

## ASX RELEASE

11 July 2022

## COMPANY

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

## CAPITAL STRUCTURE

**Shares:** 95,925,475  
**Options:** 14,293,262

## BOARD

**Brian Rodan**  
Managing Director

**Paul Angus**  
Technical Director

**Keith Murray**  
Non-Executive Director

**Sebastian Andre**  
Company Secretary

## CONTACT

Level 2  
41-43 Ord Street  
West Perth WA 6005  
t: +61 6458 4200  
e: admin@sirengold.com.au  
w: sirengold.com.au

## PROJECTS



## Big River A2 Shoot extended to 200m

**Siren Gold Limited** (ASX: **SNG**) (**Siren** or the **Company**) is pleased to provide an update on exploration activities at its Big River project.

### Highlights

- **BR37** intersected **5.2m @ 6.3g/t Au** from **213m**. This zone comprised of 2.3m of quartz and massive pyrite breccia that averaged 5g/t Au, 21% sulphur and 460ppm antimony, followed by 2.9m of disseminated acicular arsenopyrite mineralisation that averaged 7.6g/t Au.
- The results to date indicate that the A2 shoot is plunging around 55° to the NNE, similar to Shoots 1 to 4. The A2 shoot can now be traced from outcrop to 280m down plunge or 200m below surface.
- Mapping has confirmed that the Sunderland Anticline that hosts the Big River mine extends for 5kms south where it is cut off by younger granite intrusion. The anticline is associated with a 3km long arsenic and gold soil anomaly that extends from Golden Hill to a broad zone south of St George.

### Background

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

The historic underground mine workings have been modelled in 3D and this, coupled with historic mine reports, shows that four main ore shoots were mined around the Sunderland anticline (Figure 1). Shoot 1 was mined to Level 4, Shoot 2 to Level 6, Shoot 3 to Level 12 and Shoot 4 to Level 7, when the mine closed in 1942. Two new potential shoots, the A2 and Prima Donna, are located east and west of the Big River mine. The A2 shoot, Big River Mine and Prima Donna shoot combined cover a strike length of around 500m, which is overlaid by anomalous gold and arsenic soil geochemistry.

Diamond drilling commenced at the Big River project in 2011 when OceanaGold Limited (OGL) drilled 26 holes for a total of 5,032.6m. Siren commenced drilling in October 2020 and has drilled 16 holes for a total of 2,743m. Siren recommenced drilling in March 2022 with 6 holes for 1,767m completed to date.

Drilling to date has focused on Shoots 4 and A2. Previous drillhole results that intersected Shoot 4 include BR03 (**2m @ 12.1g/t Au**), BR04 (**4m @ 4.4g/t Au** from 128m and **6.6m @ 21.4g/t Au** from 136m), BR09 (**3m @ 18.5g/t Au** from 147m and **4m @ 7.8g/t Au** from 158m), BR12 (**3m @ 5.4g/t Au** from 170m and **3m @ 2.0g/t Au** from 205m), BR27 (**6m @ 5.1g/t Au**), BR34 (**5.9m @ 4.1g/t Au**) and BR35 (**6.3m @ 3.4g/t Au** from 374.8m).

The A2 shoot is located in a second anticline 200m to the west of the Sunderland anticline. Mapping and channel sampling identified outcropping quartz reef up to 1m thick surrounded by sulphide-rich sediments containing lenses of massive sulphide in the footwall. Channel sampling indicates that the quartz reef is relatively low grade, but the footwall mineralisation assayed up to 11g/t Au. Seven



## ASX ANNOUNCEMENT

---

shallow diamond holes drilled into the A2 Shoot tested 100m along strike to a depth of around 25-50m. Drillhole BR20 intersected **5.0m @ 4.2g/t Au** from **24m** below a stope. BR31, 50m along strike from BR20, intersected **3.4m @ 2.5g/t Au** from **41m**. BR22 - BR24 were drilled on a second structure 30m to the west. These holes intersected a 10m wide zone with lower grade gold mineralisation but with the same high arsenic and sulphur mineralisation. BRDDH023 has very high sulphur, averaging 10.9% over 8m, with a high of 36% over 1m. These results are encouraging and indicate a strongly mineralised system near surface.

Siren has estimated an Exploration Target of between 100koz and 125koz at a gold grade between 7-9g/t Au for Shoot 4, based on existing drillholes. With additional drilling, similar exploration targets could potentially be estimated on the other shoots. The Company considers Big River has upside potential of 250koz to 500koz.

### Recent Exploration

Siren recommenced drilling in March 2022 with 6 holes for 1,767m completed to date. Initial drilling has focussed on testing the A2 shoot at deeper levels. **BR37** intersected **5.2m @ 6.3g/t Au** from **213m** (Figure 2). This zone comprised of 2.3m of quartz and massive pyrite breccia that averaged 5g/t Au, 21% sulphur and 460ppm antimony, followed by 2.9m of disseminated acicular arsenopyrite mineralisation that averaged 7.6g/t Au.

BR39 drilled 50m below BR37 and intersected 10m @ 1.2g/t from 271m, including 3m @ 2.5g/t Au from 278m while BR40, drilled a further 50m down plunge, intersected a 16m wide zone of elevated arsenic from 271m with massive sulphide between 280 and 282m (Figure 3). Results for BR40 are awaited.

BR41 was drilled a further 50m to the west between BR37 and BR39 (Figure 1) and again intersected a 17m wide zone of mineralisation similar to BR40 with results awaited.

The results to date indicate that the A2 shoot is plunging around 55° to the NNE, similar to Shoots 1 to 4. The A2 shoot can now be traced from outcrop to 280m down plunge or 200m below surface. BR42 is now being drilled 50m NW of BR38.

Siren has budgeted 7,000m of diamond drilling for 2022, targeting all six shoots down to around 400m (Figure 1).

Mapping has confirmed that the Sunderland Anticline that hosts the Big River mine extends for 5kms south where it is cut off by younger granite intrusion (Figure 4). The main reef track that runs through the St George and Big River South mines is parallel and 250m to the west of the anticline hinge and appears to link into the Big River mine. These structures are prime target areas for Big River mine style mineralisation.

Soil geochemistry has now been completed for over 6kms from Big River North to around 2kms south of St George. The arsenic soil geochemistry shows large anomalies at Big River mine and a 3km long anomaly from Golden Hill to south of St George (Figure 4). The results clearly show that the arsenic anomaly continues strongly to the south until it is cut off by younger granite and extends into a broad zone south of St George into an area that has not been historically mined. This area lies 1.6kms south of the Big River mine that produced 136koz at an average grade of 34.1g/t Au and 4kms east of the historic Blackwater mine that produced 740koz at an average grade of 14.2g/t Au (Figure 4). Anomalous arsenic also extends for 1.5kms NE of Big River to the contact with overlying Eocene coal measures.

Gold soils have been sent to LabWest in Perth, where they are being analysed using the new UltraFine+ soil technique method developed by the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and LabWest. Ultrafine has low detection limits and can potentially detect gold in areas covered by glacial till. The gold results are lagging the arsenic, but results received to date largely mirror the arsenic results (Figure 5).



**ASX ANNOUNCEMENT**

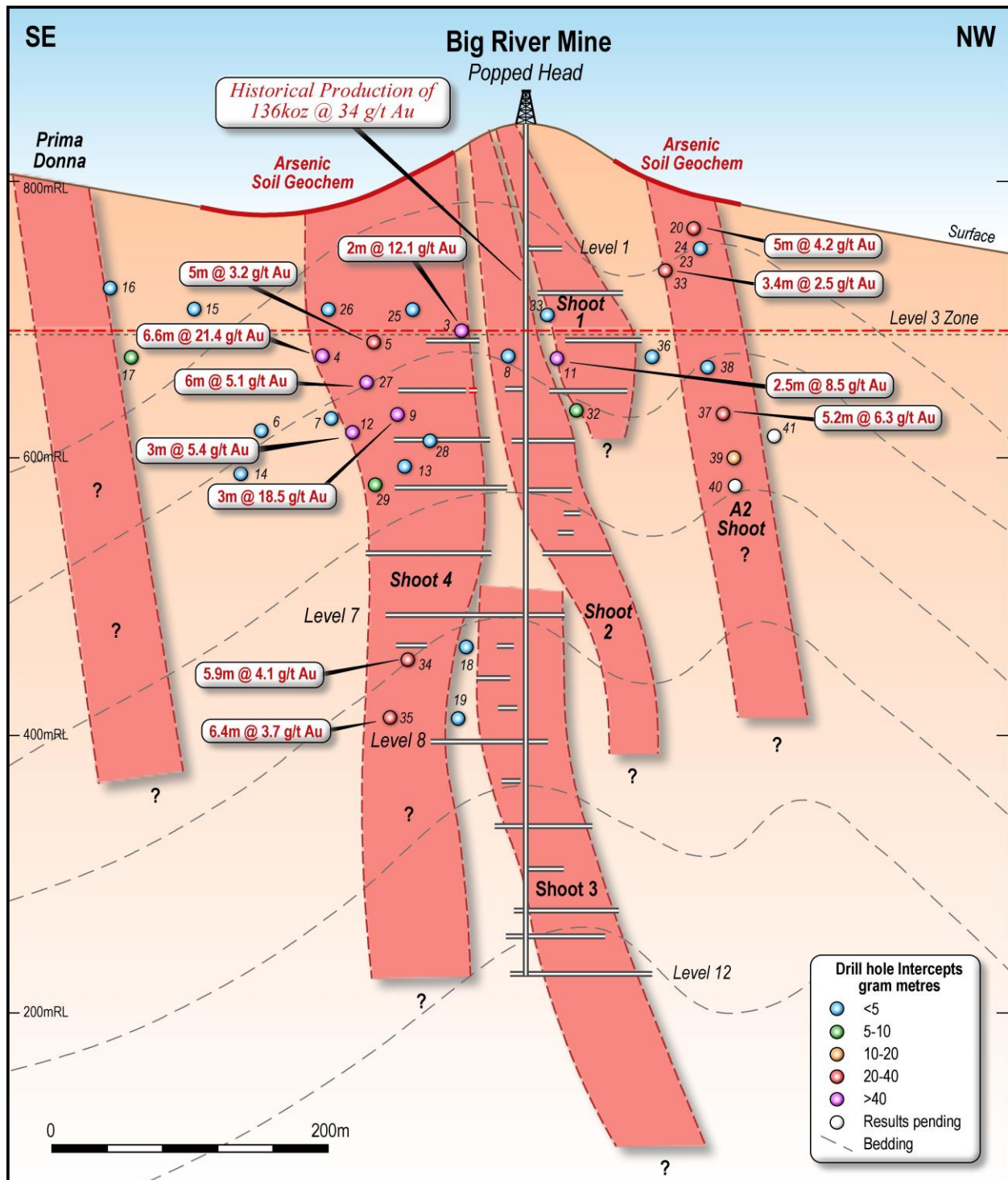


Figure 1. Big River schematic long section.



**ASX ANNOUNCEMENT**





**ASX ANNOUNCEMENT**

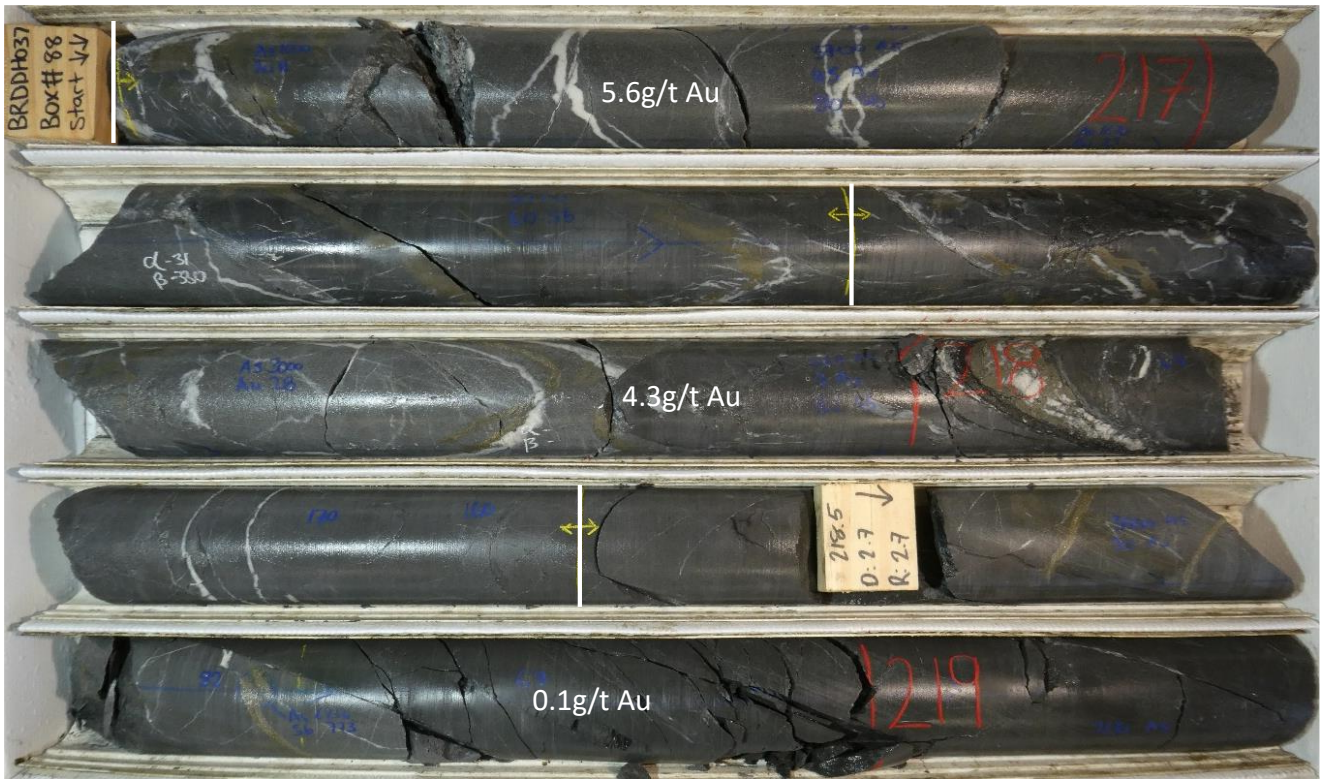


Figure 2. A2 shoot intersected in BR37. The higher grades are associated with acicular arsenopyrite.

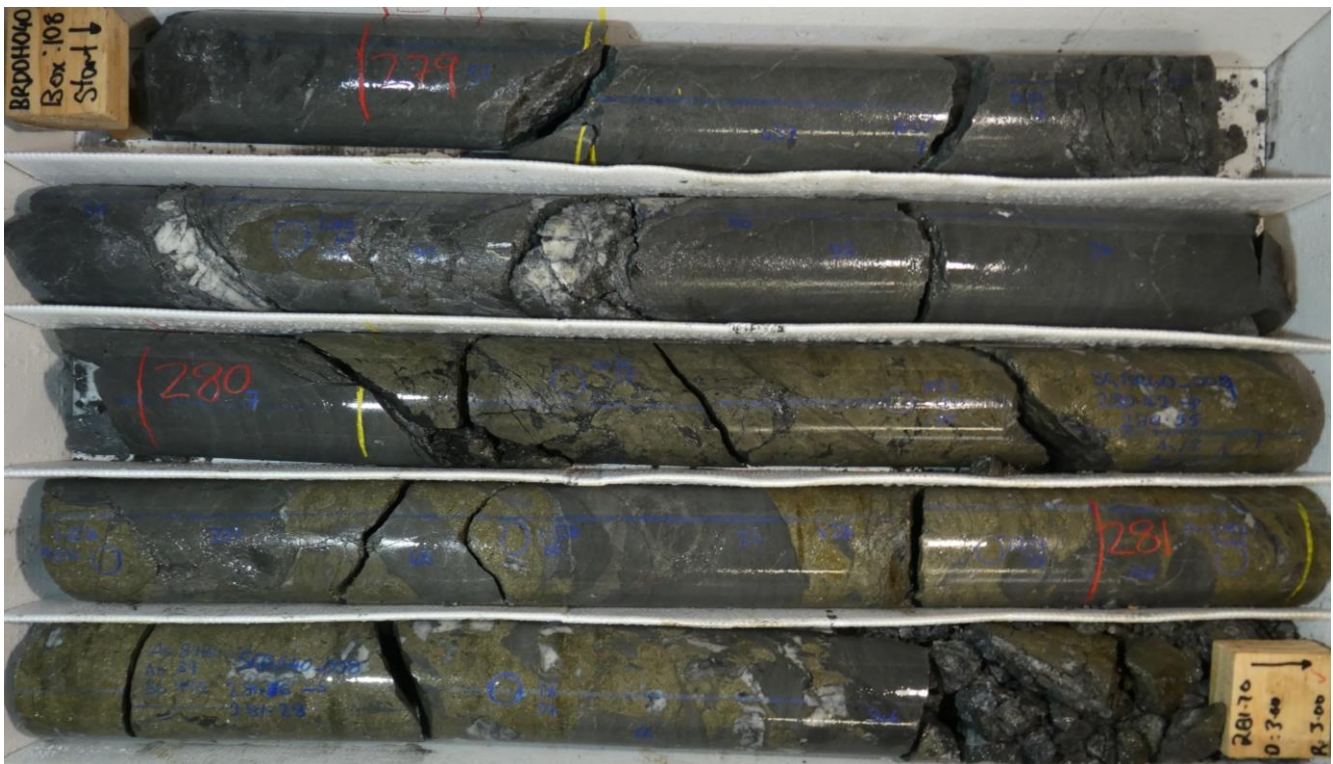


Figure 3. A2 Shoot intersected in BR40 between 279m and 282m; results awaited.



**Table 1. Big River significant drillhole intercepts**

Hole No.	Hole ID	Pad No	From (m)	To (m)	Interval (m)	Au (g/t)	Grammetres
1	<b>BRDDH020</b>	<b>8</b>	<b>24.0</b>	<b>29.0</b>	<b>5.0</b>	<b>4.2</b>	<b>21.0</b>
2	BRDDH021	8				nsa	
3	BRDDH022	8	31.0	39.5	8.5	0.6	5.1
	incl		31.0	31.7	0.7	1.4	
	incl		38.0	39.5	1.5	2.0	
4	BRDDH023	8	26.0	37.4	11.4	0.8	8.9
	incl		26.7	27.5	0.8	2.7	
	incl		33.6	34.9	1.3	1.6	
5	BRDDH024	8	38.2	39.4	1.2	1.0	1.2
6	BRDDH025	4	71.0	73.0	2.0	2.3	4.6
			88.0	89.0	1.0	1.7	
7	BRDDH026	4	107.7	109.1	1.4	2.1	2.9
			112.1	113.0	0.9	2.8	
8	<b>BRDDH027</b>	<b>4</b>	<b>142.2</b>	<b>148.2</b>	<b>6.0</b>	<b>5.1</b>	<b>30.6</b>
			153.8	155.0	1.2	3.1	
9	BRDDH028	4				nsa	0.0
10	BRDDH029	4	233.8	234.6	0.8	1.6	1.3
			240.4	241.0	0.6	2.8	
			251.0	251.1	0.1	5.0	
11	BRDDH030	8				nsa	0.0
12	BRDDH031	8	25.9	36.5	10.6	1.3	13.8
			<b>41.5</b>	<b>44.9</b>	<b>3.4</b>	<b>2.5</b>	8.5
13	BRDDH032	2	189.5	192.0	2.5	1.3	3.2
14	BRDDH033	2	123.0	124.0	1.0	2.8	2.8
14	<b>BRDDH034</b>	5	330.5	332.5	2.0	1.2	2.4
		5	<b>361.7</b>	<b>367.6</b>	<b>5.9</b>	<b>4.1</b>	<b>24.1</b>
15	<b>BRDDH035</b>	<b>5</b>	<b>374.8</b>	<b>381.2</b>	<b>6.4</b>	<b>3.7</b>	<b>23.7</b>
16	BRDDH036	2	204.9	205.4	0.5	1.3	0.7
17	<b>BRDDH037</b>	<b>2</b>	<b>213.2</b>	<b>218.4</b>	<b>5.2</b>	<b>6.3</b>	<b>32.7</b>
18	BRDDH038	2	183.0	184.0	1.0	2.3	2.3
19	BRDDH039	2	271.0	281.0	10.0	1.2	12.0
	incl		278.0	281.0	3.0	2.5	

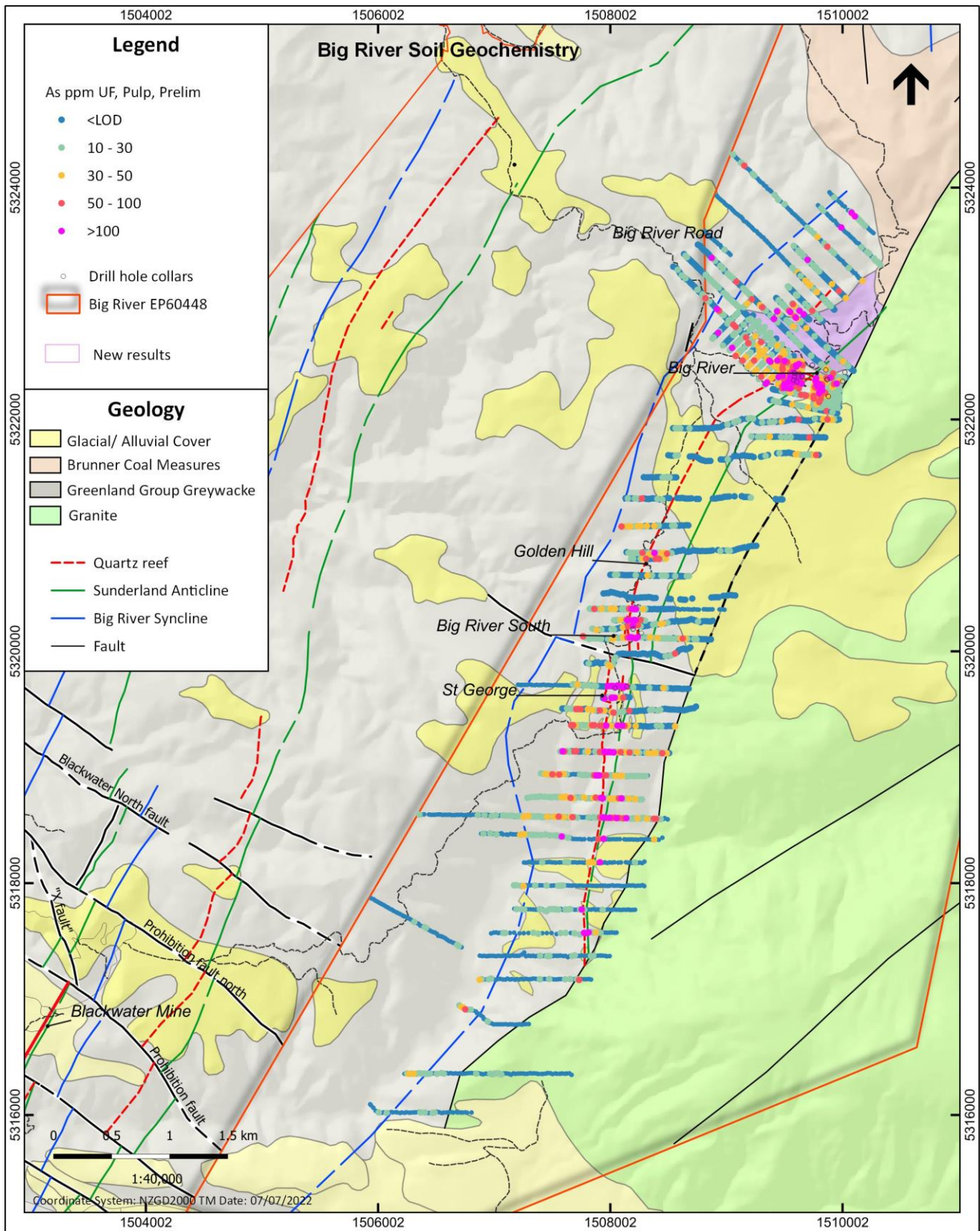


Figure 4. Arsenic soil geochemistry.

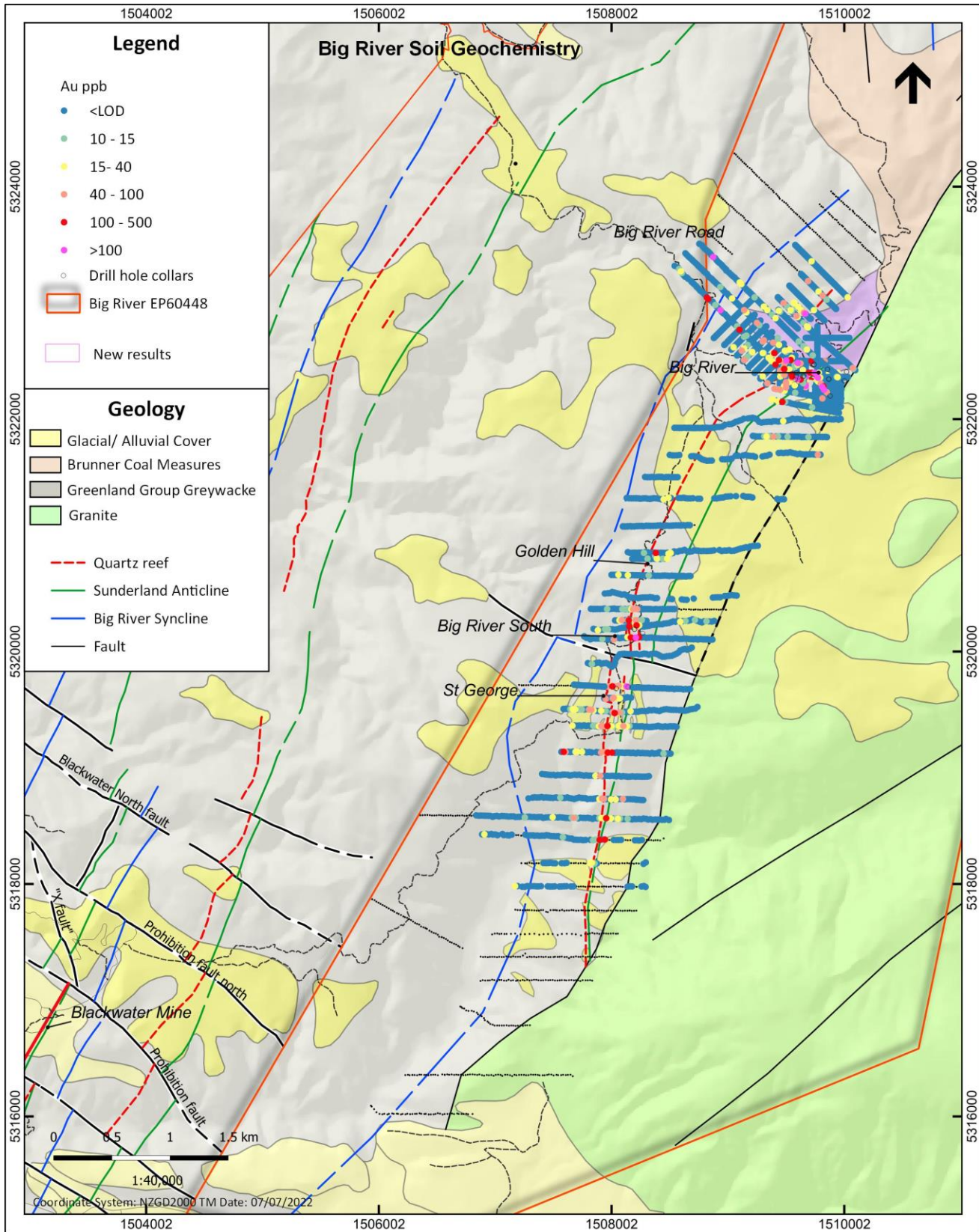


Figure 5. Gold soil geochemistry.



**Table 2. Big River drilling stats.**

Hole Number	Hole ID	Pad	Easting	Northing	Dip Azimuth	Total Depth
1	BRDDH020	8	1509582	5322341	-60/290	50.5
2	BRDDH021	8	1509607	5322325	-60/280	122.5
3	BRDDH022	8	1509588	5322370	-60/275	68.3
4	BRDDH023	8	1509623	5322370	-60/275	82.5
5	BRDDH024	8	1509653	5322371	-60/275	113.2
6	BRDDH025	4	1509869	5322345	-55/270	148.5
7	BRDDH026	4	1509869	5322345	-45/225	135.1
8	BRDDH027	4	1509869	5322345	-69/235	163.0
9	BRDDH028	4	1509869	5322345	-82/285	150.0
<b>2020 Total</b>						<b>883.6</b>
10	BRDDH029	4	1509869	5322345	-90/285	281.2
11	BRDDH030	8	1509653	5322371	-60/340	83.0
12	BRDDH031	8	1509653	5322371	-60/160	89.4
13	BRDDH032	2	1509743	5322469	-76/135	257.5
14	BRDDH033	2	1509743	5322469	-55/160	146.3
15	BRDDH034	5	1510022	5322407	-68/254	407.4
16	BRDDH035	5	1510022	5322407	-60/254	444.2
<b>2021 Total</b>						<b>1,859.2</b>
17	BRDDH036	2	1509743	5322469	-53/235	230.5
18	BRDDH037	2	1509743	5322469	-60/270	302.5
19	BRDDH038	2	1509743	5322469	-50/255	240.0
20	BRDDH039	2	1509743	5322469	-72/280	338.0
21	BRDDH040	2	1509743	5322469	-77/300	314.4
22	BRDDH041	2	1509743	5322469	-65/275	15.0
22	BRDDH041a	2	1509743	5322469	-65/275	326.6
<b>2022 Total</b>						<b>1,767.5</b>
<b>Project Total</b>						<b>4,514.8</b>

## ASX ANNOUNCEMENT

---

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

**Brian Rodan** – Managing Director  
Phone: +61 (8) 6458 4200

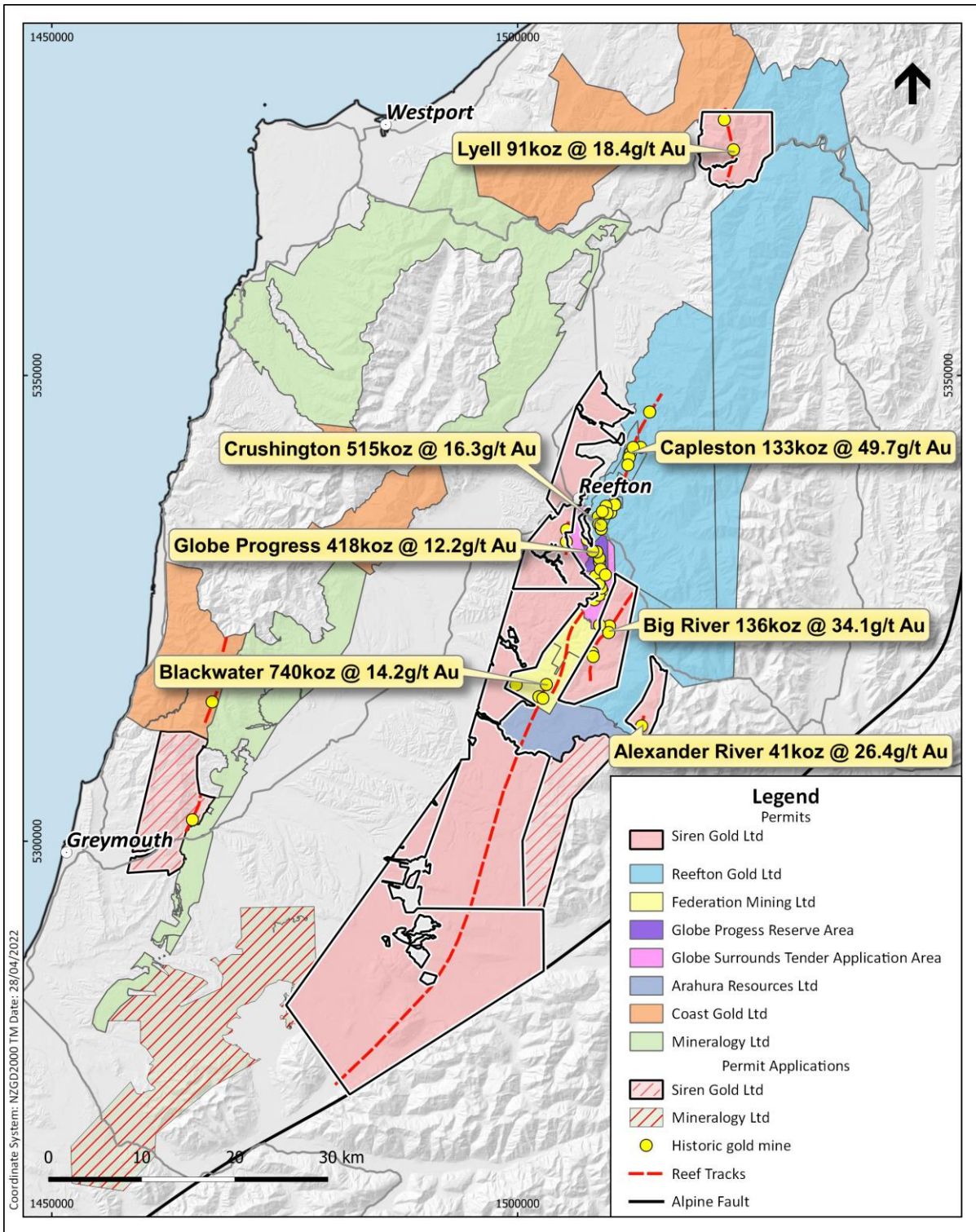
**Paul Angus** – Technical Director  
Phone: +64 274 666 526

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

### Competent Person Statement

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

Annexure A



# 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
<p><i>Sampling techniques</i></p>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Soil samples were collected with a spade or auger. The C-zone was targeted with around 300gms collected. Samples were stored in waxed paper bags.</li> <li>• Ultrafine soil samples are collected by scraping off the A soil horizon and taking a 500gm sample of B-horizon. These samples are bagged in a paper bag and dried at 1000c for 12 hrs. The samples are then sent to LabWest in Perth for Ultrafine analysis. LabWest has developed the UltraFine+™ analysis process in conjunction with CSIRO since 2017. Analysis of the reactive 2-micron clay fraction, with microwave digestion and using the latest low detection level ICPMS technology. Ultrafine includes gold and 48 other elements.</li> <li>• Outcrop channel samples were generally collected at 1m intervals across the structure to get a true thickness. Samples were collected with a geological hammer and stored in calico bags.</li> <li>• Diamond core (DC) was used to obtain samples for geological logging and sampling.</li> <li>• DC core samples were split in half using a core saw at 1m intervals unless determined by lithology i.e. Quartz vein contacts.</li> <li>• Channel samples were taken on 1m sample lengths with 1-2 kg sample size using a geological hammer.</li> <li>• Core and channel samples were pulverised to &gt;95% passing 75µm to produce a 30g charge for fire assay for Au.</li> <li>• Multi-element is now undertaken by pXRF on the returned Au pulps from SGSAll core is rolled into plastic splits from the triple tube spilt at the drill rig and then placed into the core trays. This provides a far better quality of core with preservation of structures and broken core with less handling of the core.</li> </ul>

Criteria	JORC Code Explanation	Commentary
<i>Drilling techniques</i>	<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>	<ul style="list-style-type: none"> <li>• Diamond drilling with DC diameters included PQ (96mm), HQ (63mm) and NQ (47.6mm) and are tripled tubed.</li> <li>• Drilling is helicopter supported.</li> <li>• The HQ and PQ core are orientated using Reflex orientation gear</li> </ul>
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Full run and geotechnical logging with total core recoveries, RQD and core loss is recorded for each drill run.</li> <li>• Core occurs around old workings where there are voids.</li> <li>• Core recoveries for the program so far around 91 to 93%. Highly shattered rock around puggy fault gouge zones are the areas where core loss can occur. No noticeable bias has been observed thus far in the mineralisation.</li> </ul>
<i>Logging</i>	<ul style="list-style-type: none"> <li>• <i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All DC are logged for lithology, weathering, bedding, structure, alteration, mineralisation, jointing, colour and grain size using a standard set of inhouse logging codes and template that is very similar to previous logging by OceanaGold Limited (OGL) exploration programs. The logging method is quantitative.</li> <li>• All core trays were photographed prior to core being sampled.</li> <li>• Channel samples were logged on the same lithological categories as DC.</li> </ul>
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality, and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to</i></li> </ul>	<ul style="list-style-type: none"> <li>• DC sample intervals were marked on the core, which was sawn in half lengthways with a diamond cutting saw. The resulting core was taken for the laboratory sample and remaining core was archived in the core box.</li> <li>• Channel samples are chipped along 1m length into a sample bag.</li> <li>• Field duplicates as quarter core, laboratory duplicates and laboratory repeats were collected and assayed.</li> <li>• The field duplicates are DC quarter cuts taken every 25 samples.</li> </ul>

Criteria	JORC Code Explanation	Commentary
	<p><i>maximise representativity of samples.</i></p> <ul style="list-style-type: none"> <li>• <i>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The DC (2-3 kg) and channel (1-2kg) sample sizes are considered appropriate to the grain and particle size for representative sampling.</li> <li>• Field duplicates of the channel samples have been taken in some mineralised sections.</li> <li>• Sample preparation of DC and Channel samples by SGS Laboratories in Westport comprises; drying, crushing, splitting (if required) and pulverising to obtain analytical sample of 250g with &gt;95% passing 75 µm where Au is assayed by 30g fire assay by SGS Waihi. 48 element suite completed by SGS Australia is undertaken using ICP-MS up to drillholes AX23 and BR24. For later drillholes and channel samples the pulps returned from the lab were analysed by Siren with a portable XRF (pXRF).</li> </ul>
<p><i>Quality of assay data and laboratory tests</i></p>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></li> <li>• <i>Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Soil samples were sent to SGS in Westport to be analysed by low detection gold</li> <li>• DC and Channel samples are sent to SGS Westport and Waihi, New Zealand. SGS laboratories carry a full QAQC program and are ISO 19011 certified.</li> <li>• Multielement are sent to SGS Townsville, Australia for IMS40Q which is ICP-MS analysis after DIG40Q four acid digest. Holes drilled after BR24 were analysed by pXRF.</li> <li>• For each DC drillhole the sampling includes: <ul style="list-style-type: none"> <li>• At least two Au certified Rocklab standards</li> <li>• Two blanks. At least one field duplicate and laboratory duplicate per drill holes or taken every 25 samples.</li> <li>• Lab repeats are recorded.</li> </ul> </li> <li>• Standards, duplicates and blanks are checked after receiving the results. The QAQC results so far has been acceptable The QAQC populations for the exploration program to date is not large enough to measure accuracy and precision of the sampling program.</li> <li>• RRL has a full working pXRF protocol and QAQC procedures for operation of the pXRF for analysis of pulps and samples. PXRF standards and blanks for used as well duplicate data being taken every 25 samples.</li> </ul>

Criteria	JORC Code Explanation	Commentary
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>All laboratory assay results were received by RRL stored in both CSV and laboratory signed PDF lab certificates.</li> <li>Data is stored in excel, GIS, Dropbox and Leapfrog. The data storage system is basic but robust.</li> <li>A logging and QAQC standard operating procedure are being constructed.</li> <li>No adjustments have occurred to the assay data.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Handheld GPS units (Garmin 62s and 64) were used for placing and picking up the drillhole collars as well as channel and rock chip sampling in New Zealand Transverse Mercator 2000 (NZTM).</li> <li>GPS accuracy was recorded.</li> <li>Reconciliation in GIS using NZ 50 topography map series and LINZ aerial (0.3m) series were also undertaken.</li> <li>LiDAR has been flown but the data and DTM received.</li> <li>All drillhole collars will be picked by a surveyor at the end of the program.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Channel sampling was taken on 1m intervals where clean exposure was found.</li> <li>Drilling is occurring on 100 to 150m centres with drilling directions and distances being variable because of the terrain and orientation of the target reef.</li> <li>Multiple drill holes are drilled off each drill pad. A moderate dipping hole is drilled first then followed by a steeper drill hole to target down dip. The drill spacing down dip is around 50m.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <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</li> </ul>	<ul style="list-style-type: none"> <li>Channel samples were taken across the mineralisation to sample as true thickness.</li> <li>Drilling design is planned to intercept the mineralisation at high angles but steeper angled drilling with drilling multiple holes from a single heli-drill pad does intercept the mineralisation at a lower angle. Oriented core and intact DC around mineralisation assists in understanding contacts, thickness and mineralisation orientation.</li> </ul>

Criteria	JORC Code Explanation	Commentary
	<i>material.</i>	
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>DC and Channel samples taken for the purposes of laboratory analysis were securely packaged on site and transported to the relevant laboratories by Reefton Resources Limited staff.</li> <li>Samples were stored in a locked core shed until despatch.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No review of sampling techniques and data of recent sampling has been undertaken yet.</li> </ul>

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>The Companies tenements both granted (7), and applications (2) are shown in the map in Annexure A. All RRL tenements or applications are 100% owned by RRL. All the tenements are largely within the Department of Conservation (DoC) estate. Minimum Impact Activity (MIA) Access Agreements have been issued by DoC for Alexander River, Big River, Lyell and Reefton South. DoC Access Agreements (AA) that allow drilling, have been granted for Alexander River (47 drill pads), Big River (40 drill pads) and Golden Point (22 pads). Variations to the AA's are require for additional drill sites. Refer also to diagram enclosed in Annexure A. RRL has lodged an AA for Lyell.</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Please refer to Table 1 of the Siren Gold Ltd IPO Prospectus.</li> </ul>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>Gold mineralisation in the Reefton Goldfield is structurally controlled; the formation of the different deposit types is interpreted to be due to focussing of the same hydrothermal fluid into different structural settings during a single gold mineralisation event, however, some of the deposits (e.g. Globe-Progress, Big River) appear to have been re-worked, with gold and sulphide mineral remobilisation having occurred during a later phase of brittle deformation.</li> <li>In general, two end members of</li> </ul>



Criteria	JORC Code Explanation	Commentary
		<p>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.</p> <ul style="list-style-type: none"> <li>• Three main structural deposit types appear to occur in the Reefion Goldfield. The Globe-Progress deposit occupies a distinct structural setting, where there is a clear break in the continuity and tightness of early folding. This break defines the east-west striking Globe-Progress shear zone. The fault splays off the Oriental-General Gordon shear zone. The geometry of the fault structure has allowed dilation and quartz vein deposition more or less contemporaneously with shearing, hydrothermal alteration, and low-grade mineralisation of the wall rocks. The broad disseminated mineralisation that now surrounds the Globe-Progress ore body is thought to have been formed by later movement on fault planes, in the presence of fluids, which led to some mobilisation and recrystallisation of metals and formed the halo of mineralised country rock. The Big River deposit shows similar paragenesis to Globe-Progress, except for the fact that the disseminated sulphide halo is not as extensive.</li> <li>• The second structural deposit type hosts most gold deposits i.e., Big River South, Scotia, Gallant and Crushington, however, these are typically small, narrow, steeply plunging and consequently generally sub-economic. These deposits have 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.</li> <li>• The third deposit type occurs as steeply dipping transgressive dilatant structures, which are typically northeast trending</li> </ul>

Criteria	JORC Code Explanation	Commentary
		<p>(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.</p>
<p><i>Drillhole Information</i></p>	<ul style="list-style-type: none"> <li>• <i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:</i> <ul style="list-style-type: none"> <li>○ <i>easting and northing of the drillhole collar</i></li> <li>○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar</i></li> <li>○ <i>dip and azimuth of the hole</i></li> <li>○ <i>down hole length and interception depth</i></li> <li>○ <i>hole length.</i></li> </ul> </li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• See Tables 1 to 2 in this announcement.</li> </ul>
<p><i>Data aggregation methods</i></p>	<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</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drilling results presented have used a weighted average when presenting drilling intercepts, hence, any potential sample length bias has been accounted for.</li> <li>• When reporting drillhole intercepts generally a 1g/t cut-off is used.</li> </ul>

Criteria	JORC Code Explanation	Commentary
	<p><i>aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></p> <ul style="list-style-type: none"> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	
<p><i>Relationship between mineralisation widths and intercept lengths</i></p>	<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>The true drillhole intercept thickness has estimated from sectional interpretation of the mineralised zone.</li> </ul>
<p><i>Diagrams</i></p>	<ul style="list-style-type: none"> <li><i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.</i></li> </ul>	<ul style="list-style-type: none"> <li>See Figure 1 included in this announcement.</li> </ul>
<p><i>Balanced reporting</i></p>	<ul style="list-style-type: none"> <li><i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></li> </ul>	<ul style="list-style-type: none"> <li>See Table 1 and 2 in this announcement.</li> </ul>
<p><i>Other substantive exploration data</i></p>	<ul style="list-style-type: none"> <li><i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical</i></li> </ul>	<ul style="list-style-type: none"> <li>Not applicable</li> </ul>

Criteria	JORC Code Explanation	Commentary
	<p><i>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></p>	
<p><i>Further work</i></p>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Diamond drilling is currently being undertaken at Big River with one heli-support drilling rig. Drilling is planned to continue to the end of 2022 and beyond. 7,000m of diamond core is budgeted for Big River projects in 2022, with 10,000m at Alexander and 1,000m each for Golden Point and Lyell. Project to date 17,465.4m have been drilled at Alexander, 4,514.8m at Big River and 355m at Golden Point for a total of 22,335.2m. Drilling at Alexander will continue to target down dip extensions of the Loftus McKay, Bull and McVicar West shoots (Figure 5) and drilling recommenced at Big River in March.</li> </ul>