

## NEW GOLD INTERCEPTS EXCEED PREVIOUSLY MODELLED GRADES AND THICKNESSES

- Assay results for Rise and Shine (RAS) drillholes MDD061 and MDD064 extend the high-grade zone at RAS ridge on the eastern margin of the RAS shoot (partial, aggregate, top-cut 100g/t, 0.50g/t lower cut-off).
  - MDD061
    - 33.1m @ 4.1 g/t Au from 150.9m
    - (including 1m @ 79.3 g/t from 179m and 1m @ 10.9 g/t from 228m)
  - MDD064
    - 20.0m @ 5.0 g/t Au from 176.0m
    - Including 1m @ 21.6 g/t from 186m, 23.1 g/t from 189m and 15.1 g/t from 190m
- These intercepts report higher aggregate grades and thicknesses than those modelled in the July 2022 MRE and form a high-grade quartet with recently reported drillholes MDD051 and MDD054 (ASX announcement on 22 August) extending 180 metres down-plunge on the eastern margin of the 300-400 metre wide, 1,500-metre-long RAS shoot.
  - MDD051
    - 49.9m @ 6.4 g/t Au from 152.1m
  - MDD054 “Jewellery Box”
    - 43.3m @ 11.2 g/t Au from 165.8m
- Assays received for Shreks (SHR) drillhole MDD062R confirm down-plunge continuity of the Rise and Shine Shear Zone (RSSZ) with encouraging grades:
  - MDD062R
    - 5.0m @ 2.2 g/t Au from 273m (partial, aggregate, uncut min 0.50g/t)
- Other results received from Come-in-Time (CIT) Deposit:
  - MDD052
    - 3.0m @ 1.1 g/t Au from 193m (aggregate, uncut min 0.50g/t)
- Extension drilling continues at RAS with two diamond drill (DD) rigs and at SHR with one DD rig. A reverse circulation (RC) rig is to be added before the end of September to accelerate testing the numerous well-defined targets that extend 30km along the RSSZ.

**6 September 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”).

Resource extension drilling since September 2021 has resulted in a large increase in the overall global RSSZ MRE to 1.9Moz @ 1.8g/t Au (top-cut, 0.5g/t lower cut-off), (ASX announcement on 11 July 2022).

Drilling is continuing to expand the resource potential beyond this new 1.9Moz MRE platform and these new results at RAS add considerable momentum to potential RAS resource growth.

Commenting on the results Executive Director Dick Keevers said:

*“The confirmation by these assays of above average Au grade over substantial widths, in drill holes MDD061 and MDD064, add to the dimensions and apparent continuity of this sweet spot in the SE part of the RAS deposit. A good place to find good gold in a shallow part of our conceptual future open pit, which could allow access to high-grade Au mineralisation in the early stages of any future mine.”*

## RSSZ Deposits - Extension Drilling

Four RSSZ deposits, CIT, RAS, SHR and Shreks-East (SRE) extend 4 kilometres NW-SE along strike (Figure 1) and contain the current 1.9Moz inferred gold resource. All deposits remain open at depth and presently three DD rigs are testing extensions with a total of 15,327 metres completed since January 2022 (Appendix 1).

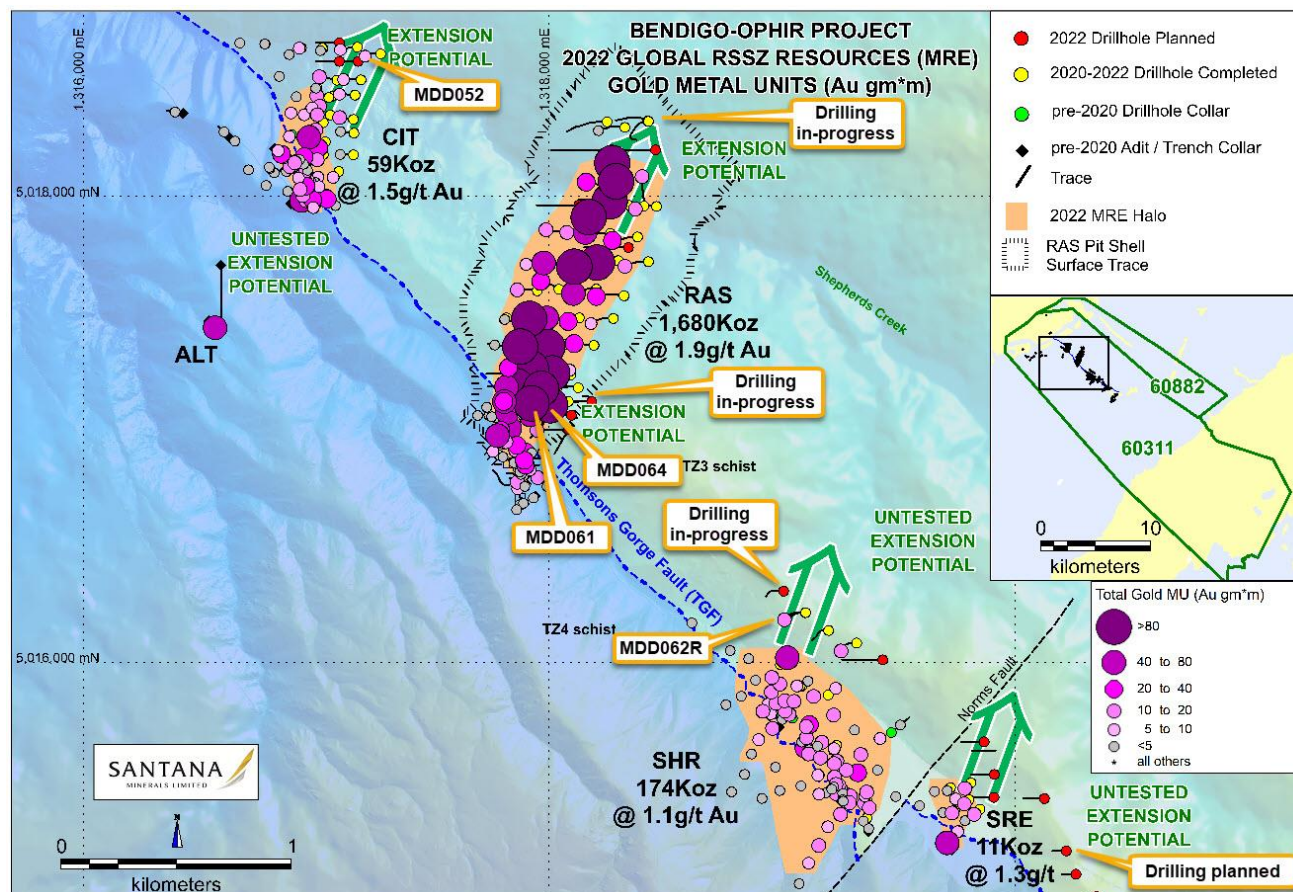


Figure 1 RSSZ Deposits / Resource Halos / Gold Metal Units (MU)

## Latest Drill Assay Results from RAS

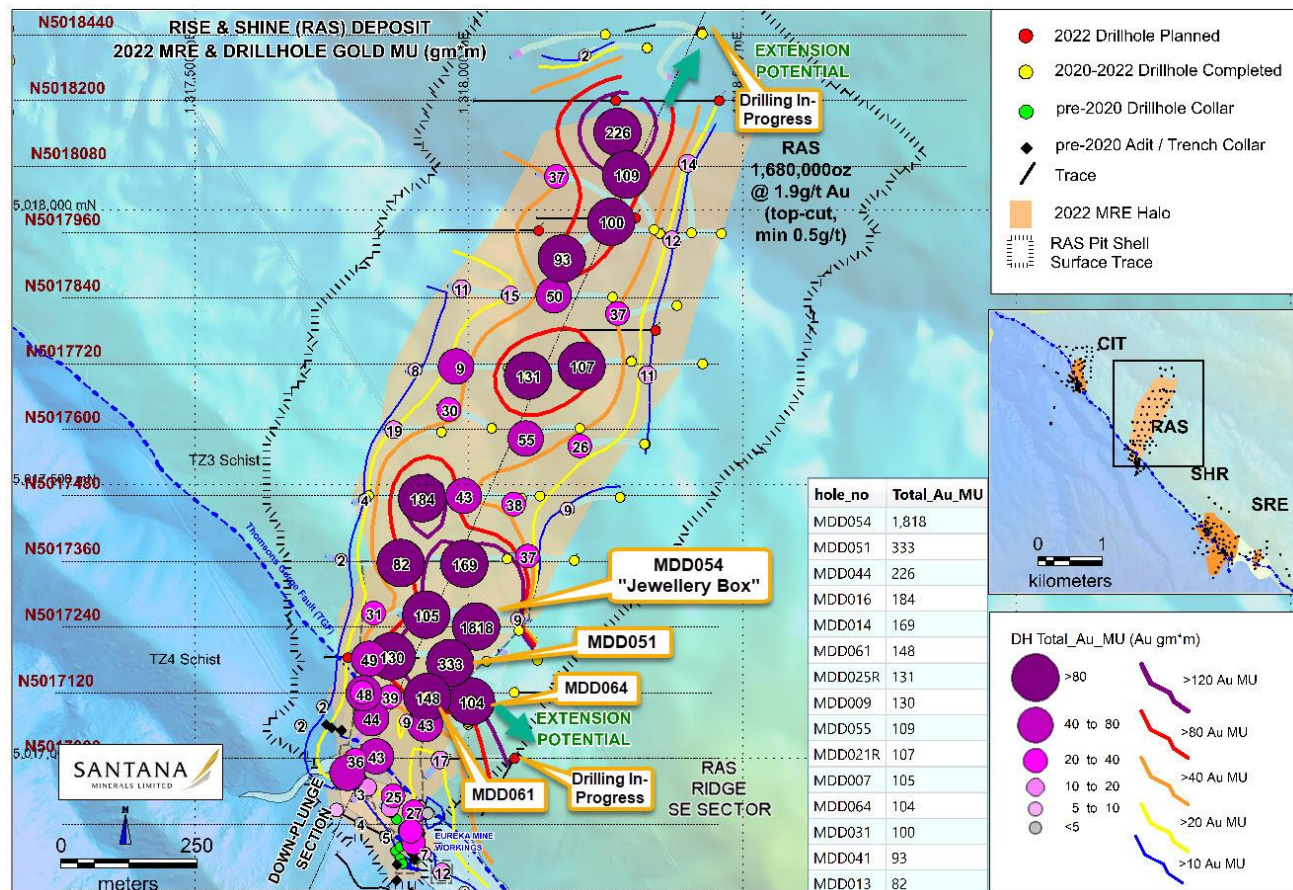
Assays have been received for drillholes, MDD061 and MDD064 (Figures 1-6, Table 1, Appendix 1 & 2).

Table 1: RAS Drillholes MDD061 & MDD064 – Composite Intercepts

Deposit	EW Section	Drillhole	From (m)	Drill intercept (m)	Average Gold Grade (g/t) (min 0.50 g/t Au)	Comments
RAS	N5017120	MDD061	150.9	17.1	5.85	
			170.0	6.0	0.76	
			178.0	2.0	1.03	
			193.0	3.0	3.92	
			228.0	5.0	3.55	
			Aggregate	33.1	4.11	
	N5017120	MDD064	176.0	11.0	4.35	(over 82.1m), partial, 66.6m pending
			189.0	9.0	5.72	
			Aggregate	20.0	4.97	



Drillhole **MDD061** and **MDD064** aggregate intercepts of **33.1 metres @ 4.11 g/t Au** and **20.0 metres @ 4.97 g/t Au** respectively are located 80 metres apart at RAS ridge on the eastern margin of the RAS shoot (EW section N5017120, Figures 2, 3 & 4). Highest-grade mineralisation occurs in the uppermost 20 metres (Table 1, Appendix 2) within the hanging wall zone (HWS) of the RSSZ associated with flood silica and laminated arsenopyrite fill veinlets.



**Figure 2 RAS Resource Extension Drilling - New Results / Gold Distribution**

Within the broad mineralised zones, individual 1-metre bonanza grades (>10g/t Au) are present in both drillholes (Appendix 2):

- MDD061, **79.3g/t Au** from 179m and **10.9g/t Au** from 228m
- MDD064, **21.6g/t Au** from 186m, **23.1g/t Au** from 189m and **15.1g/t Au** from 190m.

These new RAS Ridge gold intercepts are adjacent to recent high-grade results (ASX announcement on 22<sup>nd</sup> August 2022):

- 60 metres south of **49.9m @ 6.4 g/t Au** in MDD051 which included seven individual 1-metre bonanza grades.
- 140 metres south of **43.3m @ 11.2 g/t Au** in MDD054 "jewellery box" drillhole that previously delivered two exceptional results of 1,400g/t and 127g/t Au with nine individual 1-metre bonanza grades.

This quartet of drillhole intercepts post-date the recent RAS MRE upgrade (ASX announcement on 11 July 2022) and form a higher-grade eastern flank to a zone defined by the 80 m.mg/t (MU) isopach that remains open to the east (Figures 2 & 3). This eastern area is flanked to the north by MDD008 (2.0m @ 1.1g/t Au from 246m) and to the south by MDD028 (aggregate 32.8m @ 1.1g/t Au from 147.7m), two holes with narrow low-grade domains on the eastern edge of the July RAS MRE upgrade.

The RAS Ridge >80 MU isopach trends NNW across the axis of the shoot and combined with clustering of higher-grade holes down plunge, suggests potential for an en-echelon series of northerly trending high-grade zones separated by lower grade areas down the axis of the RAS shoot.



Northerly trending higher-grade zones (>40 MU) separated by low-grade areas are evident in published information about the Macraes Frasers Shoot, extending from Frasers Pit (FROP) through to Frasers underground zones (FRUG1 and FRUG2) with similar dimensions to RAS shoot (Figure 3).

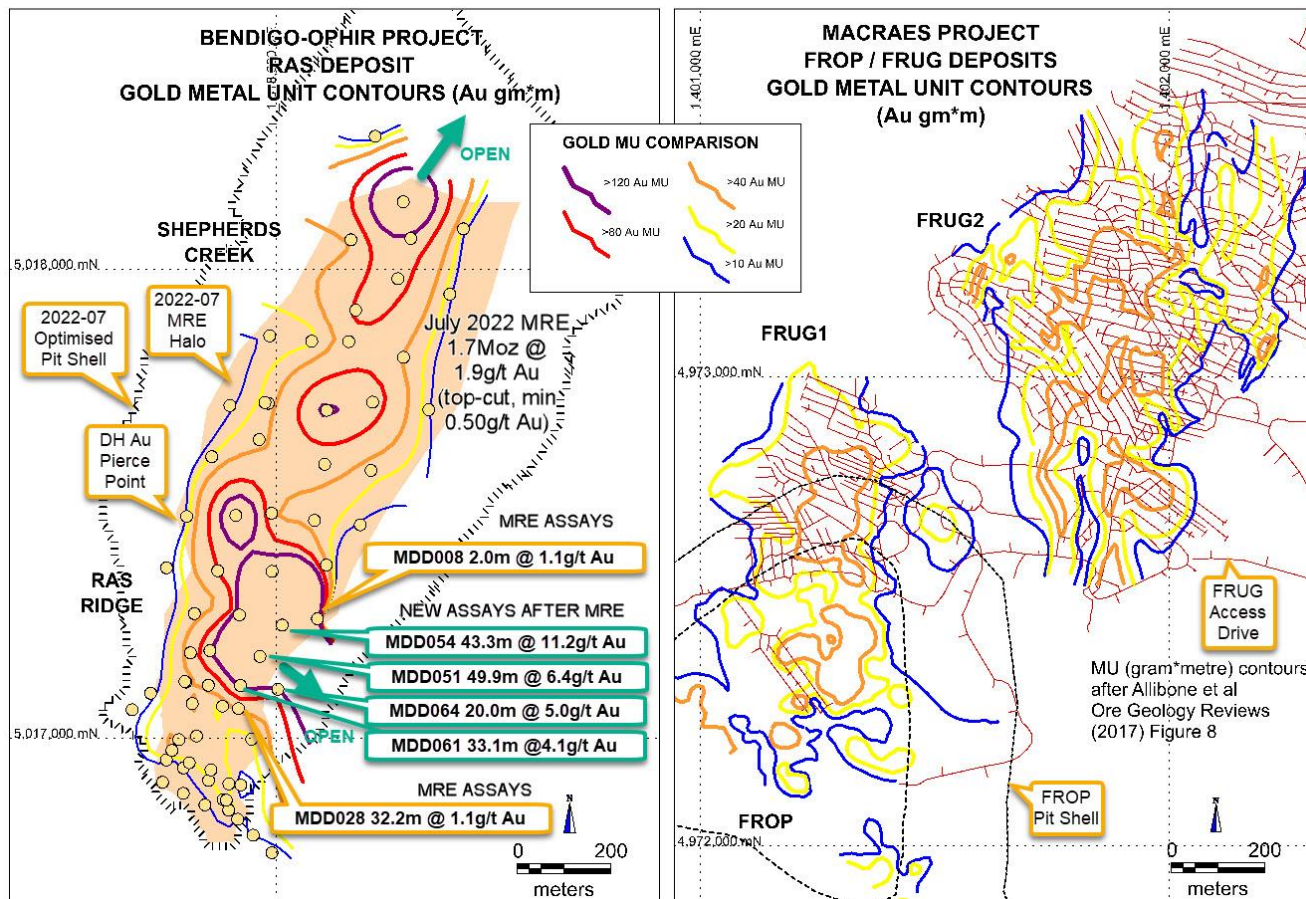


Figure 3 RAS & FRUG Deposits – Au Metal Unit (MU) Comparison

RAS mineralisation currently defined over 1,500 metres down plunge is 300 - 400 metres wide and open to the north and south-east.

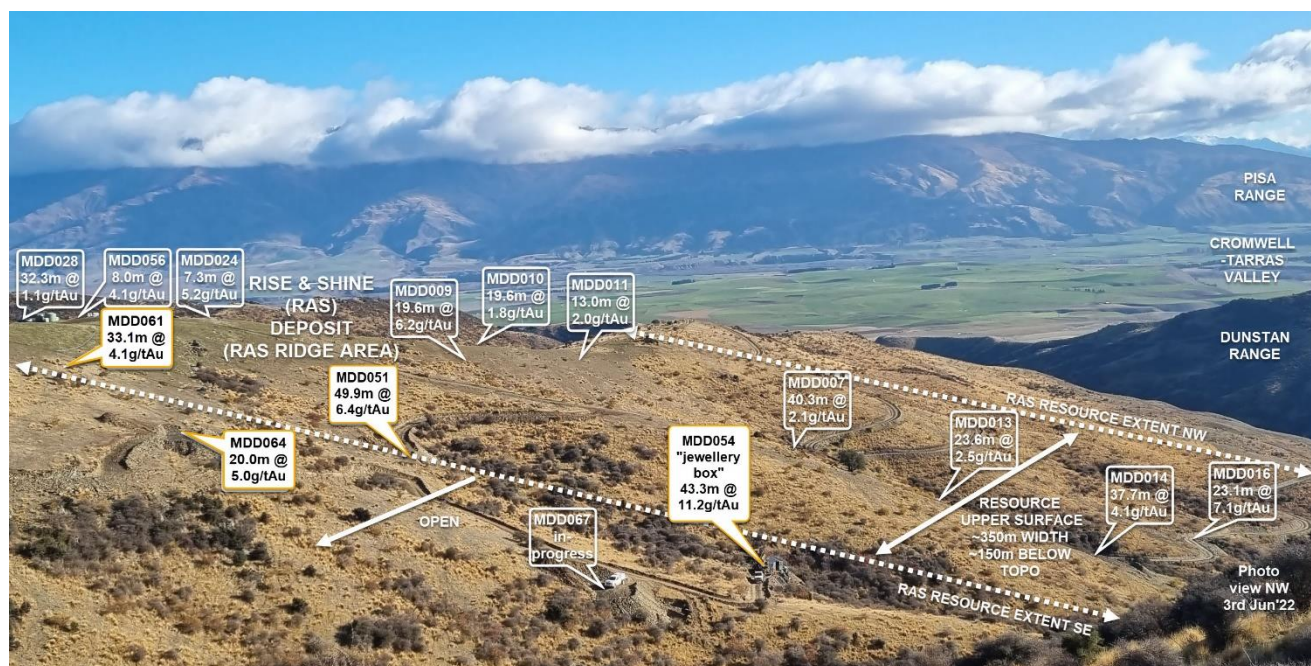


Figure 4 RAS Deposit – RAS RIDGE Sector - Dunstan Range (View NW)- DH intercepts (collar location)



The most continuous and higher grades in the RAS shoot occur in the upper 20-90 metre thick HWS section of the RSSZ, directly below the low-angle regional Thomson Gorge Fault (TGF), (Figure 5). The TGF separates unmineralised hanging wall TZ3 schist, and the mineralised RSSZ (within TZ4 schist).

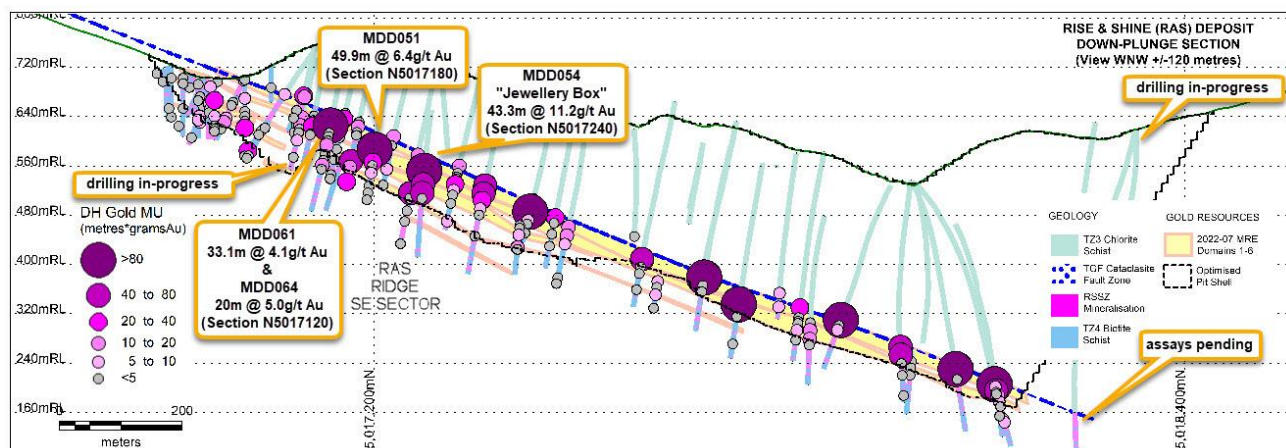


Figure 5 RAS Deposit – Down-Plunge Section (View WNW)

Both MDD061 and MDD064 drillholes have returned significantly greater widths and grade of mineralisation than the July 2022 MRE modelled domains within the optimised pit shell (E-W cross-section N5017120, Figure 6). The gold mineralisation remains open to the east on both this drill section and N5017180 (60 metres to the north), (E-W cross-section Figure 7).

These elevated grades and thicknesses, together with MDD054 “jewellery box” intercept (E-W cross section N5017240, Figure 8) now extend 180 metres NNE-SSW in the RAS Ridge area and suggest potential upside in future resource estimates within and to the east of the July 2022 MRE envelope.

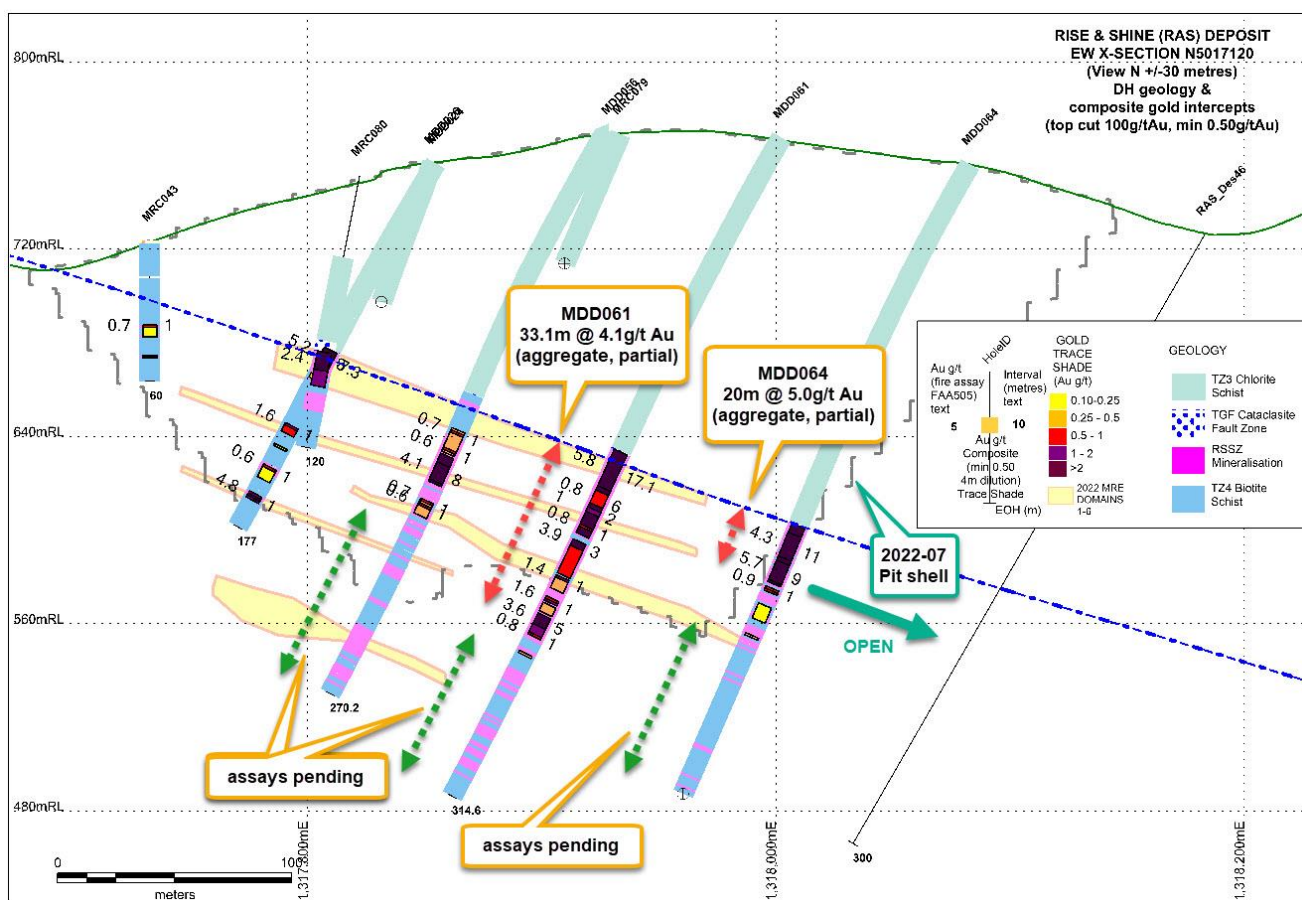


Figure 6 RAS Deposit – East-West X-Section N5017120 (View N)

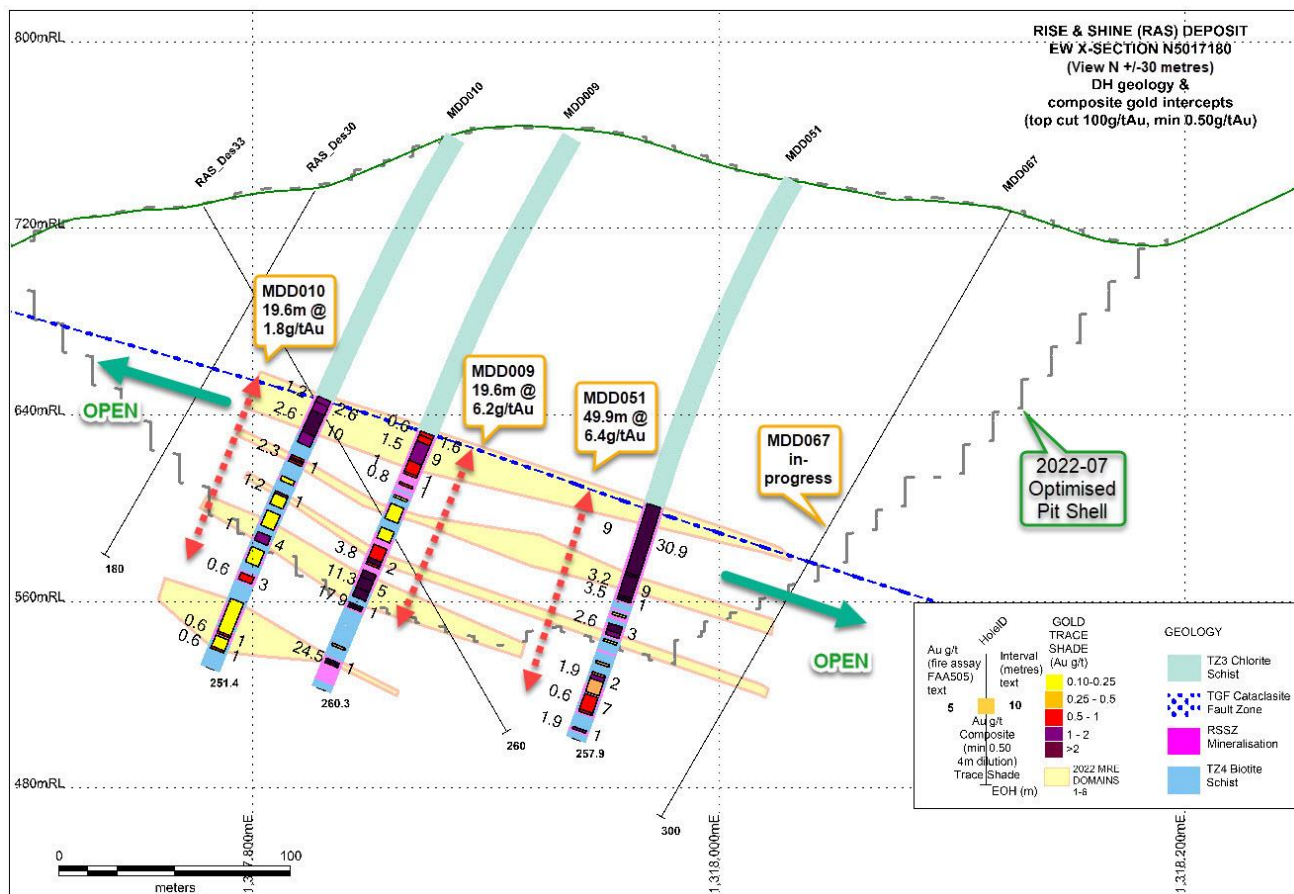


Figure 7 RAS Deposit – East-West X-Section N5017180 (View N)

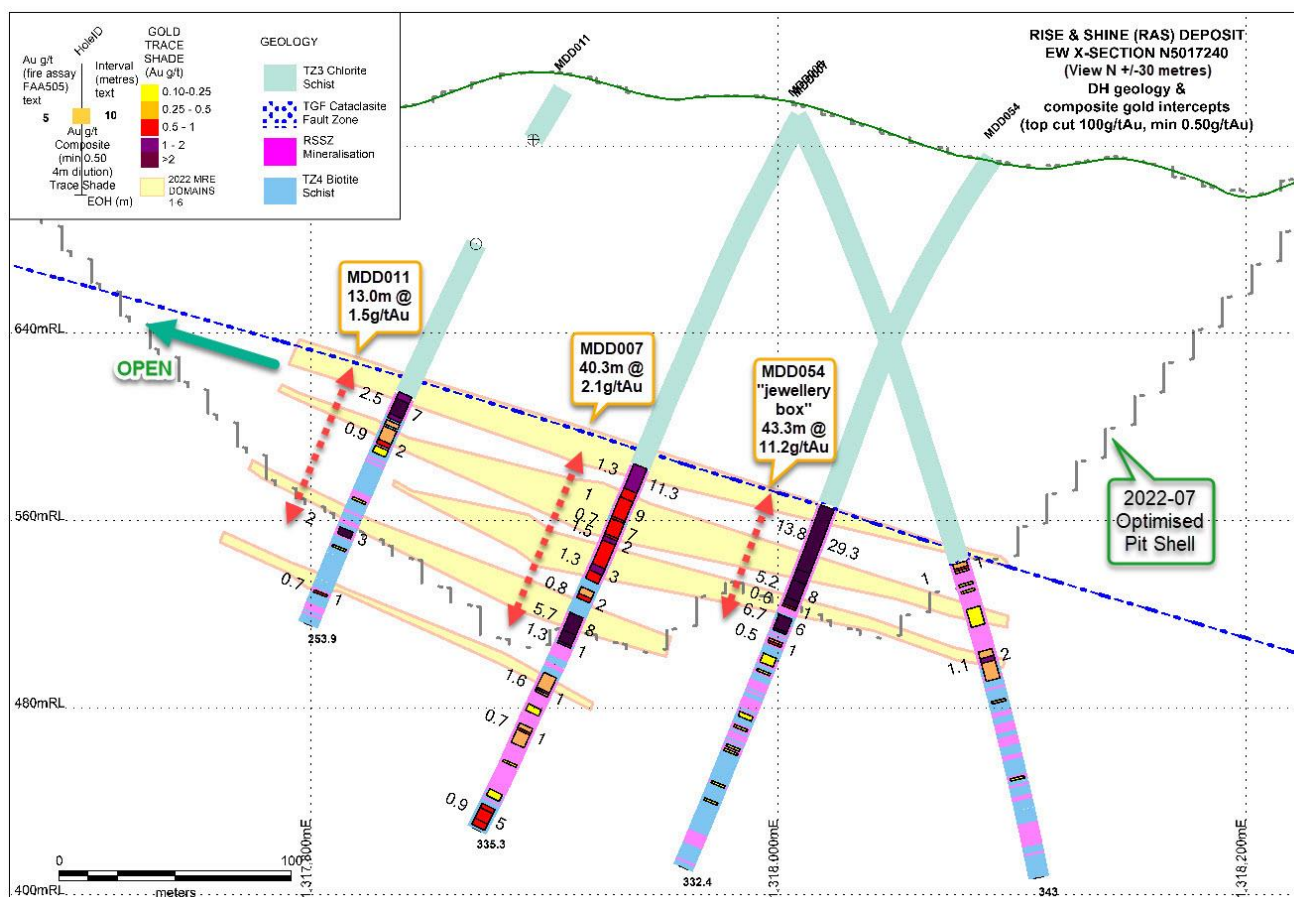


Figure 8 RAS Deposit – East-West X-Section N5017240 (View N)



## Latest Drill Assay Results from CIT and SHR Deposits

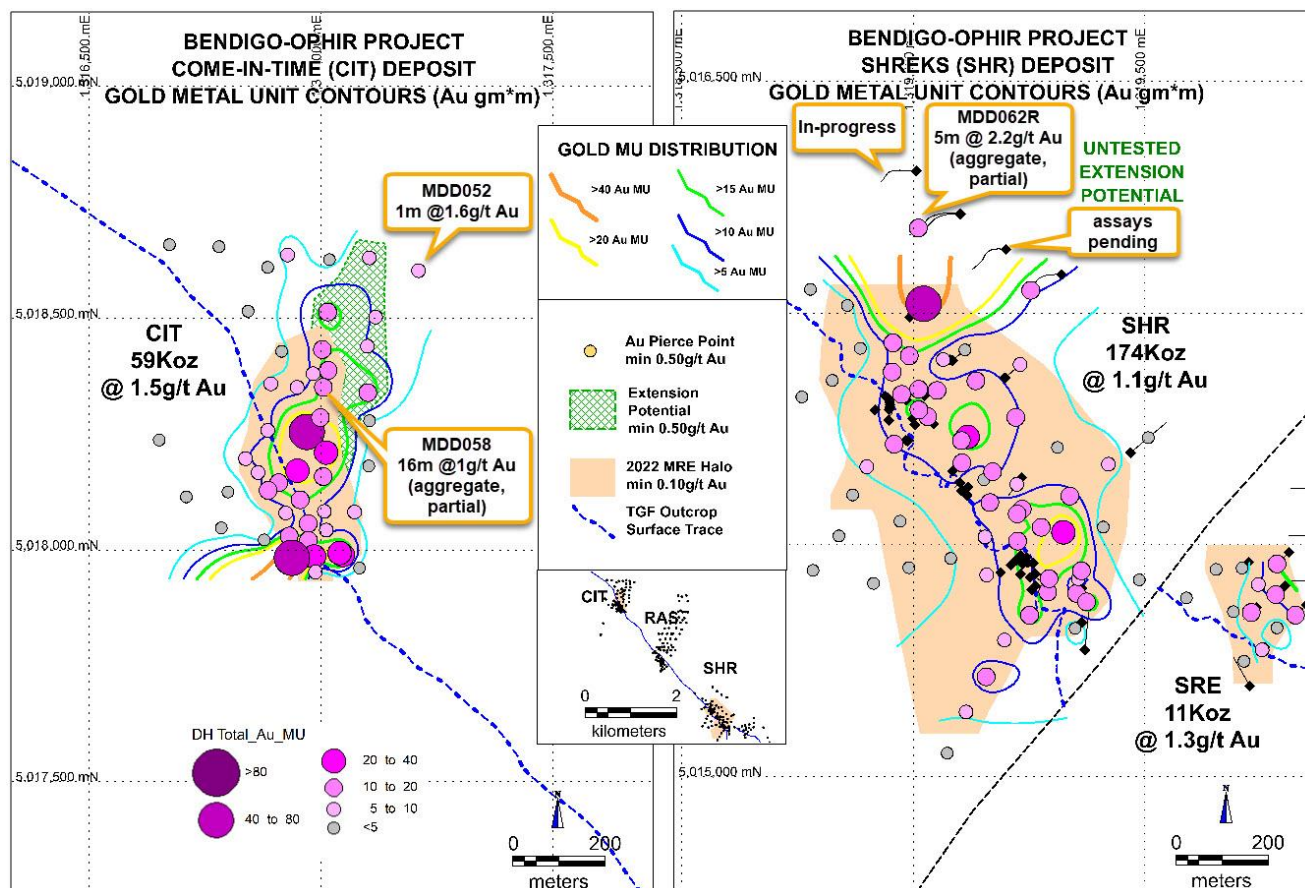
Assays have been received for drillholes MDD052 (CIT) and MDD062R (SHR), (Table 2, Appendix 2).

At CIT, MDD052 intercept of 3m @ 1.05g/t Au (aggregate) shows weakening mineralisation down-plunge to the east, whilst at SHR, MDD062R intercept of 5m @ 2.20g/t Au (partial, aggregate) confirms continuity of the RSSZ mineralisation to the north (Figure 9).

Further results are pending from both CIT and SHR with drilling ongoing at SHR.

**Table 2: CIT Drillhole MDD052, SHR Drillhole MDD062R – Composite Intercepts**

Deposit	EW Section	Drillhole	From (m)	Drill intercept (m)	Average Gold Grade (g/t) (min 0.50 g/t Au)	Comments
CIT	N5018560	MDD052	178.0	1.0	0.79	
			193.0	1.0	1.57	
			203.0	1.0	0.78	
			Aggregate	3.0	1.05	(over 26.0m)
SHR	N5016220	MDD062R	273.0	3.0	2.77	
			289.0	2.0	1.34	
			Aggregate	5.0	2.20	(over 18.0m), 74.3m assays pending



**Figure 9 CIT & SHR Deposits – Gold distribution**

## **Key Conclusions & Forward Programme**

New thick high-grade gold mineralisation in RAS south-eastern drillholes MDD061 and MDD064 form a quartet with previous MDD051 and exceptional MDD054 “jewellery box” drillholes.

This quartet outline a previously undetected high-grade zone in the south-east sector of the RAS shoot and bolster the 2022 MRE domains and gold grades in this area with further eastern extensions possible.

The RAS shoot which extends 1,500m down-plunge from outcrop also remains open to the north and structural similarities between RAS mineralisation and that reported for FROP / FRUG at Macraes have significant implications for guiding extension drilling down plunge at SHR and at other exploration targets.

Extension diamond drilling is continuing at the RAS deposit and once the limits of mineralisation are defined, a series of drillholes are planned at the southern shallower RAS Ridge area for optimisation of future in-fill drilling.

Reconnaissance drillholes are also in progress to test the down plunge extensions of the SHR (the largest surface footprint of the 3 main deposits) and SRE deposits.

Drilling is to be accelerated in late September with the addition of a reverse-circulation (RC) rig for further advances on recent drilling results that have added continuing weight to the RSSZ multi-million-ounce system potential.

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

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## About Santana Minerals Limited Bendigo-Ophir Project

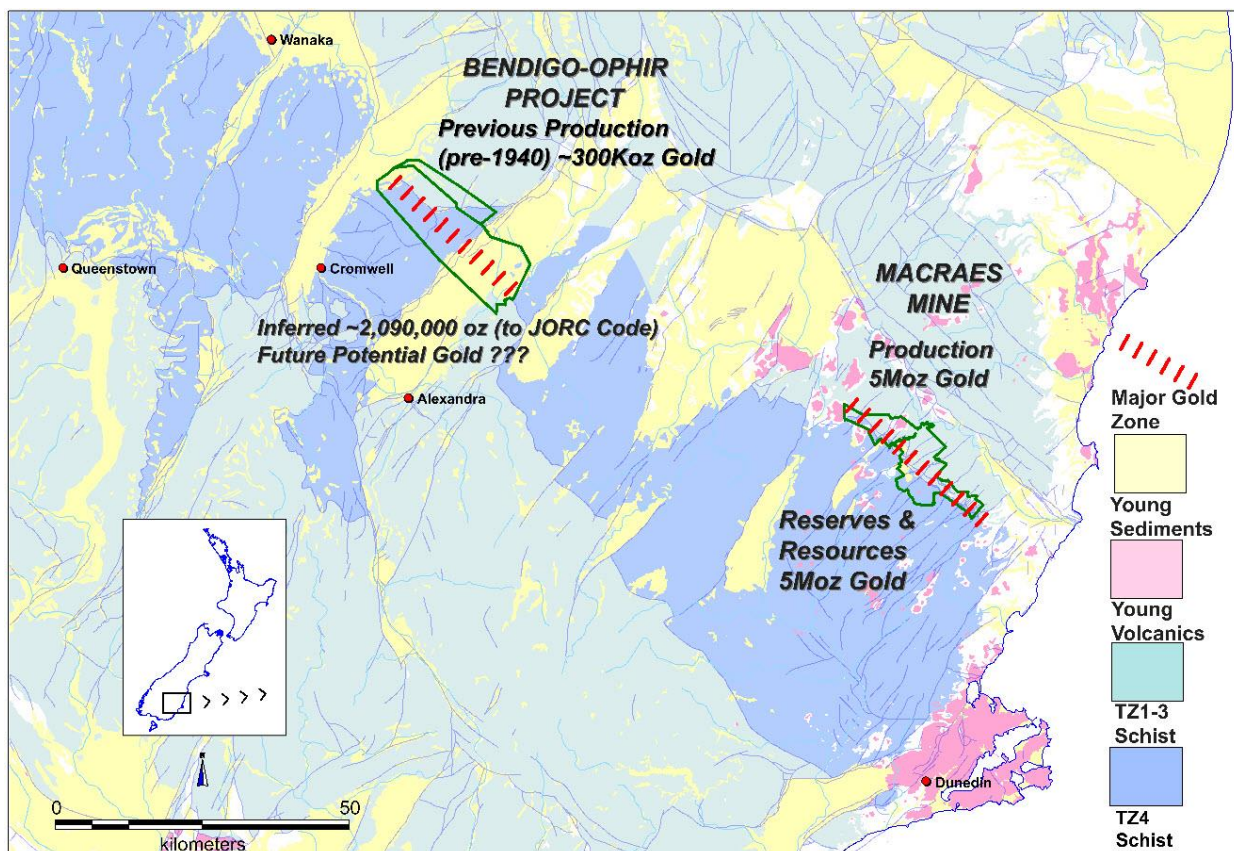
The Bendigo-Ophir Project is located on the South Island of New Zealand within the Central Otago Goldfields. The 292km<sup>2</sup> project area comprises Minerals Exploration Permit (MEP) 60311 (252km<sup>2</sup>) and Minerals Prospecting Permit Application (MPPA) 60882 (40km<sup>2</sup>) issued to 100% owned subsidiary Matakanui Gold Ltd. The Project is located ~90 kilometres northwest of Oceana Gold Ltd (OGC) Macraes Gold Mine (Figure 10).

The Company embarked on diamond drilling (DD) and reverse circulation (RC) drilling programmes in November 2020 with the immediate objective to fast-track an increase to the existing Resources by drill testing the down plunge extensions of known mineralisation.

The Project contains new Inferred Global Mineral Resource Estimates (MRE) to 1.5, 0.5 and 0.25g/t Au lower cut-offs:

- 11.9 Mt for 1,320,000 ounces of gold @ 3.5g/t Au (top-cut, and 1.50g/t Au lower cut-off).
- 33.4 Mt for 1,920,000 ounces of gold @ 1.8g/t Au (top-cut, and 0.50g/t Au lower cut-off).
- 46.7 Mt for 2,090,000 ounces of gold @ 1.4g/t Au (top-cut, and 0.25g/t Au lower cut-off).

These estimates are based on drill results to May 2022 and reported in July 2022 which the Company interprets has the potential to be further expanded and developed into a low cost per ounce heap leach or gravity-leach operation, with ore from bulk tonnage open pits or underground sources.



**Figure 10 Bendigo-Ophir Project in the Otago Goldfield, ~90km NW of Macraes**

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 mineralisation over a recognised strike length of >20km (Figure 10).

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 mineralisation (HWS) 10-40 metres in width above quartz vein and stockwork related gold mineralisation extending >120 metres below the HWS.

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 "A new 2 Million Ounce Global Inferred Gold Resource Platform" dated 11 July 2022.
- ASX announcement titled "Strong mineralisation intercepts continue at Bendigo-Ophir" dated 20 July 2022.
- ASX announcement titled "MDD054 "Jewellery Box" Drillhole Delivers Exceptional Result" dated 26 July 2022.
- ASX announcement titled "MDD054 Jewellery Box Re-Assays to 1,400g/t Gold" dated 22 August 2022.

A copy of such announcement is available to view on the Santana Minerals Limited website [www.santanaminerals.com](http://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 - 2022 Drillhole co-ordinates, downhole survey detail and Status

Deposit	Hole_No	East_NZTM	North_NZTM	RL	Azimuth (T Avg)	Dip (Avg)	Length	Method	Status	Results
RAS	MDD023R	1318320.6	5017574.0	658.5	266.6	-68	359.2	DD	Completed	Reported
RAS	MDD024	1317854.8	5017118.0	756.7	268.5	-61	176.9	DD	Completed	Reported
RAS	MDD025	1318195.1	5017716.5	632.6	256.4	-68	265.7	DD	Re-Drilled	Reported
RAS	MDD025R	1318196.5	5017715.5	632.6	255.8	-72	360.7	DD	Completed	Reported
RAS	MDD026	1317853.4	5017125.5	756.8	211.5	-56	221.7	DD	Completed	Reported
RAS	MDD027	1318262.2	5017842.0	582.6	271.5	-69	365.6	DD	Completed	Reported
RAS	MDD028	1317998.5	5017062.0	773.9	270.4	-62	250.0	DD	Completed	Reported
RAS	MDD029	1318460.9	5017957.5	537.7	259.8	-75	398.2	DD	Completed	Reported
RAS	MDD030	1317997.9	5017066.5	773.9	217.0	-58	115.3	DD	Re-Drilled	No assays
RAS	MDD030R	1317997.0	5017067.0	773.9	217.0	-58	242.6	DD	Completed	Reported
RAS	MDD031	1318348.9	5017957.5	536.7	292.0	-73	380.1	DD	Completed	Reported
RAS	MDD033	1318167.1	5017835.5	582.0	277.6	-71	336.5	DD	Completed	Reported
RAS	MDD034	1318071.8	5017712.0	597.7	269.0	-66	233.7	DD	Re-Drilled	Reported
RAS	MDD034R	1318071.6	5017712.5	597.8	268.1	-67	300.5	DD	Completed	Reported
RAS	MDD036	1318426.5	5017720.0	603.7	250.9	-73	372.5	DD	Completed	Reported
RAS	MDD037	1318379.9	5017826.5	607.2	267.1	-73	425.2	DD	Completed	Reported
RAS	MDD039	1317973.9	5017719.0	626.2	260.9	-69	256.1	DD	Completed	Reported
RAS	MDD041	1318243.5	5017969.5	528.5	232.5	-68	323.5	DD	Completed	Reported
RAS	MDD042	1318068.0	5017845.0	561.4	279.3	-69	293.0	DD	Completed	Reported
RAS	MDD044	1318291.8	5017992.0	532.3	351.1	-68	469.8	DD	Completed	Reported
RAS	MDD045	1317891.6	5017477.5	696.5	259.0	-66	251.9	DD	Completed	Reported
RAS	MDD047	1318406.6	5017959.0	535.9	360.9	-69	446.3	DD	Completed	Reported
RAS	MDD048	1317816.2	5017478.5	702.2	87.7	-64	101.9	DD	Re-Drilled	No assays
RAS	MDD048R	1317817.2	5017479.5	702.2	100.6	-74	285.0	DD	Completed	Reported
RAS	MDD050	1318276.1	5017476.5	688.8	251.3	-72	368.4	DD	Completed	Reported
RAS	MDD051	1318032.2	5017177.5	740.4	265.0	-70	257.9	DD	Completed	Reported
RAS	MDD053	1318292.0	5017990.5	532.3	291.0	-62	395.3	DD	Completed	Partial reported
RAS	MDD054	1318091.6	5017233.5	714.7	279.6	-67	332.4	DD	Completed	Reported
RAS	MDD055	1318333.8	5017972.0	533.6	331.5	-71	431.0	DD	Completed	Partial reported
RAS	MDD056	1317948.1	5017110.5	770.4	266.5	-64	270.2	DD	Completed	Partial reported
RAS	MDD060	1318325.2	5018296.5	630.4	256.4	-77	558.4	DD	Completed	Partial reported
RAS	MDD061	1318002.4	5017114.5	767.6	267.3	-64	314.6	DD	Completed	Partial reported
RAS	MDD063	1318249.1	5018321.0	632.2	251.4	-72	566.0	DD	Completed	Assays pending
RAS	MDD064	1318081.4	5017118.0	756.4	255.3	-65	377.4	DD	Completed	Partial reported
RAS	MDD066	1318425.9	5018322.0	617.1	270.3	-60	620.1	DD	Completed	Assays pending
RAS	MDD067	1318124.8	5017177.0	727.1	278.8	-59	269.9	DD	Completed	Assays pending
<b>SubTotal</b>							<b>11,993.5</b>			
CIT	MDD032	1317089.5	5018499.5	503.4	279.7	-64	197.9	DD	Completed	Reported
CIT	MDD035	1317192.1	5018500.0	501.7	265.3	-66	236.5	DD	Completed	Reported
CIT	MDD038	1317166.4	5018435.5	517.6	274.6	-67	213.0	DD	Completed	Reported
CIT	MDD040	1317160.0	5018331.0	546.3	279.5	-66	194.0	DD	Completed	Reported
CIT	MDD043	1317161.9	5018272.5	556.0	276.9	-67	184.3	DD	Completed	Reported
CIT	MDD046	1317159.6	5018179.0	594.2	270.9	-67	178.4	DD	Completed	Reported
CIT	MDD049	1317177.2	5018641.0	442.9	257.8	-65	232.0	DD	Completed	Reported
CIT	MDD052	1317277.0	5018612.5	446.8	251.9	-69	223.4	DD	Completed	Reported
CIT	MDD057	1317066.4	5018427.0	518.0	271.9	-62	179.0	DD	Completed	Partial reported
CIT	MDD058	1317053.6	5018346.5	536.7	270.1	-61	159.3	DD	Completed	Partial reported
<b>SubTotal</b>							<b>1,997.8</b>			
SHR	MDD059	1319320.0	5016083.0	854.4	229.3	-75	347.9	DD	Completed	Partial reported
SHR	MDD062	1319100.0	5016214.0	859.5	243.0	-72	266.2	DD	Re-Drilled	Assays pending
SHR	MDD062R	1319101.4	5016214.0	859.3	242.2	-71	373.3	DD	Completed	Partial reported
SHR	MDD065	1319204.5	5016129.5	862.3	270.0	-60	348.1	DD	Completed	Assays pending
<b>SubTotal</b>							<b>1,335.5</b>			
<b>TOTAL</b>							<b>15,326.8</b>			

## Appendix 2 RAS Mineralised Intercepts – Assay results MDD061

Hole ID	Sample ID	From m	To m	Interval m	Au g/t	As ppm	Geol Unit	Visible gold (VG)
MDD061		0.0	148.0	148.0				
MDD061	MG14379	148.0	149.0	1.0	-0.01	0	TZ3	
MDD061	MG14380	149.0	150.4	1.4	-0.01	8		
MDD061	MG14381	150.4	150.9	0.5	0.05	124	TGF	
MDD061	MG14382	150.9	152.0	1.1	1.04	4745		
MDD061	MG14383	152.0	153.0	1.0	1.83	3620		
MDD061	MG14384	153.0	154.0	1.0	0.45	3166		
MDD061	MG14385	154.0	155.0	1.0	0.83	4401		
MDD061	MG14386	155.0	156.0	1.0	0.52	3250		
MDD061	MG14387	156.0	157.0	1.0	2.42	3849		
MDD061	MG14388	157.0	158.0	1.0	79.30	8938		
MDD061	MG14389	158.0	159.0	1.0	0.98	4348		
MDD061	MG14390	159.0	160.0	1.0	0.71	8478		
MDD061	MG14391	160.0	161.0	1.0	0.39	5698		
MDD061	MG14392	161.0	162.0	1.0	0.54	6878		
MDD061	MG14393	162.0	163.0	1.0	0.35	6687		
MDD061	MG14394	163.0	164.0	1.0	0.42	4471		
MDD061	MG14395	164.0	165.0	1.0	0.76	4151		
MDD061	MG14396	165.0	166.0	1.0	7.69	2286		
MDD061	MG14397	166.0	167.0	1.0	0.94	2958		
MDD061	MG14398	167.0	168.0	1.0	0.69	2562		
MDD061	MG14402	168.0	169.0	1.0	0.13	1332		
MDD061	MG14403	169.0	170.0	1.0	0.14	2066		
MDD061	MG14404	170.0	171.0	1.0	0.59	2898		
MDD061	MG14405	171.0	172.0	1.0	1.80	6283	RSSZ	
MDD061	MG14406	172.0	173.0	1.0	0.45	1907		
MDD061	MG14407	173.0	174.0	1.0	0.21	1423		
MDD061	MG14408	174.0	175.0	1.0	0.34	5101		
MDD061	MG14409	175.0	176.0	1.0	1.14	1001		
MDD061	MG14410	176.0	177.0	1.0	0.40	965		
MDD061	MG14411	177.0	178.0	1.0	0.15	981		
MDD061	MG14412	178.0	179.0	1.0	1.37	9816		
MDD061	MG14413	179.0	180.0	1.0	0.69	8550		
MDD061	MG14414	180.0	181.0	1.0	0.38	3160		
MDD061	MG14415	181.0	182.0	1.0	0.14	1174		
MDD061	MG14416	182.0	183.0	1.0	0.16	1987		
MDD061	MG14417	183.0	184.0	1.0	0.22	3759		
MDD061	MG14418	184.0	185.0	1.0	0.18	4414		
MDD061	MG14419	185.0	186.0	1.0	0.13	2049		
MDD061	MG14420	186.0	187.0	1.0	0.78	1943		
MDD061	MG14421	187.0	188.0	1.0	-0.01	33		
MDD061	MG14425	188.0	189.0	1.0	0.04	51		
MDD061	MG14426	189.0	190.0	1.0	0.16	781		
MDD061	MG14427	190.0	191.0	1.0	-0.01	34		
MDD061	MG14428	191.0	192.0	1.0	-0.01	18		
MDD061	MG14429	192.0	193.0	1.0	-0.01	138	TZ4	
MDD061	MG14430	193.0	194.0	1.0	9.11	1257		
MDD061	MG14431	194.0	195.0	1.0	0.94	2200		
MDD061	MG14432	195.0	196.0	1.0	1.71	704		
MDD061	MG14433	196.0	197.0	1.0	0.42	163		
MDD061	MG14434	197.0	198.0	1.0	0.02	269		
MDD061	MG14435	198.0	199.0	1.0	0.29	203		
MDD061	MG14436	199.0	200.0	1.0	0.45	187		
MDD061	MG14437	200.0	201.0	1.0	0.02	241		
MDD061	MG14438	201.0	202.0	1.0	0.31	551	RSSZ	
MDD061	MG14439	202.0	203.0	1.0	0.05	411		
MDD061	MG14440	203.0	204.0	1.0	0.10	559		
MDD061	MG14441	204.0	205.0	1.0	0.04	80		
MDD061	MG14442	205.0	206.0	1.0	0.11	343		
MDD061	MG14443	206.0	207.0	1.0	0.27	828		
MDD061	MG14444	207.0	208.0	1.0	0.14	166		

Hole ID	Sample ID	From m	To m	Interval m	Au g/t	As ppm	Geol Unit	Visible gold (VG)
MDD061	MG14448	208.0	209.0	1.0	0.28	382		
MDD061	MG14449	209.0	210.0	1.0	-0.01	13		
MDD061	MG14450	210.0	211.0	1.0	1.39	605		
MDD061	MG14451	211.0	212.0	1.0	0.05	354		
MDD061	MG14452	212.0	213.0	1.0	0.03	239		
MDD061	MG14453	213.0	214.0	1.0	0.03	528		
MDD061	MG14454	214.0	215.0	1.0	0.09	943		
MDD061	MG14455	215.0	216.0	1.0	0.17	854		
MDD061	MG14456	216.0	217.0	1.0	0.02	133		
MDD061	MG14457	217.0	218.0	1.0	0.08	147		
MDD061	MG14458	218.0	219.0	1.0	0.07	343		
MDD061	MG14459	219.0	220.0	1.0	0.01	101		
MDD061	MG14460	220.0	221.0	1.0	0.23	22		
MDD061	MG14461	221.0	222.0	1.0	1.57	1630		
MDD061	MG14462	222.0	223.0	1.0	-0.01	27		
MDD061	MG14463	223.0	224.0	1.0	0.32	689		
MDD061	MG14464	224.0	225.0	1.0	0.11	707		
MDD061	MG14465	225.0	226.0	1.0	0.39	515		
MDD061	MG14466	226.0	227.0	1.0	0.32	902		
MDD061	MG14467	227.0	228.0	1.0	-0.01	165		
MDD061	MG14471	228.0	229.0	1.0	10.90	2214		
MDD061	MG14472	229.0	230.0	1.0	4.25	1677		P
MDD061	MG14474	230.0	231.0	1.0	0.61	1705		
MDD061	MG14475	231.0	232.0	1.0	0.34	1214		P
MDD061	MG14477	232.0	233.0	1.0	1.67	11912		
MDD061	MG14478	233.0	234.0	1.0	0.04	130		
MDD061	MG14479	234.0	235.0	1.0	0.02	81		
MDD061	MG14480	235.0	236.0	1.0	0.03	54		
MDD061	MG14481	236.0	237.0	1.0	-0.01	32		
MDD061	MG14482	237.0	238.0	1.0	0.80	2890		
MDD061	MG14483	238.0	239.0	1.0	0.08	851		
MDD061	MG14484	239.0	240.0	1.0	0.06	287		
MDD061	MG14485	240.0	241.0	1.0	-0.01	60		
MDD061	MG14486	241.0	242.0	1.0	-0.01	37		
MDD061	MG14487	242.0	243.0	1.0	-0.01	18		
MDD061	MG14488	243.0	244.0	1.0	0.07	95		
MDD061	MG14489	244.0	245.0	1.0	0.07	313		
MDD061	MG14490	245.0	246.0	1.0	0.03	84		
MDD061	MG14491	246.0	247.0	1.0	0.26	62		
MDD061	MG14492	247.0	248.0	1.0	0.03	131		

from 248 metres 66.6 m Au assays pending



## Appendix 2 RAS Mineralised Intercepts – Assay results MDD064

Hole ID	Sample ID	From m	To m	Interval m	Au g/t	As ppm	Geol Unit	Visible gold (VG)
MDD064		0.0	169.0	169.0				
MDD064	MG14574	169.0	170.0	1.0	0.03	12	TZ3	
MDD064	MG14575	170.0	171.0	1.0	0.02	14		
MDD064	MG14576	171.0	171.7	0.7	0.02	17	TGF	
MDD064	MG14577	171.7	173.0	1.3	0.28	5267		
MDD064	MG14578	173.0	174.0	1.0	0.10	2067		
MDD064	MG14579	174.0	175.0	1.0	0.06	902		
MDD064	MG14580	175.0	176.0	1.0	0.07	356		
MDD064	MG14581	176.0	177.0	1.0	6.01	725		
MDD064	MG14582	177.0	178.0	1.0	8.32	1459		
MDD064	MG14583	178.0	179.0	1.0	3.68	1416	RSSZ	P
MDD064	MG14585	179.0	180.0	1.0	0.44	702		
MDD064	MG14586	180.0	181.0	1.0	0.05	68		
MDD064	MG14587	181.0	182.0	1.0	0.91	645		
MDD064	MG14588	182.0	183.0	1.0	0.32	73		
MDD064	MG14589	183.0	184.0	1.0	2.06	1389		
MDD064	MG14590	184.0	185.0	1.0	0.22	445	TZ4	
MDD064	MG14591	185.0	186.0	1.0	4.21	364		
MDD064	MG14592	186.0	187.0	1.0	21.60	1669	RSSZ	P
MDD064	MG14594	187.0	188.0	1.0	0.34	453		
MDD064	MG14595	188.0	189.0	1.0	0.45	645	TZ4	
MDD064	MG14596	189.0	190.0	1.0	23.10	2628	RSSZ	P
MDD064	MG14601	190.0	191.0	1.0	15.10	1620		
MDD064	MG14602	191.0	192.0	1.0	0.18	281	TZ4	
MDD064	MG14603	192.0	193.0	1.0	0.30	232		
MDD064	MG14604	193.0	194.0	1.0	1.75	966		P
MDD064	MG14606	194.0	195.0	1.0	1.75	857		
MDD064	MG14607	195.0	196.0	1.0	0.02	178		
MDD064	MG14608	196.0	197.0	1.0	0.10	720		
MDD064	MG14609	197.0	198.0	1.0	9.14	1341		
MDD064	MG14610	198.0	199.0	1.0	0.11	120		
MDD064	MG14611	199.0	200.0	1.0	0.08	275		
MDD064	MG14612	200.0	201.0	1.0	-0.01	12	TZ4	
MDD064	MG14613	201.0	202.0	1.0	0.89	1241		
MDD064	MG14614	202.0	203.0	1.0	0.14	203	RSSZ	
MDD064	MG14615	203.0	204.0	1.0	0.05	38	TZ4	
MDD064	MG14616	204.0	205.0	1.0	0.02	72		
MDD064	MG14617	205.0	206.0	1.0	0.02	227		
MDD064	MG14618	206.0	207.0	1.0	0.04	174		
MDD064	MG14619	207.0	208.0	1.0	0.05	420		
MDD064	MG14620	208.0	209.0	1.0	0.05	435		
MDD064	MG14621	209.0	210.0	1.0	0.42	240	TZ4	
MDD064	MG14625	210.0	211.0	1.0	0.15	314	RSSZ	
MDD064	MG14626	211.0	212.0	1.0	0.02	31		
MDD064	MG14627	212.0	213.0	1.0	0.19	129	TZ4	
MDD064	MG14628	213.0	214.0	1.0	0.11	249		
MDD064	MG14629	214.0	215.0	1.0	0.40	1122		
MDD064	MG14630	215.0	216.0	1.0	0.19	2721		
MDD064	MG14631	216.0	217.0	1.0	0.01	108		
MDD064	MG14632	217.0	218.0	1.0	0.02	105	TZ4	
MDD064	MG14633	218.0	219.0	1.0	-0.01	10		
MDD064	MG14634	219.0	220.0	1.0	0.01	15		
MDD064	MG14635	220.0	221.0	1.0	0.04	474		
MDD064	MG14636	221.0	222.0	1.0	0.01	94		
MDD064	MG14637	222.0	223.0	1.0	0.02	208	RSSZ	
MDD064	MG14638	223.0	224.0	1.0	0.46	150		
MDD064	MG14639	224.0	225.0	1.0	-0.01	13	TZ4	
MDD064	MG14640	225.0	226.0	1.0	-0.01	17		
MDD064	MG14641	226.0	227.0	1.0	0.02	318	RSSZ	
MDD064	MG14642	227.0	228.0	1.0	-0.01	31		
MDD064	MG14643	228.0	229.0	1.0	-0.01	23	TZ4	
MDD064	MG14644	229.0	230.0	1.0	-0.01	32	RSSZ	

from 230 metres 67.6 m Au assays pending

## Appendix 2 CIT Mineralised Intercepts – Assay results MDD052

Hole ID	Sample ID	From m	To m	Interval m	Au g/t	As ppm	Geol Unit	Visible gold (VG)
MDD052		0.0	165.0	165.0			TZ3	
MDD052	MG14180	165.0	166.3	1.3	0.02	96	TGF	
MDD052	MG14181	166.3	167.0	0.7	0.05	30	RSSZ	
MDD052	MG14182	167.0	168.0	1.0	0.03	65		
MDD052	MG14183	168.0	169.0	1.0	-0.01	36		
MDD052	MG14184	169.0	170.0	1.0	0.02	81		
MDD052	MG14185	170.0	171.0	1.0	0.20	692		
MDD052	MG14186	171.0	172.0	1.0	-0.01	52		
MDD052	MG14187	172.0	173.0	1.0	-0.01	141		
MDD052	MG14188	173.0	174.0	1.0	0.02	22		
MDD052	MG14189	174.0	175.0	1.0	0.09	125		
MDD052	MG14190	175.0	176.0	1.0	0.29	161		
MDD052	MG14191	176.0	177.0	1.0	0.13	580		
MDD052	MG14192	177.0	178.0	1.0	0.43	928		
MDD052	MG14193	178.0	179.0	1.0	0.79	1319		
MDD052	MG14194	179.0	180.0	1.0	0.04	65	TZ4	
MDD052	MG14195	180.0	181.0	1.0	0.09	339	RSSZ	
MDD052	MG14196	181.0	182.0	1.0	0.09	817		
MDD052	MG14197	182.0	183.0	1.0	0.06	463	TZ4	
MDD052	MG14198	183.0	184.0	1.0	-0.01	25		
MDD052	MG14199	184.0	185.0	1.0	-0.01	17		
MDD052	MG14203	185.0	186.0	1.0	-0.01	20		
MDD052	MG14204	186.0	187.0	1.0	-0.01	17	RSSZ	
MDD052	MG14205	187.0	188.0	1.0	-0.01	20		
MDD052	MG14206	188.0	189.0	1.0	0.05	25	TZ4	
MDD052	MG14207	189.0	190.0	1.0	0.09	21		
MDD052	MG14208	190.0	191.0	1.0	0.06	47		
MDD052	MG14209	191.0	192.0	1.0	-0.01	16		
MDD052	MG14210	192.0	193.0	1.0	0.01	16		
MDD052	MG14211	193.0	194.0	1.0	1.57	70		
MDD052	MG14212	194.0	195.0	1.0	0.02	20		
MDD052	MG14213	195.0	196.0	1.0	0.03	166		
MDD052	MG14214	196.0	197.0	1.0	0.19	62		
MDD052	MG14215	197.0	198.0	1.0	0.02	13	RSSZ	
MDD052	MG14216	198.0	199.0	1.0	0.02	15		
MDD052	MG14217	199.0	200.0	1.0	0.01	14		
MDD052	MG14218	200.0	201.0	1.0	0.03	45		
MDD052	MG14219	201.0	202.0	1.0	0.16	56	TZ4	
MDD052	MG14220	202.0	203.0	1.0	0.33	114		
MDD052	MG14221	203.0	204.0	1.0	0.78	2283		
MDD052	MG14222	204.0	205.0	1.0	0.02	39		
MDD052	MG14223	205.0	206.0	1.0	0.09	271	RSSZ	
MDD052	MG14227	206.0	207.0	1.0	0.02	57		
MDD052	MG14228	207.0	208.0	1.0	0.02	41		
MDD052	MG14229	208.0	209.0	1.0	0.03	17		
MDD052	MG14230	209.0	210.0	1.0	-0.01	25	RSSZ	
MDD052	MG14231	210.0	211.0	1.0	-0.01	35		
MDD052	MG14232	211.0	212.0	1.0	0.06	115		
MDD052	MG14233	212.0	213.0	1.0	0.02	148		
MDD052	MG14234	213.0	214.0	1.0	0.04	72		
MDD052	MG14235	214.0	215.0	1.0	-0.01	76	TZ4	
MDD052	MG14236	215.0	216.0	1.0	-0.01	18		
MDD052	MG14237	216.0	217.0	1.0	0.16	429	TZ4	
MDD052	MG14238	217.0	218.0	1.0	0.03	395		
MDD052	MG14239	218.0	219.0	1.0	-0.01	15		
MDD052	MG14240	219.0	220.0	1.0	0.08	104		
MDD052	MG14241	220.0	221.0	1.0	-0.01	27		
MDD052	MG14242	221.0	222.0	1.0	0.01	33		
MDD052	MG14243	222.0	223.4	1.4	0.01	48		



## Appendix 2 SHR Mineralised Intercepts – Assay results MDD062R

Hole ID	Sample ID	From m	To m	Interval m	Au g/t	As ppm	Geol Unit	Visible gold (VG)
MDD062R		0.0	261.0	261.0				
MDD062R	MG16206	261.0	262.0	1.0	-0.01	15	TZ3	
MDD062R	MG16207	262.0	263.0	1.0	-0.01	11		
MDD062R	MG16208	263.0	263.9	0.9	-0.01	11		
MDD062R	MG16209	263.9	264.2	0.4	0.04	378	TGF	
MDD062R	MG16210	264.2	265.0	0.8	0.08	329	RSSZ	
MDD062R	MG16211	265.0	266.0	1.0	0.04	109		
MDD062R	MG16212	266.0	267.0	1.0	0.07	355		
MDD062R	MG16213	267.0	268.0	1.0	0.26	1297		
MDD062R	MG16214	268.0	269.0	1.0	0.09	397		
MDD062R	MG16215	269.0	270.0	1.0	0.10	610		
MDD062R	MG16216	270.0	271.0	1.0	0.01	28		
MDD062R	MG16217	271.0	272.0	1.0	0.06	113		
MDD062R	MG16218	272.0	273.0	1.0	0.06	123		
MDD062R	MG16219	273.0	274.0	1.0	1.70	1946		
MDD062R	MG16220	274.0	275.0	1.0	0.83	4315		
MDD062R	MG16221	275.0	276.0	1.0	5.78	2416		P
MDD062R	MG16223	276.0	277.0	1.0	0.08	277		
MDD062R	MG16224	277.0	278.0	1.0	0.13	334		
MDD062R	MG16225	278.0	279.0	1.0	0.04	91		
MDD062R	MG16226	279.0	280.0	1.0	0.12	249		
MDD062R	MG16230	280.0	281.0	1.0	0.12	209		
MDD062R	MG16231	281.0	282.0	1.0	0.02	63		
MDD062R	MG16232	282.0	283.0	1.0	0.03	90		
MDD062R	MG16233	283.0	284.0	1.0	0.08	161		
MDD062R	MG16234	284.0	285.0	1.0	0.03	176		
MDD062R	MG16235	285.0	286.0	1.0	0.09	355		
MDD062R	MG16236	286.0	287.0	1.0	0.02	39	TZ4	
MDD062R	MG16237	287.0	288.0	1.0	0.16	197	RSSZ	
MDD062R	MG16238	288.0	289.0	1.0	0.07	174	TZ4	
MDD062R	MG16239	289.0	290.0	1.0	1.55	3238	RSSZ	P
MDD062R	MG16241	290.0	291.0	1.0	1.13	2197		P
MDD062R	MG16243	291.0	292.0	1.0	0.06	571	TZ4	
MDD062R	MG16244	292.0	293.0	1.0	0.10	470	RSSZ	
MDD062R	MG16245	293.0	294.0	1.0	0.09	613	TZ4	
MDD062R	MG16246	294.0	295.0	1.0	0.28	693	RSSZ	
MDD062R	MG16247	295.0	296.0	1.0	0.27	323	TZ4	
MDD062R	MG16248	296.0	297.0	1.0	0.05	350	RSSZ	
MDD062R	MG16249	297.0	298.0	1.0	0.07	235	TZ4	
MDD062R	MG16250	298.0	299.0	1.0	0.04	67		

from 299 metres 74.3 m Au assays pending

**JORC Code, 2012 Edition – Table 1**

**Section 1 Sampling Techniques and Data**

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<p><i>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.</i></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p> <p><i>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.</i></p>	<p>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.</p> <p>Samples are crushed at the receiving laboratory to minus 2mm (85% passing) and split to provide 1kg for pulverising to -75µm. Pulps are fire assayed (FAA) using a 50g charge with AAS finish.</p> <p>Certified standards, blanks and field replicates are inserted with the original batches at a frequency of ~4% for QAQC purposes.</p> <p>All pulps and crush reject (CREJ) are returned from the laboratory for further ~4% QAQC checks which involve pulp FAA re-assays by the original and an umpire laboratory and CREJ re-assayed by 500-gram (+ &amp; -75µm) screen fire assay (SFA), 1kg BLEG (LeachWELL) and 2*500-gram Photon analysis (PHA) for gold.</p> <p>Where multiple assays exist for a single sample interval, larger samples are ranked in the database: PHA &gt; BLEG &gt; SFA &gt; FAA.</p> <p>All returned pulps are analysed for a suite of 31 elements by portable XRF (pXRF).</p>

Criteria	JORC Code explanation	Commentary
<b><i>Drilling techniques</i></b>	<i>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).</i>	<p>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).</p> <p>Drillholes are oriented to intersect known mineralised features in a nominally perpendicular orientation as much as is practicable.</p> <p>All drill core is oriented to assist with interpretation of mineralisation and structure using a Trucore orientation tool.</p>
<b><i>Drill sample recovery</i></b>	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p><i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></p>	<p>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.</p> <p>When poor core recoveries are recorded the site geologist and driller endeavour to immediately rectify any problems to maintain maximum core recoveries.</p> <p>DD core logging to date indicate ~95% recoveries.</p> <p>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.</p>



Criteria	JORC Code explanation	Commentary
<b>Logging</b>	<p><i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	<p>All DD holes have been logged for their entire sampled length below upper open hole drilling (nominally 0-450 metres below collar). Data is recorded directly into digital spreadsheets and then uploaded into a PostgreSQL cloud database with sufficient detail that supports Mineral Resource estimations (MRE).</p> <p>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.</p> <p>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.</p> <p>All core is photographed wet and dry before cutting.</p>
<b>Sub-sampling techniques and sample preparation</b>	<p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p> <p><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p> <p><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></p> <p><i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></p> <p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p>	<p>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 (FAA) using a 50g charge.</p> <p>50g charge is considered minimum requirement for the coarse nature of the gold. Larger screen fire assays (SFA), 1kg BLEG (LeachWELL) and 2*500gm Photon Analyses (PHA) are conducted periodically as a QAQC check.</p> <p>Large diameter (83mm) PQ3 core was maintained (where conditions allow) for DD holes to MDD016 and subsequently HQ3 (61mm) for drillholes MDD017 to MDD067.</p> <p>DD core drill samples are sawn in 1/2 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 1/4 core from 1/2 sections of core to be sent for assay.</p> <p>QAQC procedures include field replicates, standards, and blanks at a frequency of ~4% and also cross-lab assay checks at an umpire laboratory.</p>

Criteria	JORC Code explanation	Commentary
<b><i>Quality of assay data and laboratory tests</i></b>	<p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p> <p><i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></p> <p><i>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.</i></p>	<p>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 or FAD505 DDL 1ppm Au &amp; FAD52V DDL 500ppm Au) by SGS laboratory Waihi.</p> <p>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 secs (90 secs total).</p> <p>pXRF QAQC checks involve 2x daily calibration and QAQC analyses of SiO<sub>2</sub> blank, NIST standards (NIST 2710a &amp; NIST 2711a), &amp; OREAS standards (238, 235 &amp; 211).</p> <p>For laboratory QAQC, samples (3*certified standards, blanks and field replicates) are inserted into laboratory batches at a frequency of ~4% and ~5% respectively. Once 1,000 samples have been assayed a ~5% selection of retained lab pulps across a range of grades are sent for re-assay and to an umpire laboratory for cross-lab check assays.</p>
<b><i>Verification of sampling and assaying</i></b>	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <p><i>Discuss any adjustment to assay data.</i></p>	<p>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 re-assay or screen fire assays, the larger sample results are adopted. To date results are accurate and fit well with the mineralisation model.</p> <p>Twinned data is available where DD core holes have been sited adjacent to previous RC drillholes and where DD redrills have occurred.</p> <p>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.</p> <p>The database master is stored off-site and periodically updated and verified by an independent qualified person.</p> <p>There have been no adjustments to analytical data presented.</p>

Criteria	JORC Code explanation	Commentary
<b>Location of data points</b>	<p><i>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.</i></p> <p><i>Specification of the grid system used.</i></p> <p><i>Quality and adequacy of topographic control.</i></p>	<p>DD drillhole collar locations are accurate (+/- 50mm) xyz coordinates when captured by an experienced surveyor using RTK-GPS equipment.</p> <p>All drillholes to MDD067 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.</p> <p>All drill holes reference the NZTM map projection and collar RLs the NZVD2016 vertical datum.</p> <p>DD down hole surveys are recorded at 12m intervals using a Reflex multi-shot camera.</p>
<b>Data spacing and distribution</b>	<p><i>Data spacing for reporting of Exploration Results.</i></p> <p><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></p> <p><i>Whether sample compositing has been applied.</i></p>	<p>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.</p> <p>No compositing of samples is being undertaken for analysis. Sampling and assaying are in one metre intervals or truncated to logged features.</p>
<b>Orientation of data in relation to geological structure</b>	<p><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></p> <p><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></p>	<p>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. Drillholes MDD044, MDD047, MDD053 and MDD055 at RAS were, oriented north (-60° dip) due to topographical constraints to facilitate testing of northern mineralisation extents. True mineralisation widths in these two drillholes 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.</p>



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<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	<p>Company personnel manage the chain of custody from sampling site to laboratory.</p> <p>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.</p> <p>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 distributor 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.</p>
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	<p>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 later in 2022.</p>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b><i>Mineral tenement and land tenure status</i></b>	<ul style="list-style-type: none"> <li><i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i></li> <li><i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i></li> </ul>	<p>Exploration is being currently conducted within Mineral Exploration Permit (MEP) 60311 (252km<sup>2</sup>) registered to Matakanui Gold Ltd (MGL) issued on 13<sup>th</sup> April 2018 for 5 years with renewal date on 12<sup>th</sup> April 2023. MGL has the gold rights for this tenement. There are no material issues with third parties.</p> <p>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.</p> <p>The tenure of the Permits is secure and there are no known impediments to obtaining a licence to operate.</p> <p>The Project is subject to a 1.5% Net Smelter Royalty (NSR) on all production from MEP 60311 (and 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.</p>
<b><i>Exploration done by other parties</i></b>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<p>Early exploration in the late 1800's and early 1900's included small pits, adits and cross-cuts and alluvial mining.</p> <p>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.</p>

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<b>Geology</b>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<p>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.</p> <p>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.</p>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li><i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i> <ul style="list-style-type: none"> <li><i>easting and northing of the drill hole collar</i></li> <li><i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li><i>dip and azimuth of the hole</i></li> <li><i>down hole length and interception depth</i></li> <li><i>hole length.</i></li> </ul> </li> <li><i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i></li> </ul>	<p>Refer to the body of text.</p> <p>No material information has been excluded.</p>



Criteria	JORC Code explanation	Commentary
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li><i>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.</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>	<p>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:</p> <p>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.</p> <p>1.50g/t Au cut-off is possible economically underground exploitable Metal unit (MU) distribution, where shown on maps and in tables are calculated from total drill hole Au * associated drill hole interval metres.</p> <p>pXRF analytical results reported for laboratory pulp returns are considered accurate for the suite of elements analysed.</p> <p>Where gold assays are pending, minimum 1,000 ppm composited arsenic values provide a preliminary representation of potential mineralised zones and include 4m &lt;1,000 ppm internal dilution.</p>
<b>Relationship between mineralisation widths and intercept lengths</b>	<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 drill hole 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 (eg 'down hole length, true width not known').</i></li> </ul>	<p>All intercepts quoted are downhole widths.</p> <p>Intercepts are associated with a major 20-120m thick low-angle mineralised shear that is largely perpendicular to the drillhole traces.</p> <p>Aggregate widths of mineralisation reported are drillhole intervals &gt;0.50g/t Au occurring in apparent low angle stacked zones.</p> <p>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.</p>
<b>Diagrams</b>	<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 drill hole collar locations and appropriate sectional views.</i></li> </ul>	<p>Refer to figures in the body of the text.</p>
<b>Balanced reporting</b>	<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>	<p>All significant intercepts have been reported.</p>

Criteria	JORC Code explanation	Commentary
<b><i>Other substantive exploration data</i></b>	<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>	Not applicable; meaningful and material results are reported in the body of the text.
<b><i>Further work</i></b>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<p>DD drilling down dip / down plunge to the north and east of existing resources is continuing at RAS on ~120 metre step-out east-west drill sections.</p> <p>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.</p> <p>A 2021 MRE update (to JORC Code 2012) completed in September 2021 increased Inferred Resources 155% to 643Koz from the 252Koz 2019 MRE (uncut &amp; 0.25g/t lower cut-off).</p> <p>A 2022 MRE upgrade of RAS was completed in early July 2022 which increased the Global Inferred resources 3-fold to 2.1Moz (top-cut &amp; 0.25g/t lower cut-off).</p> <p>Potential extensions to mineralisation and resources currently being drill tested are shown in figures in the body of the text.</p>