issued for the half year ended 30 June 2020 was unqualified.
- The financial statements of the Company for the years ended 31 December 2019 & 31 December 2018 and period ended 31 December 2017, which were audited by Nexia Perth in accordance with Australia Auditing Standards. The audit reports issued for the year ended 31 December 2019 & 31 December 2018 and period ended 31 December 2017 were unqualified.

In each of the audit and review conclusions, Nexia Perth included an emphasis of matter relating to the material uncertainty around the ability to continue as a going concern and therefore the Companies may be unable to realise their assets and discharge their liabilities in the normal course of business. However, the review opinion and audit opinions were not modified in respect of this matter.

The historical financial information is presented in the Prospectus in an abbreviated form, insofar as it does not include all of the presentation and disclosures required by Australian Accounting Standards and other mandatory professional reporting requirements applicable to general purpose financial reports prepared in accordance with the Corporations Act 2001.

## **Pro Forma historical financial information**

You have requested Nexia to review the pro forma historical Statement of Financial Position as at 30 June 2020 referred to as "the pro forma historical financial information".

The pro forma historical financial information has been derived from the historical financial information of the Company, after adjusting for the effects of the subsequent events and pro forma adjustments described in Sections 6 and 7 of this report. The stated basis of preparation is the recognition and measurement principles contained in Australian Accounting Standards applied to the historical financial information and the events or transactions to which the pro forma adjustments relate, as described in Section 7 of this report, as if those events or transactions had occurred as at the date of the historical financial information. Due to its nature, the pro forma historical financial information does not represent the Company's actual or prospective financial position, financial performance and cash flows.

## **3. Directors' responsibility**

The directors of Siren Gold Limited are responsible for the preparation of the historical financial information and pro forma historical financial information, including the selection and determination of pro forma adjustments made to the historical financial information and included in the pro forma historical financial information. This includes responsibility for such internal controls as the directors determine are necessary to enable the preparation of historical financial information and pro forma historical financial information that are free from material misstatement, whether due to fraud or error.

## **4. Our responsibility**

Our responsibility is to express a limited assurance conclusion on the financial information based on the procedures performed and the evidence we have obtained. We have conducted our engagement in accordance with the Standard on Assurance Engagement ASAE 3450 *Assurance Engagements involving Corporate Fundraisings and/or Prospective Financial Information*.

A review consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. Our procedure included:

- A consistency check of the application of the stated basis of preparation, to the historical and pro forma historical financial information;
- A review of the Company's accounting records and other documents;
- Enquiry of directors, management personnel and advisors;
- Consideration of subsequent events and pro forma adjustments described in Sections 6 & 7 to this Report; and
- Performance of analytical procedures applied to the pro forma historical financial information.

A review is substantially less in scope than an audit conducted in accordance with Australian Auditing Standards and consequently does not enable us to obtain reasonable assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion. Our engagement did not involve updating or re-issuing any previously issued audit or review reports on any financial information used as a source of the financial information.

## 5. Conclusions

### Historical financial information

Based on our review, which is not an audit, nothing has come to our attention that causes us to believe that the historical financial information, as described in the appendices to this report, and comprising:

- The Consolidated Statement of Financial Position of the Company and its controlled entities as at 30 June 2020 (Appendix 1);
- The Consolidated Statement of Financial Performance of the Company and its controlled entities for the half year ended 30 June 2020 and the years ended 31 December 2019 & 31 December 2018 and period ended 31 December 2017 (Appendix 2);and
- The Statement of Cash Flows of the Company and its controlled entities for the half year ended 30 June 2020 and the years ended 31 December 2019 & 31 December 2018 and period ended 31 December 2017 (Appendix 3);

are not presented fairly, in all material respects, in accordance with the stated basis of preparation, as described in Section 2 of this Report.

### Pro Forma historical financial information

Based on our review, which is not an audit, nothing has come to our attention that causes us to believe that the pro forma historical financial information, being the pro forma Consolidated Statement of Financial Position as at 30 June 2020 of the Company and its controlled entities are not presented fairly in all material respects, in accordance with the stated basis of preparation as described in Section 2 of this Report.

## 6. Subsequent Events

The pro forma statement of financial position reflects the following events that have occurred subsequent to the period ended 30 June 2020;

- The Company has issued 12,500,000 shares at \$0.10 per share to raise \$1,250,000 share capital and incurred a capital raising costs of \$33,000;

- Incurred significant exploration and other operational costs of \$208,000 and \$93,500 respectively; and
- Issue of 7,675,000 options to Directors and other parties exercisable at \$0.375 on or before 26 September 2024 from the issue date to be approved at the Annual General Meeting. These options were externally valued by Bentleys using Hoadleys Employee Stock Option Model at \$0.0528 per option totalling \$405,240.

Apart from the matters dealt with in this Report, and having regard to the scope of this Report and the information provided by the Directors, to the best of our knowledge and belief no other material transactions or events outside the ordinary business of Siren Gold Limited not described above, has come to our attention that would require comment on, or adjustment to, the information referred to in our Report or that would cause such information to be misleading or deceptive.

## **7. Assumptions Adopted in Compiling the Pro forma Statement of Financial Position**

The pro forma historical Statement of Financial Position is shown in Appendix 1 to this Report. This has been prepared based on the Company's statement of financial position at 30 June 2020, the subsequent events set out above and the following transactions and events relating to the issue of shares under the Prospectus:

- Pursuant to the public offer, Siren Gold Limited is seeking to raise \$10,000,000 via an issue of Shares at an issue price of \$0.25 per Share;
- The total cost of the Offer is estimated to be \$1,120,250 with those costs directly attributable to the capital raising being \$870,250. These costs are offset against contributed equity. The remaining costs which are not directly attributable to the capital raising are expensed through accumulated losses; and
- The reserve balance has been adjusted to reflect the proposed issue of options to the underwriter (Morgans Corporate Limited) based on 2% of the issued capital of Siren Gold Limited upon listing exercisable on or before 26 September 2024 at a strike price at 150% of the Offer price (\$0.375). The Underwriter options have been valued at \$270,250 (1,618,262 options) using Black-Scholes Stock Option Pricing Model and have been offset against the contributed equity as a cost of the public offer.

## **8. Independence**

Nexia Perth is a member of Nexia International Ltd. Nexia Perth does not have any interest in the outcome of the proposed IPO other than in connection with the preparation of this Report for which professional fees will be received. Nexia Perth is the auditor of Siren Gold Limited.

## 9. Disclosures

This Report has been prepared, and included in the Prospectus, to provide with general information only and does not take into account the objectives, financial situation or needs of any specific investors. It is not intended to be a substitute for professional advice and potential investors should not make specific investment decisions in reliance on the information contained in the Report. Before acting or relying on any information, potential investor should consider whether it is appropriate for their objectives, financial situation or need.

Without modifying our conclusions, we draw attention to Section 2 of this Report, which describes the purpose of the financial information, being for inclusion in the Prospectus. As a result, the financial information may not be suitable for use for another purpose.

Nexia Perth has consented to the inclusion of this assurance report in the Prospectus in the form and context in which it is included. Nexia Perth has not authorised the issue of the Prospectus. Accordingly, Nexia Perth make no representation regarding, and take no responsibility for, and other documents or material, or omission from, the Prospectus.

### **Nexia Perth Corporate Finance Pty Ltd**



**Muranda Janse Van Nieuwenhuizen**

**Director**

Perth

28 August 2020

**APPENDIX 1**

**Siren Gold Limited  
Pro forma Statement of Financial Position**

	Reviewed 30 June 2020	Subsequent Events	Note	Unaudited Pro Forma Adjustments	Unaudited Pro Forma After public offer
<b>CURRENT ASSETS</b>	\$	\$		\$	\$
Cash and cash equivalents	342,924	915,500	<b>1</b>	9,150,000	10,408,424
Other receivables	26,154	-		-	26,154
	369,078	915,500		9,150,000	10,434,578
<b>NON CURRENT ASSETS</b>					
Exploration and Evaluation Assets	479,813	208,000	<b>2</b>	-	687,813
Other Financial assets	112,118	-		-	112,118
	591,931	208,000		-	799,931
<b>CURRENT LIABILITIES</b>					
Trade and other payables	123,101	-		-	123,101
Borrowings	1,885	-		-	1,885
	124,986	-		-	124,986
<b>NET ASSETS</b>	836,023	1,123,500		9,150,000	11,109,523
<b>EQUITY</b>					
Contributed equity	2,078,217	1,217,000	<b>3</b>	9,129,750	12,424,967
Option Reserves	202,816	405,240	<b>4</b>	270,250	878,306
FX Reserves	(19,981)	-		-	(19,981)
Accumulated losses	(1,425,029)	(498,740)	<b>5</b>	(250,000)	(2,173,769)
<b>TOTAL EQUITY</b>	836,023	1,123,500		9,150,000	11,109,523

The pro forma statement of financial position after the offer is as per the statement of financial position before the offer is adjusted for any subsequent events and the transactions relating to the issue of shares pursuant to this prospectus. The statement of financial position to be read in conjunction with the notes to and forming part of the historical financial information set out in Appendix 4 and prior year financial information set out in Appendices 2 & 3.

**Siren Gold Limited**  
**Statement of Profit and Loss and Other Comprehensive Income**

Statement of Profit or Loss and Other Comprehensive Income	Reviewed for the half year ended 30 June 2020	Audit for the year ended 31 December 2019	Audit for the year ended 31 December 2018 (Restated)	Audit for the period ended 31 December 2017
	\$	\$	\$	\$
Revenue	48	190	406	201
	48	190	406	201
Acquisition costs	-	-	-	(159,243)
Compliance costs	(644)	(5,191)	(3,592)	(5,985)
Employment cost	-	14,414	(240,779)	(7,260)
Exploration and evaluation	-	(24,935)	-	-
Exploration written off	(10,112)	-	-	-
Foreign exchange loss	-	-	(1,042)	-
Information technology costs	(7,806)	(13,781)	(772)	(6,595)
Insurance	(4,343)	(11,360)	(808)	-
Legal expenses	(6,014)	(70,188)	(145,832)	-
Professional fees	(67,109)	(124,223)	(149,533)	(93,017)
Public relations, marketing and advertising	-	(1,432)	(7,766)	(1,722)
Share-based payments expense	-	-	(202,816)	-
Travel and accommodation	-	(3,321)	(22,226)	(2,420)
Other expenses	(4,634)	(8,697)	(21,025)	(4,065)
Profit / (loss) before tax	(100,614)	(248,524)	(795,785)	(280,106)
Income tax benefit / (expense)	-	-	-	-
<b>Net profit/(loss) for the period</b>	<b>(100,614)</b>	<b>(248,524)</b>	<b>(795,785)</b>	<b>(280,106)</b>
<i>Other comprehensive income, net of income tax</i>				
Items that may be reclassified subsequently to profit or loss	-	7,593	(5,548)	-
Foreign currency movement	(22,026)	-	-	-
<b>Other comprehensive income for the period, net of tax</b>	<b>(22,026)</b>	<b>7,593</b>	<b>(5,548)</b>	<b>-</b>
<b>Total comprehensive income attributable to members of the parent entity</b>	<b>(122,640)</b>	<b>(240,931)</b>	<b>(801,333)</b>	<b>(280,106)</b>

These Statements of profit or loss and other comprehensive income show the historical financial performance of the Siren Gold Limited and are to be read in conjunction with the notes to and forming part of the historical financial information set out in Appendix 1

**Siren Gold Limited**  
**Statement of Cash Flows**

Statements of Cash Flows	Reviewed for the half year ended 30 June 2020 \$	Audit for the year ended 31 December 2019 \$	Audit for the year ended 31 December 2018 (Restated) \$	Audit for the period ended 31 December 2017 \$
<i>Cash flows from operating activities</i>				
Payments to suppliers and employees	(165,675)	(331,784)	(319,722)	(241,794)
Interest received	48	190	406	201
<b>Net cash used in operating activities</b>	<b>(165,627)</b>	<b>(331,594)</b>	<b>(319,316)</b>	<b>(241,593)</b>
<i>Cash flows from investing activities</i>				
Deposits on bonds	(112,118)	-	-	-
Payments for Exploration Expenditure	(170,700)	(138,107)	(149,674)	-
<b>Net cash used in investing activities</b>	<b>(282,818)</b>	<b>(138,107)</b>	<b>(149,674)</b>	<b>-</b>
<i>Cash flows from financing activities</i>				
Proceeds from issue of shares, net of overpayments refunded	633,516	597,976	422,876	334,225
Transaction costs	-	(16,940)	-	-
<b>Net cash provided by financing activities</b>	<b>633,516</b>	<b>581,036</b>	<b>422,876</b>	<b>334,225</b>
<b>Net increase/(decrease) in cash held</b>	<b>185,071</b>	<b>111,335</b>	<b>(46,114)</b>	<b>92,632</b>
Cash and cash equivalents at the beginning of the period/year	157,853	46,518	92,632	-
<b>Cash and cash equivalents at the end of the period/year</b>	<b>342,924</b>	<b>157,853</b>	<b>46,518</b>	<b>92,632</b>

These Statements of Cash flows show the historical cash flows of Siren Gold Limited and are to be read in conjunction with the notes to and forming part of the historical financial information set out in Appendix 1.

**Siren Gold Limited****Notes to and forming part of the Historical financial information****STATEMENT OF SIGNIFICANT ACCOUNTING POLICIES**

The principal accounting policies adopted in the preparation of the Historical Financial Information is set out below. These policies have been consistently applied to all the periods presented, unless otherwise stated.

**a. Basis of preparation**

The financial statements comprise the consolidated financial statements of the Group. For the purposes of preparing the consolidated financial statements, the Group is a for-profit entity. Material accounting policies adopted in the preparation of these financial statements are presented below. They have been consistently applied unless otherwise stated.

**i. Statement of compliance**

These financial statements are general purpose financial statements which have been prepared in accordance with Australian Accounting Standards of the Australian Accounting Standards Board (**AAS Board**) and International Financial Reporting Standards (**IFRS**) as issued by the International Accounting Standards Board (**IASB**), and the *Corporations Act 2001* (Cth).

Australian Accounting Standards (**AASBs**) set out accounting policies that the AAS Board has concluded would result in a financial report containing relevant and reliable information about transactions, events and conditions to which they apply. Compliance with AASBs ensures that the financial statements and notes also comply with IFRS as issued by the IASB.

**ii. Going Concern**

The financial report has been prepared on a going concern basis, which contemplates the continuity of normal business activity and the realisation of assets and the settlement of liabilities in the ordinary course of business. The Company incurred a loss for the period of \$100,614 (2019: \$149,274) and a net operating cash out-flow of \$165,627 (2019: \$150,899).

Subsequent to year end, the Company completed a seed capital raising of \$1,250,000. These funds will be utilised by the Company to complete an Initial Public Offer on the Australian Securities Exchange. Based on the factors referred to above, the directors are satisfied that the going concern basis of preparation is appropriate. In particular, given the Company's history of raising capital to date, the directors are confident of the Company's ability to raise additional funds as and when they are required.

The ability of the Company to continue as a going concern is principally dependent upon the ability of the Company to secure funds by raising capital from equity markets and managing cash flow in line with available funds. These conditions indicate a material uncertainty that may cast significant doubt about the ability of the Company to continue as a going concern and realise its assets and extinguish its liabilities in the normal course of business and at the amounts stated in the financial report.

Should the Company be unable to continue as a going concern it may be required to realise its assets and extinguish its liabilities other than in the normal course of business and at amounts different to those stated in the financial statements. The financial statements do not include any adjustments relating to the recoverability and classification of asset carrying amounts or to the amount and classification of liabilities that might result should the Company be unable to continue as a going concern and meet its debts as and when they fall due.

**iii. Use of estimates and judgments**

The preparation of financial statements requires management to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities, income and expenses. These estimates and associated assumptions are based on historical experience and various factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgements about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised and in any future periods affected.

## **Siren Gold Limited**

### **Notes to and forming part of the Historical financial information (continued)**

Judgements made by management in the application of AASBs that have significant effect on the financial statements and estimates with a significant risk of material adjustment in the next period are discussed in note p.

#### **b. Accounting Policies**

The Group has consistently applied the following accounting policies to all periods presented in the financial statements. The Group has considered the implications of new and amended Accounting Standards applicable for annual reporting periods beginning after 1 January 2020 but determined that their application to the financial statements is either not relevant or not material.

#### **c. Principles of Consolidation**

##### **i. Subsidiaries**

Subsidiaries are entities controlled by the Group. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases.

The accounting policies of subsidiaries have been changed when necessary to align them with the policies adopted by the Group. Losses applicable to the non-controlling interests in a subsidiary are allocated to the non-controlling interests even if doing so causes the non-controlling interests to have a deficit balance.

##### **ii. Transactions eliminated on consolidation**

All intra-group balances and transactions, and any unrealised income and expenses arising from intra-group transactions, are eliminated in preparing the consolidated financial statements.

##### **iii. Functional and presentation currency**

The functional currency of each of the Group's entities is measured using the currency of the primary economic environment in which that entity operates. The consolidated financial statements are presented in Australian dollars which is the parent entity's functional and presentation currency.

#### **d. Foreign currency transactions and balances**

##### **i. Functional and presentation currency**

The functional currency of the Group is measured using the currency of the primary economic environment in which that entity operates. The financial statements are presented in Australian dollars which is the Group's functional and presentation currency.

##### **ii. Transaction and balances**

Foreign currency transactions are translated into functional currency using the exchange rates prevailing at the date of the transaction. Foreign currency monetary items are translated at the period-end exchange rate. Non-monetary items measured at historical cost continue to be carried at the exchange rate at the date of the transaction. Non-monetary items measured at fair value are reported at the exchange rate at the date when fair values were determined.

Exchange differences arising on the translation of monetary items are recognised in the profit or loss except where deferred in equity as a qualifying cash flow or net investment hedge.

Exchange differences arising on the translation of non-monetary items are recognised directly in other comprehensive income to the extent that the gain or loss is directly recognised in other comprehensive income, otherwise the exchange difference is recognised in the profit or loss.

##### **iii. Foreign operations**

In the Group's financial statements, all assets, liabilities and transactions of Group entities with a functional currency other than the Australian-Dollar (\$AUD) are translated into \$AUD upon consolidation. The functional currency of the entities in the Group has remained unchanged during the reporting period.

On consolidation, assets and liabilities have been translated into \$AUD at the closing rate at the reporting date. Goodwill and fair value adjustments arising on the acquisition of a foreign entity have been treated as assets and liabilities of the foreign entity and translated into \$AUD at the closing rate. Income and expenses have been translated into \$AUD at the average rate over the reporting period. Exchange differences are charged or credited to other comprehensive income and recognised in the currency translation reserve in equity.

## **Siren Gold Limited**

### **Notes to and forming part of the Historical financial information (continued)**

On disposal of a foreign operation the cumulative translation differences recognised in equity are reclassified to profit or loss and recognised as part of the gain or loss on disposal.

#### **e. Taxation**

##### **i. Income tax**

The income tax expense/(income) for the period comprises current income tax expense/(income) and deferred tax expense/(income).

Current income tax expense charged to the profit or loss is the tax payable on taxable income calculated using applicable income tax rates enacted, or substantially enacted, as at reporting date. Current tax liabilities (assets) are therefore measured at the amounts expected to be paid to (recovered from) the relevant taxation authority.

Deferred income tax expense reflects movements in deferred tax asset and deferred tax liability balances during the year as well unused tax losses.

Current and deferred income tax expense (income) is charged or credited outside profit or loss when the tax relates to items recognised outside profit or loss.

Deferred tax assets and liabilities are ascertained based on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements. Deferred tax assets also result where amounts have been fully expensed but future tax deductions are available. No deferred income tax will be recognised from the initial recognition of an asset or liability, excluding a business combination, where there is no effect on accounting or taxable profit or loss.

Deferred tax assets and liabilities are calculated at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, based on tax rates enacted or substantively enacted at reporting date. Their measurement also reflects the manner in which management expects to recover or settle the carrying amount of the related asset or liability.

Deferred tax assets relating to temporary differences and unused tax losses are recognised only to the extent that it is probable that future taxable profit will be available against which the benefits of the deferred tax asset can be utilised.

Where temporary differences exist in relation to investments in subsidiaries, branches, associates, and joint ventures, deferred tax assets and liabilities are not recognised where the timing of the reversal of the temporary difference can be controlled and it is not probable that the reversal will occur in the foreseeable future.

Current tax assets and liabilities are offset where a legally enforceable right of set-off exists and it is intended that net settlement or simultaneous realisation and settlement of the respective asset and liability will occur. Deferred tax assets and liabilities are offset where a legally enforceable right of set-off exists, the deferred tax assets and liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities where it is intended that net settlement or simultaneous realisation and settlement of the respective asset and liability will occur in future periods in which significant amounts of deferred tax assets or liabilities are expected to be recovered or settled.

Where the Group receives the Australian Government's Research and Development Tax Incentive, the Group accounts for the refundable tax offset under AASB 112. Funds are received as a rebate through the Group's income tax return.

##### **ii. Goods and Services Tax (GST)**

Revenues, expenses, and assets are recognised net of the amount of GST, except where the amount of GST incurred is not recoverable from the taxation authority. In these circumstances the GST is recognised as part of the cost of acquisition of the asset or as part of an item of the expense. Receivables and payables in the statement of financial position are shown inclusive of GST.

## Siren Gold Limited

### Notes to and forming part of the Historical financial information (continued)

The net amount of GST recoverable from, or payable to, the Australian Taxation Office is included as a current asset or liability in the balance sheet.

Cash flows are presented in the statement of cash flows on a gross basis, except for the GST component of investing and financing activities, which are disclosed as operating cash flows.

f. **Fair Value**

i. **Fair Value of Assets and Liabilities**

The Group measures some of its assets and liabilities at fair value on either a recurring or non-recurring basis, depending on the requirements of the applicable AASB.

Fair value is the price the Group would receive to sell an asset or would have to pay to transfer a liability in an orderly unforced transaction between independent, knowledgeable and willing market participants at the measurement date.

As fair value is a market-based measure, the closest equivalent observable market pricing information is used to determine fair value. Adjustments to market values may be made having regard to the characteristics of the specific asset or liability. The fair values of assets and liabilities that are not traded in an active market are determined using one or more valuation techniques. These valuation techniques maximise, to the extent possible, the use of observable market data.

To the extent possible, market information is extracted from either the principal market for the asset or liability (i.e. the market with the greatest volume and level of activity for the asset or liability) or, in the absence of such a market, the most advantageous market available to the entity at the end of the reporting period (i.e. the market that maximises the receipts from the sale of the asset or minimises the payments made to transfer the liability, after taking into account transaction costs and transport costs).

For non-financial assets, the fair value measurement also takes into account a market participant's ability to use the asset in its highest and best use or to sell it to another market participant that would use the asset in its highest and best use.

The fair value of liabilities and the entity's own equity instruments (excluding those related to share-based payment arrangements) may be valued, where there is no observable market price in relation to the transfer of such financial instruments, by reference to observable market information where such instruments are held as assets. Where this information is not available, other valuation techniques are adopted and, where significant, are detailed in the respective note to the financial statements.

ii. **Fair value hierarchy**

AASB 13 *Fair Value Measurement* requires the disclosure of fair value information by level of the fair value hierarchy, which categorises fair value measurements into one of three possible levels based on the lowest level that an input that is significant to the measurement can be categorised into as follows:

Level 1	Level 2	Level 3
Measurements based on quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date.	Measurements based on inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly.	Measurements based on unobservable inputs for the asset or liability.

The fair values of assets and liabilities that are not traded in an active market are determined using one or more valuation techniques. These valuation techniques maximise, to the extent possible, the use of observable market data. If all significant inputs required to measure fair value are observable, the asset or liability is included in Level 2. If one or more significant inputs are not based on observable market data, the asset or liability is included in Level 3.

## Siren Gold Limited

### Notes to and forming part of the Historical financial information (continued)

#### iii. Valuation techniques

The Group selects a valuation technique that is appropriate in the circumstances and for which sufficient data is available to measure fair value. The availability of sufficient and relevant data primarily depends on the specific characteristics of the asset or liability being measured. The valuation techniques selected by the Group are consistent with one or more of the following valuation approaches:

- *Market approach*: valuation techniques that use prices and other relevant information generated by market transactions for identical or similar assets or liabilities.
- *Income approach*: valuation techniques that convert estimated future cash flows or income and expenses into a single discounted present value.
- *Cost approach*: valuation techniques that reflect the current replacement cost of an asset at its current service capacity.

Each valuation technique requires inputs that reflect the assumptions that buyers and sellers would use when pricing the asset or liability, including assumptions about risks. When selecting a valuation technique, the Group gives priority to those techniques that maximise the use of observable inputs and minimise the use of unobservable inputs. Inputs that are developed using market data (such as publicly available information on actual transactions) and reflect the assumptions that buyers and sellers would generally use when pricing the asset or liability are considered observable, whereas inputs for which market data is not available and therefore are developed using the best information available about such assumptions are considered unobservable.

#### g. Cash and cash equivalents

Cash and cash equivalents in the Statement of Financial Position include cash on hand, deposits held at call with banks and other short term highly liquid investments with original maturities of three months or less. Bank overdrafts are shown as current liabilities in the Statement of Financial Position. For the purpose of the consolidated statement of cash flows, cash and cash equivalents consist of cash and cash equivalents as described above, net of outstanding bank overdrafts.

#### h. Trade and Other Receivables

Trade receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less provision for doubtful debts. Trade receivables are generally due for settlement within 30 days. Collectability of trade receivables is reviewed on an ongoing basis. The accounting policy for impairment of trade receivables is explained in note j.iv.

They are presented as current assets unless collection is not expected for more than 12 months after the reporting date.

#### i. Trade and other payables

These amounts represent liabilities for goods and services provided to the Group prior to the end of the financial year which are unpaid and stated at their amortised cost. The amounts are unsecured and are generally settled on 30-day terms.

#### j. Investments and other financial assets

##### i. Classification

The group classifies its financial assets in the following measurement categories:

- those to be measured subsequently at fair value (either through OCI or through profit or loss), and
- those to be measured at amortised cost.

The classification depends on the entity's business model for managing the financial assets and the contractual terms of the cash flows.

## Siren Gold Limited

### Notes to and forming part of the Historical financial information (continued)

For assets measured at fair value, gains and losses will either be recorded in profit or loss or OCI. For investments in equity instruments that are not held for trading, this will depend on whether the group has made an irrevocable election at the time of initial recognition to account for the equity investment at fair value through other comprehensive income (FVOCI).

The group reclassifies debt investments when and only when its business model for managing those assets changes.

#### ii. Recognition and derecognition

Regular way purchases and sales of financial assets are recognised on trade-date, the date on which the group commits to purchase or sell the asset. Financial assets are derecognised when the rights to receive cash flows from the financial assets have expired or have been transferred and the group has transferred substantially all the risks and rewards of ownership.

#### iii. Measurement

At initial recognition, the group measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss (FVPL), transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at FVPL are expensed in profit or loss.

Financial assets with embedded derivatives are considered in their entirety when determining whether their cash flows are solely payment of principal and interest.

##### (1) Debt instruments

Subsequent measurement of debt instruments depends on the group's business model for managing the asset and the cash flow characteristics of the asset. There are three measurement categories into which the group classifies its debt instruments:

- **Amortised cost:** Assets that are held for collection of contractual cash flows where those cash flows represent solely payments of principal and interest are measured at amortised cost. Interest income from these financial assets is included in finance income using the effective interest rate method. Any gain or loss arising on derecognition is recognised directly in profit or loss and presented in other gains/(losses) together with foreign exchange gains and losses. Impairment losses are presented as separate line item in the statement of profit or loss.
- **FVOCI:** Assets that are held for collection of contractual cash flows and for selling the financial assets, where the assets' cash flows represent solely payments of principal and interest, are measured at FVOCI. Movements in the carrying amount are taken through OCI, except for the recognition of impairment gains or losses, interest income and foreign exchange gains and losses which are recognised in profit or loss. When the financial asset is derecognised, the cumulative gain or loss previously recognised in OCI is reclassified from equity to profit or loss and recognised in other gains/(losses). Interest income from these financial assets is included in finance income using the effective interest rate method. Foreign exchange gains and losses are presented in other gains/(losses) and impairment expenses are presented as separate line item in the statement of profit or loss.
- **FVPL:** Assets that do not meet the criteria for amortised cost or FVOCI are measured at FVPL. A gain or loss on a debt investment that is subsequently measured at FVPL is recognised in profit or loss and presented net within other gains/(losses) in the period in which it arises.

##### (2) Equity instruments

The group subsequently measures all equity investments at fair value. Where the group's management has elected to present fair value gains and losses on equity investments in OCI, there is no subsequent reclassification of fair value gains and losses to profit or loss following the derecognition of the investment. Dividends from such investments continue to be recognised in profit or loss as other income when the group's right to receive payments is established.

## **Siren Gold Limited**

### **Notes to and forming part of the Historical financial information (continued)**

Changes in the fair value of financial assets at FVPL are recognised in other gains/(losses) in the statement of profit or loss as applicable. Impairment losses (and reversal of impairment losses) on equity investments measured at FVOCI are not reported separately from other changes in fair value.

#### **iv. Impairment**

The group assesses on a forward-looking basis the expected credit losses associated with its debt instruments carried at amortised cost and FVOCI. The impairment methodology applied depends on whether there has been a significant increase in credit risk.

For trade receivables, the group applies the simplified approach permitted by AASB 9, which requires expected lifetime losses to be recognised from initial recognition of the receivables.

#### **k. Share capital**

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds. Incremental costs directly attributable to the issue of new shares or options, or for the acquisition of a business, are included in the cost of the acquisition as part of the purchase consideration.

#### **l. Employee benefits**

##### **i. Short-term benefits**

Liabilities for employee benefits for wages, salaries, National Insurance, superannuation, and leave that are expected to be settled within 12 months of the reporting date represent present obligations resulting from employees' services provided to the reporting date and are calculated at undiscounted amounts based on remuneration wage and salary rates that the Group expects to pay at the reporting date including related on-costs, such as workers compensation insurance and payroll tax. Liabilities for employee benefits expected to be settled in excess of the 12 months from reporting date are recognised as non-current liabilities. Due to the age of the Group, no such liabilities are currently recognised in the Group.

Non-accumulating non-monetary benefits, such as medical care, housing and relocation costs, cars and free or subsidised goods and services, are expensed based on the net marginal cost to the Group as the benefits are taken by the employees.

##### **ii. Retirement benefit obligations: Defined contribution superannuation funds**

A defined contribution plan is a post-employment benefit plan under which an entity pays fixed contributions onto a separate entity and will have no legal or constructive obligation to pay further amounts. Obligations for contributions to defined contribution superannuation funds are recognised as an expense in the income statement as incurred.

##### **iii. Termination benefits**

When applicable, the Group recognises a liability and expense for termination benefits at the earlier of: (a) the date when the Group can no longer withdraw the offer for termination benefits; and (b) when the Group recognises costs for restructuring pursuant to AASB 137 *Provisions, Contingent Liabilities and Contingent Assets* and the costs include termination benefits. In either case, unless the number of employees affected is known, the obligation for termination benefits is measured on the basis of the number of employees expected to be affected. Termination benefits that are expected to be settled wholly before 12 months after the annual reporting period in which the benefits are recognised are measured at the (undiscounted) amounts expected to be paid. All other termination benefits are accounted for on the same basis as other long-term employee benefits.

## **Siren Gold Limited**

### **Notes to and forming part of the Historical financial information (continued)**

iv. **Equity-settled compensation**

The fair value of options granted is recognised as an employee expense with a corresponding increase in equity. The fair value is measured at grant date and spread over the period during which the employees become unconditionally entitled to the options. The fair value of the options granted is measured using the Black-Scholes pricing model, taking into account the terms and conditions upon which the options were granted. The amount recognised is adjusted to reflect the actual number of share options that vest except where forfeiture is only due to market conditions not being met.

m. **Provisions**

Provisions are recognised when the Group has a legal or constructive obligation, as a result of past events, for which it is probable that an outflow of economic benefits will result and that outflow can be reliably measured.

Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and, when appropriate, the risks specific to the liability.

n. **Revenue and other income**

i. Revenue from contracts with customers

Revenue from contracts with customers is recognised when a customer obtains control of the promised asset and the Group satisfies its performance obligations under the contract. Revenue is allocated to each performance obligation. The Group considers the terms of the contract in determining the transaction price. The transaction price is based upon the amount the entity expects to be entitled to in exchange for the transferring of promised good.

ii. **Finance Income**

Interest income is recognised as the interest accrues (using the effective interest method) to the net carrying amount of the financial asset.

All revenue is stated net of the amount of GST (Note e.ii Goods and Services Tax (GST)).

o. **Segment reporting**

An operating segment is a component of the Group that engages in business activities from which it may earn revenues and incur expenses, including revenues and expenses that relate to transactions with any of the Group's other components. All operating segments' results are regularly reviewed by the Group's Directors to make decisions about resources to be allocated to the segment and assess its performance, and for which discrete financial information is available.

p. **Critical Accounting Estimates and Judgments**

Management discusses with the Board the development, selection and disclosure of the Group's critical accounting policies and estimates and the application of these policies and estimates. There are presently no estimates and judgements that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year.

**Coronavirus (COVID-19) pandemic**

Judgement has been exercised in considering the impacts that the Coronavirus (COVID-19) pandemic has had, or may have, on the consolidated entity based on known information. This consideration extends to the nature of the activities and geographic regions in which the consolidated entity operates. Other than as addressed in specific notes, there does not currently appear to be either any significant impact upon the financial statements or any significant uncertainties with respect to events or conditions which may impact the consolidated entity unfavourably as at the reporting date or subsequently as a result of the Coronavirus (COVID-19) pandemic.

## **Siren Gold Limited**

### **Notes to and forming part of the Historical financial information (continued)**

i. Key judgements and estimates – Share-based payments

The Group measures the cost of equity-settled transactions with employees by reference to the fair value of the equity instruments at the date at which they are granted. The fair value is determined by an internal valuation using a Black-Scholes option-pricing model, using the assumptions detailed in note 12 Share-based payments.

q. **Exploration and evaluation expenditure**

Costs incurred with respect to the acquisition of rights to explore for each identifiable area of interest are capitalised on the statement of financial position.

Capitalised costs are only carried forward to the extent that they are expected to be recouped through the successful development of the area or where activities in the area have not yet reached a stage that permits reasonable assessment of the existence of economically recoverable reserves.

Capitalised costs in relation to an abandoned area are written off in full against profit in the period in which the decision to abandon the area is made.

When production commences, the capitalised costs for the relevant area of interest are amortised over the life of the area according to the rate of depletion of the economically recoverable reserves.

A regular review is undertaken of each area of interest to determine the appropriateness of continuing to carry forward costs in relation to that area of interest.

**Siren Gold Limited**  
**Notes to and forming part of the Historical financial information (continued)**

Note 1: Cash and Cash Equivalents	Consolidated Reviewed 30 June 2020	Consolidated Unaudited Pro forma after Public Offer
	\$	\$
Cash and cash equivalents	342,924	10,408,424
Reviewed balance as at 30 June 2020		342,924
<i>Subsequent adjustments:</i>		
Issue of share capital		1,217,000
Exploration and other Corporate costs		(301,500)
		<u>915,500</u>
<i>Pro forma adjustments:</i>		
Proceeds from shares issued under the IPO		10,000,000
Management/underwriting fees & other costs related to IPO		(850,000)
		<u>9,150,000</u>
Pro forma balance		<u>10,408,424</u>

Note 2: Exploration and evaluation expenditure	Consolidated Reviewed 30 June 2020	Consolidated Unaudited Pro forma after Public Offer
	\$	\$
Exploration and evaluation expenditure	479,813	687,813
Reviewed balance as at 30 June 2020		479,813
<i>Subsequent adjustments:</i>		
Exploration expenditure		208,000
<i>Pro forma adjustments:</i>		-
Pro forma balance		<u>687,813</u>

**Siren Gold Limited**  
**Notes to and forming part of the Historical financial information (continued)**

Note 3: Contributed Equity	Consolidated Reviewed 30 June 2020	Consolidated Unaudited Pro forma after Public Offer
	<b>\$</b>	<b>\$</b>
Contributed Equity	2,078,217	12,424,967
Reviewed balance as at 30 June 2020		2,078,217
<i>Subsequent adjustments:</i>		
Issue of share capital		1,217,000
<i>Pro forma adjustments:</i>		
Proceeds from shares issued under the IPO		10,000,000
Management and underwriting fee related to IPO		(600,000)
Underwriter Options		(270,250)
		9,129,750
Pro forma balance		12,424,967

	Consolidated Reviewed 30 June 2020	Consolidated Unaudited Pro forma after Public Offer
	<b>Number</b>	<b>Number</b>
Contributed Equity	28,413,094	80,913,094
Reviewed balance as at 30 June 2020		28,413,094
<i>Subsequent adjustments:</i>		
Issue of share capital		12,500,000
<i>Pro forma adjustments:</i>		
Proceeds from shares issued under the IPO		40,000,000
Pro forma balance		80,913,094

**Siren Gold Limited**  
**Notes to and forming part of the Historical financial information (continued)**

Note 4: Reserves	Consolidated Reviewed 30 June 2020	Consolidated Unaudited Pro forma after Public Offer
	\$	\$
Reserves	202,816	878,306
Reviewed balance as at 30 June 2020		202,816
<i>Subsequent adjustments:</i>		
Options issued to the directors & related parties		405,240
<i>Pro forma adjustments:</i>		
Underwriter Options		270,250
		270,250
Pro forma balance		878,306

Set out below are the key inputs and terms used in the valuation of the exiting options;

	Existing options	Options to directors and other parties included in subsequent events	Underwriter Options
Number of instruments	10,720,833	7,675,000	1,618,262
Underlying share price	\$0.10	\$0.10	\$0.25
Exercise price	\$0.25	\$0.375	\$0.375
Expected volatility	80.39%	109%	109%
Life of the options (years)	4 years	4 years	4 years
Expected dividends	Nil %	Nil %	Nil %
Risk free rate	1.99%	0.28%	0.28%
Value per instrument	\$0.0406	\$0.0528	\$0.167
Value per Tranche	\$202,816	\$ 405,240	\$270,250

**Siren Gold Limited**  
**Notes to and forming part of the Historical financial information (continued)**

Note 5: Accumulated losses	Consolidated Reviewed 30 June 2020	Consolidated Unaudited Pro forma after Public Offer
	\$	\$
Accumulated losses	<u>(1,425,029)</u>	<u>(2,173,769)</u>
Reviewed balance as at 30 June 2020		(1,425,029)
<i>Subsequent adjustments:</i>		
Corporate costs		(93,500)
Options issued to the directors & related parties		<u>(405,240)</u>
		<u>(498,740)</u>
<i>Pro forma adjustments:</i>		
Other IPO related costs		<u>(250,000)</u>
		<u>(250,000)</u>
Pro forma balance		<u>(2,173,769)</u>

**Note 6: Related Party Disclosures**

Transactions with Related parties and Director's Interest are disclosed in the prospectus.

**Note 7: Commitment and Contingencies**

At 30 June 2020 the Company reported that it is required to meet minimum work program requirements to maintain current rights of tenure to the exploration licences. The Company estimated its commitment for this purpose is \$400,000 in the next 12 months from 30 June 2020.

No material contingent liabilities exist that we aware of, other than those disclosed in the Prospectus.

## **FINANCIAL SERVICES GUIDE**

Nexia Perth Corporate Finance Pty Ltd ABN 84 009 342 661 ('we' or 'us' or 'our' as appropriate), Australian Financial Services Licence ("AFSL") Number 289358 has been engaged by Siren Gold Limited to provide an Independent Limited Assurance Report ("ILAR" or "our Report") for the inclusion in the prospectus.

### **Financial Services Guide**

In the above circumstances we are required to issue to you, as a retail client, a Financial Services Guide ('FSG'). This FSG is signed to help retail clients make a decision as to their use of the general financial product advice and to ensure that we comply with our obligations as financial services license.

This FSG includes information about:

- NPCF and how they can be contacted;
- the services NPCF is authorised to provide;
- how NPCF are paid;
- any relevant associations or relationships of NPCF;
- how complaints are dealt with as well as information about internal and external dispute resolution systems, and how you can access them; and
- the compensation arrangements that NPCF has in place.

Where you have engaged NPCF we act on your behalf when providing financial services. Where you have not engaged NPCF, NPCF acts on behalf of our client when providing these financial services and are required to provide you with a FSG because you receive a report or other financial services from NPCF.

### **Financial Services that NPCF is Authorised to Provide**

NPCF holds an AFSL authorising it to carry on a financial services business to provide financial product advice for securities and deal in a financial product by arranging for another person to issue, apply for, acquire, vary or dispose of a financial product in respect of securities to retail and wholesale clients.

We provide financial product advice when engaged to prepare a report in relation to a transaction relating to one of these types of financial products.

### **General Financial Product Advice**

We only provide general financial product advice, not personal financial product advice. Our Report does not take into account your personal objectives, financial situation or needs. You should consider the

appropriateness of this general advice having regard to your own objectives, financial situation and needs before you act on the advice.

### **NPCF's Responsibility to You**

NPCF has been engaged by the directors of Siren Gold Limited ("Siren" or the "Client") to provide general financial product advice in the form of an independent Accountant's report to be included in the Prospectus.

NPCF is responsible and accountable to you for ensuring that there is a reasonable basis for the conclusions in the Report.

### **Fees NPCF May Receive**

NPCF charges fees for preparing Reports. These fees will usually be agreed with, and paid by the Client. Fees are agreed on either a fixed fee or a time cost basis. In this instance, the Client has agreed to pay NPCF approximately \$5,000 (excluding GST and out of pocket expenses) for preparing the Report. NPCF and its officers, representatives, related entities and associates will not receive any other fee or benefit in connection with the provision of this Report.

### **Remuneration or other benefits received by our employees**

All our employees receive a salary. Our employees are eligible for bonuses based on overall productivity but not directly in connection With any engagement for the provision of a report. We have received a fee from Siren for our professional services in providing this Report. That fee is not linked in any way with our opinion as expressed in this Report.

### **Referrals**

NPCF does not pay commissions or provide any other benefits to any person for referring customers to them in connection with a Report.

### **Associations and Relationships**

Through a variety of corporate and trust structures NPCF is controlled by and operates as part of the Nexia Perth Pty Ltd (or the "Nexia Perth Entity"). NPCF's directors and authorised representative may be directors in the Nexia Perth Entity. Mrs Muranda Janse Van Nieuwenhuizen, authorised representative of NPCF and director in the Nexia Perth Entity, has prepared this Report. The financial product advice in the Report is provided by NPCF and not by the Nexia Perth Entity.

From time to time NPCF, the Nexia Perth Entity and related entities ("Nexia Entities") may provide professional services, including audit, tax and financial advisory services, to companies and issuers of financial products in the ordinary course of their businesses.

Over the past two years \$nil (excluding GST) in professional fees has been invoiced and/or received from the Client in relation to the provision of Independent Accountant's Reports.

No individual involved in the preparation of this Report holds a substantial interest in, or is a substantial creditor of, the Client or has other material financial interests in the Proposed Transaction.

### **Complaints Resolution**

If you have a complaint, please let NPCF know. Formal complaints should be sent in writing to:

Nexia Perth Corporate Finance Pty Ltd  
Compliance Officer  
GPO Box 2570  
Perth WA 6001

If you have difficulty in putting your complaint in writing, please telephone the Compliance Officer, Mr Henko Vos, on +61 8 9463 2463 and he will assist you in documenting your complaint.

Written complaints are recorded, acknowledged within 5 days and investigated. As soon as practical, and not more than 45 days after receiving the written complaint, the response to your complaint will be advised in writing.

### **External Complaints Resolution Process**

If NPCF cannot resolve your complaint to your satisfaction within 45 days, you can refer the matter to the Australian Financial Complaints Authority ("AFCA"). The AFCA is an independent company that has been established to provide free advice and assistance to consumers to help in resolving complaints relating to the financial services industry.

Further details about the AFCA is available at the AFCA website <https://www.afca.org.au/> or by contacting them directly at:

Australian Financial Complaints Authority Limited  
GPO Box 3, Melbourne, Victoria 3001  
Telephone: 1300 56 55 62  
Facsimile (03) 9613 6399  
Email: [info@afca.org.au](mailto:info@afca.org.au)

The Australian Securities and Investments Commission also has a free call info line on 1300 300 630 which you may use to obtain information about your rights.

### **Compensation Arrangements**

NPCF has professional indemnity insurance cover as required by the *Corporations Act 2001* (Cth).

### **Contact Details**

You may contact NPCF at:  
Nexia Perth Corporate Finance Pty Ltd  
GPO Box 2570  
PERTH WA 6001

## Australia

### Adelaide Office

Level 3, 153 Flinders Street  
Adelaide SA 5000  
GPO Box 2163, Adelaide SA 5001  
p +61 8 8139 1111, f +61 8 8139 1100  
infoSA@nexiaem.com.au

### Brisbane Office

Level 28, 10 Eagle St, Brisbane QLD 4000  
p +61 7 3229 2022, f +61 7 3229 3277  
email@nexiabrisbane.com.au

### Brisbane South Office

1187 Logan Road, Holland Park QLD 4121  
p +61 7 3343 6333, f +61 7 3849 8598  
email@nexiabrisbane.com.au

### Canberra Office

Level 7, St George Centre, 60 Marcus Clarke Street  
GPO Box 500, Canberra ACT 2601  
p +61 2 6279 5400, f +61 2 6279 5444  
mail@nexiacanberra.com.au

### Darwin Office

Level 2, 62 Cavenagh Street, Darwin NT 0800  
p +61 8 8981 5585, f +61 8 8981 5586  
infoNT@nexiaem.com.au

### Melbourne Office

Level 12, 31 Queen St, Melbourne Vic 3000  
p +61 3 8613 8888, f +61 3 8613 8800  
info@nexiamelbourne.com.au

### Perth Office

Level 3, 88 William Street, Perth WA 6000  
GPO Box 2570, Perth WA 6001  
p +61 8 9463 2463, f +61 8 9463 2499  
info@nexiaperth.com.au

### Sydney Office

Level 16, 1 Market Street, Sydney NSW 2000  
PO Box H195, Australia Square, NSW 1215  
p +61 2 9251 4600, f +61 2 9251 7138  
info@nexiasydney.com.au

## New Zealand

### Christchurch Office

2nd Floor, 137 Victoria St, Christchurch  
p +64 3 379 0829, f +64 3 366 7144  
cityoffice@nexiachch.co.nz

[www.nexia.com.au](http://www.nexia.com.au)



**SIREN GOLD**  
LIMITED

**SIREN GOLD LIMITED**

Suite 1  
295 Rokeby Road  
SUBIACO WA 6008  
AUSTRALIA

Telephone: +61 8 6555 2950  
Facsimile: +61 8 6166 0261

Email: [sandre@sirengold.com.au](mailto:sandre@sirengold.com.au)

[www.sirengold.com.au](http://www.sirengold.com.au)