

**ASX RELEASE**

**3 June 2022**

**COMPANY**

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

**CAPITAL STRUCTURE**

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

**BOARD**

**Brian Rodan**  
Managing Director

**Paul Angus**  
Technical Director

**Keith Murray**  
Non-Executive Director

**Sebastian Andre**  
Company Secretary

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**PROJECTS**



## Siren Acquires Sams Creek Project

Siren Gold Limited (ASX: SNG) (Siren or the Company) is pleased to announce the following material transaction.

### Sams Creek Acquisition

Siren has entered into an agreement to acquire the **Sams Creek Gold Project** in New Zealand from **Sandfire Resources Limited** (Sandfire) for a consideration of A\$250k.

The **Sams Creek Gold Project** includes Sandfire's **81.9% interest in Exploration Permit 40338** and Sandfire's 100% interest in the Barrons Flat Exploration Permit 54454. **OceanaGold Limited** (OGL) will retain their 18.1% interest in Exploration Permit 40338.

Summaries of the material terms and conditions of the acquisition agreement and joint venture agreement applicable to the project are set out in Schedule 1.

### Highlights

- The Sams Creek Gold Project currently has a significant JORC (2012) **Mineral Resource of 7.5Mt @ 2.43g/t Au for 588koz** of contained gold<sup>1</sup>, with a significant potential for expansion.
- Extensive gold mineralisation hosted within a **40m thick porphyry dyke that extends for over 7km and is open at depth.**
- **Favorable metallurgical test work** indicating a gold recovery rate of 84-87%.
- Both Reefton and Sams Creek have **similar metallurgy** that would produce an arsenopyrite flotation concentrate suitable for **central downstream processing.**

### Background

Western New Zealand was originally part of Gondwana and lay adjacent to eastern Australia until around 80 Ma ago (Figure 1). The NW of the South Island comprises an area of predominantly early Paleozoic rocks in broad northerly trending belts which terminate at the Alpine Fault (Figure 2). The Paleozoic sequence is divided into the Buller Terrane, Takaka Central and Takaka Eastern Belts. These belts are interpreted to correspond with the Western, Central and Eastern belts of the Lachlan Fold Belt. The Buller and Western Lachlan belts contain the orogenic gold deposits like Bendigo, Ballarat and Fosterville in Australia and the Reefton Goldfield in New Zealand. The Sams Creek porphyry dyke deposit is located in the Eastern Takaka Terrane, which is equivalent to the Eastern Lachlan belt that hosts porphyry copper-gold deposits like Cadia and Ridgeway.

Siren already has a large strategic tenement holding in the Reefton and Lyell Goldfields, which historically produced over 2Moz of gold at an average recovered grade of 16g/t. This includes the key projects of Alexander River, where Siren recently intersected 2.5m @ 358g/t Au in diamond hole AX84 (refer announcement

<sup>1</sup> MOD Resources Limited 2013 Annual Report. Further detail with respect to the Mineral Resource are set out on page 9 and Schedule 2.



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dated 31 March 2022), and Big River where BR04 intersected 6.6m @ 21.4g/t Au (refer announcement dated 19 April 2021).

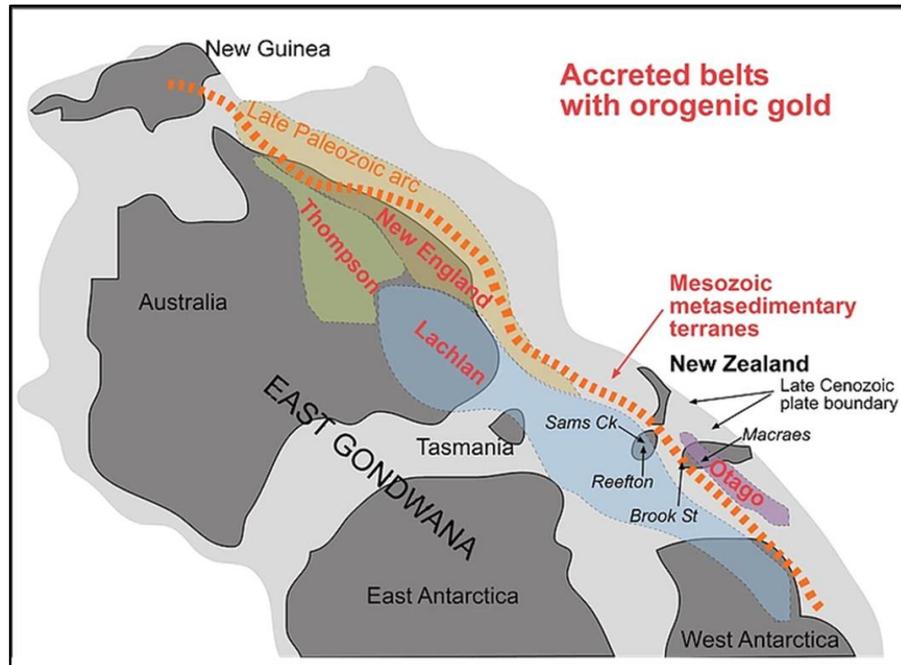


Figure 1. Gondwanaland showing the Lachlan Fold Belt and Reefton Goldfield (Cooper 1992).

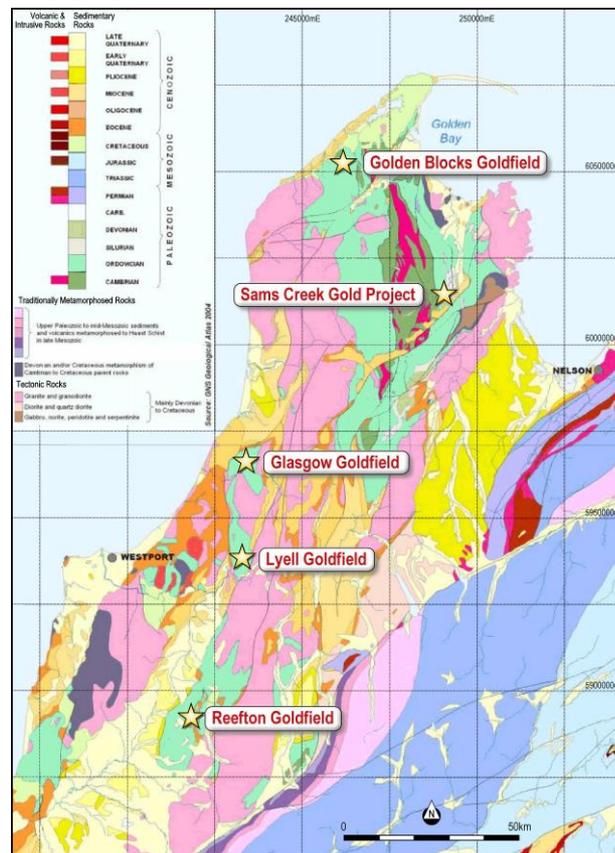


Figure 2. Top of the South Island, geology showing Paleozoic rocks in green



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### Sams Creek Gold Project

The Sams Creek Gold Project is located 140kms NE of Reefton and 100kms NE of Lyell (Figure 2). The Project comprises two exploration tenements: EP 54454, which is 100% held by Sams Creek Gold Limited (SCGL) a wholly owned subsidiary of Sandfire, and EP40338, which is 81.9% held by SCGL under a joint-venture agreement with New Zealand's largest gold miner, OGL, who own the remaining 18.1% interest.

The Sams Creek Project is in Golden Bay, approximately 20km south of Takaka and 20km northwest of Motueka, at the northern end of the South Island of New Zealand (Figure 3). The project straddles the Takaka River and the Cobb Hydro Power Station access road that branches off State Highway No. 6 at the Upper Takaka settlement.

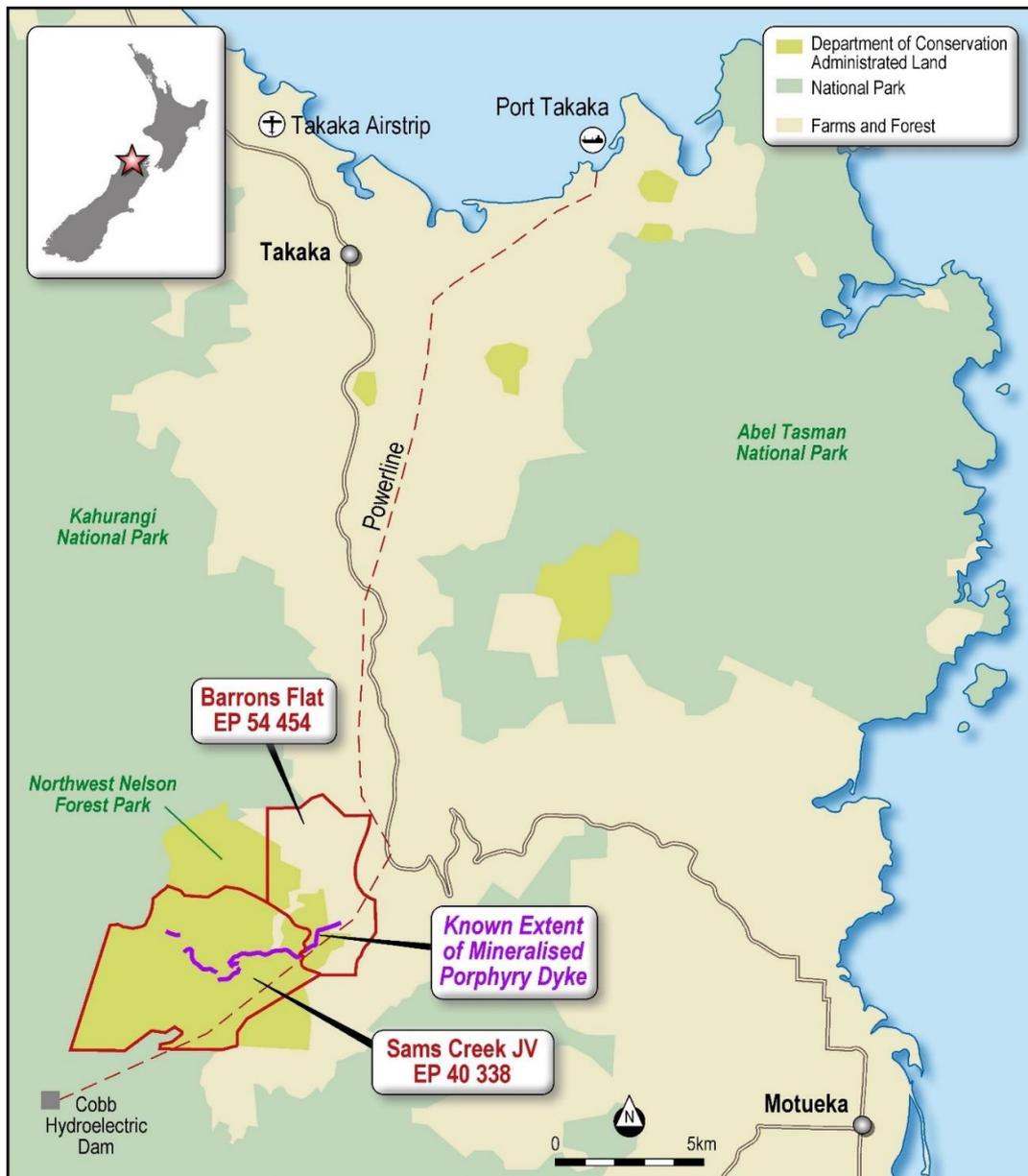


Figure 3. Sams Creek Project location tenements



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The Sams Creek Gold Project is divided into several exploration prospects along the strike of the Sams Creek Dyke (SCD), and includes Riordans, Western Outcrops, Doyles, SE Traverse, Carapace, Main Zone, Anvil and Barrons Flat (Figure 4). The SCD is up to 60m thick and can be traced E-W over 7kms along strike. The dyke generally dips steeply (~60°) to the north, where it intrudes quartzite and sandstone dominated lithologies (Figure 5), but dips more shallowly to the NW and SE between the Carapace and Western Outcrops where it intrudes argillite (Figure 6).

The porphyry dyke is variably mineralised and has been modified by at least four alteration / mineralisation stages. The main gold mineralising event is Stage III where mineralisation consists of irregular to planar gold-bearing arsenopyrite-pyrite±quartz veins (Figure 7c), which form sheeted and local stockwork vein complexes that generally dip to the SE and forms moderate-high grade gold zones (Figure 5). Veins vary in thickness from <1mm to 15mm. These veins are cut by later base metal veins up to 15mm thick containing galena, sphalerite, chalcopyrite and pyrite (Figure 7d). These veins do not appear to contain any gold but appear to be associated with the high-grade gold zones. Significant drillhole intersections are shown in Table 3.

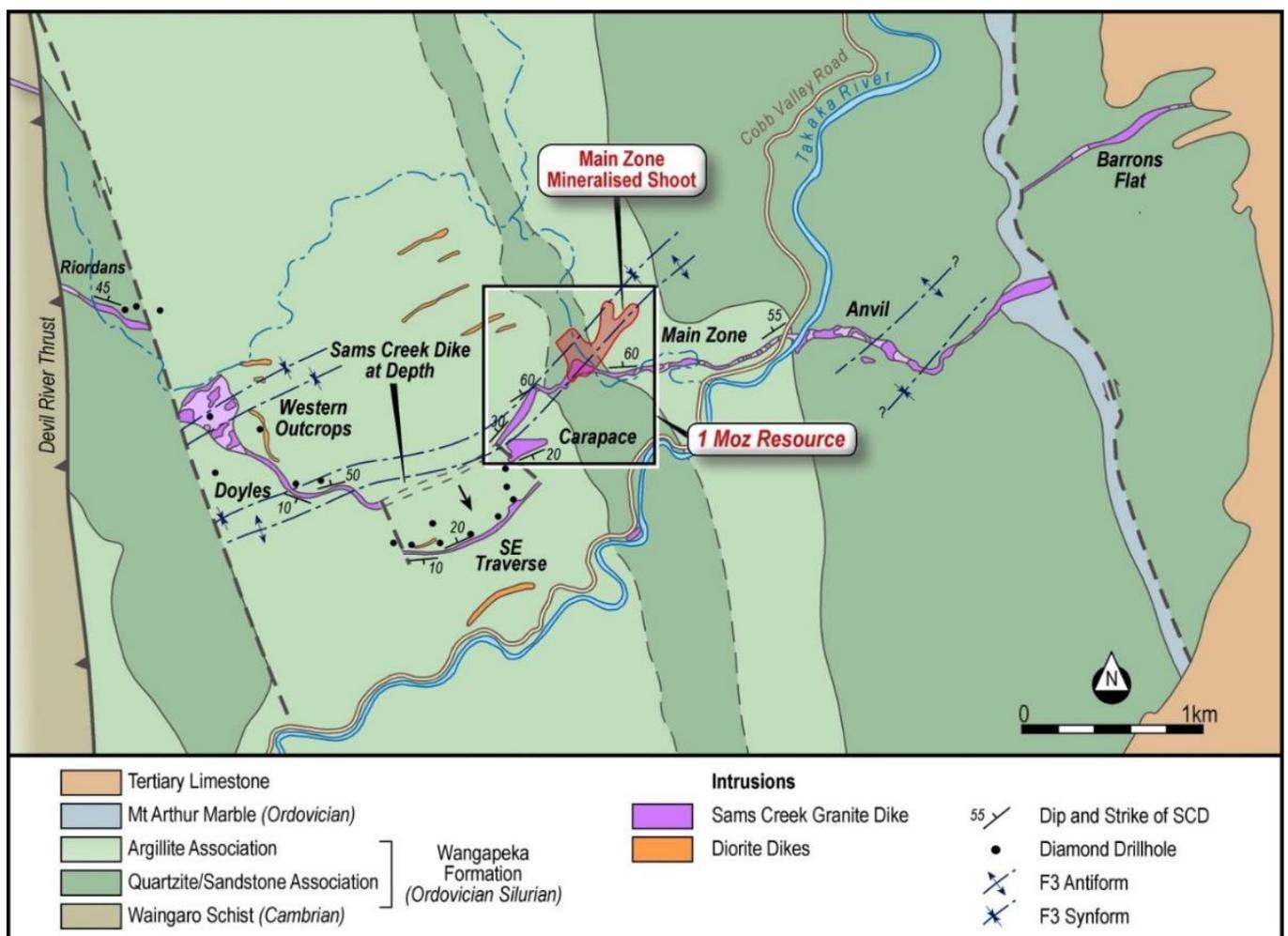


Figure 4. Geology of the Sams Creek deposit.

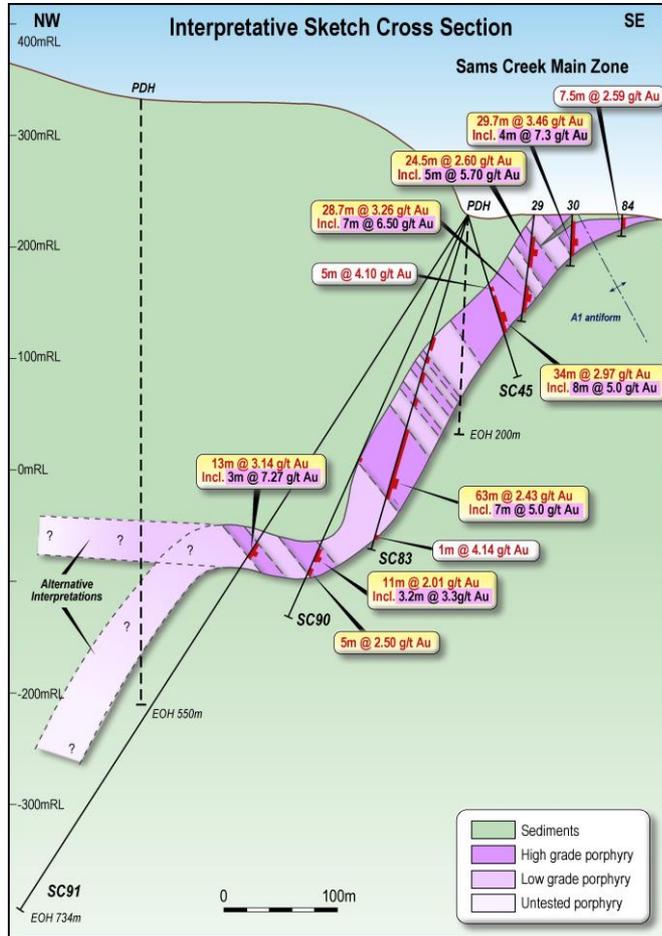


Figure 5. Cross section through the Main Zone.

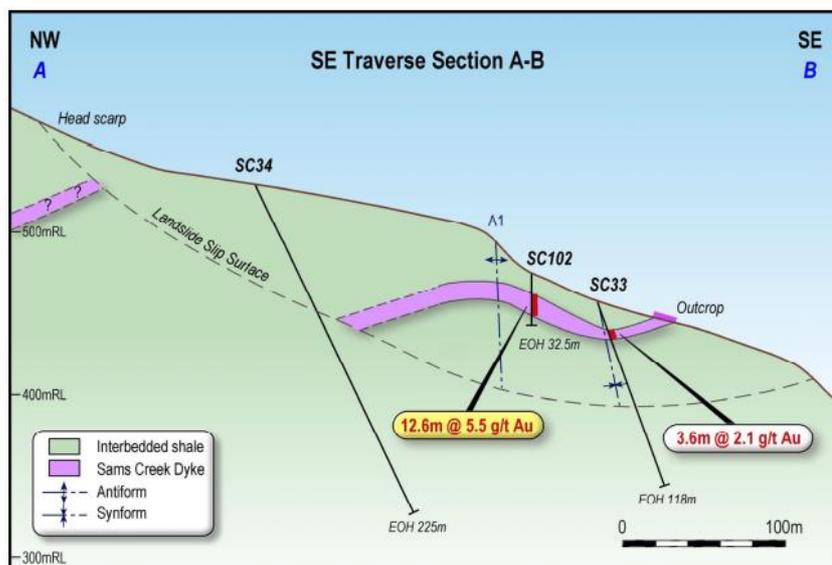
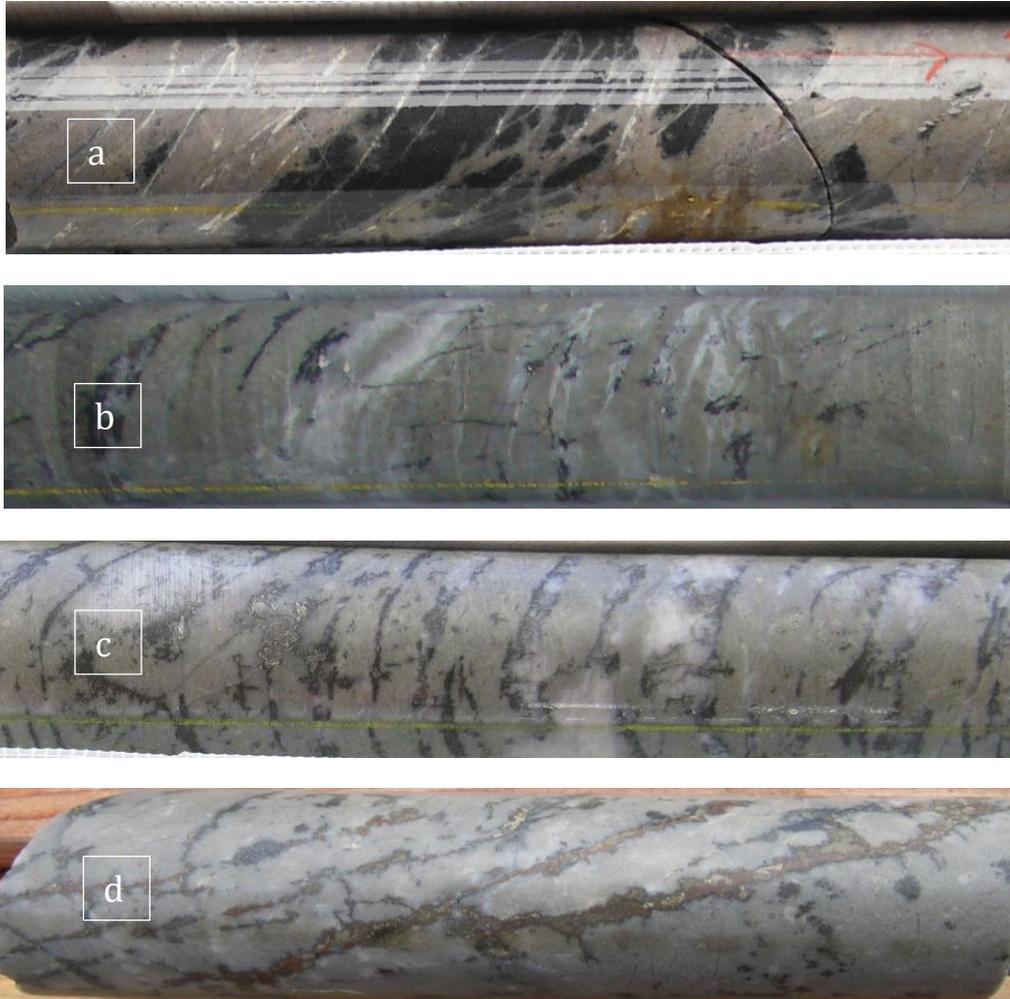


Figure 6. Cross section through SE Traverse



**Figure 7. Sams Creek Porphyry Dyke: a) Stage I magnetite–ankerite ± biotite alteration, b) Stage II quartz ± pyrite, c) Stage III arsenopyrite ± pyrite veins, d) Stage IV base metal veins.**

The SCD has been folded into gentle NE plunging folds, with the gold veins preferentially forming in the fold hinges, resulting in NE plunging mineralised shoots as shown in Figure 8.

The SCD 3D wireframe from the Main Zone to Western Outcrops (approx. 3kms) is shown in Figures 9 and 10. These figures clearly show the NE plunging F3 anticline hinges and associated high grade mineralisation (red and magenta) along the hinge zones at the Main Zone and Carapace.



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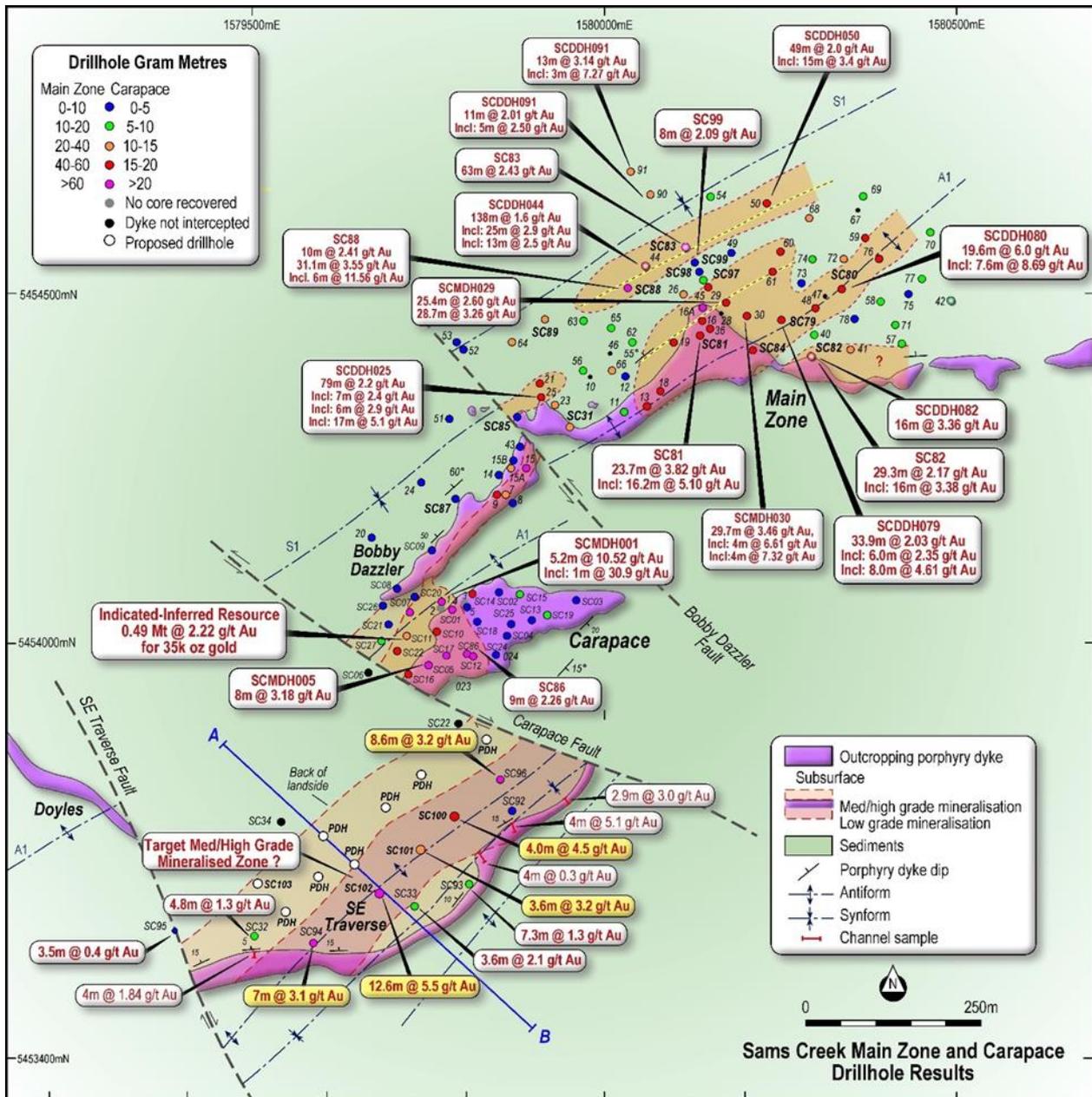


Figure 8. Plan view from Doyle's to Main Zone showing A1 anticline and drillhole results. Mineralised shoots shown orange.

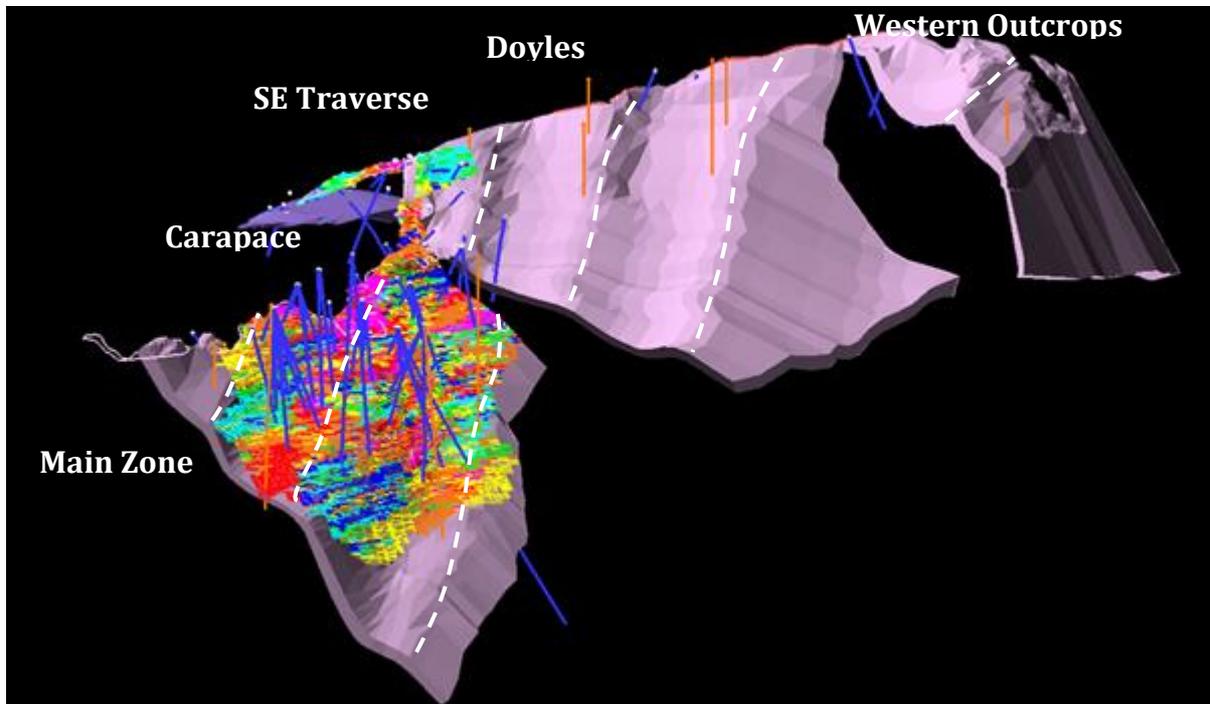


Figure 9. SCD wireframe looking SW showing the Main Zone resource model and NE plunging F3 anticline hinges (white dotted lines). Proposed drillholes shown in orange.

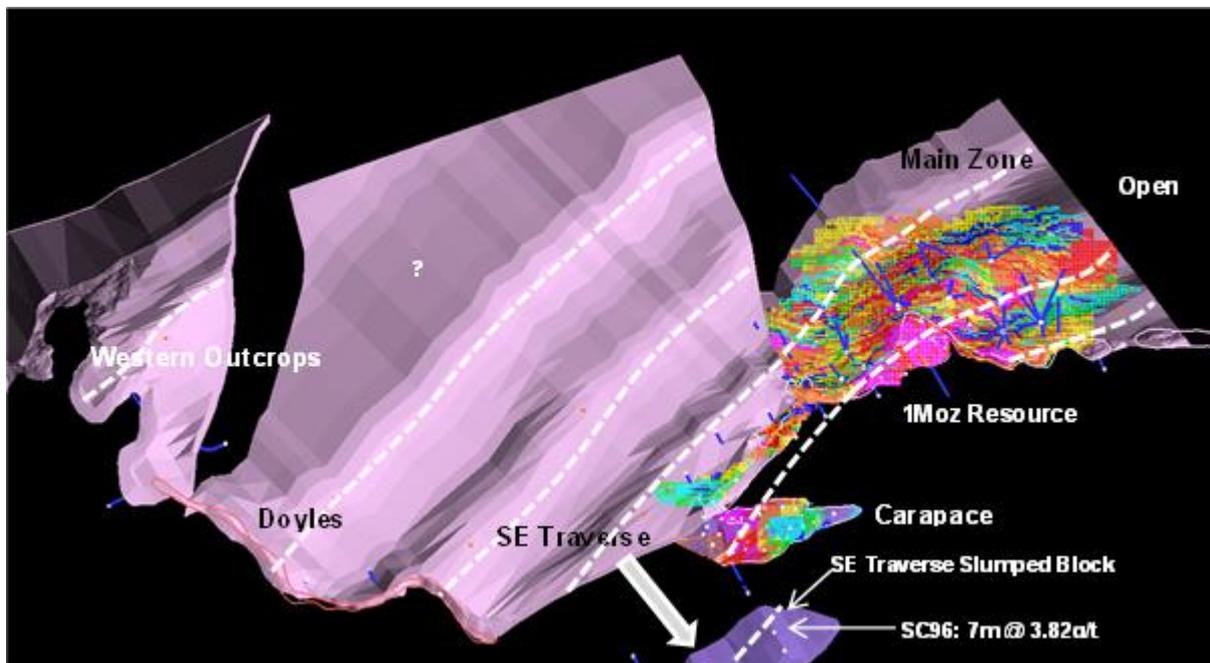


Figure 10. Sams Creek Dyke plan view.



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Golder completed a JORC-compliant resource estimate in 2013. The resource is broken into three spatially separated block models; Main Zone, Bobby Dazzler and Carapace, with separate models produced for each deposit. Ordinary Kriging with a three-pass plan was completed on an unfolded model. Each of the three block models was divided into oxide or sulphide domains based on the weathering profile with appropriate densities applied to each zone. A density of 2.59t/m<sup>3</sup> was used for oxide and 2.70t/m<sup>3</sup> for sulphide mineralisation.

The 2013 model contains a combined resource estimate of 7.5Mt @ 2.43g/t Au for 588koz at a 1.5g/t Au cut-off is shown in Table 1 (see also MOD Resources Limited 2013 Annual Report).

**Table 1. 2013 Resource estimate at a 1.5g/t cut-off.**

<b>2013 Sams Creek Mineral Resource Estimate</b>			
<b>Category</b>	<b>Tonnes (Mt)</b>	<b>Grade (g/t Au)</b>	<b>Contained Gold (koz)</b>
Indicated	5.0	2.48	402
Inferred	2.5	2.33	187
<b>Total</b>	<b>7.5</b>	<b>2.43</b>	<b>588</b>

The 2013 resource estimate doesn't include the SE Traverse prospect. The SE Traverse is an isolated section of dyke approximately 600m long and 200m wide that is interpreted to be a continuation of the A1 anticline hinge that extends from Main Zone for over 1.5kms and is open at depth. Drillhole intersections in the SE Traverse are summarised in Table 2 and confirm the continuation of the higher-grade mineralisation in the A1 anticline hinge (Figure 8).

**Table 2. SE Traverse significant drillhole intersections (unreported drillhole information considered to be non-material).**

<b>Hole ID</b>	<b>From (m)</b>	<b>To (m)</b>	<b>Interval (m)</b>	<b>Gold (g/t)</b>
SCDDH094	7.7	14.7	7.0	3.1
SCDDH096	39.8	48.8	8.6	3.2
SCDDH100	53.5	57.5	4.0	4.5
SCDDH101	43.9	47.5	3.6	3.2
SCDDH102	13.4	26.0	12.6	5.5

All holes drilled at Sams Creek are shown in Figure 11. To date the drilling has been focussed around the Main Zone and Carapace (resource model area) and SE Traverse area, with little or no drilling at Doyles, Anvil West and Anvil East. To date only around 15% of the SCD has been drill tested. Rock chip samples along the SCD are shown in Figure 12. These show that Riordans, Western Outcrops, Doyles, Anvil West and Anvil East all have high grade rock chips, interpreted to be associated with NE trending anticline hinges that have the potential to contain additional mineralisation.

Metallurgical testwork was completed by OGL and reviewed by IMO in Perth. Four samples were collected from drill core (Table 4). Direct leach recoveries ranged from 79.5% to 87.5% and averaged 83.8%. If the mineralisation was floated and acid leached, then the total recoveries ranged from 83% to 91.3% for an average of 87.2%.

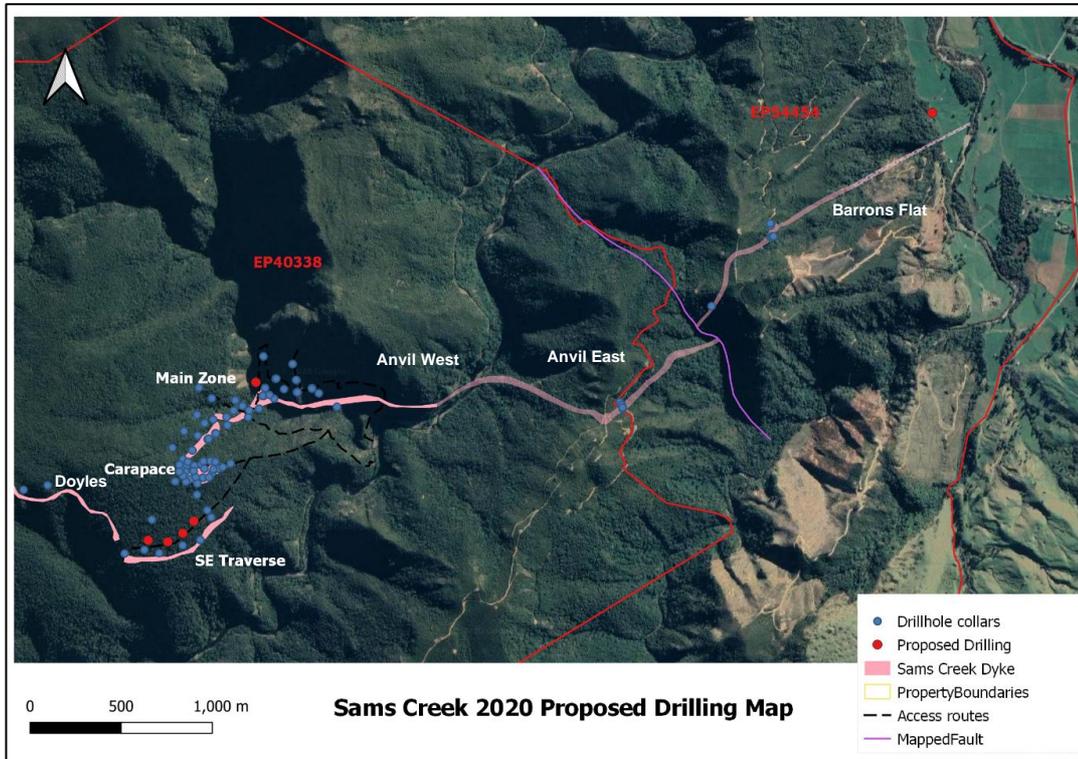


Figure 11. Sams Creek drillholes. The proposed holes in red were drilled in 2020/2021.

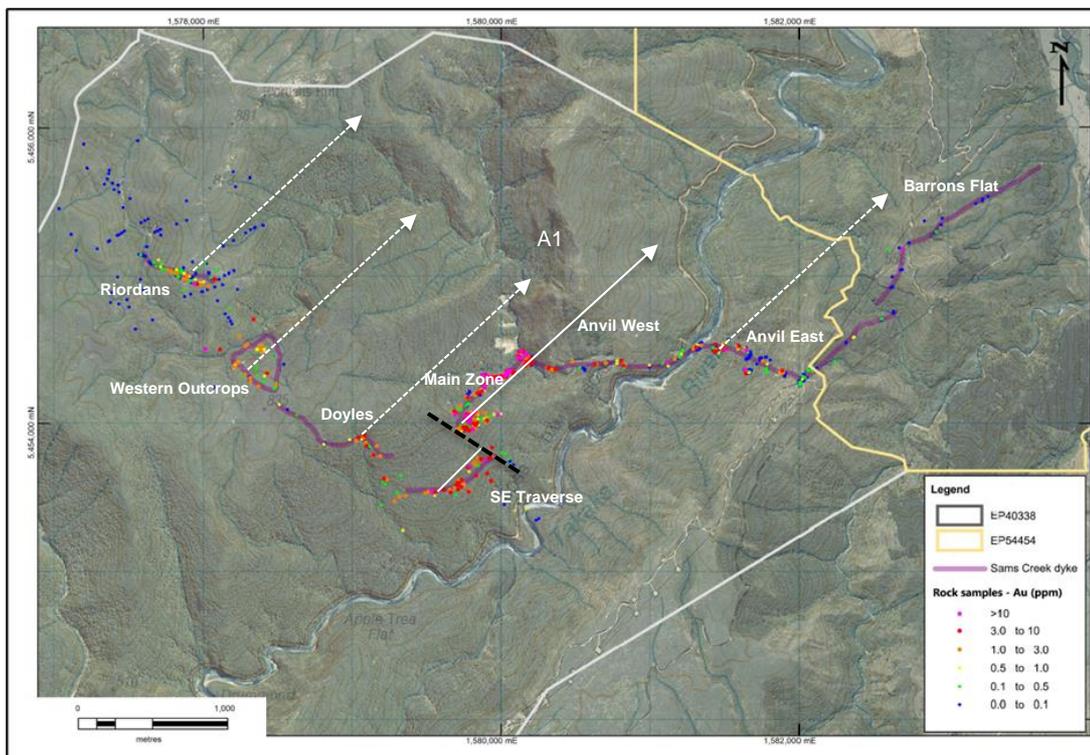


Figure 12. Rock chip samples along the SCD.



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**Table 3. Main Zone drilling intersections used in the resource estimate based on a 2g/t cut-off and a minimum 5m downhole interval (unreported drillhole information considered to be non-material).**

Main Zone					Main Zone				
Hole	From (m)	To (m)	Interval (m)	Au g/t	Hole	From (m)	To (m)	Interval (m)	Au g/t
DDH82SC07	15.6	23.1	7.5	3.56	SCDDH044	273.6	277.0	3.4	2.37
DDH82SC09	7.5	11.9	4.4	4.02	SCDDH045	67.0	71.0	4.0	4.73
DDH82SC09	22.0	42.0	20.0	3.15	SCDDH045	76.0	108.0	32.0	3.06
DDH82SC09	50.0	53.0	3.0	9.17	SCDDH048	192.0	212.0	20.0	4.36
DDH82SC09	63.0	67.0	4.0	3.30	SCDDH048	220.0	228.0	8.0	2.97
DDH83SC13	63.0	69.0	6.0	5.42	SCDDH050	231.0	237.0	6.0	2.48
DDH83SC13	102.0	105.0	3.0	3.12	SCDDH050	250.0	253.0	3.0	8.26
DDH83SC15	7.0	10.0	3.0	7.92	SCDDH050	260.0	265.0	5.0	4.02
DDH83SC15	18.0	24.0	6.0	11.11	SCDDH056	103.0	107.0	4.0	3.27
DDH83SC15A	19.0	22.0	3.0	5.40	SCDDH059	281.0	285.0	4.0	2.31
DDH84SC16	1.0	27.0	26.0	4.20	SCDDH059	292.0	296.0	4.0	2.24
DDH84SC16	86.0	90.0	4.0	2.45	SCDDH059	300.0	305.0	5.0	2.55
DDH84SC16	93.0	100.0	7.0	5.74	SCDDH059	315.0	319.0	4.0	2.36
DDH84SC16	114.0	117.0	3.0	5.10	SCDDH060	177.0	183.0	6.0	3.51
DDH84SC16	152.0	155.0	3.0	6.88	SCDDH060	210.0	214.0	4.0	4.15
DDH84SC16	161.0	200.0	39.0	3.85	SCDDH061	142.0	152.0	10.0	4.27
DDH84SC16	203.0	208.0	5.0	4.10	SCDDH063	245.0	254.0	9.0	4.01
DDH84SC16A	1.2	27.0	25.8	4.41	SCDDH064	179.5	183.0	3.5	6.09
DDH84SC17	5.0	17.0	12.0	2.95	SCDDH072	303.0	306.0	3.0	3.48
DDH84SC17A	2.0	13.0	11.0	3.97	SCDDH076	236.0	244.0	8.0	3.79
DDH84SC17A	20.0	26.0	6.0	4.59	SCDDH079	135.0	146.0	11.0	3.91
DDH84SC18	2.0	6.0	4.0	5.40	SCDDH080	255.4	275.0	19.6	6.00
DDH84SC18	10.0	15.0	5.0	7.76	SCDDH081	1.0	10.0	9.0	6.73
DDH84SC18	31.0	34.0	3.0	6.08	SCDDH081	15.0	18.0	3.0	6.81
DDH84SC19	61.0	67.0	6.0	4.20	SCDDH082	76.0	88.0	12.0	3.98
DDH84SC19	71.0	75.0	4.0	3.47	SCDDH083	197.0	212.0	15.0	2.67
DDH84SC19	79.0	105.0	26.0	3.25	SCDDH083	216.0	221.0	5.0	3.45
DDH84SC19	131.0	137.0	6.0	7.22	SCDDH083	227.0	237.0	10.0	3.02
DDH84SC19	143.0	159.0	16.0	2.99	SCDDH083	241.0	245.0	4.0	3.37
DDH84SC19	162.0	173.0	11.0	3.25	SCDDH083	250.0	260.0	10.0	4.24
DDH84SC19	177.0	200.0	23.0	2.77	SCDDH084	8.5	13.0	4.5	3.35
DDH84SC19	203.0	212.0	9.0	3.16	SCDDH086	2.0	7.0	5.0	3.05
DDH84SC21	133.0	145.0	12.0	2.42	SCDDH087	28.5	34.0	5.5	2.42
DDH84SC25	140.0	148.0	8.0	2.29	SCDDH088	130.0	138.0	8.0	2.73
DDH84SC25	153.0	160.0	7.0	2.42	SCDDH088	143.9	153.0	9.1	8.51
DDH84SC25	172.0	178.0	6.0	2.90	SCDDH088	157.0	163.0	6.0	2.95
DDH84SC25	202.0	218.0	16.0	5.37	SCDDH089	259.0	268.0	9.0	2.48
DDH85SC26	107.0	110.0	3.0	5.37	SCDDH090	325.0	332.0	7.0	2.57
DDH85SC26	121.0	124.0	3.0	2.87	SCDDH090	342.0	345.2	3.2	3.27
DDH86SC35	9.0	16.0	7.0	5.17	SCDDH091	347.0	353.0	6.0	5.07
DDH86SC36	0.0	25.5	25.5	4.78	SCMDH028	24.0	27.6	3.6	4.53
DDH87SC40	116.0	122.0	6.0	3.06	SCMDH029	32.0	47.0	15.0	3.72
DDH87SC40	138.0	141.0	3.0	2.81	SCMDH029	63.0	81.0	18.0	3.79
SCDDH044	183.0	204.0	21.0	3.26	SCMDH029	87.0	91.7	4.7	4.24
SCDDH044	233.0	236.0	3.0	2.88	SCMDH030	11.2	27.0	15.8	3.84
SCDDH044	247.0	255.0	8.0	3.41	SCMDH030	36.0	40.0	4.0	7.32

Table 4. Metallurgical testwork results.

Sample No	Drillhole ID	From (m)	To (m)	Gold (g/t)	Leach (%)	Flotation (%)	Acid Leach of Flotation Concentrate (%)	Total Recovery (%)
SC01	SCDDH044	180	259	2.9	79.3	95.6	94.4	85.0
SC02	SCDDH044	259	318	1.5	82.5	97.4	94.8	89.5
SC03	SCDDH045	65	112	4.5	87.5	97.7	95.5	91.3
SC04	SCDDH048	190	228	5.5	86.0	97.1	88.6	83.0
<b>Average</b>					<b>83.8</b>	<b>96.7</b>	<b>93.3</b>	<b>87.2</b>

### Competent Person Statement

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



## SCHEDULE 1 – CONTRACT SUMMARIES

### Share Purchase Agreement

<b>Parties</b>	The Company, MOD Resources (NZ) Pty Ltd ( <b>MOD</b> ) and Sandfire Resources Limited ( <b>Sandfire</b> )
<b>Date</b>	[31 May 2022]
<b>Acquisition</b>	<p>Sams Creek Gold Limited (NZ company number 3508391) (<b>Sams Creek</b>) is a company registered in New Zealand and has its registered office at Level 24, HSBC Tower, Wellington 6140. MOD is the registered holder and the legal and beneficial owner of all the issued shares in the capital of Sams Creek (<b>Sale Shares</b>).</p> <p>Sams Creek has a 100% legal and beneficial interest in EP 54454 and an 81.9% legal and beneficial interest in EP 40338 (<b>Project Tenements</b>). Sams Creek is a party to the Exploration Joint Venture Agreement, Sams Creek Project in respect of EP 40338 (<b>OceanaGold JVA</b>).</p> <p>MOD has agreed to sell the Sale Shares to the Company. Sandfire Resources Limited (Sandfire) has agreed to guarantee the obligations of MOD under the Share Purchase Agreement.</p>
<b>Conditions Precedent</b>	<p>Completion of the acquisition contemplated under the Share Purchase Agreement is conditional on the following conditions being satisfied or waived by the Parties by no later than 30 September 2022:</p> <ul style="list-style-type: none"><li>• the Company conducting due diligence investigations in respect of the Project Tenements and Sams Creek and being satisfied in its sole discretion with the results of the due diligence;</li><li>• a direction order being issued in accordance with section 88 of the OIA, free from any conditions, or subject only to conditions that are acceptable to the Company acting reasonably;</li><li>• the Minister providing all approvals, consents or orders required under the Crown Minerals Act 1981 (New Zealand) to give effect to the transactions contemplated by the Share Purchase Agreement, including the change of control consent required under section 41 of the Mining Act on customary terms and conditions satisfactory to the Company (acting reasonably) (<b>Mining Act Consent</b>);</li><li>• the Minister of Conservation and the Minister of Mining and Resources providing all approvals, consents or orders required under the Access Agreement to give effect to the transactions contemplated by the Share Purchase Agreement on customary terms and conditions satisfactory to the Company (acting reasonably), which approval, consent or order must include an acknowledgement that the Access Agreement remains in full force and effect for the term of the Project Tenement EP 40338 (Access Condition) (<b>Access Agreement Consent</b>); and</li><li>• the Parties obtaining all necessary regulatory approvals, consents or waivers required for the transactions contemplated by the Share Purchase Agreement, including (without limitation) any other required</li></ul>



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	New Zealand regulatory approvals, consents or waivers (other than the Mining Act Consent and Access Agreement Consent).
<b>Completion</b>	Completion of the acquisition will take place on the day which is one Business Day after satisfaction or waiver of the last of the Conditions Precedent, or any other time, date, or place that the Company and MOD agree.
<b>Consideration</b>	The purchase price of the acquisition is A\$250,000, to be satisfied in cash, bank cheque or other electronic means of transfer of cleared funds and to be payable on Completion. A\$50,000 of the purchase price has been paid as a deposit, which is refundable in certain circumstances.
<b>Bond Facility</b>	The Company will also pay NZ\$60,000 converted to Australian dollars utilising the RBA NZD:AUD exchange rate on the Business Day prior to Completion for bond facilities between Westpac, the Minister of Conservation and Sams Creek relating to security for Sam Creek's access arrangements in respect of Project Tenement EP 40338, which will remain in place following Completion.

The Share Purchase Agreement otherwise contains terms and conditions that are customary for an agreement of its nature.

### Joint Venture Agreement

<b>Parties</b>	Sams Creek Gold Limited ( <b>Sams Creek</b> ) and Oceana Gold (New Zealand) Limited ( <b>Oceana</b> )
<b>Date</b>	12 July 2012
<b>Background</b>	Oceana is the registered holder of EP40338 ( <b>Tenement</b> ) and the Parties are associated in an unincorporated joint venture ( <b>OceanaGold JV</b> ). As at the date of this announcement, Sams Creek has earned an 81.9% interest in the Tenement and Oceana retains an 18.1% interest ( <b>JV Interests</b> ).
<b>Joint Venture</b>	The Parties own all OceanaGold JV property, including the Tenement, as tenants in common in proportion to their JV Interest and the rights, duties, obligations and liabilities of the Parties arising out of the OceanaGold JV are several in proportion to their respective JV Interest.
<b>Term/Termination</b>	The OceanaGold JV commenced on 12 July 2012 and will terminate: <ul style="list-style-type: none"> <li>• if the Parties cease to hold any interest in the Tenement;</li> <li>• in the event that a Party's JV Interest is transferred or deemed to be transferred to the other Party, such that only one Party would remain interested; and</li> <li>• by mutual agreement of the Parties, in which event the Joint Venture property (including the Tenement) shall be sold or otherwise disposed of or abandoned by agreement of the Parties, with any consideration or other payment received distributed in accordance with the Parties' respective JV Interests.</li> </ul>



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<b>Contribution and Expenditure</b>	All expenditure is funded by each party in proportion to their respective JV Interests, provided that a party may elect not to contribute, which will result in that party being diluted in accordance with a customary dilution formula.
<b>Default and Interest</b>	Where a Party elects to contribute and fails to pay a contribution due in full, it shall pay interest to the Manager on the unpaid amount at a rate equal to 2% above the Westpac Banking Corporation Indicator lending rate from time to time, and the Manager shall be entitled to recover moneys owing in any court of competent jurisdiction.
<b>Management of Joint Venture</b>	Sams Creek was appointed as the Manager of the Joint Venture with effect from the commencement date of OceanaGold JVA and is responsible for carrying out or supervising all exploration of the Tenement for the parties in proportion to their respective JV Interests. The Manager is also responsible for performing the environmental rehabilitation concurrently with the mining operations.
<b>Management Committee</b>	Each Party may appoint 2 members to the Management Committee who shall meet at least once every 3 months. Each member of the Management Committee has one vote and all decisions must be declared by a simple majority of the votes cast, other than approval of all Programmes and Budgets. The Chairman of the Management Committee shall be one of the members appointed by Sams Creek and shall have a casting vote.
<b>Royalty Agreement (Royalco Royalty)</b>	There is a Royalty, being 1% of all product (gold, ores, concentrates or other minerals) that is deliverable to Royalco Resources (No 1) Pty Ltd (ACN 119 262 976).
<b>Minimum Interest</b>	If the JV Interests of Oceana or Sams Creek reduce to 10% or less as a result of dilution (Diluting Party), one of those Parties transferring part of its JV Interest to the other Party or a combination of those, then the Diluting Party's JV Interest will be deemed to be transferred to the non-Diluting Party in consideration for the grant of royalty equal to 2% of the Net Smelter Return of any product produced on the Tenement.
<b>Breach Default Event</b>	Each of the following is a default under the OceanaGold JVA: <ul style="list-style-type: none"><li>• a material breach by a party of any of its material obligations;</li><li>• an insolvency event occurring in relation to a party; and</li><li>• a change of control occurring in respect of a party without the other party's consent (which consent has been received in respect of the acquisition of Sams Creek by the Company).</li></ul>

The OceanaGold JVA otherwise contains terms and conditions that are customary for an agreement of its nature.

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### SCHEDULE 2 – JORC Code, 2012 Edition – Table 1

#### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code Explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>CRA Exploration (CRAE), OceanaGold Corporation (OGC), MOD Resources (MOD) and Sandfire Resources (SFR) have all used similar sampling techniques.</li> <li>Diamond core (DC) drilling was logged to obtain for geological and geotechnical data and samples for assaying and rock strength (unconfined compressive strength – UCS) and density.</li> <li>Downhole geophysical logging wasn't undertaken.</li> <li>DC 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 hangingwall and footwall waste.</li> <li>CRAE, OGC, MOD and SFR core samples were pulverised to &gt;95% passing 75 µm to produce a 30 g charge for fire assay for Au. Various multi-element analyses were also undertaken from the DC with at least As, Ag and S analysed.</li> <li>SFR rolled DC into plastic splits from the triple tube spilt at the drill rig and then placed into the core trays. This provided a far better quality of core presentation with preservation of structures and broken core with less handling of the core.</li> <li>Field and core duplicates, pulp, repeat analysis were completed by OGC, MOD &amp; SRF as well as checks on older CRAE data to test ensure sample representivity.</li> <li>CRAE completed trenching and channel sampling of exposed dyke outcrops.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>All DC drilling was helicopter supported.</li> <li>DC 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.</li> <li>Earlier CRAE drilling was completed HQ and NQ sizes.</li> <li>MOD used man portable rig with drillhole ID's SCMDH**** which were drilled using NQ size core.</li> </ul>

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Criteria	JORC Code Explanation	Commentary
		<ul style="list-style-type: none"> <li>A 15-hole RC drilling program at Barrons Flat was using an 80mm (3.5 inch) face sampling hammer with 1m samples collected.</li> <li>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.</li> </ul>
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>OGC, MOD &amp; SFR sample recovery was recorded by measuring the length of recovered core and comparing this with the drilled interval.</li> <li>OGC re-logged all the CRAE core and recorded recoveries.</li> <li>The core recovery for the Main Zone, historically, is approximately 96.6%.</li> <li>The Carapace had higher rates of core loss with the average of 76% recovered. These appears to have no material impact on the results.</li> <li>Increased core loss is observed in the weathered mineralised dyke.</li> <li>SE Traverse recoveries are ~ 90% in the dyke.</li> </ul>
<i>Logging</i>	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>MOD and SRF DC was oriented. Structural measurements were recorded during logging.</li> <li>OGC relogged all the CRAE core.</li> <li>Deeper interval has been logged for magnetic susceptibility (MS) using hand-held MS meters.</li> <li>Logging intervals are based on geological boundaries or assigned a nominal length of one metre.</li> <li>Mineralised zones were logged for type, alteration intensity, vein thickness, frequency, angle to long core axis, and mineralogy.</li> <li>Summary geotechnical information was recorded.</li> <li>All core trays were photographed prior to core being sampled.</li> <li>All core is stored in coreshed and containers on site or in OGC coreshed in Reefton, NZ.</li> </ul>
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> </ul>	<ul style="list-style-type: none"> <li>OGC, MOD &amp; SFR DC sample intervals were physically marked on the core, which was sawn in half lengthways with a diamond core-cutting saw. The resulting half core was taken for the laboratory sample and the remaining core was archived.</li> <li>OGC and MOD completed 5m grind samples in host rock to test for mineralisation and waste rock characterisation.</li> <li>The field duplicates, laboratory duplicates and laboratory repeats were collected and assayed</li> </ul>



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Criteria	JORC Code Explanation	Commentary
	<ul style="list-style-type: none"> <li>Quality control procedures adopted for all sub-sampling stages to maximise representativity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<p>with laboratory duplicates. Repeats were found acceptable in comparison with regular laboratory samples. No major issues identified.</p> <ul style="list-style-type: none"> <li>MOD &amp; SFR took field duplicates are routinely submitted as half core. Field duplicates were originally DC 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.</li> <li>The DC (2-3 kg) and channel (1-2kg) sample sizes are considered appropriate to the grain and particle size for representative sampling.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>CRAE- DC samples were sent to Service Laboratories in Nelson and AAS analysis was 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 was 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 or sampling quality control procedures were consistently undertaken by CRAE. No evidence of standards or blanks is available.</li> <li>OGC DC samples were fire assayed and analysed by Aqua Regia digest for Au and LECO digest for sulphur by Amdel Ltd (Amdel) at their Macraes Flat Laboratory, New Zealand. A multi-element suite comprising of Ag, As, Bi, Cu, Pb, Zn &amp; 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 &amp; As only. OGC used standards, blanks, laboratory repeats which were recorded in their last drilling programme.</li> <li>MOD &amp; SRF DC samples were sent to SGS Waihi, New Zealand, where they were assayed by 30g fire assay with AAS finish. MOD DC multi-element analysis was completed by SGS up to SCDDH078. After SCDDH078, multi-element analysis was undertaken by ALS Townsville where a 48-element suite was determined via ICP-MS. ALS has a full QAQC program. SGS laboratories carry a full QAQC program and are ISO 19011 certified. Sample preparation of geological samples by SGS comprises of drying, crushing, splitting (if required) and pulverising to obtain an analytical sample of 250 g with &gt;95% passing 75 µm. Any over limit arsenic samples (&gt;5000ppm) were then tested by XRF method. Drill holes SCDDH056 and SCDDH057 weren't tested for over limited As and recorded as 5000ppm.</li> <li>No independent laboratory inspections were carried out during these phases of drilling, sampling and analysis.</li> </ul>



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Criteria	JORC Code Explanation	Commentary
		<ul style="list-style-type: none"> <li>For each MOD and SRF drill hole QA/QC included:               <ul style="list-style-type: none"> <li>At least 2 Au certified Rocklab standards (CRM). Two blanks.</li> <li>At least one core duplicate (quarter core) and laboratory duplicate per drill hole or every 25 samples.</li> <li>Lab repeats are recorded.</li> </ul> </li> <li>Standards, duplicates and blanks are checked after receiving the results. The QAQC results has been acceptable.</li> <li>The same process for MOD channel and rock chip samples was used.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>CRAE drillhole SCDDH017 was twinned by MOD. The results for the two holes were similar suggesting that the CRAE Au results are acceptable.</li> <li>During MOD and SRF drill programs mineralisation intersection data was inspected and verified independently by the project manager or senior project geologist. The project manager and visited the deposit on average weekly in support of the exploration program.</li> <li>All laboratory assay results were received and stored in both CSV and laboratory signed PDF formats.</li> <li>Data is stored in Microsoft Excel, Leapfrog and Vulcan.</li> <li>Data storage system protocols are basic but robust.</li> <li>All data is stored in a Data room as well as back up on Drop box.</li> <li>The data and future work should be stored and managed on a commercial relational database with inbuilt validation protocols in the future.</li> <li>Quarter core cuts are added together to get the same sample weights per sample interval.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>The drillhole collar coordinate (X, Y, Z) are referenced to New Zealand Transverse Mercator 2000 (NZTM). All holes up to SCDDH096 have been picked up by GPS methods and post processed by Golden Bay Surveyors to 0.1m accuracy.</li> <li>SFR drilling from SCDDH097 to SCDDH103 have been picked by handheld GPS Garmin 64. SRF drillholes in the Main Zone are collared within 1m of previous drilling from the same drill pad.</li> <li>A digital terrain model (DTM) was constructed based on LiDAR that was flown by NZ Aerial Surveys in 2011. All drill collars elevations were reconciled with the LiDAR.</li> <li>Downhole surveys are not available for 19 out of 50 CRAE holes and one abandoned OGC hole SCDDH046. Except for one drillhole (DDH84SC16), all the unsurveyed drillholes are less than 120m deep. Hellman report (2007) noted that no significant deviation in azimuth and dip</li> </ul>



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Criteria	JORC Code Explanation	Commentary
		<p>takes place in the first 120m of the surveyed holes. It was therefore considered reasonable to assume that these unsurveyed holes follow the collar Azimuth and dip orientation.</p> <ul style="list-style-type: none"> <li>• The correction used between magnetic north and true north (magnetic declination) was 22° East.</li> <li>• MOD and SRF surveyed on average every 30m using a digital downhole tool. SRF used Longyear true shot camera for down hole surveys.</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drilling in the Main Zone and Bobby Dazzler has generally been completed on a 75m spacing with ranges between 50m to 150m.</li> <li>• The drill spacing was suggested by drill hole density analysis (Golder, 2012) down to the 50mRL in the Main Zone which is deemed reasonable for an open pit mining methodology.</li> <li>• Drilling directions and distances in the Main Zone 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.</li> <li>• The Carapace, with a much flatter terrain was drilled on 50m spacing with vertical holes. SE Traverse spacing is approximately 100m.</li> <li>• Sample compositing was to 1m which is the dominant sample length.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• 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-parallel to the mineralised sulphide veins that dip to the SE. Therefore, these intersections are sub-optimal for resource grade estimation. These drill holes provide more precise estimates of tonnage but do appear to introduce a grade bias due to the angle intersection with the mineralisation zones.</li> <li>• 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 wall footwall of the dyke.</li> <li>• This relationship between drillhole orientation and expected benefits has been taken into consideration during drill hole design and implementation.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill samples were securely packaged on site and transported by a courier with "chain of custody" documentation, to SGS laboratory in Westport, New Zealand for crushing and</li> </ul>



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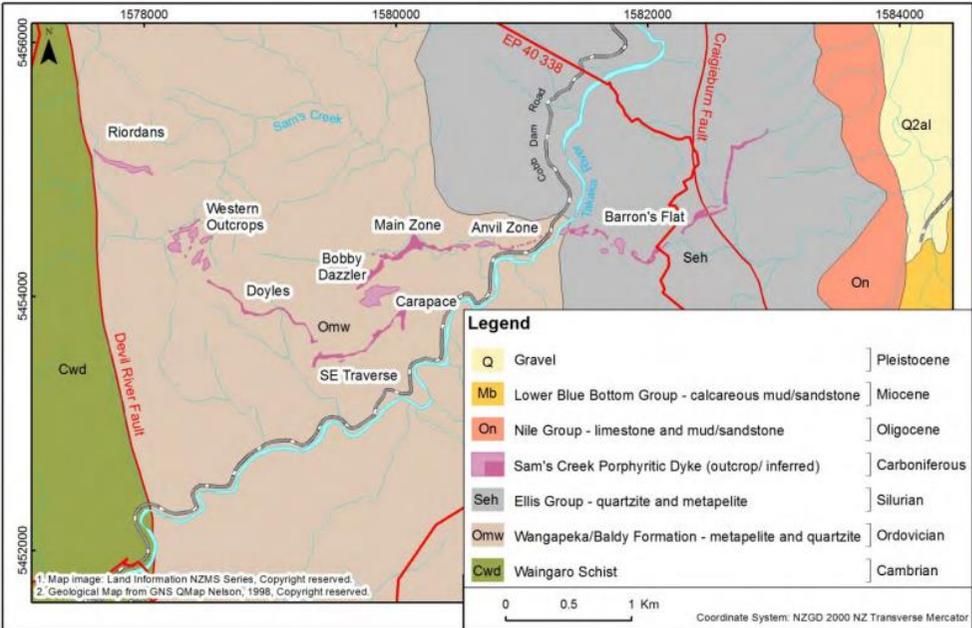
Criteria	JORC Code Explanation	Commentary
		sample preparation. Samples were stored in a locked coreshed until despatch.
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>Golder completed an audit as part of the 2013 Mineral Resource Estimation (MRE). Hellman Scofield previously carried out an independent review of the sampling techniques and data. The results were satisfactory.</li> </ul>

### Section 2 Reporting of Exploration Results

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

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>The Exploration Permit EP40338 expires on the 26 March 2025 and is subject to a joint venture with OGC with Sams Creek Gold Ltd (SGL) owning 81.9%. SGL is currently owned by SFR.</li> <li>The eastern neighbouring permit EP54454 expires on the 25 September 2022. This covers the eastern areas of the Sams Creek Dyke over Barron's Flat into the Waitui catchment. SGL is the sole permit holder of EP 54454. A four-year Appraisal Extension has been applied for.</li> <li>A 1% Crown royalty would apply to EP40338 and 2% Crown royalty to EP54454. applicable for any gold or silver production once the Sams Creek permits are converted to mining permits.</li> <li>The Sams Creek permit 40338 is also subject to an agreement between Royalco Resources Limited (Royalco) and OGC. Under this agreement, a royalty of 1% of gold produced is deliverable by OGC to Royalco.</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>All exploration results in drill holes up to SCDDH103 were produced by CRAE (1980-1987), OGC (1996-2005), MOD (2010- 2017) and SFR (2019 to 2021).</li> <li>CRAE completed trenching and soil sampling programs where MOD resources completed the CRAE soil sample pattern over Sams Creek and Barrons Flat.</li> <li>MOD completed structural mapping program over Main Zone, Carapace, SE Traverse and Doyles as well channel sampling.</li> <li>MOD completed an aerial magnetic geophysics program.</li> </ul>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>Sams Creek mineralisation is contained within a hydrothermally altered peralkaline granite porphyry dyke that intrudes Early Palaeozoic metasediments. The dyke is up to 60m thick and can be traced east-west along strike for over 7km. The dyke generally dips steeply to the north (-60°) 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).</li> </ul>

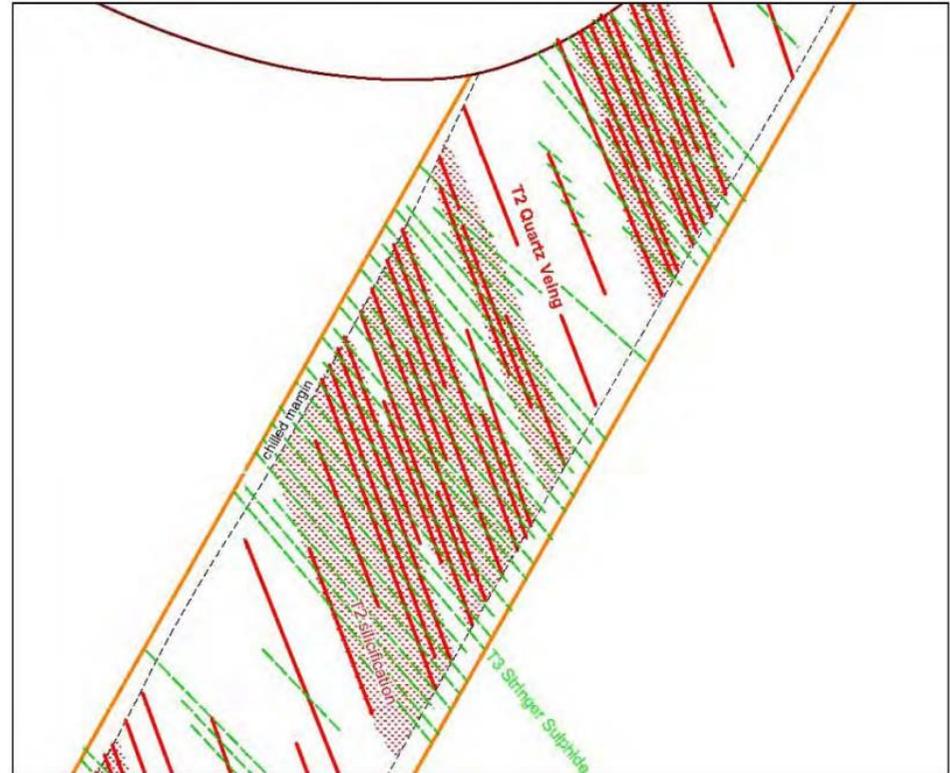
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Sams Creek Geology Map

- Gold mineralisation is largely contained within thin (1-15 mm) sheeted quartz-sulphide veins that crosscut the dyke which strike to the NE and dip predominantly to the SE at around 50°.

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**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 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 sulfide 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.



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### Drillhole Information

- A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:
  - easting and northing of the drillhole collar
  - elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar
  - dip and azimuth of the hole
  - down hole length and interception depth
  - hole length.
- If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.

Holeid	Company	Prospect	Total Depth	mE NZTM	mN NZTM	RL	Collar Azi	Collar Dip
DDH82SC01	CRAE	Carapace	84.10	1579751.76	5454047.29	561.80	121	-45
DDH82SC02	CRAE	Carapace	117.25	1579745.88	5454046.20	562.99	301	-45
DDH82SC03	CRAE	Carapace	8.20	1579801.09	5454049.82	556.63	61	-90
DDH82SC04	CRAE	Carapace	19.50	1579805.43	5454054.39	555.60	66	-45
DDH82SC05	CRAE	Carapace	8.35	1579803.67	5454053.63	555.90	261	-45
DDH82SC06	CRAE	Main Zone	9.00	1579839.27	5454190.36	486.33	61	-90
DDH82SC07	CRAE	Main Zone	29.70	1579845.94	5454194.86	486.33	36	-45
DDH82SC08	CRAE	Main Zone	48.60	1579845.05	5454194.31	486.55	36	-55
DDH82SC09	CRAE	Main Zone	80.20	1579844.51	5454193.56	486.72	15	-50
DDH82SC10	CRAE	Main Zone	13.00	1579983.75	5454350.66	329.18	121	-45
DDH82SC11	CRAE	Main Zone	98.30	1579983.75	5454350.66	329.18	121	-50
DDH83SC12	CRAE	Main Zone	42.00	1580030.78	5454375.62	289.54	151	-50
DDH83SC13	CRAE	Main Zone	119.60	1580062.49	5454313.14	336.10	331	-53
DDH83SC14	CRAE	Main Zone	65.15	1579822.99	5454280.07	430.48	151	-45
DDH83SC15	CRAE	Main Zone	27.40	1579882.78	5454224.60	460.88	331	-45
DDH83SC15A	CRAE	Main Zone	37.20	1579882.82	5454224.35	460.90	321	-45
DDH83SC15B	CRAE	Main Zone	108.60	1579883.25	5454224.11	460.43	321	-55
DDH84SC16	CRAE	Main Zone	211.70	1580142.15	5454430.99	244.39	331	-55
DDH84SC16A	CRAE	Main Zone	32.90	1580142.15	5454430.99	244.39	311	-45
DDH84SC17	CRAE	Main Zone	26.70	1580142.15	5454430.99	244.39	61	-90
DDH84SC17A	CRAE	Main Zone	28.90	1580142.15	5454430.99	244.39	331	-70
DDH84SC18	CRAE	Main Zone	62.40	1580066.92	5454350.72	311.20	321	-60
DDH84SC19	CRAE	Main Zone	239.10	1580120.96	5454360.59	287.89	331	-45
DDH84SC20	CRAE	Main Zone	250.45	1579646.48	5454144.67	562.40	151	-55
DDH84SC21	CRAE	Main Zone	200.40	1579861.26	5454417.15	398.50	151	-65
DDH84SC22	CRAE	Carapace	269.00	1579781.20	5453884.10	509.20	331	-45
DDH84SC23	CRAE	Main Zone	166.50	1579947.31	5454269.16	399.11	331	-60
DDH84SC24	CRAE	Main Zone	250.00	1579710.30	5454236.03	510.66	151	-45
DDH84SC25	CRAE	Main Zone	250.15	1579947.56	5454268.69	399.10	331	-47.5
DDH85SC26	CRAE	Main Zone	200.20	1580102.56	5454509.75	231.69	61	-90
DDH86SC27	CRAE	W Outcrops	224.00	1578654.70	5454209.00	813.00	241	-50
DDH86SC28	CRAE	W Outcrops	258.00	1578402.80	5454074.00	820.50	61	-45
DDH86SC29	CRAE	Riordans	121.20	1577903.00	5455059.60	811.00	241	-45
DDH86SC30	CRAE	Riordans	167.00	1578147.90	5455084.60	792.00	241	-45

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Holeid	Company	Prospect	Total Depth	mE NZTM	mN NZTM	RL	Collar Azi	Collar Dip
DDH86SC31	CRAE	Riordans	149.50	1577983.00	5455109.60	813.00	241	-50
DDH86SC32	CRAE	SE Traverse	91.20	1579492.30	5453580.20	495.70	151	-45
DDH86SC33	CRAE	SE Traverse	118.20	1579702.20	5453605.20	461.00	151	-70
DDH86SC34	CRAE	SE Traverse	225.80	1579533.30	5453747.10	538.20	151	-65
DDH86SC35	CRAE	Main Zone	16.80	1580144.52	5454430.15	244.05	151	-45
DDH86SC36	CRAE	Main Zone	203.00	1580144.52	5454430.15	244.05	151	-45
DDH86SC37	CRAE	Doyles	142.80	1578961.60	5453937.10	740.00	151	-65
DDH86SC38	CRAE	Doyles	115.20	1578829.60	5453912.10	734.00	201	-65
DDH86SC39	CRAE	W Outcrops	219.00	1578434.80	5454353.00	790.00	151	-50
DDH87SC40	CRAE	Main Zone	195.80	1580328.24	5454452.07	326.99	242	-65
DDH87SC41	CRAE	Main Zone	206.00	1580333.01	5454451.76	326.86	152	-67
DDH87SC42	CRAE	Main Zone	288.00	1580548.95	5454370.76	226.23	332	-50
SCDDH043	OGC	Main Zone	129.40	1579884.47	5454222.81	459.55	344	-57
SCDDH044	OGC	Main Zone	329.30	1580103.91	5454507.11	232.01	331	-73
SCDDH045	OGC	Main Zone	148.85	1580102.81	5454510.59	231.08	91	-60
SCDDH046	OGC	Main Zone	25.70	1579992.23	5454407.04	321.58	331	-80
SCDDH047	OGC	Main Zone	159.10	1580331.26	5454451.57	327.84	326	-70
SCDDH048	OGC	Main Zone	248.70	1580331.48	5454451.19	327.58	312	-75
SCDDH049	OGC	Main Zone	352.65	1580145.59	5454649.07	244.64	151	-60
SCDDH050	OGC	Main Zone	316.70	1580145.24	5454649.52	244.40	111	-65
SCDDH051	OGC	Main Zone	250.85	1579781.35	5454326.47	420.21	201	-70
SCDDH052	OGC	Main Zone	156.00	1579791.66	5454476.70	462.07	151	-80
SCDDH053	OGC	Main Zone	186.70	1579791.66	5454476.70	462.07	151	-80
SCDDH054	OGC	Main Zone	410.85	1580145.07	5454649.86	244.34	22	-90
SCDDH056	MOD	Main Zone	173.75	1579981.74	5454350.20	330.92	321	-63
SCDDH057	MOD	Main Zone	155.70	1580413.69	5454471.91	279.00	171	-66
SCDDH058	MOD	Main Zone	274.30	1580411.80	5454472.91	279.00	330	-80
SCDDH059	MOD	Main Zone	344.00	1580411.68	5454473.38	279.00	337	-65
SCDDH060	MOD	Main Zone	289.60	1580212.74	5454526.24	293.65	10	-75
SCDDH061	MOD	Main Zone	203.00	1580212.60	5454525.94	293.65	10	-90
SCDDH062	MOD	Main Zone	155.00	1579992.18	5454407.17	321.67	333	-85
SCDDH063	MOD	Main Zone	338.30	1579992.05	5454407.57	321.93	343	-70
SCDDH064	MOD	Main Zone	305.00	1579861.26	5454417.15	398.50	351	-80
SCDDH065	MOD	Main Zone	315.30	1579992.00	5454408.00	322.13	5	-70
SCDDH066	MOD	Main Zone	110.50	1579991.00	5454407.00	322.75	126	-65
SCDDH067	MOD	Main Zone	382.20	1580411.59	5454473.07	281.10	350	-62
SCDDH068	MOD	Main Zone	596.00	1580304.83	5454606.87	394.88	344	-84
SCDDH069	MOD	Main Zone	542.15	1580305.81	5454607.14	394.71	46	-79

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Holeid	Company	Prospect	Total Depth	mE NZTM	mN NZTM	RL	Collar Azi	Collar Dip
SCDDH070	MOD	Main Zone	385.50	1580411.65	5454473.39	281.12	20	-68
SCDDH071	MOD	Main Zone	241.45	1580412.41	5454472.57	280.17	0	-90
SCDDH072	MOD	Main Zone	353.10	1580327.38	5454517.53	360.77	20	-84
SCDDH073	MOD	Main Zone	238.00	1580216.03	5454526.78	292.77	79	-78
SCDDH074	MOD	Main Zone	328.30	1580324.51	5454519.41	361.02	300	-83
SCDDH075	MOD	Main Zone	280.00	1580413.06	5454473.04	279.80	27	-77
SCDDH076	MOD	Main Zone	287.40	1580411.29	5454472.18	281.18	322	-73
SCDDH077	MOD	Main Zone	253.10	1580449.57	5454445.29	239.09	0	-67
SCDDH078	MOD	Main Zone	203.20	1580411.28	5454471.66	281.06	263	-68
SCDDH079	MOD	Main Zone	170.60	1580258.40	5454468.30	289.25	309	-83
SCDDH080	MOD	Main Zone	299.20	1580331.90	5454453.30	328.05	0	-78
SCDDH081	MOD	Main Zone	49.40	1580142.40	5454432.20	244.00	89	-90
SCDDH082	MOD	Main Zone	126.40	1580331.70	5454450.70	327.50	200	-55
SCDDH083	MOD	Main Zone	308.00	1580105.80	5454507.40	230.55	15	-75
SCDDH084	MOD	Main Zone	21.00	1580204.10	5454416.20	211.50	50	-75
SCDDH085	MOD	Bobbie Dazzler	55.00	1579869.20	5454300.40	400.10	315	-80
SCDDH086	MOD	Carapace	15.40	1579815.10	5453977.90	537.10	0	-90
SCDDH087	MOD	Bobbie Dazzler	64.00	1579785.30	5454211.80	477.20	145	-75
SCDDH088	MOD	Main Zone	278.30	1580103.80	5454505.30	232.30	285	-66
SCDDH089	MOD	Main Zone	326.00	1579863.00	5454418.00	398.35	42	-77
SCDDH090	MOD	Main Zone	391.70	1580106.00	5454503.00	230.50	335	-69
SCDDH091	MOD	Main Zone	734.40	1580105.50	5454502.50	231.50	325	-63
SCDDH092	MOD	SE Traverse	35.00	1579859.00	5453759.00	462.90	150	-80
SCDDH093	MOD	SE Traverse	19.00	1579799.00	5453635.00	430.38	150	-80
SCDDH094	MOD	SE Traverse	35.00	1579574.00	5453562.00	481.85	150	-80
SCDDH095	MOD	SE Traverse	40.10	1579384.00	5453560.00	487.00	150	-80
SCDDH096	MOD	SE Traverse	55.20	1579837.00	5453799.00	494.00	150	-80
SCDDH097	SFR	Main Zone	171.30	1580105.50	5454502.50	231.50	70	-72
SCDDH098	SFR	Main Zone	165.80	1580105.50	5454502.50	231.50	50	-75
SCDDH099	SFR	Main Zone	201.70	1580105.50	5454502.50	231.50	33	-76
SCDDH100	SFR	SE Traverse	63.60	1579782.00	5453730.00	483.00	0	-90
SCDDH101	SFR	SE Traverse	54.70	1579715.00	5453665.00	481.00	0	-90
SCDDH102	SFR	SE Traverse	32.50	1579620.00	5453630.00	493.00	0	-90
SCDDH103	SFR	SE Traverse	82.90	1579520.00	5453625.00	506.00	0	-90

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Holeid	Company	Prospect	Total Depth	mE NZTM	mN NZTM	RL	Collar Azi	Collar Dip
SCMDH001	MOD	Carapace	8.80	1579766.67	5454045.66	559.24	22	-90
SCMDH002	MOD	Carapace	9.70	1579854.36	5454071.29	543.58	22	-90
SCMDH003	MOD	Carapace	20.10	1579965.34	5454056.71	509.17	22	-90
SCMDH004	MOD	Carapace	20.20	1579864.92	5454005.83	536.78	22	-90
SCMDH005	MOD	Carapace	21.14	1579748.53	5453972.24	551.46	22	-90
SCMDH006	MOD	Carapace	25.00	1579661.96	5453958.10	569.82	22	-90
SCMDH007	MOD	Carapace	20.00	1579724.23	5454045.42	567.53	22	-90
SCMDH008	MOD	Bobbie Dazzler	57.40	1579704.12	5454080.48	579.09	22	-90
SCMDH009	MOD	Bobbie Dazzler	51.70	1579755.25	5454129.90	533.45	22	-90
SCMDH010	MOD	Carapace	12.50	1579762.60	5454015.29	559.03	22	-90
SCMDH011	MOD	Carapace	22.90	1579718.72	5454012.05	566.97	22	-90
SCMDH012	MOD	Carapace	25.00	1579814.31	5453979.10	537.50	22	-90
SCMDH013	MOD	Carapace	25.90	1579898.58	5454029.57	533.86	22	-90
SCMDH014	MOD	Carapace	19.80	1579816.30	5454069.46	551.60	22	-90
SCMDH015	MOD	Carapace	15.00	1579882.48	5454067.22	530.23	22	-90
SCMDH016	MOD	Carapace	17.70	1579719.86	5453957.02	554.00	22	-90
SCMDH017	MOD	Carapace	14.10	1579774.60	5453980.71	547.66	22	-90
SCMDH018	MOD	Carapace	18.40	1579821.33	5454028.89	544.74	22	-90
SCMDH019	MOD	Carapace	14.00	1579922.45	5454037.28	525.88	22	-90
SCMDH020	MOD	Carapace	23.00	1579730.39	5454066.94	567.04	22	-90
SCMDH021	MOD	Carapace	26.00	1579692.10	5454028.36	575.46	22	-90
SCMDH022	MOD	Carapace	28.10	1579705.06	5453989.10	566.42	22	-90
SCMDH023	MOD	Carapace	21.50	1579783.50	5453946.66	528.10	22	-90
SCMDH024	MOD	Carapace	24.80	1579847.62	5453981.06	529.50	22	-90
SCMDH025	MOD	Carapace	22.60	1579870.32	5454025.44	540.59	22	-90
SCMDH026	MOD	Carapace	25.00	1579684.70	5454050.00	579.20	22	-90
SCMDH027	MOD	Carapace	30.30	1579684.10	5454012.00	576.00	22	-90
SCMDH028	MOD	Main Zone	53.80	1580153.30	5454474.40	220.75	22	-90
SCMDH029	MOD	Main Zone	93.60	1580154.90	5454474.70	220.30	45	-65
SCMDH030	MOD	Main Zone	45.20	1580178.80	5454436.60	219.85	45	-65
SCMDH031	MOD	Main Zone	91.00	1579943.30	5454313.80	374.65	22	-90

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		Holeid	Company	Prospect	Total Depth	mE NZTM	mN NZTM	RL	Collar Azi	Colla
		SCRCDH001	MOD	Barrons Flat	54.00	1582927.00	5455372.00	421.00	0	
		SCRCDH002	MOD	Barrons Flat	45.00	1582927.00	5455307.00	430.00	0	
		SCRCDH003	MOD	Barrons Flat	64.00	1582604.00	5454927.00	421.00	0	
		SCRCDH004	MOD	Barrons Flat	42.00	1582935.00	5455313.00	426.00	0	
		SCRCDH005	MOD	Barrons Flat	17.00	1582943.00	5455313.00	424.00	0	
		SCRCDH006	MOD	Barrons Flat	52.00	1582926.00	5455385.00	419.00	0	
		SCRCDH007	MOD	Barrons Flat	38.00	1582109.00	5454385.00	512.00	0	
		SCRCDH008	MOD	Barrons Flat	32.00	1582108.00	5454382.00	513.00	0	
		SCRCDH009	MOD	Barrons Flat	33.00	1582102.00	5454393.00	503.00	0	
		SCRCDH010	MOD	Barrons Flat	33.00	1582100.00	5454397.00	502.00	0	
		SCRCDH011	MOD	Barrons Flat	33.00	1582109.00	5454381.00	514.00	0	
		SCRCDH012	MOD	Barrons Flat	30.00	1582116.00	5454361.00	515.00	0	
		SCRCDH013	MOD	Barrons Flat	27.00	1582115.00	5454366.00	517.00	0	
		SCRCDH014	SFR	Barrons Flat	100.00	1583814.00	5455995.00	119.00	160	
		SCRCDH015	SFR	Barrons Flat	120.00	1583812.00	5456006.00	119.00	160	
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li><i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</i></li> <li><i>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></li> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>Drilling results presented have used a weighted average when presenting drilling intercepts, hence, any potential sample length bias has been accounted for.</li> <li>Grades are not cut in the database or presenting results.</li> </ul>								

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<p><i>Relationship between mineralisation widths and intercept lengths</i></p>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</i></li> <li>• <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</i></li> </ul>	<ul style="list-style-type: none"> <li>• All drill hole results are report as downhole intercepts.</li> <li>• In the Main zone 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.</li> <li>• 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.</li> <li>• True thicknesses have estimated from Leapfrog or Vulcan geology model which was updated as drilling progresses during MOD and SFR programmes.</li> </ul>
<p><i>Diagrams</i></p>	<ul style="list-style-type: none"> <li>• <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Relevant diagrams have been included within the main body of the announcement.</li> </ul>
<p><i>Balanced reporting</i></p>	<ul style="list-style-type: none"> <li>• <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>
<p><i>Other substantive exploration data</i></p>	<ul style="list-style-type: none"> <li>• <i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>

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Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Update JORC Resource Estimate and include SE Traverse.</li> <li>Testing for additional high-grade shoots in F3 fold hinges at Doyles, Anvil West and Anvil East to see if the resource can be extended to around 1 Moz.</li> <li>Pre-feasibility Study.</li> <li>Mining permit application.</li> </ul>
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### Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> <li>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.</li> <li>Data validation procedures used.</li> </ul>	<ul style="list-style-type: none"> <li>Database is stored Microsoft Excel which has been validated by Golder's software (Datacheck) prior to the 2013 MRE. Vulcan was used as a secondary validation check. Random spot checks were completed between database and hard copies.</li> </ul>
Site visits	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>Golder worked on the project from 2011 to 2013 and assisted in design and implementation of exploration program, database management including resource definition drilling campaign. Only limited work has been completed since 2013.</li> </ul>
Geological interpretation	<ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul style="list-style-type: none"> <li>Geological interpretation based on field mapping, structural mapping, drillhole lithology and grade data which was completed on cross-sections using Vulcan software. 3D wireframe geological modelling was carried out by Golder (NZ) and reviewed by MOD.</li> <li>The dyke was modelled using the contacts between the host rock and porphyry dyke.</li> <li>The drill spacing provided confidence in the interpretation and continuity of grade and geology. The deposit was separated into 3 geological domains cut by faults.</li> <li>The grade domain then was trimmed from the geological domains.</li> <li>The boundaries between the weathered, transitional and fresh rock were also defined.</li> </ul>
Dimensions	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The Sams Creek MRE have the following maximum extents: <ul style="list-style-type: none"> <li>Easting = 1200m</li> <li>Northing = 850m</li> <li>RL = surface (which varies from 600m RL to 200 m RL. The deepest mineralisation extends to a vertical depth of about -150m RL.</li> </ul> </li> </ul>

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<p><i>Estimation and modelling techniques</i></p>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li>• <i>The assumptions made regarding recovery of by-products.</i></li> <li>• <i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i></li> <li>• <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li>• <i>Any assumptions behind modelling of selective mining units.</i></li> <li>• <i>Any assumptions about correlation between variables.</i></li> <li>• <i>Description of how the geological interpretation was used to control the resource estimates.</i></li> <li>• <i>Discussion of basis for using or not using grade cutting or capping.</i></li> <li>• <i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Mineralisation was defined by zones identified from downhole lithological and geochemical data.</li> <li>• The block size is 25 m (X) by 50 m (Y) by 5 m (Z) or approximately ½ of the drill hole spacing in the x (east) and y (north) directions. The sub-block size is 5 m (X) by 5 m (Y) by 1 m (Z). High-grade restraining was applied based on the exploratory data analysis. The high-grade samples were used only in the estimation of the closest blocks to the sample.</li> <li>• Using parameters derived from modelled variograms, Ordinary Kriging (OK) was used to estimate average block grades for Au, Ag, As.</li> <li>• Unfolding was used in the Main Zone during variography and estimation to enable correlation of samples around the folded structure.</li> <li>• The estimation was conducted in three passes with the search size increasing for each pass.</li> <li>• The model was validated visually and statistically using swath plots and comparison to sample statistics.</li> </ul>
<p><i>Moisture</i></p>	<ul style="list-style-type: none"> <li>• <i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i></li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>
<p><i>Cut-off parameters</i></p>	<ul style="list-style-type: none"> <li>• <i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The resource model is constrained by assumptions about economic cut-off grades. The fresh mineralisation is confined by a 0.1 g/t Au cut-off and tabulated resources are based on cut-off grade of 0.7 g/t Au.</li> </ul>
<p><i>Mining factors or assumptions</i></p>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Sams Creek dyke contains several medium to high grade mineralised shoots. The top of the resource has been drilled on a nominal 75 m by 75 m pattern sufficient to define the continuity of these zones but at deeper levels the drilling is too wide spaced for these zones to be sufficiently defined. As a result, no underground mining assessment has been completed at this stage.</li> <li>• The block model has been built using a parent cell size of 25 m (X) by 25 m (Y) by 5 m (Z), primarily determined by data availability.</li> </ul>

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<p><i>Metallurgical factors or assumptions</i></p>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Cyanidation testwork completed on six oxide bulk samples by CRAE resulted in Au recoveries of 85–95%.</li> <li>Testwork was completed on fresh sulfide mineralisation at the start of 2004 by OGC to characterise the metallurgical behaviour of Sams Creek sulphide mineralisation.</li> <li>The recoveries from this testwork are summarised as: <ul style="list-style-type: none"> <li>Direct Leach: 79–87% gold recovery</li> <li>Float and then leach: 73–86% gold recovery</li> <li>Float and acid leach: 83–91% gold recovery.</li> </ul> </li> </ul> <p>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.</p>
<p><i>Environmental factors or assumptions</i></p>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The Sams Creek project predominantly lies within the NW Nelson Forrest 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 Forrest 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 vent raises which require a similar cleared area to a drill pad (10mx10m).</li> <li>SGC has an Access Agreement with DoC which allows for 100 drill pads and several camps and helicopter landing sites.</li> </ul>
<p><i>Bulk density</i></p>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul style="list-style-type: none"> <li>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 that hosts the mineralisation and other waste rock. These density values were then divided by oxide and fresh rock. A median of 2.70 t/m<sup>3</sup> and 2.59 t/m<sup>3</sup> were used for fresh and oxide porphyry respectively.</li> <li>Sams Creek density (sg) assignment is based on a density assessment completed in 2011-2013. Density samples are routinely collected during logging of diamond drill core. Specific Gravity is automatically calculated using the following formula: Weight in Air (Weight in Air – Weight in water) = SG</li> </ul>
<p><i>Classification</i></p>	<ul style="list-style-type: none"> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (ie relative</li> </ul>	<ul style="list-style-type: none"> <li>Resources were classified in accordance with the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition).</li> </ul>



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	<p><i>confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i></p> <ul style="list-style-type: none"> <li>• <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The classification of Mineral Resources was completed by Golder based on the geological complexity, estimation performance, number of drill samples, drill hole spacing and sample distribution. The Competent Person is satisfied that the result appropriately reflects his view of the deposit.</li> <li>• Continuous zones meeting the following criteria were used to define the resource class: <ul style="list-style-type: none"> <li><u>Indicated Resource</u> <ul style="list-style-type: none"> <li>○ Drill spacing up to about 75 m by 75 m</li> <li>○ Estimation performance: Slope average above 0.45</li> <li>○ Evidence of geological and grade continuity: Surface mapping and channel sampling</li> </ul> </li> <li><u>Inferred Resource</u> <ul style="list-style-type: none"> <li>○ Drill spacing wider than 100 m by 100 m</li> <li>○ Estimation performance: Slope average below 0.45, blocks estimated in the third pass</li> <li>○ Limited number of drill holes</li> <li>○ Greater geological complexity indicated by interpretation uncertainty in location of features like faults and folds</li> </ul> </li> </ul> </li> </ul>
<p><i>Audits or reviews</i></p>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>• This Resource Estimate is an independent estimate from the previous estimate from the 2012 Golder NZ Resource estimation.</li> <li>• Golder's work was internally reviewed by the stakeholders Golder NZ and MOD.</li> </ul>
<p><i>Discussion of relative accuracy/ confidence</i></p>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> <li>• <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The relative accuracy is reflected in the resource classification discussed above that is in line with industry acceptable standards.</li> <li>• This is a global resource estimate with no production data.</li> </ul>