ASX Announcement 25 July 2024



Sams Creek and Reefton Exploration Update

Siren Gold Limited (ASX: **SNG**) (**Siren** or the **Company**) is pleased to provide an update on its **Sams Creek and Reefton Projects.**

Highlights



Sams Creek Gold Project

- Results received for the last two of four "scouting" holes drilled at the Anvil Zone.
 - SCDDH107 intersected 22m @ 1g/t Au with higher grade intervals of 2m @ 2.91g/t from 141m and 1.2m @ 8.3g/t from 161m on the hanging wall and footwall respectively.
 - SCDDH106 intersected a **35.4m thick dyke** which was extensively altered. A 4m section in the centre of the dyke returned **4m @ 1.32g/t Au** from 124m.
- An lonic Leach (IL) soil survey identified a number of targets both around and inside two large circular structures.
- The circular structure anomalies have been divided into five dyke and six porphyry targets.
- The dyke targets have an Au-As signature, and the porphyry targets have an Au-Cu-REE signature.
- The IL survey has now been extended beyond the boundaries of the circular structures so potential mineralisation can be fully evaluated. Results are expected in August.

Reefton Gold Antimony Project

- Four additional diamond holes were drilled in the Auld Creek's Bonanza East Shoot following the exceptional intersection in ACDDH011, which intersected an estimated true thickness of 3m @ 4.1g/t Au and 7% Sb.
- ACDDH015 and ACDDH016 were drilled 50m to the north and intersected true widths of 6m @ 5.3g/t Au, 14.9% Sb and 10m @ 7.2g/t Au, 0.3% Sb.
- ACDDH020 and ACDDH021 were drilled a further 100m to the north and intersected the footwall of the shoot, indicating that the Bonanza East Shoot plunges to the south parallel to the Fraternal Shoot.
- The Bonanza East maiden MRE and an update on the Fraternal MRE will be completed in August.

Siren Managing Director and CEO, Victor Rajasooriar commented:

"The drilling results from the recent scouting holes targeting the Anvil prospect have confirmed similar alternation to the Main Zone, which hosts the 824koz @ 2.8g/t Au Resource. Additionally, the knowledge base of the geology at Sams Creek is growing with the expanded Ionic Leach survey cross referenced with the Lidar topography analysis, with results expected in August. This should give us additional information to more accurately target the potential Gold-Copper porphyry targets and commence a diamond drilling program later this year at Sams Creek.

In addition, the drilling results from Auld Creek have returned some strong results and we look forward to updating the Resource in August."

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Projects

Sams Creek Project Reefton Project

Shares on Issue 206,607,497



Sams Creek Gold Project

Four diamond drillholes for a total of 526m were drilled at Anvil West from two sites on the Cobb Valley Road (Figure 1). These holes were drilled before the extended IL results were available and the two circular structures recognised. All four holes intersected the Sams Creek Dyke (SCD), which is around 20m thick and has been extensively altered with three stages of alteration similar to the Main Zone recognised. Results for SCDDH104 and SCDDH105 have been reported (*see ASX Announcement dated 2 July 2024*). Results have now been received for SCDDH106 and SCDDH107.

SCDDH106 was drilled to the west of SCDDH105 and intersected the SCD between 113.7m -149.1m (35.4m). The SCD is extensively altered but only had limited sulphide mineralisation. A 4m section in the centre of the dyke returned **4m @ 1.32g/t Au** from 124m but has a very low average arsenic (10ppm As) and low sulphur, indicating the gold is not associated with sulphides.

SCDDH107 was drilled a further 80m to the east of SCDDH105 and intersected the SCD between 140.2m and 162.2m (22m), with sulphide (arsenopyrite and pyrite) mineralisation predominantly on the hanging wall (Figures 2 & 3). The full SCD intersection assayed 22m @ 1g/t Au with higher grade intervals of **2m @ 2.91g/t** from 141m and **1.2m @ 8.3g/t** from 161m on the hanging wall and footwall respectively.

SCDDH104 intersected the SCD between 18m and 40m (22m) with sulphide (arsenopyrite, pyrite ± sphalerite) and gold mineralisation, predominantly on the hanging wall and footwall contacts. The full SCD intersection assayed 22m @ 0.54g/t Au with higher grade intervals of 4m @ 1.0g/t from 20m and 3m @ 1.9g/t from 34m on the hanging wall and footwall respectively.

SCDDH105 was drilled 150m to the NE and down dip of SCDDH104. SCDDH105 and intersected the SCD between 115.8m and 132.5m (16.7m), with sulphide (arsenopyrite and pyrite) and gold mineralisation predominantly on the hanging wall contact. The full SCD intersection assayed 16.7m @ 0.65g/t Au, with higher grade intervals of 3m @ 1.6g/t from 117m on the hanging wall.

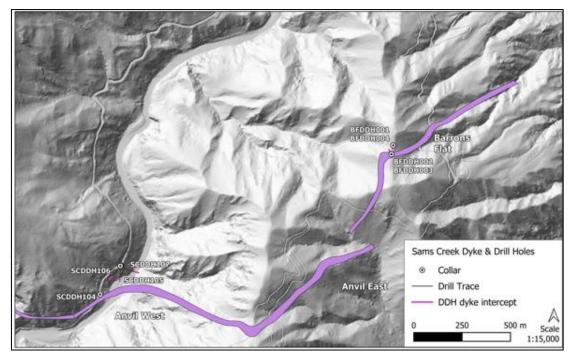


Figure 1. Anvil West with recent diamond drill holes. Pink on drillhole trace represents SCD intersection.

Drilling results to date indicate that the SCD in the Anvil West area is intensely altered and is remarkably similar to alteration and mineralisation seen in the Main Zone, supporting the IL survey results. The limited drilling to date suggests that the mineralisation is increasing in intensity to the east and that the targeted fold hinge may also lie further to the east.





Figure 2. SCDDH107 Hanging wall from 141.1m to 143.4m



Figure 3. SCDDH107 Footwall from 159.5m to 161.9m

The Ionic Leach (IL) soil geochemistry survey has been extended (Stage 4) to cover the Main and Anvil Zone circular structures with an additional 411 samples collected (Figure 4). IL geochemistry is a proprietary partial leach soil assay technique available from ALS Geochemistry. The method has a deep sensing capability that can be used to identify buried or blind mineral systems that host metal deposits, using their fingerprints at surface to complement other techniques (ie. geophysics), allowing better drillhole positioning.



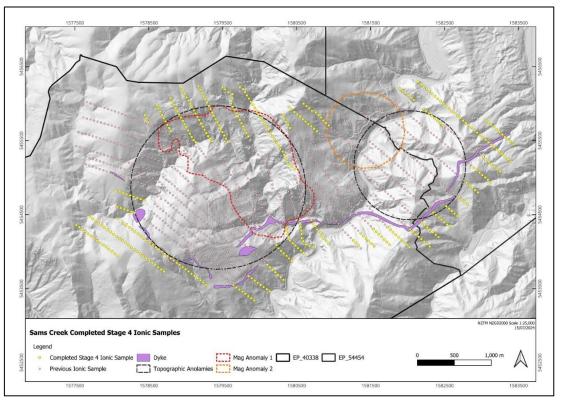


Figure 4. Ionic Leach soil sample locations with new Stage 4 samples shown in yellow.

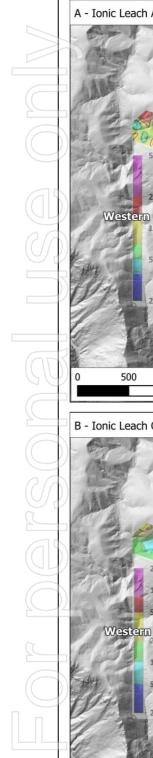
The recent results from the Stage 3 survey and LiDAR interpretation (*see ASX Announcement dated 2 July 2024*) identified two large circular structures at the Main and Anvil Zones associated with corresponding multi metal IL anomalies, including gold, copper, arsenic and REE's.

The Main Zone circular structure is only partially covered by the IL survey. The gold map (Figure 5A) shows a very strong anomaly in the SE segment associated with the Main Zone resource of 824koz @ 2.8g/t Au (*see ASX Announcement dated 21 August 2023*) and the remainder of the outcropping SCD where sampled. The SE Traverse block has been displaced south by an historical landslide and originally linked the Main Zone and Doyles along the circular structure. The gold anomaly to the north of the Main Zone is not associated with any known mineralisation but does overlie the potential magnetic anomaly. Main Zone copper map is shown in Figure 5B. This largely mimics the gold but has a strongest anomaly to the north of the Main Zone centred on the magnetic anomaly.

The Main and Anvil Zone circular structure anomalies have been divided into SCD (D) and porphyry (P) targets in Figure 6 and existing drill holes shown in Figure 7. The SCD targets are close to the outcrop and generally have an **Au-As**-±REE signature. The porphyry targets are located on the northern rim or middle of the circular structures and generally have a **Au-Cu-REE** signature. The IL survey will be extended beyond the Main and Anvil Zone circular structures in order to fully assess the potential of the project.

The Stage 4 survey extends the sampling beyond the boundaries of the circular structures so potential mineralisation can be fully evaluated. The Stage 4 survey also extended the sampling around the Anvil Zone circular structure (Figure 4). Results are expected in August.





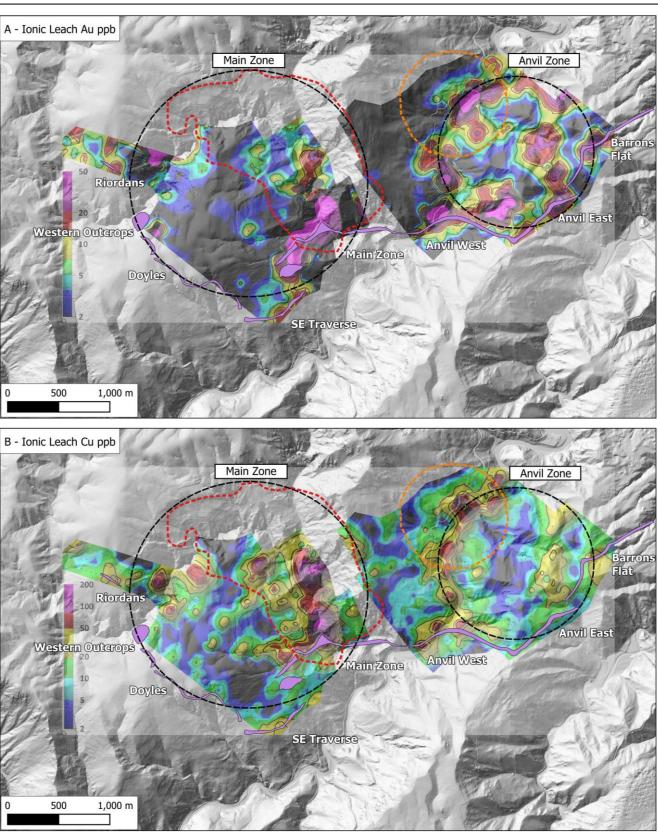


Figure 5. A) IL gold anomaly (ppb), Main Zone and Anvil circular structures and outline of interpreted magnetic intrusion (red dotted line) and non-magnetic circular structure (orange dotted line). B) IL copper anomaly (ppb).



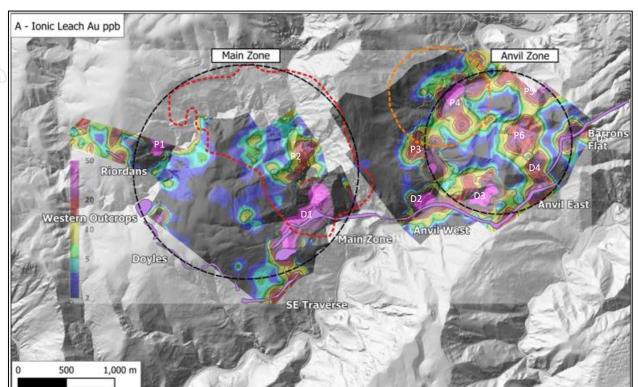
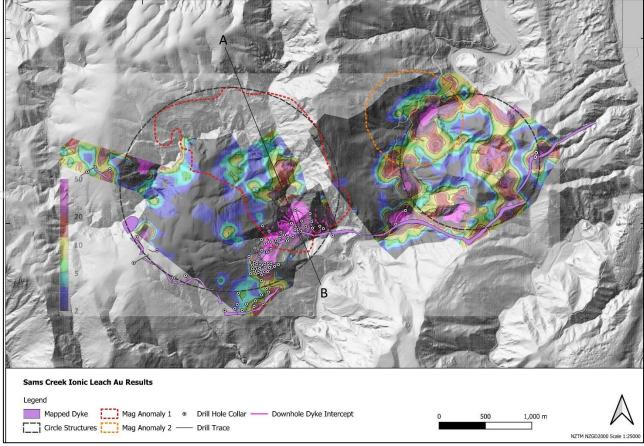


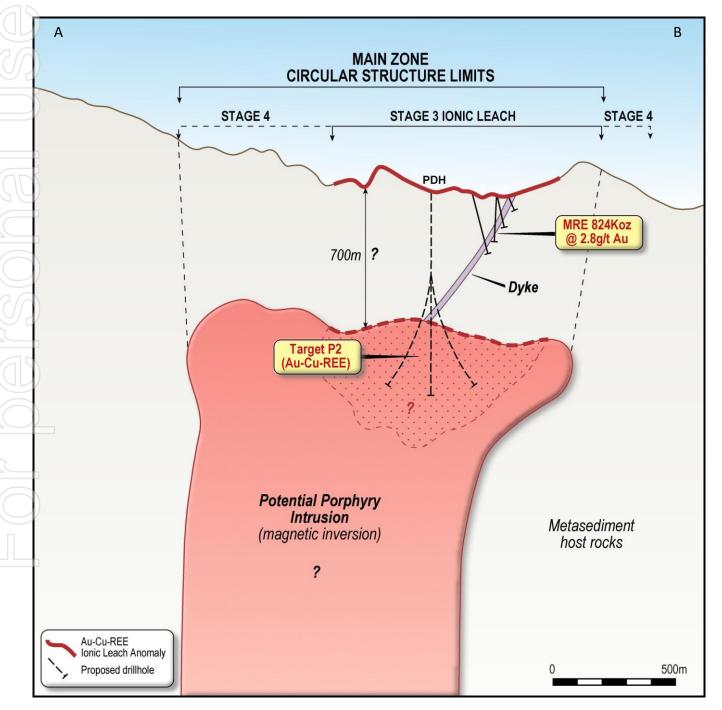
Figure 6. SCD targets (D) and porphyry targets (P).







A schematic cross section through the Main Zone circular structure is shown in Figure 8. The location of the potential buried intrusion is based on the magnetic inversion completed by Southern Geoscience which indicates a depth of approximately 700m to the top of the intrusion. The dimensions of the potential intrusion match the circular structure and the stage 3 IL anomalies. The P2 porphyry target (Figure 6) would be located at the top of the intrusion. The deepest hole drilled at Sams Creek to date; SCDDH091 (734m) was drilled from close to the dyke outcrop to the to the NW (Figure 9). This hole intersected the dyke between 329m -366m(37m) assaying 36m @ 1.24g/t Au including 13m @ 3.0g/t Au from 342m. The hole did not intersect an intrusion but the sediments in the last 30m (704m-734m) have fine sulphides with anomalous copper, averaging 507ppm. SCDDH091 is drilled towards the lower grade IL copper anomaly to the west of porphyry target P2 (Figure 9).





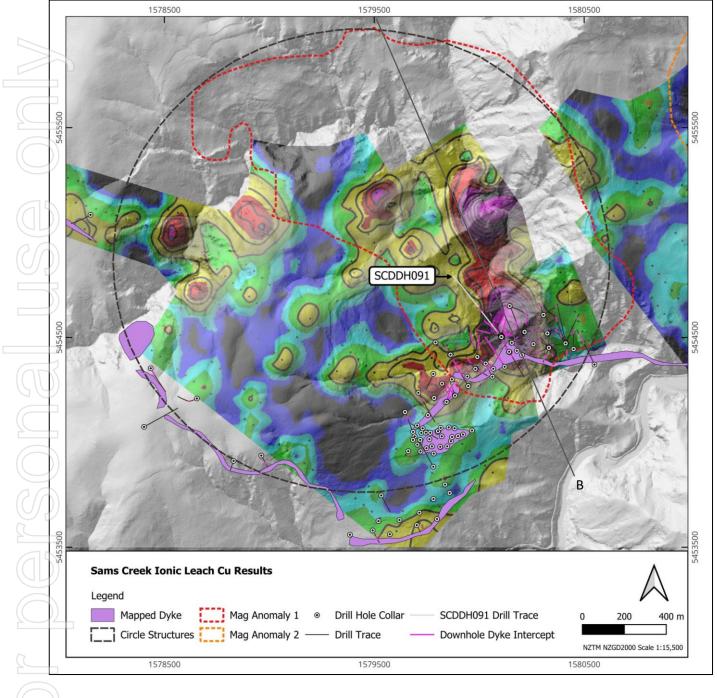


Figure 9. The Main Zone circular structure and IL copper anomalies with SCDDH091 highlighted in white.



Reefton Gold and Antimony Project

Four additional diamond holes were drilled in the Auld Creek's Bonanza East Shoot following the exceptional intersection in **ACDDH011** which intersected an estimated true thickness of **3m @ 4.1g/t Au and 7% Sb** (*see ASX Announcement dated 18 December 2023*) shown in Figure 10. **ACDDH015** and **ACDDH016** were drilled approximately 50m to the north and intersected true widths of **6m @ 5.3g/t Au, 14.9% Sb** and **10m @ 7.2g/t Au, 0.3% Sb** respectively (*see ASX Announcement dated 15 April and 7 May 2024*).

ACDDH020 and **ACDDH021** were drilled a further 100m to the north (Figure 10). These holes only intersected a thin reef track that did not contain any significant mineralisation. The initial interpretation was that the Bonanza East Shoot plunged to the north. It is now interpreted that the Bonanza East Shoot plunges to the south parallel to the Fraternal Shoot (Figure 11), and ACDDH020 and ACDDH021 were drilled into the footwall of the shoot. The higher-grade antimony mineralisation in both the Fraternal and Bonanza East Shoots lies in the footwall, with only gold mineralisation in the hangingwall.

The Bonanza East maiden MRE and an update on the Fraternal MRE will be completed in August.

The Bonanza reef was targeted by the historic explorers with a shaft and exploration drive. The reef intersected in the shaft was reported to be 2.4m thick and average 23g/t Au. Large blocks of stibnite can be found on the mullock heap, indicating that the Bonanza reef contains high-grade gold and antimony. The Inhangahua Times reported on 13 April 1911, that the Bonanza reef was traced for 242m on surface and was up to 1.5m thick with "gold plainly seen in the stone". A 300m long tunnel was to be driven from a valley to the west, to intersect the reef around 240m below the outcrop, but was never completed. In 1914, a drive beneath the Bonanza Shaft was revitalised and extended, returning grades up to 21.7 g/t Au.

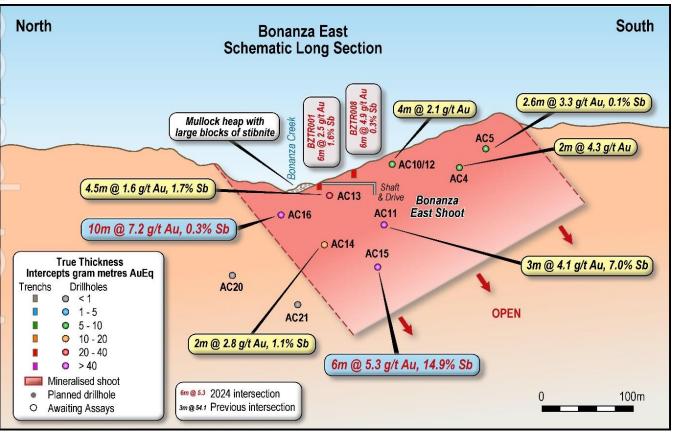


Figure 10. Bonanza East schematic long section showing estimated true width intersections.



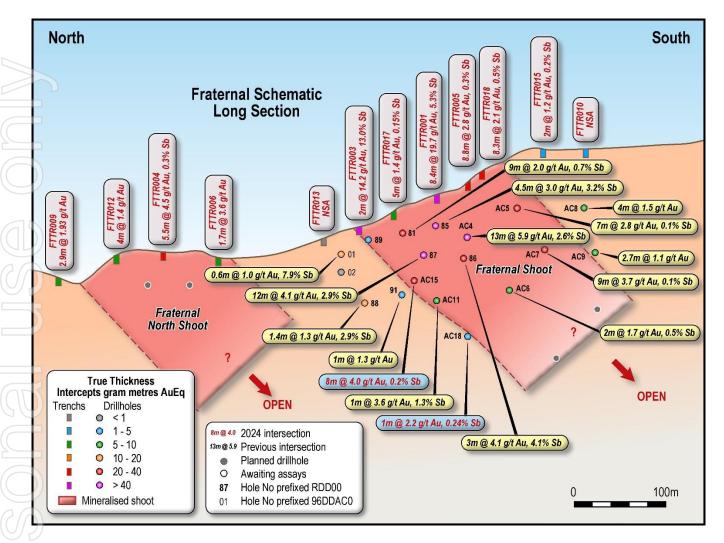


Figure 11. Fraternal schematic long section showing estimated true width intersections.

The location of the Bonanza Reef is not certain, but two trenches were excavated on anomalous soil geochemistry and intersected **3.4m @ 4.0g/t Au** (BZT002) and **2.2m @ 7.0g/t Au** (BZTR011). The mineralised fault was interpreted to dip steeply to the west similar to Fraternal Fault. Three diamond holes (ACDDH017, ACDDH018 and ACDDH019) were drilled below the trenches to test this interpretation (Figure 12), however no significant mineralisation was intersected, suggesting that the Bonanza reef may dip to the east parallel to the Bonanza East Fault and was missed by the drillholes.



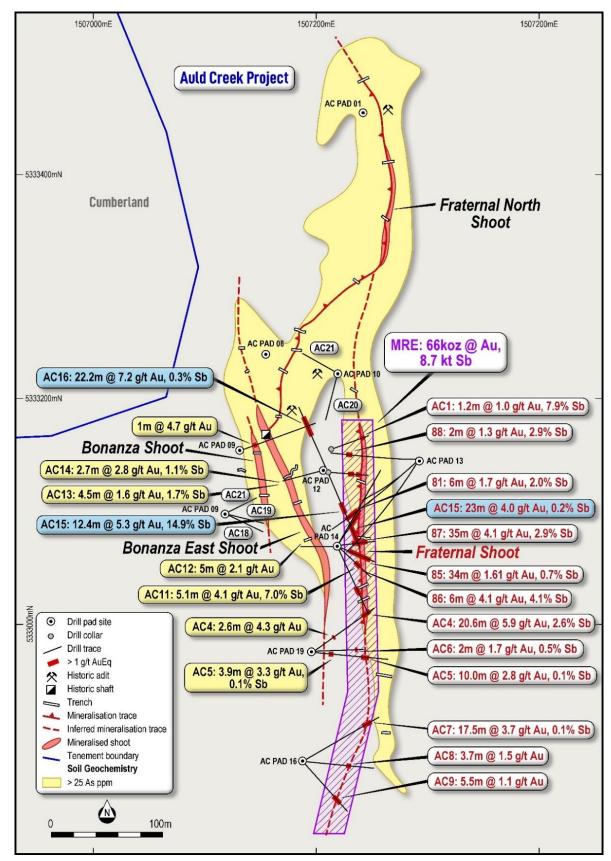


Figure 12. Plan view of Auld Creek downhole drill intersections.



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

Enquiries

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Competent Person Statement

The information in this announcement that relates to exploration results, and any 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.

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

•	JORC Code Explanation	Commentary
Sampling techniques	 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. 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. 	 Oceana Gold Corporation (OGL) & Macraes Mining Co Ltd (MMCL) diamond core (DC) was used to obtain samples for geological logging and sampling. OGL DC core samples were spilt in half using a core saw at 1m intervals unless determined by lithology i.e. Quartz vein contacts. OGL completed 5m composited grind samples through barren host rock and assayed only for Au. CRAE and MMCL channel and trench samples were based on 1m sample lengths with sample size and collection method is unknown. OGL DC samples were pulverised to >95% passing 75µm to produce a 50g charge for fire assay for Au. Siren Gold Limited (SGL) trench sampling was taken based on 1m samples unless determined by lithology or mineralisation. <i>In situ</i> rock samples collected by geology hammer with average sample size of 2 kg. Soil sampling was completed by hand auger or spade by CRAE. Macraes Mining Co Ltd (MMCL) used both hand auger & wacker drill for soil sampling. OGL collected soil samples by wacker drill collecting around 300-500g sample. SGL used a hand auger to collect 300-400g sample of B-C horizon.
Drilling techniques	• 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).	 Diamond drilling with DC diameters included PQ (96mm), HQ (63mm and NQ (47.6mm) and OGL & SGL drilling is triple tubed using CS1000 or LF70 heli-rigs. 2013 OGL drilling trailed open holing with a Strata-Pac collar for 50.6m in RDD0091. All drilling has been helicopter supported.
Drill sampl recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. 	 Full run and geotechnical logging with total core recoveries, RQD and core lost has be recorded by 1m for OGL 2007 & 2011 drilling. Core recoveries for OGL were good. Highly shattered rock around puggy fault gouge zones are the areas the core loss can occur. No noticeable losses were observed by OGL or by SGL.

•		JC	ORC Code Explanation	Commentary
	ogging	•	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged.	 All DC for OGL were logged for lithology, weathering, bedding, structure, alteration, mineralisation, jointing, colour and grain size using a standard set of inhouse logging codes and a template that was very similar to previous logging by OceanaGold (OGL) exploration programs. The logging method is quantitative. Logging entered into an acQuire database. OGL reported all core trays were photographed prior to core being sampled. MMCL logging was completed on paper which was entered into OGL acquire database. Hard copies of these logs are complete. SGL trench and DC logging is based on RRL core logging templates with similar quantitative data captured as OGL. Photos are taken of the trench and of each sample.
s te a	Sub- ampling echniques ind sample ireparation	•	If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representativity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled.	 DC sample intervals were marked on the core, which was cut in half length ways with a diamond saw. Half the core was taken for the laboratory sample and the remaining core was archived. DC sampling was based on 1m lengths as well as allowing for geology. Laboratory duplicates and laboratory repeats were collected and assayed. The DC (2-3kg) and channel (1-2kg) sample sizes are considered appropriate to the grain and particle size for representative sampling. OGL completed 5m composited grind samples in barren host rock. Any grind samples that returned anomalous mineralisation (equivalent to at least 1m at 0.5 g/t Au), then had the equivalent core intervals cut in half and submitted to the laboratory as one metre half core samples. MMCL sampling SOP for DC is not recorded but DC sample lengths varied from 2m in barren rock to 1m lengths in mineralised core. SGL trench sample length is based on 1m with field duplicates taken on 1:20 samples.
a a la	Quality of ssay data ind aboratory ests	•	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	 CRAE tested their soils for Au (ppb) As, Cu, Pb and Zn by Fire assay. CRAE tested their trench samples for Au, As & Sb. MMCL stream sediment samples were analysed for Au (>1 ppb Au detection limit), Ag, As, Ba, Bi, Cd, Co, Cu, Mo, Pb, Sb, and Zn. 1996 MMCL DC were tested for Au, As, Sb, Cu, Pb & Zn. Their trenching & soil samples were processed by ALS for a suite that included Au (>1 ppb Au), As, Bi, Ca, Cu, Fe, Mn, Mo, Pb, Sb, and Zn. OGL 2007 DC samples were set to Amdel Laboratories in Macraes Flat, NZ for Au, As & Sb.

•	JORC Code Explanation	Commentary
	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.	 2011 OGL DC and Channel samples are sent to SGS New Zealand. SGS laboratories carry a full QAQC program and are ISO 19011 certified where they were assayed by 50g fire assay. OGL DC & wacker submissions included at least 2 Au Rocklab standards, 1 blank, laboratory duplicates and lab repeats were recorded. 2011 Au results were completed at Reefton SGS mine lab while As and Sb were analysed at SGS Westport. Sb was analysed by XRF pressed powder pellet. Over limit method for Sb is unknown. Sample preparation of OGL's DC at SGS comprised of drying, crushing, splitting (if required) and pulverising to obtain analytical sample of 250g with ∋95% passing 75 µm. 2013 OGL included at least 1 certified standard and 2 blanks as well as at least 2 duplicates and were tested at SGS Reefton & Westport for Au, As & Sb. Sb was analysed by XRF pressed powder pellet. OGL reviewed their results based on the performance of their certified standards results. If both standard deviations of the actual value, the laboratory was requested to re-assay the job. SGL re-assayed RRD087 and SGL trenches have been assayed using SGS, New Zealand using FAM303 with 30g fire assay and AAS finish for Au. 42 multielement suite are then analysed by an Olympus Vanta pXRF on the <75µm pulps received from SGS. Sb is included which has a lower detection limit of 5ppm. SGL samples are submitted with blanks, duplicates, lab repeats and CRM for Au analysis as well as full QAQC program of blanks, standards, repeats & duplicates during pXRF multielement analysis of the galera. SGL samples are sent to SGS New Zealand for Au 30g fire assay analysis for ppb detection limits. The pulp is returned for a full analysis completed by Olympus Vanta pXRF with full QAQC. Preliminary soil sample analysis after the samples are sent to SGS. SQL SGL SGL Cand Channel samples are sent to SGS New Zealand. SGS laboratories carry a full QAQC program a
Verification of sampling	The verification of significant intersections by either independent or alternative company personnel.	Hard copies of the results for 1996 exploration by MMCL were entered into acQuire database by OGL.

•	JORC Code Explanation	Commentary
and assaying	 The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 All laboratory assay results were received by OGL were stored in an acQuire database and laboratory signed PDF lab certificates for 2013 have been submitted to NZPAM. SGL data is stored in excel, Dropbox and Leapfrog. The data storage system is basic but robust. All SGS assay results received by SGL are signed PDF lab certificates hard copies that are stored. The data and future work will be stored and managed on a commercial database with inbuilt validation protocols in the future. OGL completed RDD0081 and RDD0081A which are 3m a part. Sb results have also been adjusted for AuEq using (<i>AuEq = Au g/t + 2.36 × Sb %</i>). See Section 2 - Data aggregation methods
Location of data points	 Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	 Handheld GPS were used by OGL for placing and picking up the drillhole collars with series RDD00* while MMCL drillholes with the prefix of 96DDA* were picked up by Chris Coll, a registered surveyor. OGL & MMCL used New Zealand Map Grid (NZMG). SGL used handheld Garmin 64s to pick up trenches, check old pad sites and mapping. The data has translated into Transverse Mercator 2000 (NZTM). Downhole surveys were taken every 50m in 2007 and 30m in 2011 & 2103 OGL drill programs. SGL used a Precision downhole gyro for 15m surveys. 1996 drilling by Macraes Limited completed a downhole survey at the end of the hole. Relative level (RL) is calculated as above Sea Level SGL trenches are surveyed at the collar and azimuth and dip are taken at any changes along the trench length.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	 Drilling directions and distances were variable because of the terrain and orientation of the target reef system but were within 25 to 75m spacing at the Fraternal zone. Some pads had multiple drilling fanning from them.
Orientation of data in relation to	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the 	• Drilling design was planned to intercept the mineralisation at high angles but with drilling multiple holes from a single heli-drill pad into a very steep dipping reef zone mineralisation was intercepted at a lower angle when drilling down dip.

•	JORC Code Explanation	Commentary
geological structure	orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	
 Sample security	The measures taken to ensure sample security.	 OGL DC, soil and trench samples taken for the purposes of laboratory analysis were securely packaged on site and transported to the relevant laboratories by OGL. MMCL and CRAE did not record their sample security processes. SGL samples are stored in a locked core shed until despatch. Samples are transported to SGS, Westport by SGL.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	 No review of sampling techniques and data of recent sampling has been undertaken yet at the Auld Creek project. Big River and Alexander Projects have been independently reviewed by Measured Group. Successful field checks by SGL have been completed to find OGL, MMCL & CRAE drill pad and trenching locations.

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	 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. 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. 	 The Auld Creek Project (ACP) is within the permit EP 60-648 is a total of 4622 hectares in size and was granted to Reefton Resources Pty Limited (RRL) (a wholly owned subsidiary of Siren Gold Ltd (SNG)) for a period of 5 years, expiring in March 2026. The ACP is located 4km south of the township of Reefton on the West Coast of New Zealand. The boundary of the Prospect is delineated by the catchment of Auld Creek which drains northwest into the Inangahua River. The ACP is immediately north of the rehabilitated Globe Progress Mine, which produced 418koz @ 12.2 g/t Au historically. 1km to the northeast, across the Inangahua River, the Crushington Gold Mining District historically produced 515koz @ 16.3 g/t Au. ACP is situated within Department of Conservation administrated land.
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	 Auld Creek mineralisation was found in 1870 where an adit was developed, with further adit and shaft developed 1908 and 1914. In 1930's the Department of Scientific Industrial & Research (DSIR) conducted an IP survey over the area. In 1970-71, Lime and Marble explored primarily for Sb with a soil sample program over the old workings which delineated two zones of anomalous Sb.

Criteria	JORC Code Explanation	Commentary
		 CRAE explored the greater Reefton Goldfield including the Auld Creek project. In the 1980's they completed an extensive soil grid followed by collection of 118 rock chip, float, and trench samples. CRAE completed two ground magnetic surveys over the area attempting to locate a magnetic response from the shear zone and concluded that drilling was needed. CRAE focus and budget at the time moved into drilling the Globe Progress deposit just to the south. MMCL explored the project from 1994 to 2000 and undertook stream sediment sampling, infilled the central section of CRAE soil grid with several anomalous zones highlighted. MMCL completed wacker sampling in the southern portion where there is a thin glacial cover on the ridges. MMCL completed 109m of trenching to help generate drilling targets in the Bonanza and Fraternal zones. MMCL drilled 3 diamond holes with 96DDAC001 and 96DDAC002 targeting Fraternal and 96DDAC003 drilling into the Bonanza zone with a total of 324.6m OGL begun work in the project area in 2007 with a 3 diamond drillhole program (RDD0044, 045 & 59) to test the southern areas of the permit based on soil anomalies and structures extending from Globe Progress. From 2008 to 2010 OGL completed mapping and wacker soil sampling program into Auld Creek North extending CRAE's soil grid another 400m. In 2010 OGL completed another wacker program into the Fraternal & Bonanza zones overlapping previous work. OGL then completed 7 diamond holes in 2010-11 to test southern extents of Fraternal zone completing 801.7m into a mineralised, steep westerly dipping zone ranging from 1m to 15m thick. OGL completed a neiner dresource of 0.17 Mt @ 2.60 g/t Au for 14,300 oz Au using 5 drillholes at the Fraternal deposit. OGL completed a neional exploration drill hole (RDD0084) which was drilled into the southeast of the project area testing an Au+ As wacker anomaly. It returned a 1m @ 2.54 g/t Au which has not been
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.

Criteria	JORC Code Explanation	Commentary						
		 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-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 structurals 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 strik						
Drillhole Information	 A summary of all information material to the understanding of the 		ils for ACP:		DI	Total Dopth (m)	Din	Azimuth (true)
	exploration results including a	Hole ID	NZTM E	NZTM N	RL	Total Depth (m)	Dip 70	Azimuth (true)
	tabulation of the following	96DDAC001	1507211	5333156	528	70.1	-70	60
	information for all Material	96DDAC002	1507211	5333156	528	84.0	-75	70
	drillholes:	96DDAC003	1507129	5333155	532	170.5	-65	70

Criteria	JORC Code Explanation	Commentary						
	\circ easting and northing of the	RDD0044	1507830	5331978	612	60.6	-60	90
	drillhole collar	RDD0045	1507687	5332133	608	67.7	-60	90
	 elevation or RL (Reduced Level – elevation above sea level in 	RDD0059	1507705	5332243	568	100.3	-60	90
	metres) of the drillhole collar	RDD0081	1507216	5333070	559	75.9	-60	35
	\circ dip and azimuth of the hole	RDD0081A	1507216	5333070	559	151.5	-60	35
	 down hole length and interception depth 	RDD0084	1507782	5332707	577	148.1	-60	270
	 hole length. 	RDD0085	1507216	5333070	559	79.0	-60	110
	• If the exclusion of this information is	RDD0086	1507216	5333070	559	141.5	-60	150
	justified on the basis that the	RDD0087	1507216	5333070	559	132.5	-75	75
	information is not Material and this exclusion does not detract from the	RDD0088	1507290	5333147	539	159.5	-60	270
	understanding of the report, the	RDD0089	1507208	5333135	535	61.8	-52	90
	Competent Person should clearly	RDD0091	1507290	5333147	539	166.5	-52	230
	explain why this is the case.	RDD0092	1507290	5333147	539	161.1	-62	230
		RDD0093	1507290	5333147	539	185.5	-55	215
		ACDDH004	1507198	5332970	605	142.6	-60	045
		ACDDH005	1507198	5332970	605	147.4	-60	100
		ACDDH006	1507198	5332970	605	177.4	-75	090
		ACDDH007	1507185	5332877	604	154.3	-58	040
		ACDDH008	1507185	5332877	604	110.0	-58	100
		ACDDH009	1507185	5332877	604	181.5	-74	135
		ACDDH010	1507215	5333070	560	40.8	-60	270
		ACDDH011	1507215	5333070	560	161.0	-81	130
		ACDDH012	1507215	5333070	560	39.2	-65	270
		ACDDH013	1507208	5333135	533	52.0	-50	255
		ACDDH014	1507208	5333135	533	70.4	-90	255
		ACDDH015	1507208	5333135	533	136.0	-58	158
		ACDDH016	1507208	5333135	533	101.9	-55	330
		ACDDH017	1507085	5333091	582	060	-55	100
		ACDDH018	1507085	5333091	582	115	-50	270
		ACDDH019	1507085	5333091	582	105	-78	130
		ACDDH020	1507212	5333199	510	300	-72	100
		ACDDH021	1507212	5333199	510	195	-76	110
		TOTAL				4,320.4		
		Down hole	intercepts for	ACP:				

Criteria JORC Co	de Explanation	Commentary							
		Hole ID	Mineralised Zone	From	То	Interval (m)	True Width (m) ¹	Au g/t	Sb %
		96DDAC001	Fraternal	51.9	53.1	1.2	0.6	1.0	7.9
		RDD0081	Fraternal	45.0	51.0	6.0	3.0	1.7	2.0
			Fraternal	57.0	67.0	11.0	6.0	2.2	0.1
		RDD0081a	Fraternal	57.0	67.0	10.0	5.5	1.7	0.1
		RDD0085	Fraternal	30.0	64.0	34.0	20.5	1.6	0.7
		Incl		30.0	37.0	7.0	4.5	3.0	3.2
		Incl		43.0	51.0	8.0	5.2	2.6	0.2
		Incl		59.0	64.0	5.0	3.4	1.6	0.0
		RDD0087	Fraternal	63.0	98.0	35.0	12.0	4.1	2.9
		Incl		63.0	81.0	18.0	5.5	5.7	4.8
		RDD0088	Fraternal	125.0	127.0	2.0	1.4	1.3	2.9
		ACDDH004	Bonanza East	53.3	55.9	2.6	2.0	4.3	0.0
		ACDDH004	Fraternal	116.2	136.8	20.6	13.0	5.9	2.6
		Incl		116.2	120.8	4.6	3.0	10.7	3.9
		ACDDH005	Fraternal	59.4	77.3	17.9	12.0	2.3	0.1
		Incl		59.4	63.3	3.9	2.6	3.3	0.1
		Incl		67.3	77.3	10.0	6.7	2.8	0.1
		ACDDH006	Fraternal	147.5	156.1	8.6	4.0	1.3	0.2
		Incl		147.5	150.4	3.1	2.0	1.7	0.5
		ACDDH007	Fraternal	124.0	150.5	26.5	15.0	2.7	0.07
		Incl		133.0	150.5	17.5	9.0	3.7	0.1
		Incl		142.0	148.5	8.5	4.5	6.7	0.0
		Incl		142.0	148.5	6.5	3.7	8.5	0.0
		ACDDH008	Fraternal	72.1	76.3	4.2	4.0	1.5	0.0
		ACDDH009	Fraternal	118.7	124.2	5.5	2.7	1.1	0.0
		ACDDH011	Bonanza East	78.3	83.4	5.1	3.0	4.1	7.0
				79.3	82.4	3.1	2.0	6.5	11.4
			Fraternal	145.3	147.0	1.7	1.0	3.6	1.3
		ACDDH012	Bonanza East	18.7	23.7	5.0	4.0	2.1	0.0
		ACDDH013	Bonanza East	29.0	33.5	4.5	4.5	1.6	1.7
				29.0	30.4	1.4	1.4	4.0	5.1
		ACDDH014	Bonanza East	50.0	52.7	2.7	2.0	2.8	1.1
		ACDDH015	Bonanza East	69.6	82.0	12.4	6.0	5.3	14.9

JORC Code Explanation	Commentary							
		Fraternal	105.0 1	.28.0 2	23.0	8.0 4	.0 0.2	
	ACDDH016	Bonanza East	67.0 8	9.15 2	2.15	10.0 7	.3 0.3	
	dip may vary as mo	on a sectional interpre ore data becomes avail etails for ACP:	tation of the Fra able and the tru	aternal mineral e widths may	ised zone dip change.	ping steeply (-	-85°) to the we	est. This
	Trench	Zone	NZTM_E	NZTM_N	Elev	Length	Dip	Azimuth
	FTTR001	Fraternal	1507244	5333083	541	8	0	281
	FTTR002	Fraternal	1507237	5333081	543	1.5	0	189
	FTTR003	Fraternal	1507235	5333167	519	7	0	273
	FTTR004	Fraternal Nth	1507261	5333361	467	5	0	80
	FTTR005	Fraternal	1507234	5333031	573	9.8	0	60
	FTTR006	Fraternal	1507232	5333306	479	5.6	-40	110
	FTTR007	Fraternal Nth	1507177	5333243	577	7.7	-20	95
	FTTR008	Fraternal Nth	1507188	5333260	583	9.2	2	284
	FTTR009	Fraternal Nth	1507238	5333483	438	10	0	67
	FTTR010	Fraternal	1507260	5332902	607	5.7	0	274
	FTTR011	Fraternal	1507259	5332953	608	4	-5	109
	FTTR012	Fraternal	1507267	5333411	468	7	0	265
	FTTR013	Fraternal Nth	1507229	5333208	517	4.8	0	117
	FTTR014	Fraternal Nth	1507228	5333509	442	2.7	0	70
	FTTR015	Fraternal	1507250	5332956	621	11	5	108
	FTTR016	Fraternal	1507258	5332985	597	10.5	-2	277
	FTTR017	Fraternal	1507240	5333131	542	8	0	290
	FTTR018	Fraternal	1507245	5333028	563	12.5	3	239
	BZTR001	Bonanza East	1507179	5333140	538	17.5	0	226
	BZTR002	Bonanza	1507147	5333152	504	5.2	17	273
	BZTR003	Bonanza	1507165	5333226	520	6.6	-23	116
	BZTR004	Bonanza	1507136	5333225	545	1.9	0	249
	BZTR005	Bonanza	1507133	5333245	556	4	0	277
	BZTR006	Bonanza	1507161	5333183	513	3.4	-38	9:
	BZTR007	Bonanza	1507132	5333135	539	6	-5	278
	BZTR008	Bonanza East	1507188	5333260	583	9.2	5	275
	BZTR009	Bonanza	1507238	5333483	438	10	-19	67

Criteria	JORC Code Explanation	Commentary							
		BZTR010 BZTR011	Bonanza East Bonanza East	1507135 1507140	5333133 5333104	531 540	3.7 5	-11 27	108 272
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	 The core be taken estimate In the ca dilution (- Grades a Siren ha Mandala formula i 	is generally samples around geological of s are used based on alculation of significa <0.5g/t AuEq) was in are compiled using le us used the same go y Resources Ltd for s based on a gold p d metal recoveries of	s at 1 metre contacts. F a 0.5 g/t A ant interval ncluded and ength weigh old equivale the Coster price of US	e intervals, or reporting uEq cut-off s, no more d only inter ting. ent formula field mine \$1,900 per	but slightly g of drill ho f. No top cu e than two cepts great a ($AuEq = 2$ (NI 43-101 r ounce, an	Au g/t + 1. report date when y a set of the set of t	longer samp its weighted ied. internal con g/t AuEq rep .88 × <i>Sb</i> %) ed March 20	oles may average secutive oorted. used by 24). The
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported. 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'). 		s are reported as truned otherwise the res		-	•		ion is knowr	n or been
Diagrams	 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. 	 Plans, cr announc 	ross sections and lo ement.	ong section:	s of trench	and drillho	ole locatior	ns are incluc	led in the
Balanced reporting	Where comprehensive reporting of all Exploration Results is not		oration results inclu I from NZPAM explo	-	-	results from	n OGL and	SGL. OGL	data was

Criteria	JORC Code Explanation	Commentary
	practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	
Other substantive exploration data	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.	 No other exploration data reported.
Further work	 The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 Drilling Structural mapping Ongoing soil sampling to the south towards Globe Progress Ongoing Independent Lab re analysis of trench and drill core samples. Drill testing of all four interpreted shoots; Fraternal, Fraternal North, Bonanza and Bonanza Eas

Section 3 - Estimation and Reporting of Mineral Resource

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	Explanation	Commentary
Database integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used.	 The database is stored in Microsoft Excel which has been validated by SGL using software (Leapfrog Geo). Random spot checks were completed between database and hard copies. Prior to using the drilling data in the Mineral Resource Estimate (MRE), SGL undertook a database audit. SGL database checks included the following: Checking for duplicate drill hole names and duplicate coordinates in the collar table.

Criteria	Explanation	Commentary
D.		 Checking for missing drill holes in the collar, survey, assay, and geology tables based on drill hole names. Checking for survey inconsistencies including dips and azimuths 90°, azimuths >360°, and negative depth values. Checking for inconsistencies in the 'From' and 'To' fields of the assay and geology tables. The inconsistency checks included the identification of negative values, overlapping intervals, duplicate intervals, gaps and intervals where the 'From' value is greater than the 'To' value in assay and geology tables. Checking density data. The drill hole data was considered suitable for underpinning the MRE of Inferred global Au, Sb and AuEq resources as of 10 August 2023.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case.	• The Competent Person has visited the site. The site visits included reviewing and supervision SGL core and core logging that was available on site as well as the ground over the mineral resource area which, drill supervision, involved spot checks on collar survey details. QAQC, geology modelling, and observations of mineralisation in the field and core.
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology.	 Geological interpretation based on available field mapping data, structural mapping, trench & drillhole lithology and grade data. Modelling was completed using Leapfrog Geo modelling software. Wireframing and geological modelling was carried out by SGL. The Fraternal Shear is a steep west dipping hosting shear zone that appears structurally controlled with relation to a shearing, anticline hinge zone and local bedding. The controls on both Sb and Au plunge have yet to be determined. The variography suggests that the Sb grade plunges moderately to the north parallel to the interception of east dipping Bonanza East mineralised shear and the Fraternal. Au appears to plunge moderately to the south. A cut-off grade of 0.5g/t AuEq was used to guide the geological continuity of the interpreted shear mineralisation. The cut-off grade was selected based on the reef shoot contact correlating with mineralisation greater than 0.5 g/t AuEq. Within the mineralised wireframe, if an intercept fell below the nominal cut-off but continuity was supported by host lithologies, the intercept was retained for continuity purposes due to the commodity and the style of deposit.

Criteria	Explanation	Commentary
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	 Fraternal MRE domain edges are set by grade, shape, spacing and continuity of geology, trenching and drilling. The domain extends haft the average drill spacing along strike and down plunge. Fraternal extends 250m along strike, averages 200 m down dip below the surface and varies from 0.5m-15m thick.
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by- products. Estimation of deleterious elements or other non- grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units.	 For this MRE, SGL has completed the following: Geological interpretation and wireframing in Leapfrog Geo Hard boundary compositing in Leapfrog – Edge Module (Leapfrog Edge); Variography and Ordinary Kriging in Leapfrog Edge; and Block Model Estimation in Leapfrog. Block Model Validation in Leapfrog Composites were based on 1 m composites for Au and Sb. Outlier grades were assessed by reviewing composite histograms of Au & SI grade for each individual wireframe. Extreme outlier grades weren't identified, and it was determined that no top- cut was required. The search distances, number of passes, minimum and maximum sample numbers were based on the variography model and Major and Semi-Majo directions were around 75%-100% of the range of variogram models. 3 estimation passes were used for Au, and Sb. First pass search was around 75 x 45 x 8 m Each pass after that was extended by ~10-15%. Sub block model parent size was 10 x 10 x 5m based on domain geometry and drillhole spacing with sub-blocking to 0.5 x 5 x 2.5m. The first pass used a minimum of 5 samples and maximum of 28 samples and maximum of 4 samples per drill hole. The second pass used a minimum of 2 samples. Cell discretization of 5 x 5 x 1 (X, Y, Z) was employed. Block model validation included block statistics review, visual inspection of grade distribution against composites, domain boundary and estimation variable changes were undertaken.

Criteria	Explanation	Commentary
	Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	 Arsenic is shown to be moderately positively correlated with gold grades and typical of refractory gold-pyrite-arsenopyrite mineralisation. Au and Sb were estimated in this mineral resource and are correlatable. Sb appears to occur as a late-stage mineralisation phase which is hosted in brittle fractures and veinlets within the Au hosting shear envelope. Au and Sb were estimated and the AuEq were calculated for each block from these results. An estimation was also completed estimating AuEq from the drillhole database as a variable to help reconcile and test the calculated AuEq results. The formula used is (<i>AuEq = Au g/t + 2.36 × Sb %</i>) used by Mandalay Resources Ltd for the Costerfield mine (<i>refer Mandalay Website: Mandalay have adopted CY2022 metal prices</i>). The formula is based on a gold price of US\$1,750 per ounce, antimony price of US\$13,000 per tonne and metal recoveries of 93% for gold and 95% for antimony.
	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	 All tonnages are based on dry bulk density measures. The mean of the bulk density measures was assigned to the block by mineralisation domains.
	The basis of the adopted cut-off grade(s) or quality parameters applied.	• The grade envelope was used for domaining using a lower cut-off of 0.5 g/t AuEq. This number was subjectively selected based on previous resource estimations completed by SNG in the Reefton Goldfield.
assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	 No assumptions have been made regarding future mining methods.
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	Criteria	Explanation	Commentary
	Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	 No metallurgical studies have been carried out for Auld Creek Project, but metallurgical test work at Alexander River and Big River indicated gold recoveries of over 90% with flotation and pressure oxidation. The Costerfield mine on Victoria Australia has very similar geology and metallurgy of of 93% for gold and 95% for antimony. No metallurgical recovery factors were applied to the MRE.
	Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	 No environmental factors were applied to the MRE. The deposit is located on an existing exploration permit.
	Bulk density	 Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit. 	 The dry bulk density value used in the MRE were assigned based on average values of the available density data from ACP as well as other SGL Reefton projects. A mean of 2.65 t/m³ were used for oxide at the top of the model and 2.75 t/m³ for fresh rock. 35 density samples have been collected in the Auld Creek mineralisation and 35 samples in the host rocks. SGL collects density samples routinely during logging of diamond drill core. Specific Gravity (SG) is calculated using the following formula: Weight in Air (Weight in Air – Weight in water) = SG.
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Criteria	Explanation	Commentary
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	
Classification	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). 	 Mineral Resources were classified as Inferred to appropriately represent confidence and risk with respect to data quality, drill hole spacing, geological and grade continuity and mineralisation volumes. Additional considerations were the stage of project assessment, amount of diamond drilling and trenching undertaken, current understanding of mineralisation controls and selectivity within an underground mining environment. In SGL opinion, the drilling, surveying and sampling undertaken, and analytical methods and quality controls used, are appropriate for the style of deposit under consideration. Inferred Mineral Resources were defined where a low to moderate level of geological confidence in geometry, continuity and grade was demonstrated. The reported Mineral Resource was constrained at depth by the available drill hole spacing outlined for Inferred classification,
	Whether the result appropriately reflects the Competent Person's view of the deposit.	 The data spacing, and distribution is sufficient to establish geological and grade continuity appropriate for MRE and the results appropriately reflect the Competen Person's view of the deposit.
Audits or Reviews	The results of any audits or reviews of Mineral Resource estimates.	Internal reviews of the MRE by SGL were completed.
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.	 Variances to the tonnage, grade, and metal tonnes of the Mineral Resource estimate are expected with further definition drilling. It is the opinion of the Competent Person that the classification criteria for Inferred Mineral Resources appropriately capture and communicate these variances and risks. The Mineral Resource estimate is considered fit for the purpose of drill targeting. The Mineral Resource Statement relates to global tonnage and grade estimates No formal confidence intervals nor recoverable resources were undertaken or derived.
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Criteria	Explanation	Commentary
	 The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	 Variography was completed for Au and Sb and used to influence the resource classification. The variogram models were interpreted as being isotropic along the plane of shoot mineralisation, with shorter ranges perpendicular to this plane of maximum continuity. Validation checks have been completed on raw data, composited data, model data and Resource estimates. The model validations checked to ensure data honouring. The validated data consists of no obvious anomalies which are not geologically sound. The mineralised zone is based on actual intersections. These intersections are checked against the drill hole data. Field geologist selections, and the Competent Person has independently checked laboratory sample data. The selections are sound and suitable to be used in the modelling and estimation process. Where the drill hole data showed that no Au existed, the mineralised zone was not created in these areas. Further drilling and structural analysis need to be completed to improve Resource classification of the Inferred Resource.

APPENDIX 1

The following Table and Sections are provided to ensure compliance with the JORC Code (2012 Edition)

Section 1 - Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	Explanation	Commentary
Sampling techniques	 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. 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. 	 CRA Exploration (CRAE), OceanaGold Corporation (OGC), MOD Resources (MOD), Sandfire Resources (SFR) and Siren Gold (SNG) have all used similar sampling techniques. Diamond drilling core (DD) drilling was logged to obtain for geological and geotechnical data and samples for assaying and rock strength (unconfined compressive strength - UCS) and density. Downhole geophysical logging wasn't undertaken. DD drilling was used to obtain core samples. Mineralised core was cut in half with diamond saw at 1 m intervals unless determined by lithology e.g. dyke contact areas. Sample length ranged from 0.2 m to 2.9 m. The core sampling included at least 5 m into the hanging wall and footwall waste. CRAE, OGC, MOD, SFR and SNG core samples were pulverised to >95% passing 75 µm to produce a 30 g charge for fire assay for Au. Various multi-element analyses were also undertaken from the DD with at least As, Ag and S analysed. SFR rolled DD into plastic splits from the triple tube split at the drill rig and then placed into the core trays. This provided a far better-quality core presentation with the preservation of structures and broken core with less handling of the core. Field and core duplicates, pulp, and repeat analysis were completed by OGC, MOD & SFR as well as checks on older CRAE data to test and ensure sample representativity. CRAE and MOD completed trenching and channel sampling of exposed dyke outcrops taking rockchip or handsaw samples based on 1m basis. CRAE and MOD completed C horizon soil sampling using hand augers or spades. SNG completed lonic Leach Geochemistry program using trowel to collect 150g of material 10-15 cm underneath the surface.
Drilling techniques	• 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.).	 All DD drilling was helicopter supported except for BFDDH001-004 and SCDDH104-107 where a track mounted rig was used. DD diameters included PQ (96mm) and HQ (63mm), using a triple tube. NQ was a mixture of NQ (47.6mm) and NQ3 (45.1mm). Most of the drilling was HQ with PQ collars generally limited to depths less than 50m. Earlier CRAE drilling was completed HQ and NQ sizes. MOD used man-portable rig with drillhole ID's SCMDH**** which were drilled using NQ size core.

Criteria	Explanation	Commentary
		 A 15-hole RC drilling program at Barrons Flat was using an 80mm (3.5 inch) face sampling hammer with 1m samples collected. OGC has limited success with orientation spear system. MOD oriented their core using Coretell Ori Shot CNH100 - a digital core orientation system. SFR used Longyear True Core tool. SNG used a north facing gyro.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. 	 OGC, MOD, SFR and SNG sample recovery was recorded by measuring the length of recovered core and comparing this with the drilled interval. OGC re-logged all the CRAE core and recorded recoveries. The core recovery for the Main Zone and Bobby Dazzler, historically, is approximately 96.6%. The Carapace had higher rates of core loss with the average of 76% recovered. These appears to have no material impact on the results. Increased core loss is observed in the weathered mineralised dyke. SE Traverse recoveries are 83 % in the dyke.
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged. 	 All drilling has been logged for lithology, weathering, bedding, structure, alteration, mineralisation, and colour using a standard set of in-house logging codes. The logging method is quantitative. MOD, SFR & SNG DD was oriented. Structural measurements were recorded during logging. OGC relogged all the CRAE core. Deeper interval has been logged for magnetic susceptibility (MS) using hand-held MS meters. Logging intervals are based on geological boundaries or assigned a nominal length of one metre. Mineralised zones were logged for type, alteration intensity, vein thickness, frequency, angle to long core axis, and mineralogy. Summary geotechnical information was recorded. All core trays were photographed prior to core being sampled. All core is stored in core shed and containers on site in Takaka or in OGC core shed in Reefton, NZ.
Sub- sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all subsampling stages to maximise representivity of samples. 	 OGC, MOD, SFR & SNG DD sample intervals were physically marked on the core, which was sawn in half lengthways with a diamond core-cutting saw. The core cutting plane was randomly selected, not based on core orientation line or other factors. Where core was too broken to be cut, the broken core was split longways into two equal amounts from the core tray. The resulting half core was taken for the laboratory sample and the remaining core was archived. OGC and MOD completed 5 m grind samples into the hanging wall and footwall to test for mineralisation and waste rock characterisation.

Criteria	Explanation	Commentary
	 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. 	 The field duplicates, laboratory duplicates and laboratory repeats were collected and assayed with laboratory duplicates. Repeats were found acceptable in comparison with regular laboratory samples. No major issues identified. MOD, SFR & SNG took field duplicates and are routinely submitted as half core. Field duplicates were originally DD quarter cuts. This practice caused an issue with repeatability due to the smaller sample size and vein orientation. To address this issue, the remaining quarter core was sampled and the results for the two quarter cuts were average for comparison with the routine sample. The DD (2-3 kg) and channel (1-2 kg) sample sizes are considered appropriate to the grain and particle size for representative sampling. C horizon geochemistry samples were 300-400g while lonic Leach samples size is 150g Field duplicated are taken on range of 1:40 to 1:25.
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. 	 CRAE - DD samples were sent to Service Laboratories in Nelson and AAS analysis wat carried out. OGC completed fire assay re-checks on drillholes DDH82SC09 and DDH82SC11 resulting in an average of 10% upgrade in the Au grades. No adjustment wat undertaken for CRAE results. For CRAE drilling, the laboratories and methods used are insufficiently recorded in the logs, assay results and reporting. It is unknown if any assay o sampling quality control procedures were consistently undertaken by CRAE. No evidence of standards or blanks is available. OGC DD samples were fire assayed and analysed by Aqua Regia digest for Au and LECC digest for sulphur by Amdel Ltd (Amdel) at their Macraes Flat Laboratory, New Zealand. A multielement suite comprising of Ag, As, Bi, Cu, Pb, Zn & Mo was subsequently assayed by ICP-MS and AAS by Amdel in Adelaide, Australia. Grind samples were prepared and assayed at Amdel Macraes Flat. These were assayed for Au & As only. OGC used standards, blanks, laboratory repeats which were recorded in their last drilling programme. MOD, SFR & SNG DD samples were sent to SGS Waihi or SGS Macraes in New Zealand They were assayed by 30g fire assay with AAS finish. MOD DD multielement analysis was completed by SGS up to SCDDH078. For SCDDH102 multi-element analysis was undertaken by ALS Townsville where a 48-element suite was determined via ICP-MS ALS has a full QAQC program. SNG holes SCDDH104-107 multielement was completed inhouse using a pXRF where a 41-element suite was determined from the laboratory pulps SCD DH056 and SCDDH057 weren't tested for over limited As and recorded as 5000ppm. No independent laboratory inspections were carried out during these phases of drilling sampling and analysis. For each MOD, SFR & SNG drill hole QA/QC included: At least 2 Au certified Rocklab standards (CRM). Two blanks. At least 0 cerd duplicate (quarter core) and laboratory duplica

Criteria	Explanation	Commentary
		Lab repeats are recorded.
		 Standards, duplicates and blanks are checked after receiving the results. The QA/QC resul have been deemed acceptable.
		- The same process for MOD channel and rock chip samples was used.
		 SNG lonic samples are analysed by ALS, Ireland by method ME-MS23 by ICP-MS.
Verification of sampling	• The verification of significant intersections by either independent or alternative company personnel.	 CRAE drillhole SCDDH017 was twinned by MOD. The results for the two holes were simila suggesting that the CRAE Au results are acceptable.
and assaying	 The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) 	 During MOD and SFR drill programs mineralisation intersection data was inspected ar verified independently by the project manager or senior project geologist. The proje manager and visited the deposit on average weekly in support of the exploration program
	protocols.Discuss any adjustment to assay data	 All laboratory assay results were received and stored in both CSV and laboratory signe PDF formats.
		- Data is stored in Microsoft Excel, Leapfrog and Vulcan.
		 Data storage system protocols are basic but robust.
		- All data is stored in a Data room as well as back up on Drop box.
		 The data and future work should be stored and managed on a commercial relation database with inbuilt validation protocols in the future.
		- Quarter core cuts are added together to get the same sample weights per sample interval
Location of data points	• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource	 The drillhole collar coordinate (X, Y, Z) are referenced to New Zealand Transverse Mercate 2000 (NZTM). All holes up to SCDDH096 have been picked up by GPS methods and pos processed by Golden Bay Surveyors to 0.1m accuracy.
	estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	 SFR drilling from SCDDH097 to SCDDH103 have been picked by handheld GPS Garm 64. SFR drillholes in the Main Zone are collared within 1m of previous drilling from the sam drill pad.
		 SNG drilling from SCDDH103 to SCDDH107 have been picked up by GPS methods ar post processed by Golden Bay Surveyors to 0.1m accuracy.
		 A digital terrain model (DTM) was constructed based on LiDAR that was flown by NZ Aeri Surveys in 2011. All drill collars elevations were reconciled with the LiDAR.
		 Downhole surveys are not available for 19 out of 50 CRAE holes and one abandoned OG hole SCDDH046. Except for one drillhole (DDH84SC16), all the unsurveyed drillholes a less than 120m deep. Hellman report (2007) noted that no significant deviation in azimur and dip takes place in the first 120m of the surveyed holes. It was therefore considerer reasonable to assume that these unsurveyed holes follow the collar Azimuth and d orientation.
		 The correction used between magnetic north and true north (magnetic declination) was 2 East.
		 MOD & SFR SNG surveyed on average every 30m using a digital downhole tool. SFR use Longyear true shot camera for down hole surveys.
		 SNG surveyed on average every 15m using a north pointing gyro.

Criteria	Explanation	Commentary
		- Soil and lonic samples sites are located by handheld Garmin GPS.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	 Drilling in the Main Zone has generally been completed on a 75m spacing with ranges between 50m to 150m. The drill spacing was suggested by drill hole density analysis (Golder, 2012) down to the 50mRL in the Main Zone. Drilling in Bobby Dazzler has spacing with ranging from very closely spaced (5-10 m) where holes are collared in the outcropping dyke up to spacings of between 75-125 m. Drilling directions and distances in the Main Zone and Bobby Dazzler are variable because of the terrain, orientation of the target dyke and the orientation of the mineralisation within the dyke. Multiple drilling orientations have been fanned off single drill pads to make most of pad sites due to access agreement restrictions and the steep and challenging terrain. The Carapace, with a much flatter terrain was drilled on 50m spacing with vertical holes. SE Traverse spacing is approximately 100m. CRAE and MOD soil sample pattern is on 100 x 20m pattern. Ionic sample spacing along the lines is 50m. Line spacing is varies from 100-200m.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	 Many drill holes are collared in the hanging wall to the dyke and are drilled at high angles to the north dipping dyke. These drill holes are better for assessing the Sams Creek porphyry contact and true thickness, however, the holes are often drilled at low angle or sub-paralle to the mineralised suphide veins that dip to the SE. Therefore, these intersections are sub-optimal for resource grade estimation. These drill holes provide more precise estimates or tonnage but do appear to introduce a grade bias due to the angle intersection with the mineralisation zones. Most drill holes intercept at a low angle to the host porphyry and therefore drill down the porphyry but at a higher angle to the general orientation of the mineralisation. These holes appear to be more optimal to delineate grade and possible grade domains. However, with often poorly intact porphyry contacts recovered in the core. These holes are sub-optimal for delineating the geometry of the porphyry. These holes are drilled from both hanging wal footwall of the dyke. This relationship between drillhole orientation and expected benefits has been taken into consideration during drill hole design and implementation. CRAE and MOD Soil lines cut mineralisation at high angles. Ionic Leach intercepts the projected down plunge of the folds which host the high grade shoots at a high angle.
Sample security	• The measures taken to ensure sample security.	 Drill samples were securely packaged on site and transported by a courier or by staff with "chain of custody" documentation. Samples were stored in a locked coreshed until despatch
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	 Golder completed an audit as part of the 2013 Mineral Resource Estimation (MRE). Hellmar Scofield previously carried out an independent review of the sampling techniques and data The results were satisfactory.

Section 2 - Reporting of Exploration Results

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

Criteria	Explanation	Commentary
Mineral tenement and land tenure status	 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. 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. 	 Sams Creek project is situated mostly in the Northwest Nelson Conservation Park which lies on the eastern edge of the Kahurangi National Park in northwest Nelson area. The Exploration Permit EP 40338 expires on the 26 March 2025 and is subject to a join venture with OGC with SNG owning 82%. The eastern neighbouring permit EP 54454 expires on the 25 September 2026. This covers the eastern areas of the Sams Creek Dyke over Barron's Flat into the Waitui catchment SNG is the sole permit holder of EP 54454. A 1% Crown royalty would apply to EP 40338 and 2% Crown royalty to EP 54454, applicable for any gold or silver production once the Sams Creek permits are converted to mining permits. The Sams Creek permit EP 40338 is also subject to an agreement between Golden Wes Refining Corporation Limited (GWCL) and OGC (GWCL replaced Royalco). Under this agreement, a royalty of 1% of gold produced is deliverable by OGC to GWCL.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 All exploration results in drill holes up to SCDDH107 were produced by: CRAE (1980-1987) OGC (1996-2005), MOD (2010- 2017), SFR (2019 to 2022) and SNG (2024). CRAE completed trenching and soil sampling programs where MOD resources completed the CRAE soil sample pattern over Sams Creek and Barrons Flat. OGL completed desk top studies of prospectivity and ore controls. MOD completed structural mapping program over Main Zone, Carapace, SE Traverse and Doyles as well channel sampling. MOD completed a heli magnetic & radiometerics geophysics survey in 2011 with processing and interpretation completed by Southern Geoscience in 2012.
Geology	• Deposit type, geological setting and style of mineralisation.	Sams Creek mineralisation is contained within a hydrothermally altered peralkaline granitic porphyry dyke that intrudes Early Palaeozoic metasediments. The dyke is up to 60m thic and can be traced east-west along strike for over 7km. The dyke generally dips steeply to the north (-60°), including within the Main Zone and Bobby Dazzler, with gold mineralisation extending down dip for at least 1 km and is open at depth. The geological and geochemical characteristics of the Sams Creek granite dyke indicate it is a member of the intrusion related gold deposits (IRGD). Within the Carapace and SE Traverse areas the dyke is flat or only gently dipping. The relative positive and geometry of the SE Traverse deposit i thought to have been affected by movement along landslip planes which has displace the dyke to the south-east by ~250m.
		 Gold mineralisation is largely contained within thin (1-15 mm) sheeted quartz-sulphide (T3 veins that crosscut the dyke which strike to the NE and dip predominantly to the SE a around 50°.

Criteria	Explanation	Commentary
		NW-SE section of the Main Zone of Sams Creek Porphyry Dyke showing T2 quartz veining, T3 sulphide veins (GOD 2010). The majority of the gold mineralisation is contained in the T3 veins.
		 The Sams Creek dyke was deformed by a D3 event which resulted in gentle upright F3 folds plunging to the NE-ENE. A model is proposed whereby gold-bearing sulphide veins formed along F3 fold hinges and parallel boudin necks of extending fold limbs, perpendicular to the maximum shortening direction. The higher concentrations of veining in these two areas, results in NE plunging mineralised shoots up to 35 m wide and 100 m high separated by zones of lower grade gold mineralisation.

Drill hole Information	• A summary of all information material to the understanding of the exploration results including a	Hole ID	Prospect	TD	mE NZTM	mN NZTM	RL	Collar Dip	Collar Azimuth
	tabulation of the following information for all Material	DDH82SC01	Carapace	84.10	1579751.76	5454047.29	561.80	-45	121
	<i>drill holes:</i><i>easting and northing of the drill hole collar</i>	DDH82SC02	Carapace	117.25	1579745.88	5454046.20	562.99	-45	301
	• elevation or RL (Reduced Level - elevation above sea	DDH82SC04	Carapace	19.50	1579805.43	5454054.39	555.60	-45	066
	 level in metres) of the drill hole collar dip and azimuth of the hole 	DDH82SC05	Carapace	8.35	1579803.67	5454053.63	555.90	-45	261
	 down hole length and interception depth 	SCDDH086	Carapace	15.40	1579983.75	5454350.66	329.18	-90	000
	hole length.	SCMDH001	Carapace	8.80	1580030.78	5454375.62	289.54	-90	022
	 If the exclusion of this information is justified on the basis that the information is not Material and this 	SCMDH002	Carapace	9.70	1580062.49	5454313.14	336.10	-90	022
	exclusion does not detract from the understanding of	SCMDH003	Carapace	20.10	1580142.15	5454430.99	244.39	-90	022
	the report, the Competent Person should clearly explain why this is the case	SCMDH004	Carapace	20.20	1580142.15	5454430.99	244.39	-90	022
		SCMDH005	Carapace	21.14	1580142.15	5454430.99	244.39	-90	022
		SCMDH007	Carapace	20.00	1580142.15	5454430.99	244.39	-90	022
		SCMDH008	Carapace	57.40	1580066.92	5454350.72	311.20	-90	022
		SCMDH010	Carapace	12.50	1580120.96	5454360.59	287.89	-90	022
		SCMDH011	Carapace	22.90	1579861.26	5454417.15	398.50	-90	022
		SCMDH012	Carapace	25.00	1579947.31	5454269.16	399.11	-90	022
		SCMDH013	Carapace	25.90	1579947.56	5454268.69	399.10	-90	022
		SCMDH014	Carapace	19.80	1580102.56	5454509.75	231.69	-90	022
		SCMDH015	Carapace	15.00	1579492.30	5453580.20	495.70	-90	022
		SCMDH016	Carapace	17.70	1579702.20	5453605.20	461.00	-90	022
		SCMDH017	Carapace	14.10	1580144.52	5454430.15	244.05	-90	022
		SCMDH018	Carapace	18.40	1580144.52	5454430.15	244.05	-90	022
		SCMDH019	Carapace	14.00	1580328.24	5454452.07	326.99	-90	022
		SCMDH020	Carapace	23.00	1580333.01	5454451.76	326.86	-90	022
		SCMDH021	Carapace	26.00	1580548.95	5454370.76	226.23	-90	022
		SCMDH022	Carapace	28.10	1580103.91	5454507.11	232.01	-90	022
		SCMDH025	Carapace	22.60	1580102.81	5454510.59	231.08	-90	022
		SCMDH026	Carapace	25.00	1580331.48	5454451.19	327.58	-90	022
		SCMDH027	Carapace	30.30	1580145.59	5454649.07	244.64	-90	022
		DDH82SC11	Main Zone	98.30	1580145.24	5454649.52	244.40	-50	121
		DDH83SC12	Main Zone	42.00	1580145.07	5454649.86	244.34	-50	151
		DDH83SC13	Main Zone	119.60	1579981.74	5454350.20	330.92	-53	331

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DDH84SC	16 Main Zone	211.70	1580413.69	5454471.91	279.00	-55	331
DDH84SC	16A Main Zone	32.90	1580411.80	5454472.91	279.00	-45	311
DDH84SC	17 Main Zone	26.70	1580411.68	5454473.38	279.00	-90	061
DDH84SC	17A Main Zone	28.90	1580212.74	5454526.24	293.65	-70	331
DDH84SC	18 Main Zone	62.40	1580212.60	5454525.94	293.65	-60	321
DDH84SC	19 Main Zone	239.10	1579992.18	5454407.17	321.67	-45	331
DDH84SC	21 Main Zone	200.40	1579992.05	5454407.57	321.93	-65	151
DDH84SC	23 Main Zone	166.50	1579861.26	5454417.15	398.50	-60	331
DDH84SC	25 Main Zone	250.15	1579992.00	5454408.00	322.13	-47.5	331
DDH85SC	26 Main Zone	200.20	1579991.00	5454407.00	322.75	-90	061
DDH86SC	35 Main Zone	16.80	1580304.83	5454606.87	394.88	-45	151
DDH86SC	36 Main Zone	203.00	1580305.81	5454607.14	394.71	-45	151
DDH87SC	40 Main Zone	195.80	1580411.65	5454473.39	281.12	-65	242
DDH87SC	41 Main Zone	206.00	1580412.41	5454472.57	280.17	-67	152
DDH87SC	42 Main Zone	288.00	1580327.38	5454517.53	360.77	-50	332
SCDDH04	4 Main Zone	329.30	1580216.03	5454526.78	292.77	-73	331
SCDDH04	5 Main Zone	148.85	1580324.51	5454519.41	361.02	-60	091
SCDDH04	8 Main Zone	248.70	1580413.06	5454473.04	279.80	-75	312
SCDDH04	9 Main Zone	352.65	1580411.29	5454472.18	281.18	-60	151
SCDDH05	0 Main Zone	316.70	1580449.57	5454445.29	239.09	-65	111
SCDDH05	4 Main Zone	410.85	1580411.28	5454471.66	281.06	-90	022
SCDDH05	6 Main Zone	173.75	1580258.40	5454468.30	289.25	-63	321
SCDDH05	7 Main Zone	155.70	1580331.90	5454453.30	328.05	-66	171
SCDDH05	8 Main Zone	274.30	1580142.40	5454432.20	244.00	-80	330
SCDDH05	9 Main Zone	344.00	1580331.70	5454450.70	327.50	-65	337
SCDDH06	0 Main Zone	289.60	1580105.80	5454507.40	230.55	-75	010
SCDDH06	1 Main Zone	203.00	1580204.10	5454416.20	211.50	-90	010
SCDDH06	2 Main Zone	155.00	1579815.10	5453977.90	537.10	-85	333
SCDDH06	3 Main Zone	338.30	1580103.80	5454505.30	232.30	-70	343
SCDDH06	4 Main Zone	305.00	1579863.00	5454418.00	398.35	-80	351
SCDDH06	5 Main Zone	315.30	1580106.00	5454503.00	230.50	-70	005
SCDDH06	6 Main Zone	110.50	1580105.50	5454502.50	231.50	-65	126
SCDDH06	8 Main Zone	596.00	1579859.00	5453759.00	462.90	-84	344

SCDDH069	Main Zone	542.15	1579799.00	5453635.00	430.38	-79	046
SCDDH070	Main Zone	385.50	1579574.00	5453562.00	481.85	-68	020
SCDDH071	Main Zone	241.45	1579384.00	5453560.00	487.00	-90	000
SCDDH072	Main Zone	353.10	1579837.00	5453799.00	494.00	-84	020
SCDDH073	Main Zone	238.00	1580105.50	5454502.50	231.50	-78	079
SCDDH074	Main Zone	328.30	1580105.50	5454502.50	231.50	-83	300
SCDDH075	Main Zone	280.00	1580105.50	5454502.50	231.50	-77	027
SCDDH076	Main Zone	287.40	1579782.00	5453730.00	483.00	-73	322
SCDDH077	Main Zone	253.10	1579715.00	5453665.00	481.00	-67	000
SCDDH078	Main Zone	203.20	1579620.00	5453630.00	493.00	-68	263
SCDDH079	Main Zone	170.60	1579520.00	5453625.00	506.00	-83	309
SCDDH080	Main Zone	299.20	1579766.67	5454045.66	559.24	-78	000
SCDDH081	Main Zone	49.40	1579854.36	5454071.29	543.58	-90	089
SCDDH082	Main Zone	126.40	1579965.34	5454056.71	509.17	-55	200
SCDDH083	Main Zone	308.00	1579864.92	5454005.83	536.78	-75	015
SCDDH084	Main Zone	21.00	1579748.53	5453972.24	551.46	-75	050
SCDDH088	Main Zone	278.30	1579724.23	5454045.42	567.53	-66	285
SCDDH089	Main Zone	326.00	1579704.12	5454080.48	579.09	-77	042
SCDDH090	Main Zone	391.70	1579762.60	5454015.29	559.03	-69	335
SCDDH091	Main Zone	734.40	1579718.72	5454012.05	566.97	-63	325
SCDDH097	Main Zone	171.30	1579814.31	5453979.10	537.50	-72	070
SCDDH098	Main Zone	165.80	1579898.58	5454029.57	533.86	-75	050
SCDDH099	Main Zone	201.70	1579816.30	5454069.46	551.60	-76	033
SCMDH028	Main Zone	53.80	1579882.48	5454067.22	530.23	-90	022
SCMDH029	Main Zone	93.60	1579719.86	5453957.02	554.00	-65	045
SCMDH030	Main Zone	45.20	1579774.60	5453980.71	547.66	-65	045
SCMDH031	Main Zone	91.00	1579821.33	5454028.89	544.74	-90	022
DDH86SC32	SE Traverse	91.20	1579922.45	5454037.28	525.88	-45	151
DDH86SC33	SE Traverse	118.20	1579730.39	5454066.94	567.04	-70	151
SCDDH092	SE Traverse	35.00	1579692.10	5454028.36	575.46	-80	150
SCDDH093	SE Traverse	19.00	1579705.06	5453989.10	566.42	-80	150
SCDDH094	SE Traverse	35.00	1579870.32	5454025.44	540.59	-80	150
SCDDH095	SE Traverse	40.10	1579684.70	5454050.00	579.20	-80	150

Criteria	Explanation	Commentary							
		SCDDH096	SE Traverse	55.20	1579684.10	5454012.00	576.00	-80	150
		SCDDH100	SE Traverse	63.60	1580153.30	5454474.40	220.75	-90	000
		SCDDH101	SE Traverse	54.70	1580154.90	5454474.70	220.30	-90	000
		SCDDH102	SE Traverse	32.50	1580178.80	5454436.60	219.85	-90	000
		SCDDH103	SE Traverse	82.90	1579943.30	5454313.80	374.65	-90	000
		SCDDH104	Anvil West	50.70	1581230.96	5454493.19	171.14	-90	000
		SCDDH105	Anvil West	144.00	1581339.37	5454642.58	190.73	-50	180
		SCDDH106	Anvil West	167.00	1581338.23	5454642.98	190.57	-55	216
		SCDDH107	Anvil West	164.60	1581336.21	5454640.84	190.34	-50	110
		DDH82SC06	Bobby Dazzler	93.00	1579839.27	5454190.35	486.33	-90	000
		DDH82SC07	Bobby Dazzler	29.70	1579845.94	5454194.86	486.33	-45	036
		DDH82SC08	Bobby Dazzler	48.60	1579845.05	5454194.30	486.54	-55	036
		DDH82SC09	Bobby Dazzler	80.20	1579844.51	5454193.56	486.71	-50	015
		DDH83SC14	Bobby Dazzler	65.15	1579822.99	5454280.06	430.47	-45	151
		DDH83SC15	Bobby Dazzler	27.40	1579882.77	5454224.60	460.88	-45	331
		DDH83SC15A	Bobby Dazzler	37.20	1579882.82	5454224.34	460.89	-45	321
		DDH83SC15B	Bobby Dazzler	108.60	1579883.24	5454224.10	460.43	-55	321
		DDH84SC20	Bobby Dazzler	250.45	1579646.48	5454144.66	562.40	-55	151
		DDH84SC24	Bobby Dazzler	250.00	1579710.29	5454236.03	510.66	-45	151
		SCDDH043	Bobby Dazzler	129.40	1579884.46	5454222.81	459.55	-57	344
		SCDDH051	Bobby Dazzler	250.85	1579781.35	5454326.46	420.21	-70	201
		SCDDH052	Bobby Dazzler	156.00	1579791.65	5454476.70	462.07	-80	151
		SCDDH053	Bobby Dazzler	186.70	1579791.65	5454476.70	462.07	-80	151
		SCDDH085	Bobby Dazzler	55.00	1579869.20	5454300.40	400.10	-80	315
		SCDDH087	Bobby Dazzler	64.00	1579785.30	5454211.80	477.20	-75	145
		SCMDH009	Bobby Dazzler	51.70	1579755.25	5454129.90	533.44	-90	000
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation 	hence	g results preser e, any potential es are not cut in	sample le	ength bias ha	s been acco	unted for		drilling inter

Criteria	Explanation	Commentary
	 should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated 	
Relationship between mineralisation widths and intercept length	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 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'). 	 All drill hole results are report as downhole intercepts. In the Main Zone and Bobby Dazzler with steep dipping dyke and drilling in steep terrain the drilling was designed to either intercept mineralisation at higher angle which mean some holes intercepted the dyke's contacts at a low angle or intercept the dyke at high angle and potential mineralisation at low angle. Drilling into the flatter lying Carapace and SE Traverse with vertical holes appeared to intercept both the dyke contacts at high angles and the mineralisation to both delineate dyke's geometry and mineralisation. True thicknesses have estimated from Leapfrog or Vulcan geology model, which was updated as drilling progresses during MOD, SFR and SNG programmes.
Diagrams	• 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 drill hole collar locations and appropriate sectional views.	- Relevant diagrams have been included within the main body of the announcement.
Balanced reporting	• 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.	- N/A
Other substantive exploration data	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.	- N/A
Further work	 The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 Recommendations for further work are included in the Sams Creek Mineral Estimate Resource report.

Section 3 - Estimation and Reporting of Mineral Resources

Criteria	Explanation	Commentary
Database integrity	 Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. 	 Database is stored Microsoft Excel which has been validated by Measured Group using software (Leapfrog Geo). Random spot checks were completed between database and hard copies.
Site visits	 Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	- Due to complications resulting from the Covid pandemic, the Competent Person was unable to visit the site in person. However, two MG geologists, including the lead technical director, visited the site in October 2022. The site visit included reviewing SNG core that was available on site as well as the ground over the mineral resource area which, involved spot checks on collar survey details and observations of mineralisation in the field. Core from known ore grade intercepts was inspected to confirm mineralisation style as well as inspected host rock material. Extensive notes were prepared
Geological interpretation	 Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	 Geological interpretation based on available field mapping data, structural mapping, drillhole lithology and grade data. Modelling was completed using Leapfrog Geo modelling software. Wireframing and geological modelling was carried out by Measured Group and reviewed by SNG. Mineralisation is contained exclusively within the porphyry dyke, however there are extensive zones, particularly in the steeply dipping fold limbs of Main Zone, where extensive very low grade material is present within some drillholes that has previously been included within the modelled wireframe due to the modelling process employed (hanging wall and footwall snapped to first occurrence of an assay sample >0.1 g/t Au).

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	Explanation	Commentary
		Au discrete 2 1.5 1 0.5
		-150
		Golder 2021 MRE Main Zone wireframe showing extensive low grade Au intervals included
		 Due to a focus on optimisation for potential underground mining in the Main Zone, the wireframe modelling process worked on excluding some of the large zones of low grade Au compared to the 2021 MRE wireframe with the intention of increasing the overall grade of the resource estimate. Composite intervals of 0.75 g/t Au were used as a guide for the interval selection process, however in some areas where mineralisation was particular patchy within drillholes, the modelling geologists discretion was applied in excluding including certain intervals in the wireframe based on geological understanding and o body continuity.

Criteria	Explanation	Commentary
		Au discrete
		Plunge +03 Azimuth 097
		0 25 50 75
		 MG 2022 MRE Main Zone wireframe. Red intervals are 0.75 g/t Au composites The Main Zone deposit was separated into 2 geological domains prior to estimation, Eas
		and West,
		 cut by a pseudo-fault surface, The western extent of the Main Zone wireframe is controlled by the Bobby Dazzler faul which was modelled and provided to MG by SNG. The deposit is open at depth and along strike to the east.
		 Within the Carapace and SE Traverse areas, the mineralised intervals with the dyke are generally thinner than Main Zone and include much less internal waste, so interval selection for wireframing was reasonably simple. For Carapace, due to it being an open cut target, composite intervals of 0.25 g/t and in SE Traverse composite intervals of 0.75 g/t were used to guide interval selection, however the modelling geologists discretion was again applied in excluding or including certain intervals in based on geological understanding and ore body continuity.

Criteria	Explanation	Commentary					
		 The Carapace deposit is truncated to the north, east and south by topography. The dyk is thought to continue along strike to the west leading into the Bobby Dazzler and Doyle prospect areas. SE Traverse wireframe outcrops against topography to the south and is otherwist truncated by the SE Traverse slip plane on all other sides, This has been modelled base on drillhole intercepts and field mapping data. Bobby Dazzler is located west of the Bobby Dazzler fault from the Main Zone and has similar geometry in that it is dipping to the north although less steeply that Main Zone. Th deposit is open at depth and along strike to the west leading into the Doyles and Wester Outcrops areas. The modelled mineralised wireframe is contiguous with the Carapace t the south where the dyke enters a fold anticline. A dummy fault surface was used to defin the boundary between the Bobby Dazzler and Carapace deposit areas. The drill spacing provided confidence in the interpretation and continuity of grade an geology. 					
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	- The mineral resource is split into 3 areas; Main Zone, Carapace and SE Traverse. The relative wireframe dimensions and variability in terms of continuity of each deposite					
		Prospect Dimensions (LxWxD expressed in metres) Comments on variability					
		Main Zone950x590x80 striking 089° and dipping 55° to 359°Open at depth and to the east					
		Carapace425x100x10 striking 012° and dipping 14° to 102°Outcrops at surface. Deposit truncated by topography to north, east and south. 					
		SE Traverse830x240x10 striking 070° and dipping 5° to 340°Displaced slumped landslip block. Dyke truncated by slip plane and topography.					
		Bobby Dazzler450x200x10 striking 095° and dipping 35° to 005°Open at depth and to the west					
Estimation and modelling techniques	 The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and 	 Geological interpretation and wireframing in Leapfrog Geo Hard boundary compositing in Leapfrog - Edge Module (Leapfrog Edge); Variography and Ordinary Kriging in Leapfrog Edge; and Block Model Estimation in Leapfrog. Composites were based on 1 m composites. 					

Criteria	Explanation	Commentary
Criteria	 Explanation whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. 	 Outlier grades were assessed by reviewing composite histograms of gold grade for each individual wireframe. Extreme outlier grades weren't identified, and it was determined that no top-cut was required Estimation domains were created for each deposit area. The Main Zone deposit was split into two domain areas, East and West. The two Main Zone domains were set to have a soft boundary between the dyke in the two domains but hard boundary for the contact with the host rock. Carapace and SE Traverse were treated as hard boundary domains as they were picked from drilling assays. The Bobby Dazzler domain was set to have a soft boundary with the contiguous Carapace deposit with a 20 m range but a hard boundary for the contact with the host rock. Individual domain search distances, number of passes, minimum and maximum sample numbers are outlined in the Sams Creek Mineral Estimate Report. Previous mineral resource estimates have been conducted on the Sams Creek project including 2013 and 2021 estimates carried out by Golder Associates. These block models have been made available to MG during the resource estimate work. Previous resource estimates have used ordinary kriging estimation. To confirm the appropriateness of this technique both inverse distance and nearest neighbour were estimated as comparison. Comparing these through Leapfrog's Swath Plots function it was determined that the Ordinary Kriging showed the most representative estimator for the underlying composited data. Swath plots for each area are shown in the final Mineral Estimate Report. Test work completed to date indicates that recoveries from 80 to 90% are achievable from Sams Creek material. The work completed at this stage is preliminary. Further test work is required. Arsenic is shown to be weakly to moderately positively correlated with gold grades and typical of refractory gold-pyrite-arsenopyrite mineralisation. No considerations were made for the estimation of deleteri
		- As only gold is estimated in this mineral resource, no variables are correlatable.
		 The geological modelling of the dyke for each deposit were used as sub-block triggers within the block model to ensure the block model estimation was representing the 3D wireframes.

Criteria	Explanation C	Commentary
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	 All tonnages are based on dry bulk density measures. The median of the bulk density measures was assigned to the block by mineralisation and weathering domains.
Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied.	 The resource model is constrained by assumptions about economic cut-off grades. The Main Zone, SE Traverse resources are based on a 1.85 g/t Au cut-off grade. Bobby Dazzler resources are reported at cut-off grades between 1.0 and 2.0 g/t Au Carapace resource is based on a 0.5 g/t cut-off grade.
Mining factors or assumptions	• Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	 The resource has been estimated based on an assumption of underground mining for the Main Zone, Bobby Dazzler (sub-level open stoping or cut and fill) and SE Traverse (room and pillar) prospect areas. Carapace is thought to potentially be a target for small scale open-cut extraction and resource estimation has been conducted based on that assumption.
Metallurgical factors or assumptions	 The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made. 	 Cyanidation testwork completed on six oxide bulk samples by CRAE resulted in Au recoveries of 85-95%. Testwork was completed on fresh sulphide mineralisation at the start of 2004 by OGC to characterise the metallurgical behaviour of Sams Creek sulphide mineralisation. The recoveries from this testwork are summarised as: <i>Direct Leach: 79-87% gold recovery</i> <i>Float and then leach: 73-86% gold recovery</i> <i>Float and acid leach: 83-91% gold recovery</i>. Testwork completed to date indicates that recoveries from 80 to 90% are achievable from Sams Creek material. The work completed at this stage is preliminary. Further test work is required.
Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where	The Sams Creek project predominantly lies within the NW Nelson Forest Park administered by the Department of Conservation (DoC). The Reefton open cut gold mine 100 km to the SW, which has been successfully operated by OGC between 2007 and 2016 is also contained within a Forest Park administered by DoC. The area is generally covered with beech forest with native scrub and sub-alpine grasslands. Some of the beech forest has been logged, with other areas burned and grazed. The current plan is to mine by underground methods with decline access from private land at Barrons Flat. Disturbance to the DoC estate would be limited to a small open pit at Carapace and vent raises which require a cleared area similar to a drill pad (10mx10m).

Criteria	Explanation	Commentary
	these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	 SNG has an Access Agreement with DoC which allows for 100 drill pads and severa camps and helicopter landing sites.
Bulk density	 Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	 The dry bulk density values used in the resource model were assigned using the median values of the available data. The bulk density data was separated into the porphyry tha hosts the mineralisation and other waste rock. These density values were then divided b oxide and fresh rock. A median of 2.70 t/m³ and 2.59 t/m³ were used for fresh and oxide porphyry respectively. Sams Creek density assignment is based on a density assessment completed in 2011 2013. Density samples are routinely collected during logging of diamond drill core. Specific Gravity (SG) is calculated using the following formula: Weight in Air (Weight in Air - Weight in water) = SG.
Classification	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	 The resource classification accounts for all relevant factors. Two methods were used t determine the optimal drill spacing between boreholes for resource classification at th Sams Creek Project. These were: Variogram methodology which analyses the different proportions of the sill; An estimation variance methodology. The data spacing and distribution is sufficient to establish geological and grade continuit appropriate for Mineral Resource estimation and classification and the result appropriately reflect the Competent Person's view of the deposit.
Audits or reviews.	• The results of any audits or reviews of Mineral Resource estimates.	- Internal audits by MG and company audits were completed
Discussion of relative accuracy/ confidence	 Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant to technical and economic evaluation. Documentation 	 The estimates made in this report are global estimates. Local block model estimates, or grade control estimates, whose block grades are to be relied upon for selection of ore from waste at the time of mining will require additional drilling and sampling of blast holes. Confidence in the relative accuracy of the estimates is reflected in the classification of estimates as Indicated and Inferred. Variography was completed for Gold and used to influence the resource classification. The variogram models were interpreted as being isotropic along the plane of vein mineralisation, with shorter ranges perpendicular to this plane of maximum continuity. Validation checks have been completed on raw data, composited data, model data and Resource estimates. The model validations checked to ensure data honouring. The validated data consists on o obvious anomalies which are not geologically sound.

	Criteria	Explanation	Commentary
		,	- The mineralised zones are based on actual intersections. These intersections are checked against the drill hole data. Field geologist selections, and the Competent Person has independently checked laboratory sample data. The selections are sound and suitable to be used in the modelling and estimation process.
	data, where available.	- Where the drill hole data showed that no Gold existed, the mineralised zone was not created in these areas.	
			- Further drilling needs to be completed to improve Resource classification of the Inferred Resource.