

RISE & SHINE (RAS) MINERALISATION EXTENDS NORTH, METALLURGICAL TESTWORK UPDATE

- Drillhole MDD044 at RAS intercepts 87 metres of silicified Rise and Shine Shear zone (RSSZ)
 mineralisation from 356m with multiple intervals of coarse visible gold between 361 and 384
 metres (assays pending).
- This MDD044 intercept is 120 metres north of previously reported MDD031 intercept of 21m @ 4.4 g/t Au from 281 metres and extends RAS mineralization 1400 metres down plunge.
- Gold assays received for:
 - o MDD030R 4m @ 1.2g/t from 154m
 - o MDD031 (balance of hole) 3m @ 0.8 g/t from 313m (below prior 21m @ 4.4 g/t from 281m)
 - o MDD033 (partial assays) 8m @ 1.5 g/t (aggregate) between 243 and 270m
 - o MDD034R (partial assays) 13m @ 2.9 g/t (aggregate) between 202 and 225m
- Drilling is accelerating with three diamond drill (DD) rigs currently operating and a reverse circulation (RC) rig scheduled to be added. Mineralization remains open at depth at all 4 drilltested deposits (RAS, Come-in-Time (CIT), Shreks (SHR) and Shreks East (SRE)).
- The RAS MRE upgrade currently underway will be finalised once the extension limits of new mineralisation are adequately defined.
- Metallurgical gravity-leach gold recoveries of 98-99% for two low arsenic / sulphide samples and 64-94% for two high arsenic / sulphide samples continue to demonstrate a very low refractory component to the Bendigo-Ophir gold. Testwork is continuing.
- The potential for a multi-million-ounce non-refractory gold resource along the RSSZ continues to be enhanced by the ongoing results of drilling.

11 May 2022 Santana Minerals Limited (ASX: SMI) ("Santana" or "the Company") is pleased to announce further significant results from the 100% owned Bendigo-Ophir Project ("the Project") where a 643Koz Inferred Gold Resource (MRE) in four Rise and Shine Shear Zone (RSSZ) Deposits has been estimated to JORC Code 2012 (ASX announcement on 28th September 2021).

Drilling from September 2021 has primarily focused on extending mineralisation down-plunge at RAS where mineralisation within the RAS shoot consistently occurs over a vertical interval of 40-80 metres. Concentration of gold is in the 10-20-metre-thick hanging wall shear (HWS), with common grades of 1-10 g/t Au. Mineralisation is also in higher-grade stockwork within and below the HWS, as in MDD016 with bonanza grades to 57.5 g/t Au (ASX announcement 23rd December 2021) and 51.2 g/t Au in MDD025R (ASX announcement 3rd March 2022).

The latest completed drill hole MDD044 extends RAS mineralization over 1,400 metres down plunge (860 metres beyond the September 2021 MRE), intersecting 87 metres of strongly silicified RSSZ from 356 metres including coarse visible gold in 9 one-metre intervals between 361 and 384 metres with assays pending.

New metallurgical gravity-leach testwork results report recoveries to 99% reflecting the largely non-refractory nature of Bendigo-Ophir gold. Testwork is ongoing.

Commenting on the results Executive Director Dick Keevers said:

"Our latest northern extension of the RAS deposit in drill hole MDD 044, pushing on beyond the prominent geographical feature Shepherds Creek, is a pleasing result for Santana and our exploration team, providing continuing confidence for expanding the resource down plunge. No assays for MDD044 yet, but visible gold in the core as shown in Figure 5 and tabulated in Appendix 1.

As we push our evaluation harder, our metallurgical consultants in Perth, WA, have produced excellent interim gold recovery results from new drill core composite samples, compiled from primary sulphide bearing drill intercepts, further down plunge at RAS. We successfully recovered our gold with gravity and cyanide leach in 2021, now our new trials have improved on that same process with up to 99% gold recovery, another step along the way for successful high gold recovery, relying on the dominance of non-refractory free gold."



RSSZ Deposits - Extension Drilling

Four RSSZ deposits, CIT, RAS, SHR and SRE extend 4 kilometres NW-SE along strike and contain the current 643Koz inferred gold resources (Figure 1). All deposits remain open at depth.

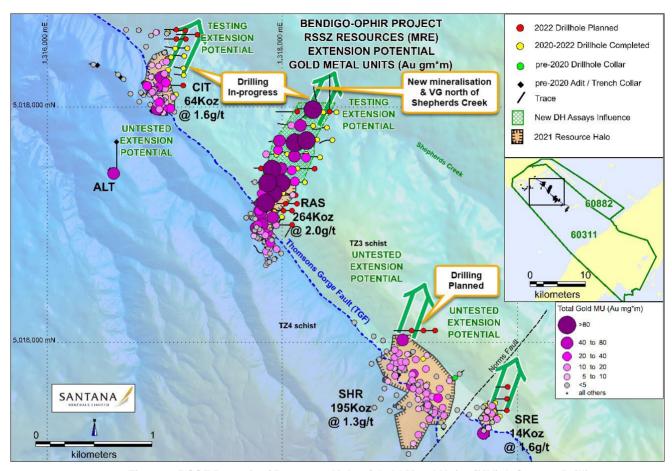


Figure 1 RSSZ Deposits / Resource Halos / Gold Metal Units (MU) & Current Drilling



Figure 2 RAS Deposit - Dunstan Range (View south)



Three DD rigs are now operating 24/7 with a total of 7,138 metres completed since January 2022 (Table 1). A total of 16,300 metres have now been drilled since the Company commenced the current programme in November 2020. Presently drilling is primarily focused on the new northern extension at RAS (Figures 1, 2, 3 & 4), southern infill at RAS and at the CIT deposit (Figure 1 & 6).

Table 1: 2022 Drillhole co-ordinates, downhole survey detail and Status

D	II-l- N-	F NITTM	North NITTA	RL	Azimuth	Dip	1	8.0 - ell	Charlana	Dorodko
Deposit	Hole_No	East_INZTIVI	North_NZTM	KL	(T Avg)	(Avg)	Length	Method	Status	Results
RAS	MDD023R	1318320.6	5017574.1	658.47	266.6	-68	359.2	DD	Completed	Reported
RAS	MDD024	1317854.7	5017118.1	756.71	268.9	-61	177.0	DD	Completed	Reported
RAS	MDD025	1318195.1	5017716.4	632.55	258.1	-67	265.7	DD	Re-Drilled	Reported
RAS	MDD025R	1318196.5	5017715.3	632.65	256.2	-72	360.7	DD	Completed	Reported
RAS	MDD026	1317853.3	5017125.6	756.82	212.5	-56	221.7	DD	Completed	Reported
RAS	MDD027	1318262.3	5017841.8	582.34	271.6	-69	365.6	DD	Completed	Reported
RAS	MDD028	1317998.5	5017062.1	773.89	270.6	-62	250.0	DD	Completed	Reported
RAS	MDD029	1318460.9	5017957.4	537.69	260.2	-75	398.2	DD	Completed	assays pending
RAS	MDD030	1317997.9	5017066.3	773.85	210.0	-55	115.0	DD	Re-Drilled	No assays
RAS	MDD030R	1317997.1	5017067.0	773.95	217.0	-58	242.6	DD	Completed	Reported
RAS	MDD031	1318348.9	5017957.7	536.72	291.5	-73	380.1	DD	Completed	Reported
RAS	MDD033	1318167.1	5017835.5	581.95	277.0	-70	336.5	DD	Completed	Partial reported
RAS	MDD034	1318071.8	5017712.2	597.71	269.3	-66	233.7	DD	Re-Drilled	assays pending
RAS	MDD034R	1318071.6	5017712.3	597.79	268.1	-67	300.5	DD	Completed	Partial reported
RAS	MDD036	1318426.5	5017720.0	603.71	251.4	-73	372.8	DD	Completed	assays pending
RAS	MDD037	1318379.9	5017826.4	607.16	267.2	-73	425.2	DD	Completed	assays pending
RAS	MDD039	1317973.8	5017719.0	626.20	261.3	-69	256.1	DD	Completed	assays pending
RAS	MDD041	1318243.5	5017969.3	528.53	232.5	-68	287.2	DD	Completed	assays pending
RAS	MDD042	1318068.1	5017844.9	561.41	279.4	-69	293.0	DD	Completed	assays pending
RAS	MDD044	1318291.7	5017991.8	532.34	340.2	-70	469.8	DD	Completed	assays pending
SubTotal							6,110.6			
CIT	MDD032	1317089.5	5018499.6	503.38	279.7	-64	200.0	DD	Completed	assays pending
CIT	MDD035	1317192.1	5018500.0	501.69	265.7	-66	236.5	DD	Completed	assays pending
CIT	MDD038	1317166.4	5018435.7	517.58	274.8	-67	213.0	DD	Completed	assays pending
CIT	MDD040	1317160.0	5018331.0	546.28	279.1	-66	194.0	DD	Completed	assays pending
CIT	MDD043	1317161.9	5018272.4	556.02	276.8	-67	184.3	DD	Completed	assays pending
SubTotal							1,027.8			
TOTAL							7,138.4			

Drillhole MDD044 Mineralised Intercept

MDD044 collared on northernmost section N5017960 (Figure 3) was aligned true north to test mineralisation north of Shepherds Creek where drillhole MDD031 intersected significant mineralisation of 21.2 metres @ 4.38g/t Au from 280.8 metres (ASX announcement on 20th April 2022).

An 87-metre interval of silicified RSSZ was intersected 120 metres north of MDD031 (Figure 4) from 356 metres depth with multiple occurrences of coarse VG associated with breccia, quartz-arsenopyrite-pyrite veins between 361 and 384 metres (Figure 5, Appendix 1). MDD044 is the first drillhole at RAS to be oriented down plunge (340°T) and as such true widths will be less than down-hole intervals. Assays are pending.

This MDD044 intercept has extended RAS mineralisation more than 1,400m down-plunge from outcrop (860 metres beyond the September 2021 MRE) and remains open. At Macraes Mine, 90 km to the southeast, the Frasers Underground shoot (FRUG) is known to extend 2,400m down plunge.



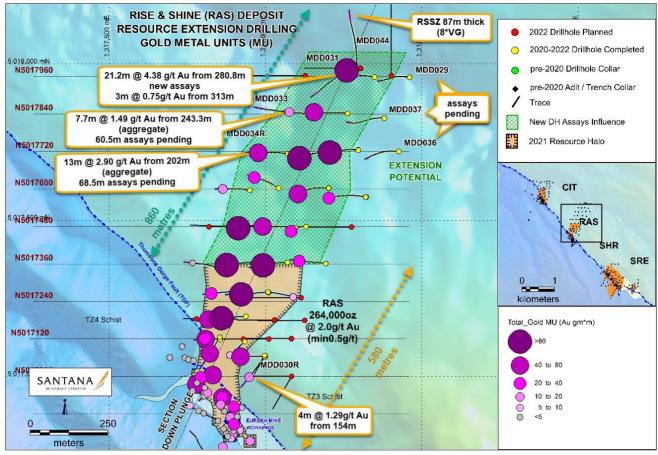


Figure 3 RAS Resource Extension Drilling - New Results / Gold Distribution

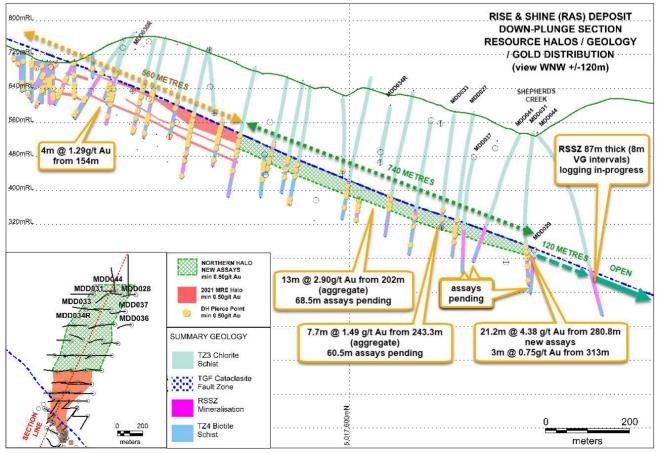


Figure 4 RAS Down-plunge Section (new assays, geology & extension envelope)



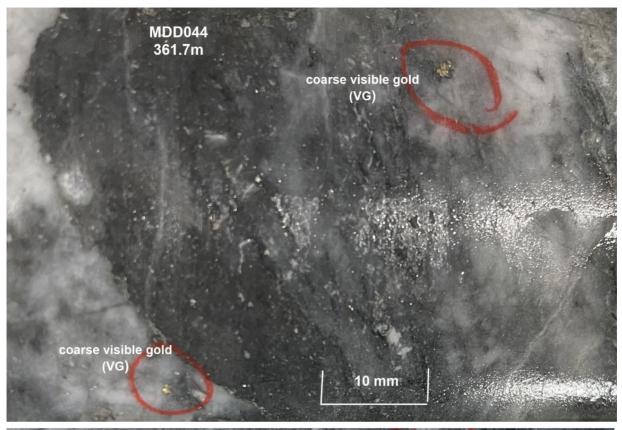




Figure 5 RAS Drillhole MDD044 coarse visible gold (VG) @ 361.7m and 363.8 m



Latest Drill Assay Results from RAS

Assays have been received for the balance of MDD031, all of MDD030R and partially for MDD033 and MDD034R (Figures 3 & 4, Table 2, Appendix 2).

MDD031 assays are from the balance of the hole below the previously reported 21.2 m @ 4.38 g/t which included 5 intervals greater than 10 g/t gold (ASX announcement on 20th April 2022).

MDD033 and MDD034R assays are from the upper part of the RSSZ with assays outstanding for the lower 60.5m and 68.5m respectively. The higher-grade intercepts of 6.28 g/t and 31.8 g/t gold in these two holes (Table 2, Appendix 2) coincide with reported intervals of visible gold (ASX announcement on 20th April 2022). Both holes are on the western side of the RAS mineralized zone extending down plunge from the September 2021 MRE.

MDD30R is up-plunge on the eastern side of the mineralized zone outside the September 2021 MRE.

Laboratory assay turnaround (TAT), drill shifts, and exploration staff availability continues to be slowed with staff isolations due to the surge in Omicron virus throughout New Zealand. TAT will improve as Lab staff return.

Table 2: New mineralised drill intercepts

Drillhole	Section	From (m)	Drill intercept (m)	Average Gold Grade (g/t) (min 0.50 g/t Au)	Comments
MDD030R	N5017000	154.0	4.0	1.29	
		280.2	21.2	4.38*	* reported ASX 20 April 2022
MDD031	N5017960	313.0	3.0	0.75	
		Aggregate	24.2	3.93	(over 35.2m)
		243.3	6.7	0.77	
MDD033	N5017840	269.0	1.0	6.28	
		Aggregate	7.7	1.49	(over 26.7m), 60.5m assays pending
		202.0	8.0	0.65	
MDD034R	N5017720	220.0	5.0	6.49	
IVIDD034K	14301/720	Including	1.0	31.80	
		Aggregate	13.0	2.90	(over 23.0m), 68.5m assays pending

All significant intercepts received to date from the 15 holes drilled within the mineralized zone extending down-plunge from the September 2021 MRE are summarised in Table 3. The extended zone extends 740 metres down plunge in a NNE direction oblique to the drill sections. The average width of the zone is approximately 270 metres (sectional widths 100 to 370 metres) although margins are still to be defined with only MDD12 and MDD17 clearly closing of the western side of the zone. The average aggregate thickness and grade of mineralization within the zone is 21.0 metres @ 2.96 g/t Au. The gold grade and dimensions of the extended zone have the potential to add significantly to the overall mineral resources which will be updated by the end of this quarter.



Table 3: RAS NEW EXTENSION Section Intercept Summary (Sep'21-Apr'22)

RAS Northe	rn Extension	DH Inter	rcepts - Se	ction Summa	ary (min 0.50	g/t Au, 4mid)			
Section	Hole ID	From (m)	Length (m)	Grade (g/t)	Section E-W Intercept width (m)	Section E-W Envelope width (m)	Section N-S influence (m)	Env*DP (m2)	Average Thickness (m)
N5017960	MDD031	280.8	21.2	4.38					
N5017960	Average	280.8	21.2	4.38	100	100	120	12,000	21.2
N5017840	MDD033	243.3	7.7	1.49					
N5017840	MDD027	267.7	11.4	3.29					
N5017840	Average	255.5	9.5	2.56	85	185	120	22,200	9.5
N5017720	MDD034R	202.0	13.0	2.90					
N5017720	MDD025R	264.0	14.0	9.00					
N5017720	MDD021R	270.0	41.0	2.36					
N5017720	Average	236.0	22.7	3.83	230	330	120	39,600	22.7
N5017600	MDD018	199.0	6.0	3.70					
N5017600	MDD023R	307.0	20.0	0.82					
N5017600	MDD022	262.3	25.7	1.89					
N5017600	Average	230.7	17.2	1.69	245	345	120	41,400	17.2
N5017480	MDD016	193.8	23.1	7.06					
N5017480	MDD015	195.4	22.7	1.50					
N5017480	MDD020	185.0	40.0	0.82					
N5017480	Average	191.4	28.6	2.68	175	275	120	33,000	28.6
N5017360	MDD013	152.3	23.6	2.51					
N5017360	MDD014	174.3	37.7	4.09					
N5017360	MDD019R	218.0	14.7	1.92					
N5017360	Average	181.5	25.3	3.18	270	370	60	22,200	25.3
MDD013-N	IDD034R Stat	tistics		2.96		270	660	170,400	21.0

a=aggregate, c=continuous, *= 68.5m assays pending, **= 60.5m assays pending

CIT Extension Drilling - MDD032, MDD035, MDD038 & MDD040

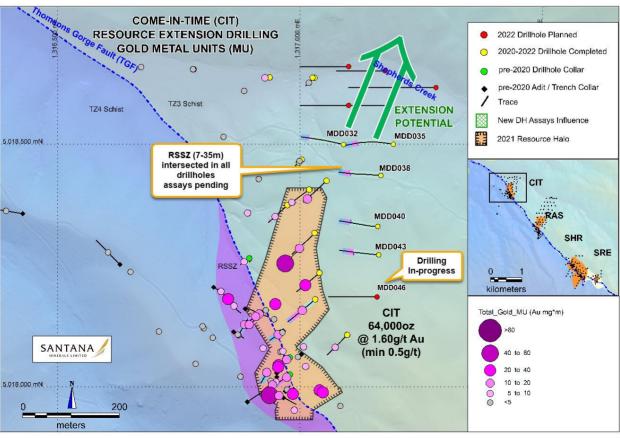


Figure 6 CIT Resource Extension Drilling - New Results / Gold Distribution



Five drillholes have been completed at CIT located along the RSSZ one kilometre NW of RAS. RSSZ mineralisation was intersected in all drillholes over thicknesses between 7 and 35 metres. VG was logged in MDD035 and MDD040 in two intervals associated with laminated veinlets and arsenopyrite. The hanging wall zone of the RSSZ at CIT has generally been thinner than thicknesses encountered at RAS. Assays are pending.

Ongoing Metallurgical Testwork

Stage 3 testwork has followed on from earlier gravity-leach tests that showed 90% largely non-refractory recoverable gold. The programme, designed by KCAA consultants and undertaken at ALS Metallurgical Laboratory Perth involved six composite samples (representative of varying gold, arsenic grades and sulphide content) to further understand the non-refractory / refractory nature and distribution of the RAS mineralisation.

Four composited samples, RAS-01, RAS-02 (with high arsenic & sulphide), RAS-05, RAS-06 (with low arsenic & sulphide) from 6 representative RAS drillholes were subjected to standard Metallurgical laboratory gravity-cyanide leach test work to establish total recoverable gold responses. Results (Table 4) show:

- Gold head grades ranged between 2.8 g/t and 7.4 g/t Au
- 94% to 99% overall gold recovery for three of the samples (RAS-1, RAS-5, RAS-6)
- 64% overall gold recovery for one sample (RAS-2) with the highest sulphide content. (Work is ongoing to determine the reason for the lower recovery and establish methods to improve)

		•			_			
Sample No	Sample Source	Composite	Head Assay	s Measured	I	estwork Go	ld Recovere	d
Sample NO	(Drillholes)	Type	As %	S %	Calc Au g/t	Gravity %	Leach %	Total %
RAS-01	MDD014, MDD021R	Hi As, S, Au	1.44	0.66	7.40	32%	62%	94%
RAS-02	MDD014, MDD015, MDD021R, MDD022	Hi As, S, Au	2.12	0.92	4.36	17%	47%	64%
RAS-05	MDD013, MDD014, MDD015	Lo As, S, Au	0.12	0.14	4.40	61%	38%	99%
RAS-06	MDD009, MDD013, MDD014, MDD015		0.10	0.10	2.76	75%	23%	98%

Table 4: Metallurgical Gold Recovery Testwork vs high and low arsenic / sulphide mineralisation

Other laboratory characterisation test work performed on the four samples showed:

- . The samples were not acid generating and AMD will not be an issue with these ore types
- Very low organic or potentially gold preg-robbing carbon. Consequently, no preg-robbing issues were encountered during the cyanide leach test work

Gravity-leach testwork is currently underway on RAS-03 and RAS-04 (medium arsenic and sulphide content) (Appendix 3) and mineralogical work has commenced on all samples to complete Stage 3.



Key Conclusions & Forward Programme

RAS new mineralisation extent has been further expanded and down-plunge potential considerably enhanced with significant MDD044 mineralisation (& VG) north of Shepherds Creek.

The RAS mineralisation now extends more than 1,400m down-plunge from outcrop (860 metres beyond the September 2021 MRE) and remains open. At Macraes Mine, 90 km southeast, the Frasers Underground shoot (FRUG) extends 2,400m down plunge.

The Stage 3 follow-on gravity & leach metallurgical testwork results of 94% to 98% gold recovery in 3 samples (RAS-01, RAS-05 and RAS-06) is significant (previously 90% total recoverable gold) and work is continuing to establish methods of improving recoveries in RAS-02 ore-types where 64% of gold was recovered.

Extension and infill DD drilling is continuing at CIT and RAS deposits. Reconnaissance holes are also scheduled to test the down plunge extensions of SHR deposit (the largest surface footprint of the 3 main deposits).

An MRE upgrade has commenced at RAS and prior to finalisation, further assays are to be added from fringe drillholes that are expected to define mineralisation extents.

The RAS new northern mineralisation results have flagged the higher-grade potential down plunge at CIT and SHR (which remain relatively undrilled) and at other prospects with strong geochemical anomalies (drill untested) along the inferred 30km length of the RSSZ with the project area.

The RSSZ is emerging as a potential multi-million-ounce system similar to the world class Macraes deposit (10Moz) 90 kilometres to the NE.

This announcement has been authorised for release to the ASX by the Board.

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About Santana Minerals Limited Bendigo-Ophir Project

The Bendigo-Ophir Project is located on the South Island of New Zealand within the Central Otago Goldfields. The 292km2 project area comprises Minerals Exploration Permit (MEP) 60311 (252km2) and Minerals Prospecting Permit Application (MPPA) 60882 (40km2) issued to 100% owned subsidiary Matakanui Gold Ltd. The Project is located ~90 kilometres northwest of Oceana Gold Ltd (OGC) Macraes Gold Mine (Figure 7).

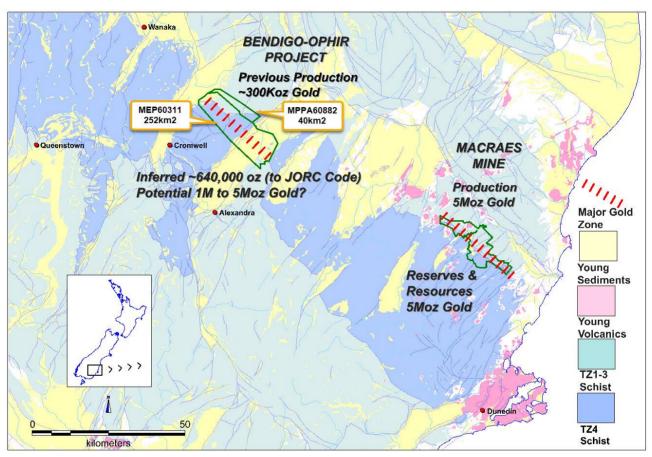


Figure 7 Bendigo-Ophir Project in the Otago Goldfield, ~90km NW of Macraes

The Project contains a new Inferred Mineral Resource Estimate (MRE2021) of 643K ounces of gold @ 1.0g/t (0.25 g/t Au lower cut-off grade, no top-cut), an estimate based on drill results to June 2021 and reported in September 2021 which the Company interprets has the potential to be further expanded and developed.

The Bendigo-Ophir resources occur in 4 deposits (Figure 1) that are inferred to extend in a northerly direction within the RSSZ which hosts gold mineralization over a recognised strike length of >20km.

The RSSZ occurs at the contact with TZ3 and TZ4 schist units separated by a regional fault (Thomsons Gorge Fault-TGF) and dips at a low angle (25°) to the north-east. The RSSZ is currently interpreted to have upper shear hosted gold mineralization (HWS) 10-40 metres in width above quartz vein and stockwork related gold mineralization extending >120 metres below the HWS which is largely untested down-plunge and at depth.

The Company embarked on diamond drilling (DD) and reverse circulation (RC) drilling programmes in November 2020 with the immediate objective to increase the existing resources by drill testing the down plunge extensions of known mineralisation. The Company is focusing on advanced precious metals opportunities in New Zealand and Mexico.



Previous Disclosure - 2012 JORC Code

Information relating to Mineral Resources, Exploration Targets and Exploration Data associated with the Company's projects in this announcement is extracted from the following ASX Announcements:

- ASX announcement titled "Drill Assays, Modelling & Metallurgy—Building Bendigo-Ophir Gold Assets" dated 1 July 2021.
- ASX announcement titled "Gold Resources Increased 155% to 643Koz" dated 28 September 2021
- ASX announcement titled "Bonanza gold grades continue beyond new Rise & Shine Resources" dated 23 December 2021
- ASX announcement titled "Impressive Drill Assays and Metallurgical Testwork Results" dated 3 March 2022
- ASX announcement titled "Rise & Shine Drilling continues to deliver high gold grades" dated 20 April 2022

A copy of such announcement is available to view on the Santana Minerals Limited website www.santanaminerals.com. The reports were issued in accordance with the 2012 Edition of the JORC Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

Current Disclosure - Competent Persons Statement

The information in this report that relates to Exploration Results is based on information compiled by Mr Richard Keevers, a Competent Person who is a Fellow of The Australasian Institute of Mining and Metallurgy. Mr Keevers is a Director of Santana Minerals Limited and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which is being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.' Mr Keevers consents to the inclusion in this report of the matters based on his information in the form and context in which it appears. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified.

Forward Looking Statements

Forward-looking statements in this announcement include, but are not limited to, statements with respect to Santana's plans, strategy, activities, events or developments the Company believes, expects or anticipates will or may occur. By their very nature, forward-looking statements require Santana to make assumptions that may not materialize or that may not be accurate. Although Santana believes that the expectations reflected in the forward-looking statements in this announcement are reasonable, no assurance can be given that these expectations will prove to have been correct, as actual results and future events could differ materially from those anticipated in the forward-looking statements. Accordingly, viewers are cautioned not to place undue reliance on forward-looking statements. Santana does not undertake to update publicly or to revise any of the included forward-looking statements, except as may be required under applicable securities laws.



Appendix 1 RAS MDD044 Preliminary Abbreviated Geological Drill log to 385 metres

0.0 354.0 354.7 356.0	To m 354.0 354.7 356.0	Interval m 354.0 0.7	Geol UNIT TZ3	Lithology	Vein %	Vein type	Vein fill	Visible Gold
354.0 354.7 356.0	354.7		TZ3					
354.7 356.0		0.7						
356.0	356.0		TZ3	spe	8	tgash	qtz	
		1.2	TGF	flt				
	357.0	1.1	RSSZ	ls;ssb	5	tgash	qtz	
357.0	358.0	1.0	RSSZ	spe	5	tgash;lam	q asp	
358.0	359.0	1.0	RSSZ	spe	4	tgash;lam	q asp py	
359.0	360.0	1.0	RSSZ	spe	3	tgash;lam	q asp	
360.0	361.0	1.0	RSSZ	spe	7	tgash;lam	q asp	
361.0	362.0	1.0	RSSZ	ls;ssb	6	tgash	qtz	Р
362.0	363.0	1.0	RSSZ	spe	3	tgash;bx	qtz	Р
363.0	364.0	1.0	RSSZ	ssb;ls	30	tgash; ssb	q asp py	Р
364.0	365.0	1.0	RSSZ	spe;ssb	10	tgash;ssb	q asp py	Р
365.0	366.0	1.0	RSSZ	spe	10	tgash;lam;ssb	qtz	Р
366.0	367.0	1.0	RSSZ	spa;spe	7	tgashs; lam	qtz	
367.0	368.0	1.0	RSSZ	spa;spe	10	tgash;bx	q asp	
368.0	369.0	1.0	RSSZ	spe;spa	7	tgash;lam	q asp	
369.0	370.0	1.0	RSSZ	ls;sbx	25	sbx;lam	q asp py	Р
370.0	371.0	1.0	RSSZ	spa	8	tgash;lam	q asp	
371.0	372.0	1.0	RSSZ	spa;spe	25	lam;tgash	q asp	
372.0	373.0	1.0	RSSZ	spa;spe	30	tgash;lam	qtz	
373.0	374.0	1.0	RSSZ	swpe;ls	40	tgash;lam	qtz	
374.0	375.0	1.0	RSSZ	sbx;ls;spe	20	tgash;lam	qtz	Р
375.0	376.0	1.0	RSSZ	swpe;ls	50	ssb;tgash	q asp	
376.0	377.0	1.0	RSSZ	spe;ls	15	tgash;lam	qtz	
377.0	378.0	1.0	RSSZ	ls;sbx	40	tgash;lam	qtz	
378.0	379.0	1.0	RSSZ	spe;spa;ls	45	tgash;lam	q asp	
379.0	380.0	1.0	RSSZ	spe;spa	10	tgash;lam	qtz	
380.0	381.0	1.0	RSSZ	swspe;ls	20	lam;tgash	q asp	
381.0	382.0	1.0	RSSZ	spa;spe	10	tgash;lam	qtz	
382.0	383.0	1.0	RSSZ	ls;spe;sbx	30	ssb;lam;tgash	q asp	Р
383.0	384.0	1.0			20	lam;tgash	q asp	Р
384.0	385.0	1.0	RSSZ	spe;spa;ls	15	lam;tgash	qtz	
	360.0 361.0 362.0 363.0 364.0 365.0 366.0 367.0 368.0 370.0 371.0 372.0 373.0 374.0 375.0 376.0 377.0 378.0 379.0 380.0 381.0 382.0 383.0	360.0 361.0 361.0 362.0 362.0 363.0 363.0 364.0 365.0 365.0 365.0 366.0 367.0 368.0 369.0 370.0 371.0 372.0 372.0 373.0 375.0 376.0 376.0 377.0 377.0 378.0 379.0 380.0 381.0 382.0 383.0 384.0	360.0 361.0 1.0 361.0 362.0 1.0 362.0 363.0 1.0 363.0 364.0 1.0 364.0 365.0 1.0 365.0 366.0 1.0 366.0 367.0 1.0 366.0 369.0 1.0 368.0 369.0 1.0 369.0 370.0 1.0 370.0 371.0 1.0 372.0 373.0 1.0 373.0 374.0 1.0 375.0 376.0 1.0 376.0 377.0 1.0 377.0 378.0 1.0 379.0 380.0 1.0 380.0 381.0 1.0 382.0 383.0 1.0 382.0 383.0 1.0	360.0 361.0 1.0 RSSZ 361.0 362.0 1.0 RSSZ 362.0 363.0 1.0 RSSZ 362.0 363.0 1.0 RSSZ 363.0 364.0 1.0 RSSZ 364.0 365.0 1.0 RSSZ 365.0 366.0 1.0 RSSZ 366.0 367.0 1.0 RSSZ 367.0 368.0 1.0 RSSZ 368.0 369.0 1.0 RSSZ 370.0 371.0 1.0 RSSZ 371.0 372.0 1.0 RSSZ 372.0 373.0 1.0 RSSZ 374.0 375.0 1.0 RSSZ 376.0 377.0 1.0 RSSZ 377.0 378.0 1.0 RSSZ 379.0 380.0 1.0 RSSZ 380.0 380.0 1.0 RSSZ 381.0 382.0 1.0 RSSZ	360.0 361.0 1.0 RSSZ spe 361.0 362.0 1.0 RSSZ Is;ssb 362.0 363.0 1.0 RSSZ spe 363.0 364.0 1.0 RSSZ ssb;ls 364.0 365.0 1.0 RSSZ spe;ssb 365.0 366.0 1.0 RSSZ spa;spe 366.0 367.0 1.0 RSSZ spa;spe 367.0 368.0 1.0 RSSZ spa;spe 368.0 369.0 1.0 RSSZ spa;spe 369.0 370.0 1.0 RSSZ spa;spe 370.0 371.0 1.0 RSSZ spa;spe 372.0 373.0 1.0 RSSZ spa;spe 373.0 374.0 1.0 RSSZ swpe;ls 375.0 376.0 1.0 RSSZ spe;ls 376.0 377.0 1.0 RSSZ spe;spa;ls 379.0 380.0	360.0 361.0 1.0 RSSZ spe 7 361.0 362.0 1.0 RSSZ Is;ssb 6 362.0 363.0 1.0 RSSZ spe 3 363.0 364.0 1.0 RSSZ spe;ssb 10 364.0 365.0 1.0 RSSZ spe;ssb 10 365.0 366.0 1.0 RSSZ spe;spe 7 366.0 367.0 1.0 RSSZ spa;spe 7 367.0 368.0 1.0 RSSZ spa;spe 10 368.0 369.0 1.0 RSSZ spe;spa 7 369.0 370.0 1.0 RSSZ spa;spe 10 370.0 371.0 1.0 RSSZ spa;spe 25 372.0 373.0 1.0 RSSZ spa;spe 30 373.0 374.0 1.0 RSSZ swpe;ls 40 374.0 375.0 1.0	360.0 361.0 1.0 RSSZ spe 7 tgash;lam 361.0 362.0 1.0 RSSZ ls;ssb 6 tgash;lam 362.0 363.0 1.0 RSSZ spe 3 tgash;bx 363.0 364.0 1.0 RSSZ spe;ssb 10 tgash;ssb 364.0 365.0 1.0 RSSZ spe;ssb 10 tgash;ssb 365.0 366.0 1.0 RSSZ spe;ssb 10 tgash;lam;ssb 366.0 367.0 1.0 RSSZ spa;spe 7 tgash;lam;ssb 366.0 367.0 1.0 RSSZ spa;spe 7 tgash;lam 367.0 368.0 1.0 RSSZ spe;spa 7 tgash;lam 369.0 370.0 1.0 RSSZ spe;spa 7 tgash;lam 370.0 370.0 1.0 RSSZ spa;spe 25 lam;tgash 372.0 373.0 1.0 <td>360.0 361.0 1.0 RSSZ spe 7 tgash;lam q asp 361.0 362.0 1.0 RSSZ ls;ssb 6 tgash;lam q asp 362.0 363.0 1.0 RSSZ spe 3 tgash;lam qtz 363.0 364.0 1.0 RSSZ spe 30 tgash;ssb q asp py 364.0 365.0 1.0 RSSZ spe;ssb 10 tgash;lam;ssb qtz 365.0 366.0 1.0 RSSZ spe;ssb 10 tgash;lam;ssb qtz 366.0 367.0 1.0 RSSZ spa;spe 7 tgash;lam qtz 366.0 367.0 1.0 RSSZ spa;spe 10 tgash;lam qtz 367.0 368.0 1.0 RSSZ spe;spa 7 tgash;lam qtz 369.0 370.0 1.0 RSSZ spe;spa 7 tgash;lam q asp 370.0</td>	360.0 361.0 1.0 RSSZ spe 7 tgash;lam q asp 361.0 362.0 1.0 RSSZ ls;ssb 6 tgash;lam q asp 362.0 363.0 1.0 RSSZ spe 3 tgash;lam qtz 363.0 364.0 1.0 RSSZ spe 30 tgash;ssb q asp py 364.0 365.0 1.0 RSSZ spe;ssb 10 tgash;lam;ssb qtz 365.0 366.0 1.0 RSSZ spe;ssb 10 tgash;lam;ssb qtz 366.0 367.0 1.0 RSSZ spa;spe 7 tgash;lam qtz 366.0 367.0 1.0 RSSZ spa;spe 10 tgash;lam qtz 367.0 368.0 1.0 RSSZ spe;spa 7 tgash;lam qtz 369.0 370.0 1.0 RSSZ spe;spa 7 tgash;lam q asp 370.0

Geol Unit		Lithold	ogy	Vein Type	
Q	Quaternary	cat	cataclasite	bx	breccia
Т	Undiff Tertiary Seds	flt	fault	lam	laminated
TZ3	Chlorite Schist	ls	lode schist	lam vs	laminated vn swarm
TZ4	Biotite Schist	myl	mylonite	met seg	metamorphic seggs
TGF	Thompsons Gorge Fault Zone	pa	psammite	neb vs	nebulous vs
RSSZ	Rise & Shine Shear Zone (TZ4)	pe	pelite	rep	replacement Veining
GSCH	Meta-Volcanic/Basalt	qcat	quartz cataclasite	sbx	silicified breccia
Vein Fill		qtzv	quartz vein	shr	shear veins
fq	feathered quartz	sbx	silicified breccia	sht vs	sheeted vein swarm
qtz	quartz	shr	shear(<5mm)	ssb	silicified shear bands
q carb	quartz carbonate	spa	semi-psammite	stwk	stockwork veins
cc	calcite and/or other carbonate	spe	semi-pelite	tgash	T-gash vein arrays
q asp	quartz-arsenopyrite	ssb	silicified shear bands	tgash ee	T-gash enechelon
q asp py	quartz-pyrite-arsenopyrite	swpa	stockwork psammite	tgash ht	T-gash horse-tails
qpy	quartz-pyrite	swpe	stockwork pelite		
q chl	qtz chlorite	SZ	shear (>5cm)		
chl	chlorite				
bx	breccia				
asp	arsenopyrite				
cha	chalcedonic quartz				
go	gouge				
pug	pug				
fe	ferriginous material				
cly	clay				



Appendix 2 RAS MDD030R Mineralised Intercepts – Assay results, quartz-arsenopyrite veins, geology

						Composite	Composite	Composite	Composite							
Hole_No	From m	To m	Interval m	Sample_ID	Au g/t	metres min025	Au g/t min025	metres min050	Au g/t min050	Geol Log	Visible Gold	QV-aspy Dip	QV-aspy Dip-Dir		f Poles to Q nb Contour	
MDD030R	0.0	143.0	143.0													
MDD030R	143.0	144.0	1.0	MG13386	0.02					TZ3						
MDD030R	144.0	145.0	1.0	MG13387	-0.01					.23						
MDD030R	145.0	146.0	1.0	MG13388	0.03											
MDD030R	146.0	146.3	0.3	MG13389	0.05					TGF						
MDD030R	146.3	147.0	0.7	MG13390	0.09											
MDD030R	147.0	148.0	1.0	MG13391	0.11											
MDD030R	148.0	149.0	1.0	MG13392	0.05											
MDD030R	149.0	150.0	1.0	MG13393	0.03											
MDD030R	150.0	151.0	1.0	MG13394	0.08					TZ4						
MDD030R	151.0	152.0	1.0	MG13395	0.26											
MDD030R	152.0	153.0	1.0	MG13396	0.15											
MDD030R	153.0	154.0	1.0	MG13397 MG13398	0.18					1						
MDD030R MDD030R	154.0 155.0	155.0 156.0	1.0		4.22 0.20	8.0	0.77									
MDD030R	156.0	157.0	1.0	MG13399 MG13400	0.20			4.0	1.29	RSSZ						
MDD030R	157.0	158.0	1.0	MG13400	0.68					TZ4						
MDD030R	158.0	159.0	1.0	MG13401	0.38					RSSZ	P					
MDD030R	159.0	160.0	1.0	MG13402	0.38					K332	-					
MDD030R	160.0	161.0	1.0	MG13404	0.22					TZ4						
MDD030R	161.0	162.0	1.0	MG13408	0.16											
MDD030R	162.0	163.0	1.0	MG13409	0.34											
MDD030R	163.0	164.0	1.0	MG13410	0.84					RSSZ						
MDD030R	164.0	165.0	1.0	MG13411	0.25	4.0	0.48									
MDD030R	165.0	166.0	1.0	MG13412	0.48											
MDD030R	166.0	167.0	1.0	MG13413	0.05											
MDD030R	167.0	168.0	1.0	MG13414	0.06											
MDD030R	168.0	169.0	1.0	MG13415	0.09											
MDD030R	169.0	170.0	1.0	MG13416	0.03					774						
MDD030R	170.0	171.0	1.0	MG13417	-0.01					TZ4						
MDD030R	171.0	172.0	1.0	MG13418	-0.01											
MDD030R	172.0	173.0	1.0	MG13419	-0.01											
MDD030R	173.0	174.0	1.0	MG13420	-0.01							52	102	MDI		√asnv \
MDD030R	174.0	175.0	1.0	MG13421	0.23							80	6	.0		
MDD030R	175.0	176.0	1.0	MG13422	0.04							54	296			
MDD030R	176.0	177.0	1.0	MG13423	0.16									1		•
MDD030R	177.0	178.0	1.0	MG13424	0.04											
MDD030R	178.0	179.0	1.0	MG13425	0.41					RSSZ						
MDD030R	179.0	180.0	1.0	MG13426	0.55	3.0	0.43								•	
MDD030R	180.0	181.0	1.0	MG13430	0.32							65	356			
MDD030R	181.0	182.0	1.0	MG13431	0.07											
MDD030R	182.0	183.0	1.0	MG13432	0.22											
MDD030R	183.0	184.0	1.0	MG13433	0.08											
MDD030R	184.0	185.0	1.0	MG13434	0.03											
MDD030R	185.0	186.0	1.0	MG13435 MG13436	0.02											
MDD030R MDD030R	186.0 187.0	187.0 188.0	1.0		-0.01 0.32											
MDD030R	188.0	189.0	1.0	MG13437 MG13438	0.32											
MDD030R	189.0	190.0	1.0	MG13438	0.41					TZ4						
MDD030R	190.0	191.0	1.0	MG13439	0.09											
MDD030R	191.0	192.0	1.0	MG13441	0.17											
MDD030R	192.0	193.0	1.0	MG13442	0.12											
MDD030R	193.0	194.0	1.0	MG13443	0.03					1				1		
MDD030R		195.0		MG13444	0.15					1						
MDD030R		196.0		MG13445	0.09					2007						
MDD030R	196.0	197.0		MG13446	0.18					RSSZ						
MDD030R		198.0		MG13447	0.23					TZ4						
MDD030R	198.0	199.0	1.0	MG13448	0.16											
MDD030R		200.0		MG13452	0.11											
MDD030R	200.0	201.0	1.0	MG13453	0.05					RSSZ						
MDD030R	201.0	202.0	1.0	MG13454	0.26											
MDD030R	202.0	203.0	1.0	MG13455	0.07											



Appendix 2 RAS MDD031 Mineralised Intercepts – Assay results, quartz-arsenopyrite veins, geology

Hole_No	From m	To m	Interval m	Sample_ID		Composite metres min025	Composite Au g/t min025	Composite metres min050	Composite Au g/t min050	Geol Log	Visible Gold	QV-aspy Dip	QV-aspy Dip-Dir	ı		f Poles to (mb Contou	
MDD031	0.0	279.3	279.3							TZ3							
MDD031	279.3	280.8	1.5							TGF							
MDD031	280.8	282.0	1.2	MG12173	0.89												
MDD031	282.0	283.0	1.0	MG12174	7.87							-				0.0	
MDD031	283.0	284.0	1.0	MG12175	1.95						P			stockwork	veining 29	% aspy	
MDD031	284.0	285.0	1.0	MG12176	16.90												
MDD031	285.0	286.0	1.0	MG12177	3.09												
MDD031	286.0	287.0	1.0	MG12178	0.28												
MDD031	287.0	288.0	1.0	MG12179	7.42												
MDD031	288.0 289.0	289.0 290.0	1.0	MG12180	9.24 0.10												
MDD031 MDD031	289.0	290.0	1.0	MG12181 MG12182	0.10												
MDD031	290.0	292.0	1.0		1.66			21.2	4.20								
MDD031	291.0	293.0	1.0	MG12183 MG12184	2.52			21.2	4.38			41	165				
MDD031	292.0	294.0	1.0	MG12185	0.23	24.2	3.89			B007		41	103				
MDD031	293.0	295.0	1.0	MG12186	0.23					RSSZ							
MDD031	295.0	296.0	1.0	MG12187	1.03										MDD031	Qv aspy	
MDD031	296.0	297.0	1.0	MG12191	12.20						Р						1
MDD031	297.0	298.0	1.0	MG12191	10.00						P	1					\
	298.0	299.0	1.0		0.49						-	42	11			\ \ \ \ \ \	V=7
MDD031 MDD031	298.0	300.0	1.0	MG12193 MG12194	0.49				1			+42	- 11		~ \		
MDD031	300.0	300.0	1.0	MG12194 MG12195	12.90				1								
MDD031	300.0	301.0	1.0	MG12195 MG12196	2.45				1						e e		/
MDD031	301.0	303.0	1.0	MG12196 MG12197	0.46					1		37	37				/
MDD031	302.0	304.0	1.0	MG12197 MG12198	0.46					1		3/	3/				/
MDD031	303.0	304.0	1.0	MG12198 MG12199	0.06					1		66	45				
MDD031	304.0	305.0	1.0	MG12199 MG12200	0.83					1		- 00	43				
				assays below													+
MDD031	306.0	307.0	~uiuiice Ol	MG12201	0.09												
MDD031	307.0	308.0		MG12202	0.37					TZ4							
MDD031	308.0	309.0		MG12203	-0.01												
MDD031	309.0	310.0		MG12204	0.12												
MDD031	310.0	311.0		MG12205	0.14												
MDD031	311.0	312.0		MG12206	-0.01												
MDD031	312.0	313.0		MG12207	0.13					RSSZ							
MDD031	313.0	314.0		MG12208	1.11												
MDD031	314.0	315.0		MG12209	0.29	3.0	0.75	3.0	0.75								
MDD031	315.0	316.0		MG12213	0.86												
MDD031	316.0	317.0		MG12214	0.13												
MDD031	317.0	318.0		MG12215	0.06												
MDD031	318.0	319.0		MG12216	0.10					TZ4							
MDD031	319.0	320.0		MG12217	0.09												
MDD031	320.0	321.0		MG12218	0.05												
MDD031	321.0	322.0		MG12219	0.03												
MDD031	322.0	323.0		MG12220	-0.01												
MDD031	323.0	324.0		MG12221	-0.01												
MDD031	324.0	325.0		MG12222	-0.01												
MDD031	325.0	326.0		MG12223	0.22					RSSZ		29	87	MDU	031 325-	331m QV	aspy \
MDD031	326.0	327.0		MG12224	0.10							34	111				
MDD031	327.0	328.0		MG12225	0.11												
MDD031	328.0	329.0		MG12226	0.11										•		N=3
MDD031	329.0	330.0		MG12227	0.11												
MDD031	330.0	331.0		MG12228	0.38							46	32				
MDD031	331.0	332.0		MG12229	0.08					TZ4					•		/
MDD031	332.0	333.0		MG12230	0.01					124							/
MDD031	333.0	334.0		MG12231	0.03												
MDD031	334.0	335.0		MG12235	0.58												
MDD031	335.0	336.0		MG12236	0.04					RSSZ							
MDD031	336.0	337.0		MG12237	-0.01												
MDD031	337.0	338.0		MG12238	-0.01												
MDD031	338.0	339.0		MG12239	-0.01												
MDD031	339.0	340.0		MG12240	-0.01					TZ4							
MDD031	340.0	341.0		MG12241	-0.01												
MDD031	341.0	342.0		MG12242	-0.01					RSSZ							
MDD031	342.0	343.0		MG12243	-0.01												
MDD031	343.0	344.0		MG12244	-0.01												
MDD031	344.0	345.0		MG12245	-0.01												
MDD031	345.0	346.0		MG12246	-0.01												
MDD031	346.0	347.0		MG12247	-0.01					TZ4							
MDD031	347.0	348.0		MG12248	0.37												
MDD031	348.0	349.0		MG12249	-0.01												
MDD031	349.0	350.0		MG12250	0.11					RSSZ							
MDD031	350.0	351.0		MG12254	-0.01												
MDD031	351.0	352.0		MG12255	-0.01												
MDD031	352.0	353.0		MG12256	-0.01												
MDD031	353.0	354.0		MG12257	-0.01					TZ4							
MDD031	354.0	355.0		MG12258	-0.01												
MDD031	355.0	356.0		MG12259	0.01					I		1		I			



Appendix 2 RAS MDD033 Mineralised Intercepts – Assay results, quartz-arsenopyrite veins, geology

Hole_No	From m	To m	Interval m	Sample_ID	Au g/t	Composite metres min025	Composite Au g/t min025	Composite metres min050	Composite Au g/t min050	Geol Log	Visible Gold	QV-aspy Dip	QV-aspy Dip-Dir		net Plots Planes (Ka		o QV-Aspy ours)
MDD033	239	240	1.0	MG13596	-0.01												
MDD033	240	241	1.0	MG13597	-0.01					TZ3							
MDD033	241	242.4	1.4	MG13598	-0.01												
MDD033	242.4	243.3	0.9	MG13599	0.12					TGF							
MDD033	243.3	244	0.7	MG13600	1.02												
MDD033	244	245	1.0	MG13601	0.73												
MDD033	245	246	1.0	MG13602	0.50												
MDD033	246	247	1.0	MG13603	0.41	6.7	0.77	6.7	0.77		P						
MDD033	247	248	1.0	MG13604	0.89												
MDD033	248	249	1.0	MG13605	0.77												
MDD033	249	250	1.0	MG13606	1.12												
MDD033	250	251	1.0	MG13607	0.22					RSSZ							
MDD033	251	252	1.0	MG13608	0.06												
MDD033	252	253	1.0	MG13609	0.03					1							
MDD033	253	254	1.0	MG13610	0.05					1		27	52				
MDD033	254	255	1.0	MG13611	0.08												
MDD033	255	256	1.0	MG13612	0.09					1							
MDD033	256	257	1.0	MG13613	0.01					1							
MDD033	257	258	1.0	MG13614	0.05												
MDD033	258	259	1.0	MG13618	0.12					TZ4							
MDD033	259	260	1.0	MG13619	0.01					RSSZ							
MDD033	260	261	1.0	MG13620	0.02												
MDD033	261	262	1.0	MG13621	0.01					1							
MDD033	262	263	1.0	MG13622	0.05					TZ4							
MDD033	264	265	1.0	MG13624	0.10					1				/			
MDD033	265	266	1.0	MG13625	0.03					RSSZ				/		0	
MDD033	266	267	1.0	MG13626	0.01					TZ4				/			
MDD033	267	268	1.0	MG13627	0.03									/ MD	D033 270		
MDD033	268	269	1.0	MG13628	0.26					1							
MDD033	269	270	1.0	MG13629	6.28	2.0	3.27	1.0	6.28	1	Р						
MDD033	270	271	1.0	MG13630	0.13							54	33				N=5
MDD033	271	272		MG13631	0.07					RSSZ		57	180				14-0
MDD033	272	273		MG13632	0.18										o°		/
MDD033	273	274		MG13633	0.10							58	212		8		/
MDD033	274	275		MG13634	0.06							50	34				
MDD033	275	276		MG13635	0.11							38	31				
	ending to 3			23000													



Appendix 2 RAS MDD034R Mineralised Intercepts – Assay results, quartz-arsenopyrite veins, geology

Hole_No	From m	To m	Interval m	Sample_ID	Au g/t	Composite metres min025	Composite Au g/t min025	Composite metres min050	Composite Au g/t min050	Geol Log	Visible Gold	QV-aspy Dip	QV-aspy Dip-Dir		onet Plots Planes (K		to QV-Aspy tours)
MDD034R	193.0	194.0	1.0	MG15001	-0.01					TZ3							
MDD034R	194.0	195.0	1.0	MG15002	-0.01					TGF							
MDD034R	195.0	196.4	1.4	MG15003	-0.01												
MDD034R	196.4	197.3	0.9	MG15004	0.02												
MDD034R	197.3	198.0	0.7	MG15005	0.25												
MDD034R	198.0	199.0	1.0	MG15006	0.32												
MDD034R	199.0	200.0	1.0	MG15007	0.31												
MDD034R	200.0	201.0	1.0	MG15008	0.21												
MDD034R	201.0	202.0	1.0	MG15009	0.41												
MDD034R	202.0	203.0	1.0	MG15010	0.87					RSSZ							
MDD034R	203.0	204.0	1.0	MG15011	1.55	12.7	0.52										
MDD034R	204.0	205.0	1.0	MG15012	0.17												
MDD034R	205.0	206.0	1.0	MG15013	0.18			8.0	0.65								
MDD034R	206.0	207.0	1.0	MG15014	0.15			8.0	0.03								
MDD034R	207.0	208.0	1.0	MG15015	0.39												
MDD034R	208.0	209.0	1.0	MG15016	0.52												
MDD034R	209.0	210.0	1.0	MG15017	1.34												
MDD034R	210.0	211.0	1.0	MG15018	0.19					TZ4							
MDD034R	211.0	212.0	1.0	MG15019	0.15					124							
MDD034R	212.0	213.0	1.0	MG15020	-0.01												
MDD034R	213.0	214.0	1.0	MG15024	0.02					RSSZ							
MDD034R	214.0	215.0	1.0	MG15025	0.06												
MDD034R	215.0	216.0	1.0	MG15026	0.05												
MDD034R	216.0	217.0	1.0	MG15027	0.10					TZ4							
MDD034R	217.0	218.0	1.0	MG15028	0.05												
MDD034R	218.0	219.0	1.0	MG15029	-0.01												
MDD034R	219.0	220.0	1.0	MG15030	-0.01												
MDD034R	220.0	221.0	1.0	MG15031	0.55												
MDD034R	221.0	222.0	1.0	MG15032	0.03							18	71				
MDD034R	222.0	223.0	1.0	MG15033	0.03			5.0	6.49			16	18	MDI		22-229m	QV aspy
MDD034R	223.0	224.0	1.0	MG15034	0.06							26	105				, ,
MDD034R	224.0	225.0	1.0	MG15035	31.80	8.0	4.17			RSSZ	Р	71	330		1	~	N=11
MDD034R	225.0	226.0	1.0	MG15036	0.32					1		76	50		•		
MDD034R	226.0	227.0	1.0	MG15037	0.28							23	177	\	•	•	
MDD034R	227.0	228.0	1.0	MG15038	0.32							74	11	\			0
MDD034R	228.0	229.0	1.0	MG15039	0.17							54	30		•		
MDD034R	229.0	230.0	1.0	MG15040	0.12							44	304		•		
MDD034R	230.0	231.0	1.0	MG15040	0.05					TZ4		41	39				•
MDD034R	231.0	232.0	1.0	MG15041	0.03					RSSZ		64	126		0		
	ending to 3			141013042	0.03					NJJZ		04	120				



Appendix 3 ALS Metallurgy - RAS Composites - Head Assays

ALS								
PROJECT	A 2227E RENDICO	OBUID COL	D BROILET					
CLIENT	A23275 - BENDIGO MATAKANUI GOLD		D PROJECT					
SAMPLE ID	RAS COMPOSITES							
DATE	4/05/2022							
lead Assays								
Analyte	Method	Unit	RAS01	RAS02	RAS03	RAS04	RAS05	RAS06
Au_1	Fire Assay	g/t	2.79	5.61	0.68	4.93	2.77	0.71
Au_2	Fire Assay	g/t	3.01	10.0	0.73	6.06	2.32	0.48
Au_3	Fire Assay	g/t	7.03	1.98	0.96	7.64	2.10	0.65
Au_Av	Fire Assay	g/t	4.28	5.86	0.79	6.21	2.40	0.61
Au	Screen Fire Assay	g/t	5.48	7.22	1.11	NA	1.95	1.56
Ag	D3/ICP	ppm	0.6	0.9	<0.3	<0.3	<0.3	<0.3
Al	D4Z/ICP	%	5.00	6.44	6.64	6.68	6.92	6.84
As	D4Z/ICP	%	1.44	2.12	0.88	0.60	0.12	0.10
Ba	D4Z/ICP	ppm	200	900	500	600	500	600
Be n:	D3/ICP	ppm	10.0	5.00	<5	<5	<5	<5
Bi C Total	D3/ICP	ppm	<10	10.0	<10	<10 1.17	<10	<10 1.20
C Organic	CS2000 CS2000	% %	0.90	0.09	0.09	0.06	0.09	0.06
Ca	D4Z/ICP	% %	1.50	1.70	2.00	1.90	1.80	1.80
Cd	D3/ICP	ppm	<5	<5	<5	<5	<5	<5
Co	D3/ICP	ppm	10.0	10.0	10.0	10.0	10.0	10.0
Cr	D3/ICP	ppm	50.0	40.0	40.0	30.0	30.0	30.0
Cu	D3/ICP	ppm	6.00	14.0	28.0	20.0	20.0	26.0
F	ISE	ppm	250	250	450	450	400	450
Fe	D4Z/ICP	%	2.26	3.10	2.48	2.52	2.52	2.40
Hg	D1/ICP	ppm	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
K	D3/ICP	%	0.77	2.20	2.17	2.17	1.86	2.13
Li	D3/ICP	ppm	10.0	10.0	20.0	20.0	25.0	20.0
Mg	D4Z/ICP	ppm	6000	6800	8400	8800	8400	8400
Mn	D4Z/ICP	ppm	300	300	400	500	400	400
Mo	D3/ICP	ppm	<5	<5	<5	<5	<5	<5
Na	D3/ICP	%	3.20	3.39	3.23	2.80	3.41	3.14
Ni	D3/ICP	ppm	15.0	20.0	15.0	15.0	15.0	15.0
Р	D3/ICP	ppm	600	600	800	700	800	800
Pb	D3/ICP	ppm	45.0	65.0	15.0	15.0	40.0	35.0
S Total	C\$2000	%	0.70	1.04	0.46	0.30	0.16	0.12
S Sulphide	CS2000	%	0.66	0.92	0.38	0.28	0.14	0.10
Sb	D1/ICP	ppm	5.20	10.2	3.10	4.70	0.80	1.30
Se	D1/ICP	ppm	<5	<5	<5	<5	<5	<5
SiO2	D4Z/ICP	%	71.2	55.6	66.4	67.6	67.0	55.6
Sn	D4Z/ICP	ppm	<50	<50	<50	<50	<50	<50
Sr Te	D4Z/ICP	ppm	360	0.20	400 <0.2	360	360	360 <0.2
Th	D1/ICP D4Z/ICP	ppm	0.40 6.00	10.0	8.00	<0.2 10.0	<0.2 8.00	10.0
Ti	D4Z/ICP D4Z/ICP	ppm	2200	3200	3000	3000	3000	3000
U	D4Z/ICP	ррт	2.00	4.00	4.00	4.00	4.00	4.00
V	D3/ICP	ppm	40.0	54.0	66.0	66.0	60.0	56.0
W	D4Z/ICP	ppm	60.0	80.0	60.0	50.0	40.0	30.0
Y	D4Z/ICP	ppm	10.0	16.0	16.0	16.0	14.0	16.0
Zn	D3/ICP	ppm	38.0	74.0	60.0	62.0	114	70.0
Zr	D3/ICP	ppm	25.0	45.0	25.0	25.0	20.0	25.0



JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (eg 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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.	Diamond drill (DD) core samples for laboratory assay are typically 1 metre samples of diamond saw cut ½ diameter core. Where distinct mineralisation boundaries are logged, sample lengths are adjusted to the respective geological contact. Samples are crushed at the receiving laboratory to minus 2mm (80% passing) and split to provide 1kg for pulverising to -75um. Pulps are fire assayed using a 50g charge.



Criteria	JORC Code explanation	Commentary
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).	Current drilling techniques are diamond coring (DD) PQ3 and HQ3 size triple tube. Where PQ3 core size (83mm diameter) is commenced this is maintained throughout the DD hole until drilling conditions dictate reduction in size to HQ3 core (61mm diameter).
		Drillholes are oriented to intersect known mineralised features in a nominally perpendicular orientation as much as is practicable.
		All drill core is oriented to assist with interpretation of mineralisation and structure using a Trucore orientation tool.
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.	DD core sample recoveries are recorded by the drillers at the time of drilling by measuring the actual distance of the drill run against the actual core recovered. The measurements are checked by the site geologist. When poor core recoveries are recorded the site geologist and driller endeavour to immediately rectify any problems to maintain maximum core recoveries. DD core logging to date indicate >97% recoveries. The drilling contract used states for any given run, a level of recovery is required otherwise financial penalties are applied to the drill contractor to ensure sample recovery priority along with production performance.



Criteria	JORC Code explanation	Commentary
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.	All DD holes have been logged for their entire sampled length below upper open hole drilling (nominally 0-320 metres below collar). Data is recorded directly into digital spreadsheets and then uploaded into an Access cloud database with sufficient detail that supports Mineral Resource estimations (MRE).
	The total length and percentage of the relevant intersections logged.	Logging is mostly qualitative but there are estimations of quartz and sulphide content and quantitative records of geological / structural unit, oxidation state and water table boundaries.
		Oriented DD core allows alpha / beta measurements to determine structural element detail (dip / dip direction) to supplement routine recording of lithologies / alteration / mineralisation / structure / oxidation / colour and other features for MRE reporting.
		All core is photographed wet and dry before cutting.
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.	Industry standard laboratory sample preparation methods are suitable for the mineralisation style and involve, oven drying, crushing and splitting of samples to 1kg for pulverising to -75um. Pulps are fire assayed using a 50g charge.
	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 representivity of samples.	50g charge is considered minimum requirement for the coarse nature of the gold. Larger screen fire assays and 1kg Leachwell determinations are conducted periodically as a QAQC check.
	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.	Large diameter (83mm) PQ3 core was maintained (where conditions allow) for DD holes to MDD016 and subsequently HQ3 (61mm) for drillholes MDD017 to MDD044.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	DD core drill samples are sawn in ½ along the length of the core on cut lines marked by geologists' perpendicular to structure / foliation or to bisect vein mineralisation for representative samples whilst preserving the orientation line. Intervals required for QAQC checks are ¼ core from ½ sections of core to be sent for assay.
		QAQC procedures include field replicates, standards, and blanks at a frequency of ~4% and also cross-lab assay checks at an umpire laboratory.



Criteria	JORC Code explanation	Commentary
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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	DD core for gold assays undergo sample preparation by SGS laboratory Westport and 50g fire assay with an AAS finish (SGS method FAA505, DDL 0.01ppm Au) by SGS laboratory Waihi. Portable XRF (pXRF) instrumentation is used onsite (Olympus Innov-X Delta Professional Series model DPO-4000 equipped with a 4 W 40kV X-Ray tube) primarily to identify arsenical samples (arsenic correlates well with gold grade in these orogenic deposits). The pXRF analyses a 31-element suite (Ag, As, Bi, Ca, Cd, Cl, Co, Cr, Cu, Fe, Hg, K, Mn, Mo, Nb, Ni, P, Pb, Rb, S, Sb, Se, Sn, Sr, Th, Ti, V, W, Y, Zn, Zr) utilising 3 beam Soil mode, each beam set for 30 seconds (90 seconds total). pXRF QAQC checks involve 2x daily calibration and QAQC analyses of SiO2 blank and NIST standards (NIST 2710a & NIST 2711a). For laboratory QAQC, samples (3*certified standards, blanks and field replicates) are inserted into laboratory batches at a frequency of ~4% and ~5% respectively. Samples are selected at the end of each drilling campaign to be sent to an umpire laboratory for cross-lab check assays.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel. 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.	Significant gold assays and pXRF arsenic analyses are checked by alternative senior company personnel. Original lab assays are initially reported and where replicate assays and other QAQC work require reassay or screen fire assays, the results from the larger samples are adopted. To date results are accurate and fit well with the mineralisation model. Some DD core holes have been sited adjacent to previous RC drillholes to provide twinned data. pXRF multi-element analyses are directly downloaded from the pXRF analyser as csv electronic files. These and laboratory assay csv files are imported into the database, appended and merged with previous data. The database master is stored off-site and periodically updated and verified by an independent qualified person. There have been no adjustments to analytical data presented.



Criteria	JORC Code explanation	Commentary
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 estimation. Specification of the grid system used. Quality and adequacy of topographic control.	DD drillhole collar locations are accurate (+/- 50mm) xyz coordinates when captured by a licensed surveyor using RTK-GPS equipment. All drillholes to MDD044 have been surveyed by RTK-GPS equipment with subsequent and planned collar locations based on hand-held GPS coordinates with xy accuracy of +/-3 metres and RL accuracy to 0.5 metres from detailed LiDAR DTM. All drill holes reference the NZTM map projection and collar RLs the NZVD2016 vertical datum. DD down hole surveys are recorded at 12m intervals using a Reflex multi-shot camera.
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.	Drillhole collar spacing is variable and considered appropriate for determination of geological and grade continuity during this phase of the drilling programme. Site locations in steep terrain are dictated by best access allowed by contour tracks with gentle gradients to allow safe working drill pad excavations. No compositing of samples is being undertaken for analysis. Sampling and assaying are in one metre intervals or truncated to logged features.
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.	The majority of drillholes in this campaign are inclined (-60° or -75°) to 270°T to intercept mineralisation at a reasonable angle and facilitate core orientation measurements. MDD044 is the only drillhole, at RAS to date, oriented 0°T (-60°) due to topographical constraints, to facilitate testing of northern mineralisation extents. True mineralisation widths in MDD044 will be less than downhole intervals. As the deposits are tabular and lie at low angles, there is not anticipated to be any introduced bias for resource estimates.



Criteria	JORC Code explanation	Commentary
Sample security	The measures taken to ensure sample security.	Company personnel manage the chain of custody from sampling site to laboratory. DD drill core samples are transported daily from DD rig by the drilling contractor in numbered core boxes to the Company secure storage facility for logging and sample preparation. After core cutting, the core for assay is bagged, securely tied, and weighed before being placed in polyweave bags which are securely tied. Retained core is stored on racks in secure locked containers. Polyweave bags with the calico bagged samples for assay are placed in steel cage pallets, sealed with a wire-tied tarpaulin cover, photographed, and transported to local freight distributer for delivery to the laboratory. On arrival at the laboratory photographs taken of the consignment are checked against despatch condition to ensure no tampering has occurred.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	An independent competent Person (CP) conducted a site audit in January 2021 of all sampling techniques and data management. No major issues were identified, and recommendations have been followed. Further CP site audits will be undertaken in 2022.



Section 2 Reporting of Exploration Results

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.	Exploration is being currently conducted within Mineral Exploration Permit (MEP) 60311 (252km²) registered to Matakanui Gold Ltd (MGL) issued on 13th April 2018 for 5 years with renewal date on 12th April 2023. MGL has the gold rights for this tenement. There are no material issues with third parties.
	• 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.	MGL applied for a Minerals Prospecting Permit (MPPA) in March 2022, and this is in process with the Government Ministerial Authority (NZPAM) for issue under MPP 60882.
		The tenure of the Permits is secure and there are no known impediments to obtaining a licence to operate.
		The Project is subject to a 1.5% Net Smelter Royalty (NSR) on all production from MEP 60311 (successor permits) payable to an incorporated, private company (Rise and Shine Holdings Limited) which is owned by the prior shareholders of MGL (NSRW Agreement) before acquisition of 100% of MGL shares by Santana Minerals Limited.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Early exploration in the late 1800's and early 1900's included small pits, adits and cross-cuts and alluvial mining.
		Exploration has included soil and rock chip sampling by numerous companies since 1983 with drilling starting in 1986. Exploration in the 1990's commenced with a search for Macraes style gold deposits along the RSSZ. Drilling included 13 RC holes by Homestake NZ Exploration Ltd in 1986, 20 RC holes by BHP Gold Mines NZ Ltd in 1988 (10 of these holes were in the Bendigo Reefs area which is not part of the MRE area), 5 RC holes by Macraes Mining Company Ltd in 1991, 22 shallow (probably blasthole) holes by Aurum Reef Resources (NZ) Ltd in 1996, 30 RC holes by CanAlaska Ventures Ltd from 2005-2007, 35 RC holes by MGL in 2018 and a further 18 RC holes by MGL in 2019.



Criteria	JORC Code explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	The RSSZ is a low-angle late-metamorphic shear-zone, presently known to be up to 120m thick. It is sub-parallel to the metamorphic foliation and dips gently to the north- east. It occurs within psammitic, pelitic and meta-volcanic rocks. Gold mineralisation is concentrated in multiple deposits along the RSSZ. In the Project area there are 4 deposits with Mineral Resource Estimates (MRE) – Come-in-Time (CIT), Rise and Shine (RAS), Shreks (SHR) and Shreks-East (SRE). The gold and associated pyrite/arsenopyrite mineralisation at all deposits occur along micro-shears, and in brecciated / laminar quartz veinlets within the highly- sheared schist. There are several controls on mineralisation with apparent NNW, N and NNE trending structures all influencing gold distribution. Shear dominated mineralisation within the top 20-40m of the shear zone is in a unit termed the "Hanging Wall Shear" (HWS) which lies immediately below the Thomsons Gorge Fault (TGF). The TGF is a regional low-angle fault that separates upper barren chlorite (TZ3) schist from underlying mineralised biotite (TZ4) schists. Stacked stockwork vein swarms (SVS) occur deeper in the RSSZ. Unlike Macraes, the gold mineralisation in the oxide, transition and fresh zones is characterised by coarse free gold and silica- poor but extensive ankerite alteration.
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole 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. 	Refer to the body of text. No material information has been excluded.



Criteria	JORC Code explanation	Commentary
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg 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. 	Significant gold intercepts are reported using 0.25g/t Au and 0.50g/t Au lower grade cut-offs with 4m of internal dilution included. Broad zonation is: 0.10g/t Au cut-off defines the wider low-grade halo of mineralisation, 0.25g/t Au cut-off represents possible economic mineralisation, with 0.50g/t Au defining high-grade axes / envelopes. Metal unit (MU) distribution, where shown on maps and in tables are calculated from total drill hole Au * associated drill hole interval metres. pXRF analytical results reported for laboratory pulp returns are considered accurate for the suite of elements analysed. Where gold assays are pending, minimum 1,000 ppm composited arsenic values provide a preliminary representation of potential mineralised zones and include 4m <1,000 ppm internal dilution.
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 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 (eg 'down hole length, true width not known'). 	All intercepts quoted are downhole widths. Intercepts are associated with a major 20-120m thick low-angle mineralised shear that is largely perpendicular to the drillhole traces. Aggregate widths of mineralisation reported are drillhole intervals >0.50g/t Au occurring in low-angle stacked zones. There are steeply dipping narrow (1-5m) structures deeper in the footwall and the appropriateness of the current drillhole orientation will become evident and modified as additional drill results dictate.
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. 	Refer to figures in the body of the text.
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.	All significant intercepts have been reported.



Criteria	JORC Code explanation	Commentary
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.	
Further work	• The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	DD drilling down dip / down plunge to the north of existing resources is continuing at RAS on ~120 metre step-out east-west drill sections.
	 Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	Further work is following at RAS, CIT and SHR deposits as results dictate, which may include infill RC, further DD core drilling, and metallurgical test-work.
		A new 2021 MRE update (to JORC Code 2012) was completed in September 2021 which increased Inferred Resources 155% to 643Koz from the 252Koz 2019 MRE (0.25g/t lower cut-off). A 2022 MRE upgrade to RAS is currently underway.
		Potential extensions to mineralisation and resources are shown in figures in the body of the text.