GOLD RESOURCES INCREASED 155% TO 643,000 OUNCES

UPDATED MINERAL RESOURCE ESTIMATE (2021 MRE) COMPLETED

- **Increases Inferred Rise and Shine Shear Zone (RSSZ) Resources to 643,000 ounces of gold at an average uncut grade of 1.0g/t Au (at 0.25g/t Au lower cut-off grade).**
- **The 2021 MRE is an 155% increase in contained gold at a 25% higher grade over the 2019 MRE.**
- **Includes 537,000 ounces gold at an uncut grade of 1.6 g/t Au (at 0.5 g/t Au lower cut-off grade).**
- **The 2021 MRE incorporates all drilling to MDD010 at Rise & Shine (RAS) deposit**
  - **High-grade mineralisation intersected in MDD014 is not included.**
- **RAS is the largest RSSZ Resource containing an Inferred Resource of 287,000 ounces of gold @ 1.4g/t Au (at 0.25g/t Au lower cut-off grade)**
- **All deposits remain open down plunge with diamond drilling continuing at RAS**

28 September 2021 Santana Minerals Limited (ASX: SMI) ("Santana" or "the Company") is pleased to announce significant results from the 100% owned Bendigo-Ophir Project ("the Project"). Inferred Gold Resources reported to comply with the JORC Code 2012 guidelines have increased to:

- 19.8Mt for 643Koz @ 1.0g/t Au (lower cut-off 0.25g/t Au, no top-cut grade) or
- 10.4Mt for 537Koz @ 1.6g/t Au (lower cut-off grade 0.5g/t Au, no top-cut grade).

Resource extension drilling since November 2020 has been conducted at 4 RSSZ deposits; Come-in-Time (CIT), Rise and Shine (RAS), Shreks (SHR) and Shreks-East (SRE).

Drilling is ongoing north of the RAS deposit and significant high-grade mineralisation has been intersected down-plunge beyond the new 2021 resource grade shells (ASX announcement on 23 September 2021).

Commenting on this important milestone Executive Director Dick Keevers said:

"It is very pleasing to see the substantial increase in Inferred Gold Resources, along with the increase in average grade at the 0.25g/t Au cut-off to 1.0 g/t Au, compared with the previous 2019 MRE estimation. Perhaps even more pleasing is when we applied a 0.5 g/t Au cut-off, we still have substantially increased the Inferred Resource ounces of gold, now at an average grade of 1.6 g/t Au, which may give us greater flexibility when it comes to possible mining studies and processing options.

The presence of abundant free gold in the fresh sulphide mineralisation is of great significance also because it leaves open a heap leach processing option for some or all the mineralisation and/or the process of gold recovery by gravity and CIP / CIL for higher-grade mineralisation. We have excellent high-grade Au mineralisation with visible free gold in our drilling at RAS, but its extent and continuity for mining over the RAS deposit at the high grades encountered, can only be determined by further drilling".

2021 Mineral Resource Estimate (MRE)

The 2021 Bendigo-Ophir Project MRE update has been completed on the Come-in-Time (CIT), Rise and Shine (RAS), Shreks (SHR) and Shreks-East (SRE) deposits along the RSSZ by independent resource consultants Wildfire Resources Pty Ltd, Perth WA (WFRL) in September 2021 at cut-off grades of 0.25 and 0.5 g/t Au (Tables 1, 5 and 6 (Appendix 1 Additional Mineral Resource information and Appendix 2 JORC Code Table 1)).

The RSSZ is a major regional structure defined by geology, geochemistry, and geophysics of a strike length of 7 kilometres. The Inferred Resources occur in 4 deposits over a strike length of 4 kilometres (Figures 1 and 2).

Table 1: September 2021 MRE Summary by Deposit

Deposit	Class	Cut-off Au g/t	Tonnes	Au_ppm Uncut	Au_ppm Cut	Contained Oz Au Uncut	Contained Oz Au Cut
CIT	inferred	0.25	3,227,000	0.8	0.8	86,000	82,000
RAS			6,276,000	1.4	1.4	287,000	283,000
SHR			9,662,000	0.8	0.7	252,000	228,000
SRE			679,000	0.8	0.7	18,000	15,000
GRAND TOTAL	**inferred**	**0.25**	**19,844,000**	**1.0**	**0.9**	**643,000**	**608,000**
CIT	inferred	0.50	1,217,000	1.6	1.5	64,000	60,000
RAS			4,203,000	2.0	1.9	264,000	260,000
SHR			4,741,000	1.3	1.1	195,000	173,000
SRE			268,000	1.6	1.3	14,000	11,000
GRAND TOTAL	**inferred**	**0.50**	**10,429,000**	**1.6**	**1.5**	**537,000**	**504,000**

(* figures rounded for reporting)

The 0.25 g/t Au cut-off grade is considered appropriate at this stage of the project based on scoping studies conducted for a heap leach operation. However potential for significant higher-grade resources is shown at the cut-off grade of 0.5 g/t Au.

The Mineral Resource Estimate has been classified by WRPL as Inferred due to grade estimation confidence limited by irregularly spaced and sparse drilling in places and the effect of higher-grade samples in these areas. In addition, trench and channel samples have been used to fill data gaps in outcrop areas of oxide mineralisation (8%) of the total Resource (Table 2). Most of the Resource (87%) is sulphide mineralisation. The oxide component varies between 0.3% of the Resource at RAS and 13.4% at CIT.

Table 2: September 2021 MRE Summary by Oxidation State (0.25g/t Au lower cut-off grade)

OX State	%	Tonnes	Au_ppm Uncut	Au_ppm Cut	Contained Oz Au Uncut	Contained Oz Au Cut
Oxide	8%	1,581,000	0.8	0.8	40,000	40,000
Transitional	5%	1,035,000	0.8	0.7	25,000	24,000
Fresh	87%	17,228,000	1.0	1.0	578,000	544,000
TOTAL	100%	19,844,000	1.0	0.9	643,000	608,000

(* figures rounded for reporting)

There is confidence in the continuity of Resources in each deposit where mineralisation occurs in elongate northward plunging shoots up to 200 metres wide at CIT and RAS. Although the Resources at SHR occur over a greater strike length, the deposit has not been drilled at depth and the down-plunge geometry of the mineralisation is still to be resolved. Mineralisation is concentrated in the strongly sheared top 10-20 metres of the RSSZ. Higher-grade mineralisation lower in the RSSZ is within both shear zones and stockwork vein swarms. The micro controls of shoot mineralisation is as yet unclear.

Two other prospects without Resources have had limited drilling well down in the footwall of the RSSZ, with no adequate test of the hanging wall where most mineralisation is concentrated. There has been no drilling between any of the deposits where RSSZ outcrop is concealed by colluvium and glacial loess.

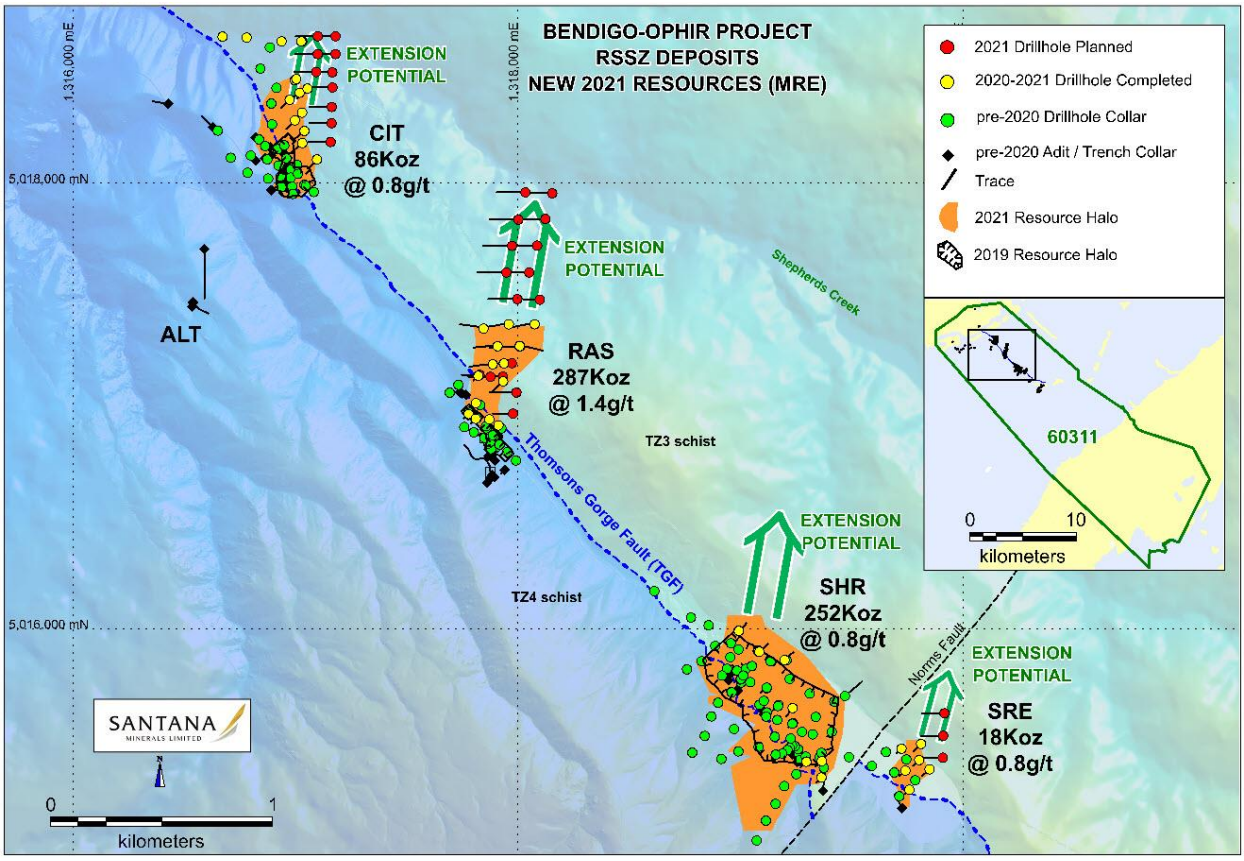

Figure 1 RSSZ 2021 Mineral Resources (MRE) at 0.25g/t Au lower cut-off grade

Drilling focus since November 2020 has been on northerly down-plunge extensions to the previous 2019 MRE of 252Koz @ 0.8g/t Au (ASX announcement on 14 September 2020) and at the new SRE deposit (Figure 1). This has delivered a 155% increase in Resource gold ounces and 25% increase in gold grade over the 2019 MRE (at the 0.25 g/t Au lower cut-off grade).

The updated 2021 MRE is based on assays for RSSZ drillholes completed to June 2021 (Table 3) which includes DD holes to MDD010 at RAS. Assays for MDD011-MDD014, with partial results announced for MDD014 (ASX announcement on 23 September 2021) were received after the MRE database and wireframes were closed for estimation purposes.

Table 3: Summary of RSSZ Drilling for new MRE to end June 2021

DH Campaign	Company	RAB Metres	RAB Holes	RC Metres	RC Holes	DD Metres	DD Holes	Total Metres	% Total
2020-2021	MGL			3,417	33	1,851	10	5,268	39
2018-2019	MGL			3,641	64			3,641	27
1986-2007	Legacy	315	21	4,186	48			4,501	34
Total		**315**	**21**	**11,244**	**145**	**1,851**	**10**	**13,410**	

All Inferred Resources are above 260 metres vertical depth from the natural surface and all daylight. Sufficient Resources have now been identified to justify pit optimisation. This is scheduled to commence in late 2021 when assays are received from the current RAS extension drilling designed to test a further 500m of down-plunge mineralisation. Deeper portions of the mineralisation are potential underground mining Resources.

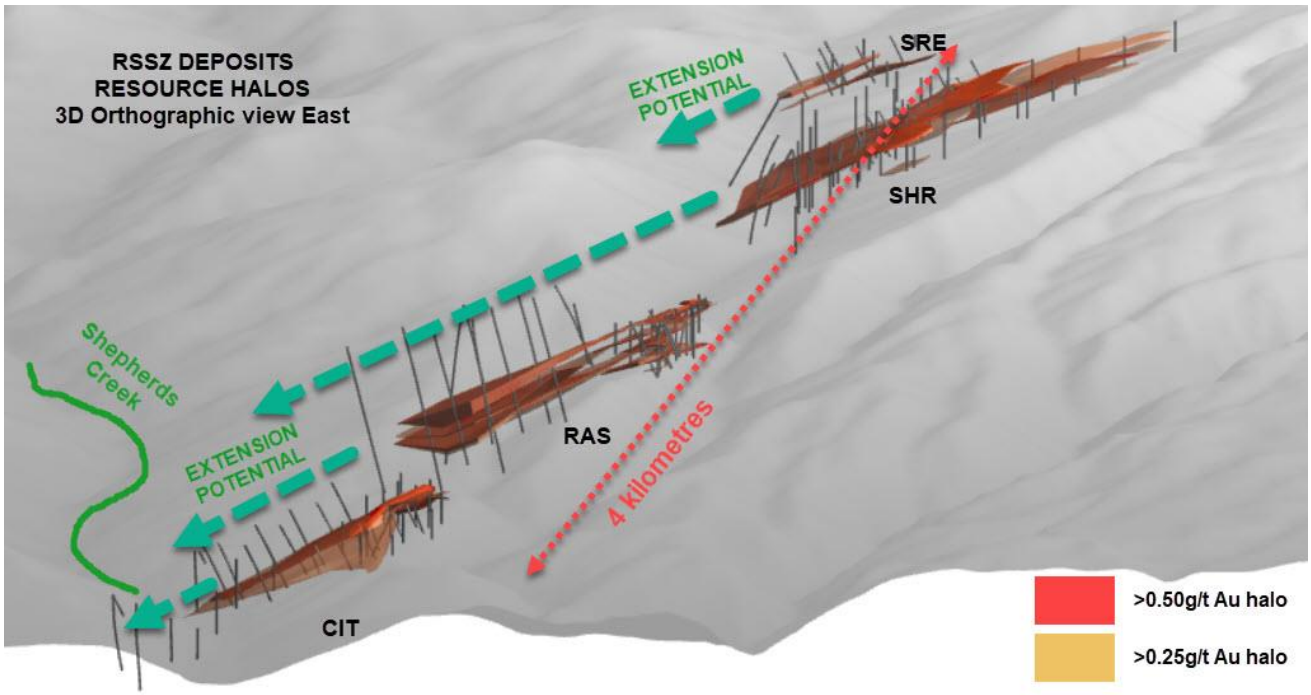

Figure 2 RSSZ Deposits & Resource Halos (3D view East). The MRE covers 4km strike length from CIT to SRE.

Tonnage and grade relationships are shown in Figure 3 Tonnages are estimated on a dry tonnage basis from density measurements of 197 surface rock and drill core samples from 25 sites in the project area, averaging:

Oxide rock	2.55g/cm^3
Transitional rock	2.62g/cm^3
Fresh rock	2.72g/cm^3

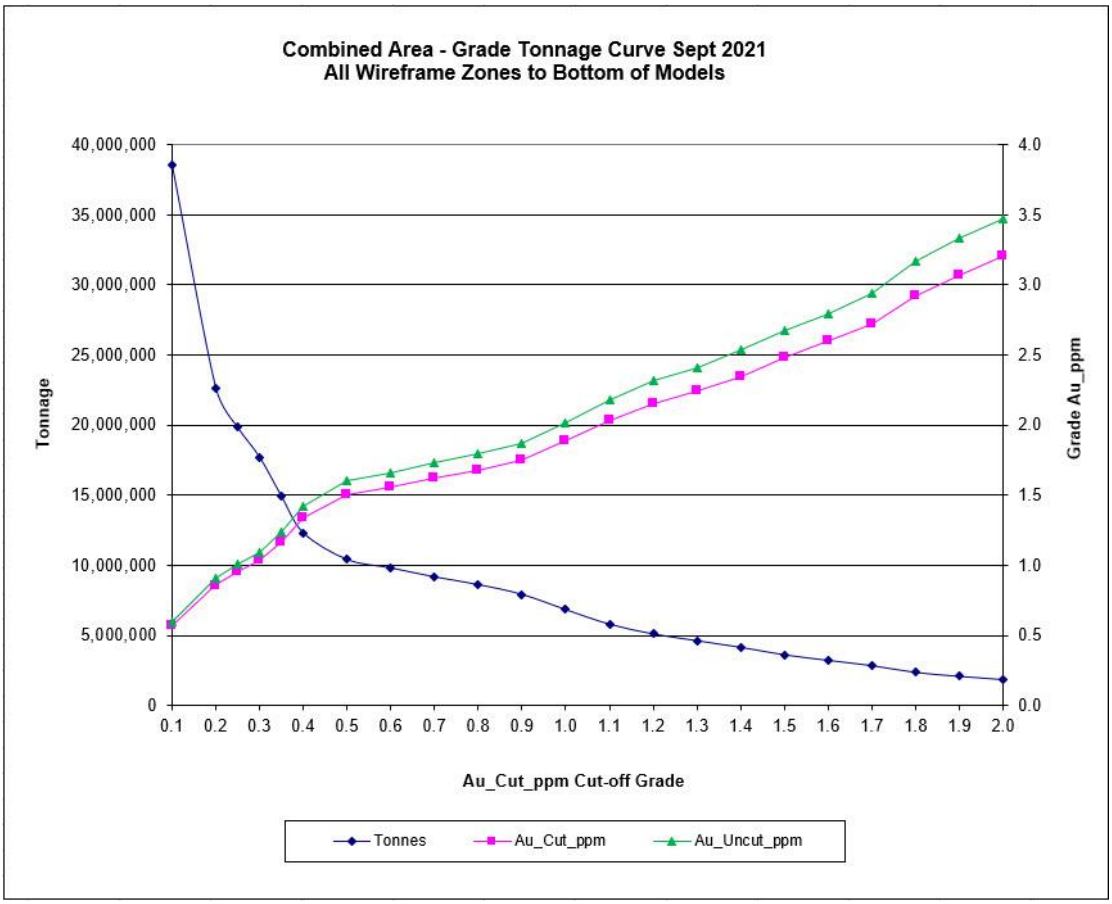

Figure 3 Global Inferred Resource Grade Tonnage Curve

RSSZ Deposits and Resource Geometry

CIT deposit daylights at the north-westernmost outcrop of the RSSZ around a shallow pit mined in the 1930's and has a strike length of 400 metres. It has been drilled 500 metres down plunge and remains open with depth (Figure 4). The NNE-trending shoot is at least 150 metres wide but has not been closed off to the east. Mineralisation is concentrated in the top 10-20 metres of the shear zone. Overlying barren waste rock (TZ3 schist) extends to 120 metres vertical depth in the north, above the model.

RAS deposit is located 1.4 kilometres south-east of CIT and outcrops in the south where the Rise and Shine valley narrows. It has a strike length of 300 metres (Figure 5). Mineralisation plunges NNE in a shoot up to 200 metres wide in stacked zones over a vertical interval of 80 metres. The shoot extends at least 500 metres down plunge and remains open with grades appearing to strengthen to the north and with depth. Overlying barren waste rock (TZ3 schist) extends to 160 metres vertical depth at the northern end of the MRE where topography is sub-parallel to the mineralisation halos. Drilling is ongoing at RAS with four drillholes completed since June 2021.

SHR deposit is 1.5 kilometres south-east of RAS and has the largest footprint of the 4 deposits with an outcrop and strike length of 750 metres (Figure 6). Mineralisation dips gently north-east and may comprise multiple higher-grade shoots plunging to the north with extents of 1000 metres. In the western sector where drilling has intersected northernmost mineralisation, overlying barren waste rock (TZ3 schist) extends to 180 metres vertical depth where topography climbs north of Rise and Shine Creek.

SRE deposit is a newly defined deposit 350 metres east of SHR, first identified in 2019 as faulted off from the main SHR mineralisation (Figure 7). SRE daylights in the south and extends for 300 metres to the north with a gentle plunge of around 20° and average width of 180 metres. Overlying barren waste rock (TZ3 schist) extends to 90 metres vertical depth at the north where topography climbs north of Rise and Shine Creek.

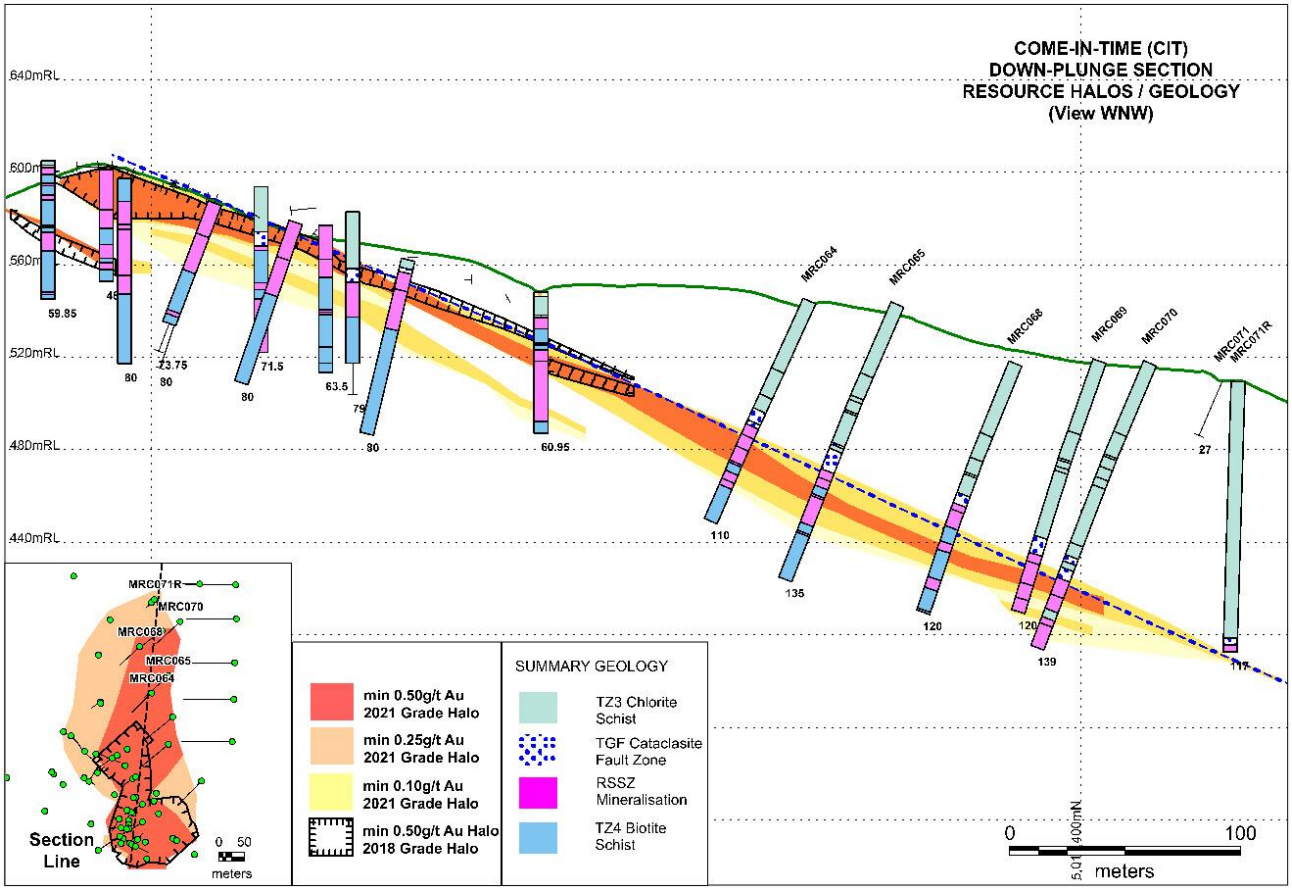

Figure 4 CIT Down-plunge Section - Resource Halos & Geology

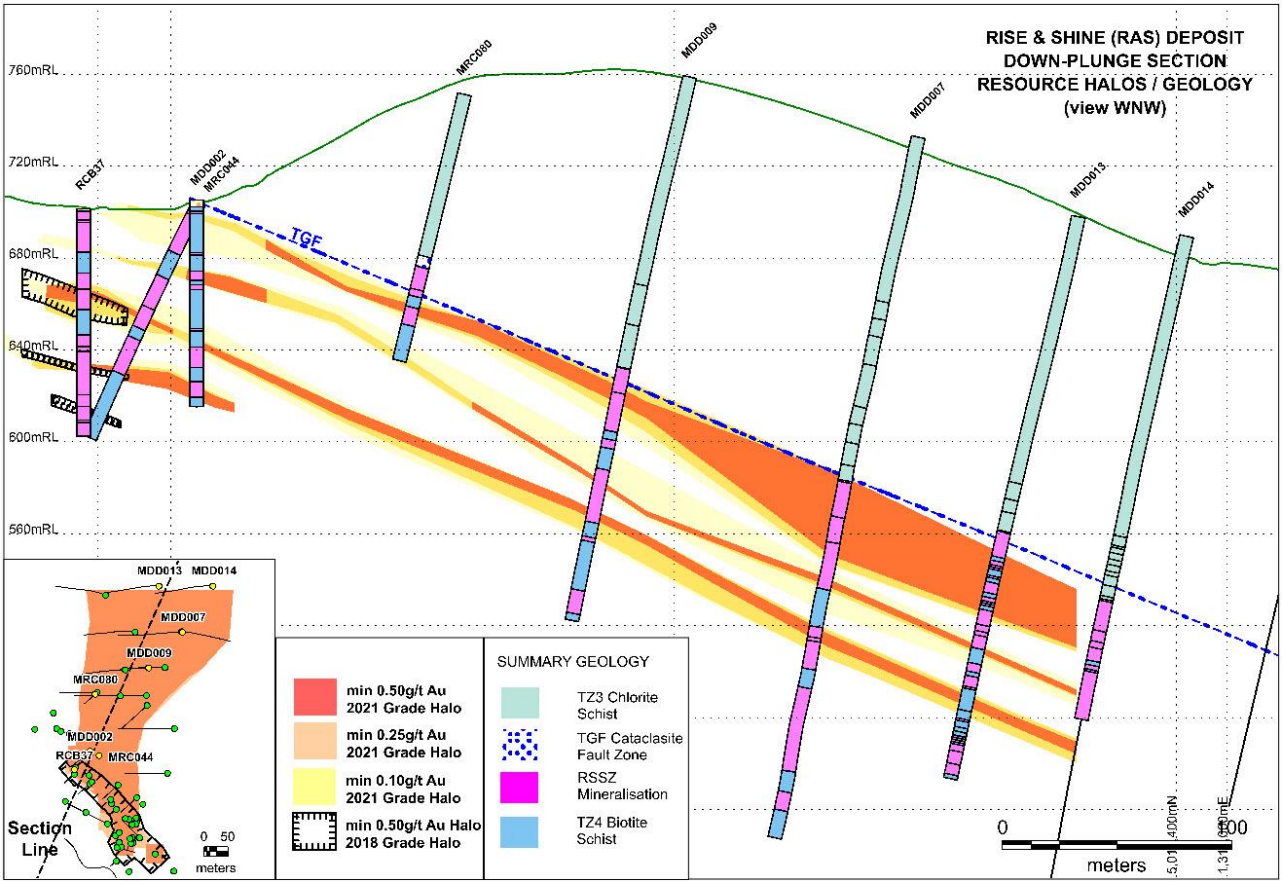

Figure 5 RAS Down-plunge Section - Resource Halos & Geology

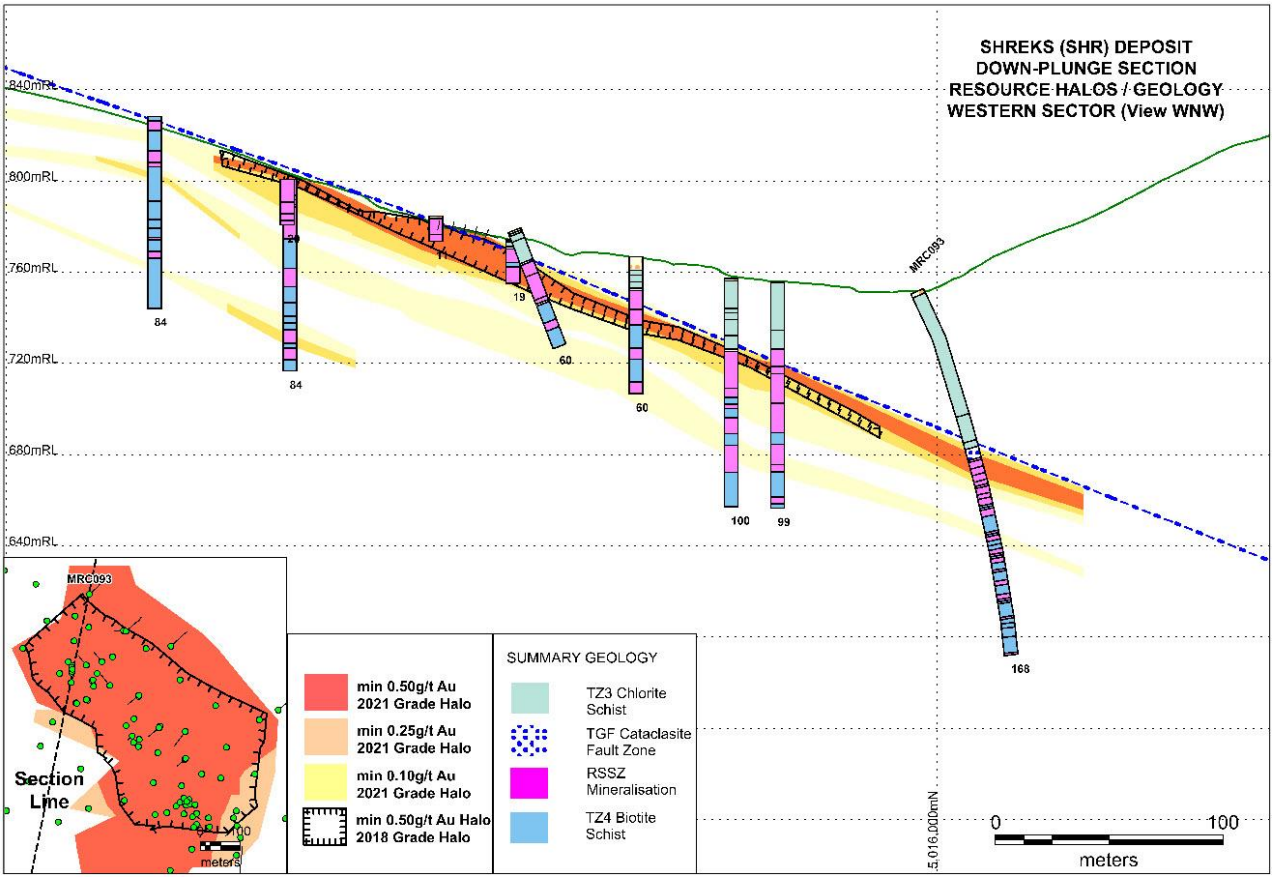

Figure 6 SHR Down-plunge Section - Resource Halos & Geology

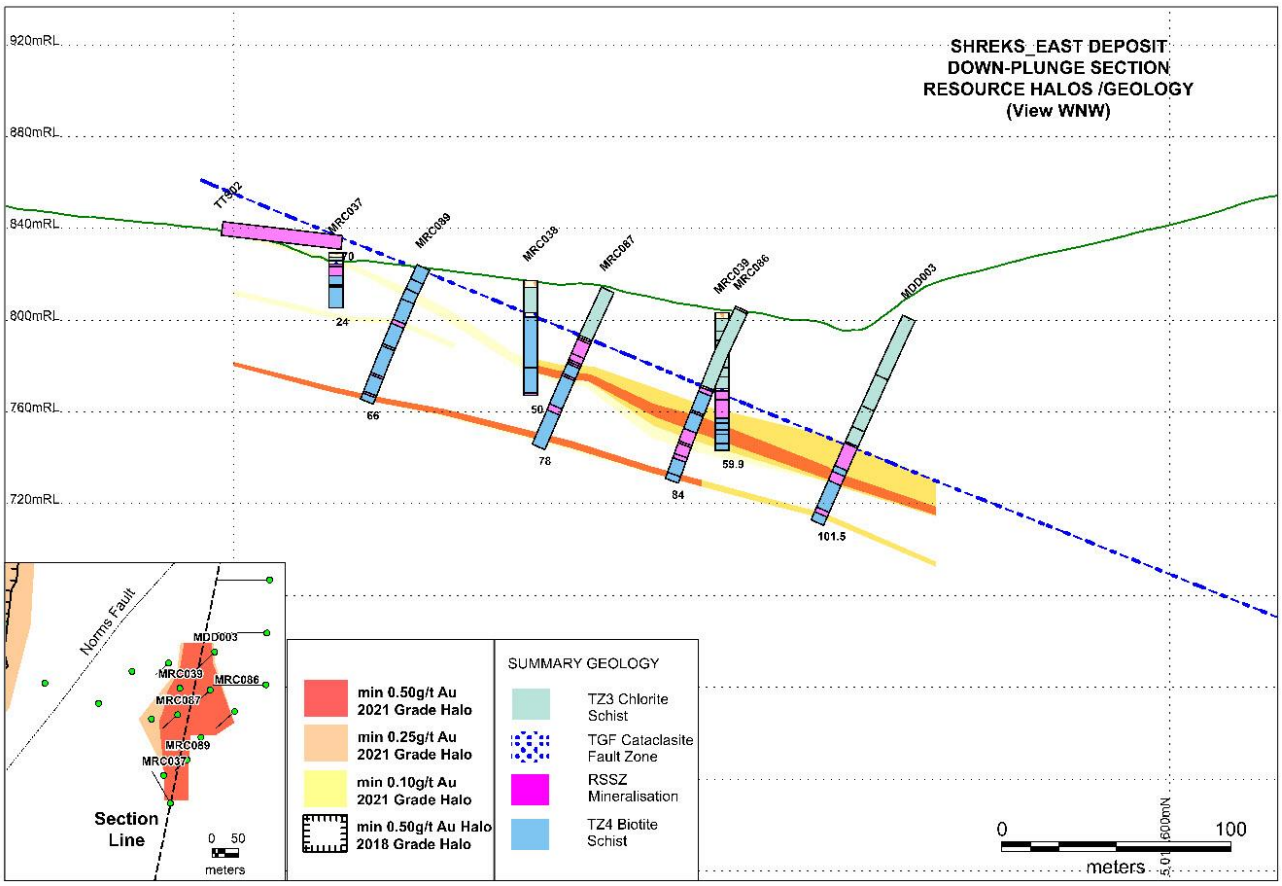

Figure 7 SRE Down-plunge Section - Resource Halos & Geology

Forward Programme / Ongoing step-out drilling

The Company's immediate priority is to continue fast-track drilling of RAS a further 500 metres down plunge (Figure 8) to Shepherds Creek before accelerating drilling at both RAS and CIT deposits to upgrade Resource classification and allow commencement of Preliminary Feasibility studies.

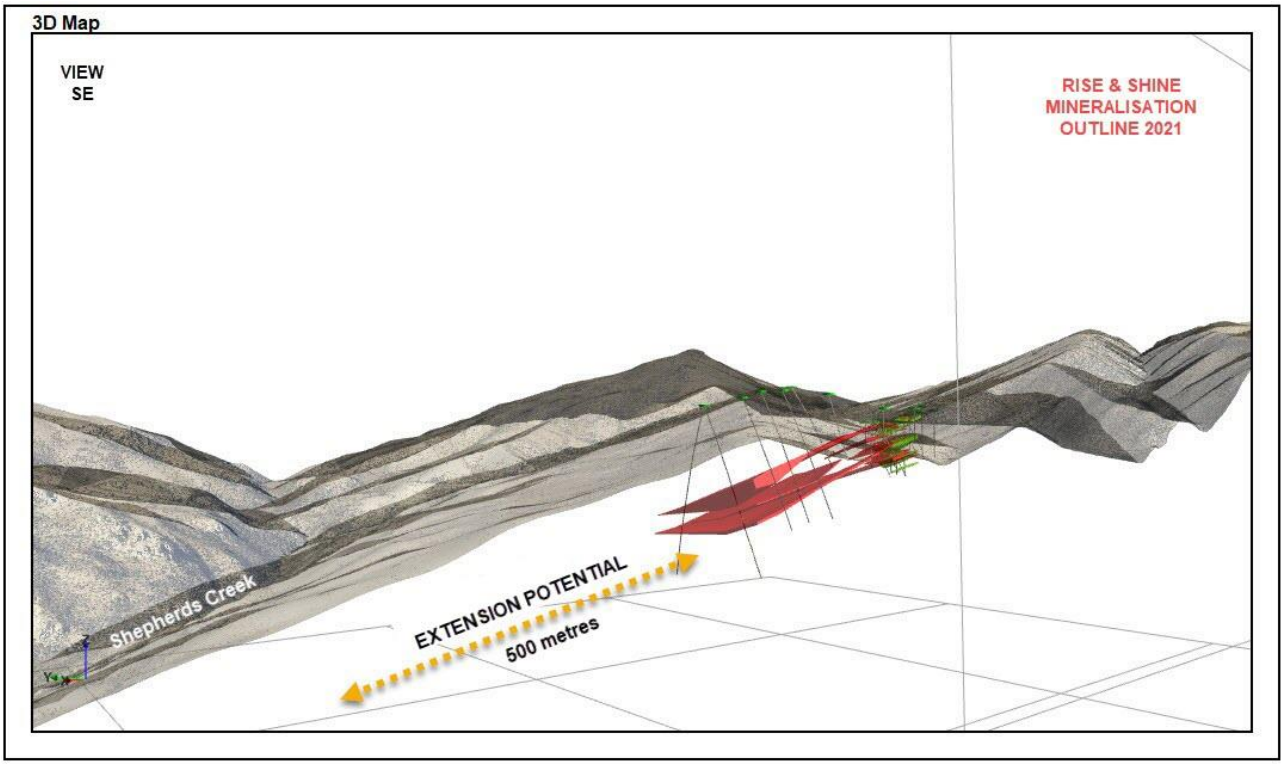

Figure 8 RAS Down-plunge Resource Potential (3D view SE)

Metallurgical Testwork

Metallurgical column leach testwork supervised by Kappes Cassiday & Associates Australia (KCAA) at ALS Metallurgy Laboratory in Perth on fresh sulphide bearing PQ3 core (crush assay rejects) is nearing completion. The samples are from 60 to 80m below surface at CIT, RAS and SRE deposits where fresh sulphide bearing mineralisation comprises ~90% of the Resource.

The work is a continuation of test work undertaken on oxide and transitional mineralisation in 2018 where column leach testwork by SGS Perth returned 73-94% gold recoveries from oxide and transitional material.
A significant modifying factor is the presence of abundant free non-refractory gold, as seen in the drill core.

On termination, columns were continuing to extract gold after 85 days with all three samples yielding what would be considered economic recovered gold values (CIT 0.65 g/t Au, RAS 0.51g/t Au, SRE 1.00g/t Au, Table 4, Figure 9).

Table 4: Preliminary Metallurgical Column Leach Testwork data (85 days)

Deposit	Drill composite Sample No	Drill composite Head Grade Au g/t	ALS Column Sample No	ALS Head Grade Au g/t	Median Residue Au g/t	Gold to Carbon Au g/t	Gold to Solution Au g/t	Avg Gold Rec'd Au g/t	Calc'd Head Grade Au g/t	% Extract
CIT	CSC-02	1.07	PW5462	0.55	0.33	0.60	0.70	0.65	0.97	66%
RAS	RCS-05	0.68	PW5463	0.52	0.14	0.49	0.53	0.51	0.64	79%
SRE	SSC-09	1.54	PW5464	1.13	0.67	0.92	1.08	1.00	1.67	60%

Residue assaying is incomplete however based on an average of gold to carbon and solution values with median residue results received to date, preliminary gold recoveries of 60-79% average 68%, which aligns with 2018 transitional mineralisation results.

Final results of the metallurgical column leach test-work and mineralogical studies will determine future gold recovery pathways.

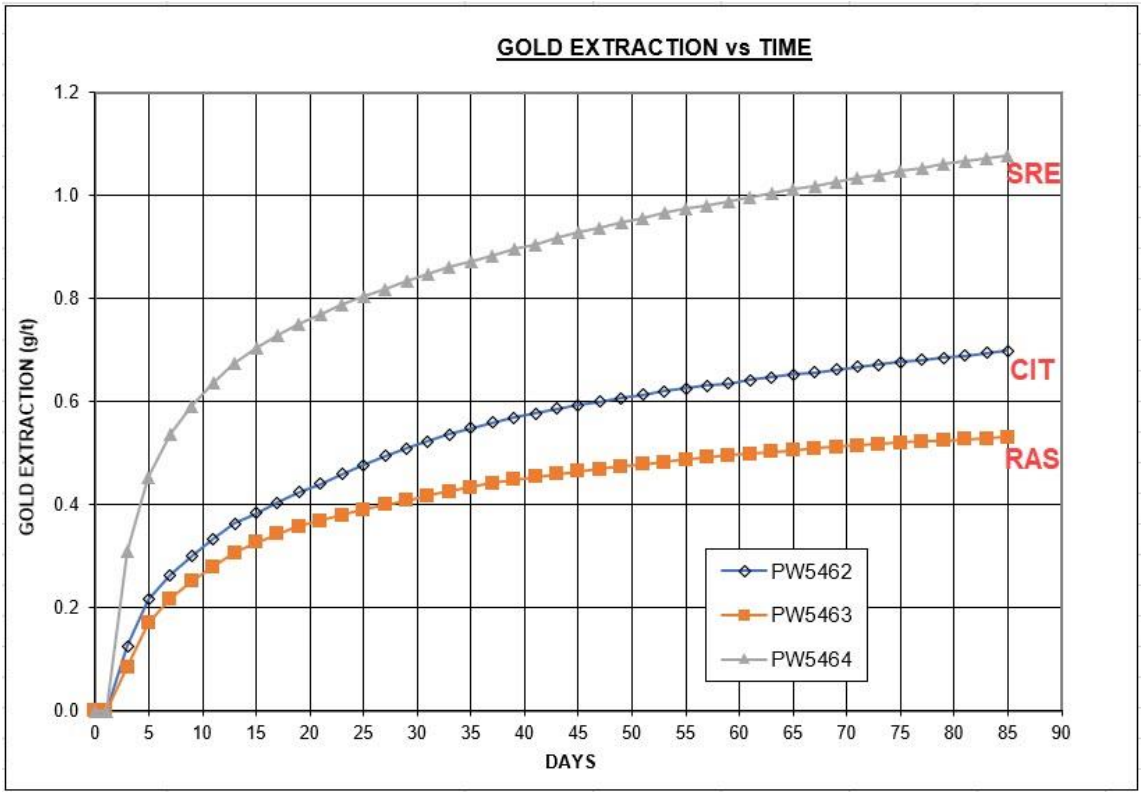

Figure 9: 2021 Provisional Column Leach Sulphide Gold Extractions (Au g/t 85 days)

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

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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 information in this report that relates to Mineral Resource Estimates (MRE) is based on work completed by Ms Michelle Wild, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Ms Wild is Principal Geologist of Wildfire Resources Pty Ltd 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". Ms Wild consents to the inclusion in this report of the matters based on her information in the form and context in which it appears. Ms Wild and Wildfire Resources Pty Ltd are completely independent of Santana Minerals Ltd.

The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified.

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 "Acquisition of Bendigo-Ophir Gold Project, New Zealand" dated 14th September 2020.

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.

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.

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 Project is located ~90 kilometres northwest of Oceana Gold Ltd (OGC) Macraes Gold Mine (Figure 10).

The Project contains a new Inferred Mineral Resource Estimate (MRE) 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 into a low cost per ounce heap leach operation, with ore from bulk tonnage open pits.

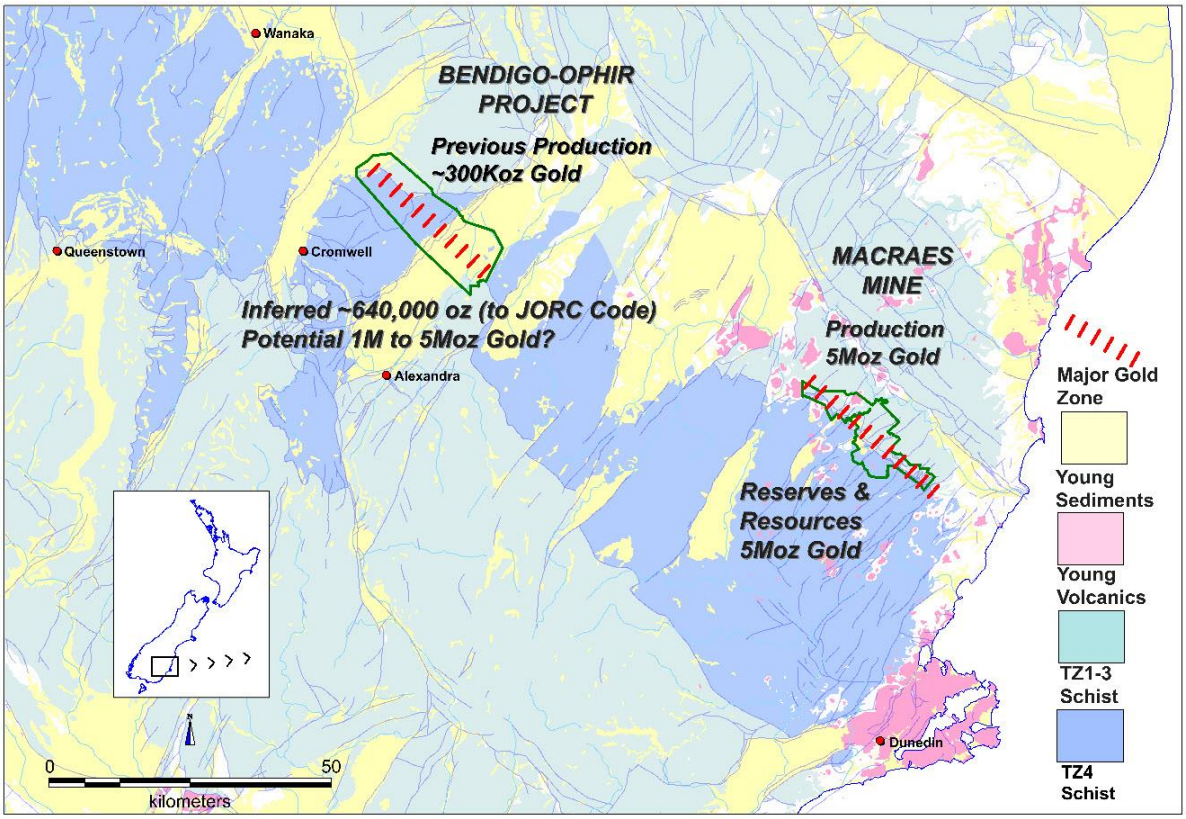

Figure 10 Bendigo-Ophir Project in the Otago Goldfield, ~90km NW of Macraes

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.

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 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 Company is focusing on advanced precious metals opportunities in New Zealand and Mexico.

SANTANA MINERALS LIMITED

Appendix 1 - Additional Mineral Resource Information

Legacy drilling (pre-2005) with lower quality drilling equipment and/or sampling QC practices focused on limited areas of upper RSSZ mineralisation. The legacy results are becoming a smaller percentage (34%) of the Resource drilling (Table 3) as more recent 2018 to 2021 drilling increase in proportion. QC practices have dramatically improved in the 2020-2021 drilling and there is greater confidence in these later results.

QC shows acceptable levels of assay accuracy with no bias but there is low precision, common for gold deposits with coarse particulate gold. Paired data scatterplots (field duplicates, cross-lab checks, pulp duplicates) show this, however this is not expected to influence the global MRE grades significantly. Infill drilling and replacement of the historic holes, trench and channel samples with new drill holes will lift estimation quality and raise future resource classification.

Table 5: Global Mineral Resource Estimate (September 2021 to 0.25g/t Au lower cut-off grade), shows the Inferred Mineral Resource both on an uncut basis (no Au top-cut grade applied) and utilising a top-cut grade (Au ppm Cut) with all figures rounded for reporting purposes.

Global Mineral Resource Estimate As At September 2021 Rounded for Reporting
All Wireframes, 0.25g/t Au cut-off grade applied

Deposit	Class	OX Zone	Tonnes	Au_ppm Uncut	Au_ppm Cut	Contained Oz Au Uncut	Contained Oz Au Cut
Come In Time	Inferred	Oxide	434,000	1.0	1.0	14,000	14,000
		Transitional	298,000	0.7	0.7	7,000	7,000
		Fresh	2,495,000	0.8	0.8	65,000	61,000
		Total	**3,227,000**	**0.8**	**0.8**	**86,000**	**82,000**

Deposit	Class	OX Zone	Tonnes	Au_ppm Uncut	Au_ppm Cut	Contained Oz Au Uncut	Contained Oz Au Cut
Rise And Shine	Inferred	Oxide	20,000	1.0	0.9	1,000	1,000
		Transitional	82,000	0.8	0.7	2,000	2,000
		Fresh	6,174,000	1.4	1.4	284,000	280,000
		Total	**6,276,000**	**1.4**	**1.4**	**287,000**	**283,000**

Deposit	Class	OX Zone	Tonnes	Au_ppm Uncut	Au_ppm Cut	Contained Oz Au Uncut	Contained Oz Au Cut
Shreks	Inferred	Oxide	1,120,000	0.7	0.7	25,000	25,000
		Transitional	651,000	0.8	0.7	16,000	15,000
		Fresh	7,891,000	0.8	0.7	211,000	188,000
		Total	**9,662,000**	**0.8**	**0.7**	**252,000**	**228,000**

Deposit	Class	OX Zone	Tonnes	Au_ppm Uncut	Au_ppm Cut	Contained Oz Au Uncut	Contained Oz Au Cut
Shreks East	Inferred	Oxide	7,000	0.3	0.3	0	0
		Transitional	4,000	0.3	0.3	0	0
		Fresh	668,000	0.8	0.7	18,000	15,000
		Total	**679,000**	**0.8**	**0.7**	**18,000**	**15,000**

GRAND TOTAL			**19,844,000**	**1.0**	**0.9**	**643,000**	**608,000**

Table 6: Global Mineral Resource Estimate (September 2021 to 0.5g/t Au lower cut-off grade), shows the Inferred Mineral Resource both on an uncut basis (no Au top-cut grade applied) and utilising a top-cut grade (Au ppm Cut) with all figures rounded for reporting purposes.

Global Mineral Resource Estimate As At September 2021 Rounded for Reporting
All Wireframes, 0.5g/t Au cut-off grade applied

Deposit	Class	OX Zone	Tonnes	Au_ppm Uncut	Au_ppm Cut	Contained Oz Au Uncut	Contained Oz Au Cut
Come In Time	Inferred	Oxide	269,000	1.4	1.4	12,000	12,000
		Transitional	115,000	1.4	1.3	5,000	5,000
		Fresh	833,000	1.7	1.6	47,000	43,000
		Total	**1,217,000**	**1.6**	**1.5**	**64,000**	**60,000**
Rise And Shine	Inferred	Oxide	17,000	1.1	1.0	1,000	1,000
		Transitional	59,000	0.9	0.9	2,000	2,000
		Fresh	4,127,000	2.0	1.9	261,000	257,000
		Total	**4,203,000**	**2.0**	**1.9**	**264,000**	**260,000**
Shreks	Inferred	Oxide	528,000	1.1	1.1	18,000	18,000
		Transitional	335,000	1.1	1.1	12,000	12,000
		Fresh	3,878,000	1.3	1.2	165,000	143,000
		Total	**4,741,000**	**1.3**	**1.1**	**195,000**	**173,000**
Shreks East	Inferred	Oxide	0	0.0	0.0	0	0
		Transitional	0	0.0	0.0	0	0
		Fresh	268,000	1.6	1.3	14,000	11,000
		Total	**268,000**	**1.6**	**1.3**	**14,000**	**11,000**
GRAND TOTAL			**10,429,000**	**1.6**	**1.5**	**537,000**	**504,000**

Wireframe models are tabular and sheet-like (Figure 2) within the low-angle RSSZ and below the overlying regional Thomsons Gorge Fault (TGF). Wireframe modelling used a cut-off grade of 0.10g/t Au for the low-grade halo mineralisation. Sub-domains within the 0.10g/t Au wireframes were created using cut-off grades of 0.25g/t and 0.5g/t Au to limit the overestimation of grade into the lower grade areas. Top-cuts were applied to wireframe domains where the Coefficient of Variation (CV) was >1.4 and from a study of the histograms and log-probability plots.

Ordinary Kriging was used for grade estimation and is considered suitable for Mineral Resource estimation for this type of deposit. Maximum search distances varied in each deposit and were based on variography and KNA, ranging from 100 – 160 metres in the major direction of continuity.

Search orientations ranged from a bearing of 325° through to 015° and plunge of 20° which match the northerly down-plunge shoot mineralisation model that emerged from 2019 drilling.

The broad 2020-2021 drilling envelopes have shown that mineralisation is continuous in northerly directions and down-plunge extrapolation between data points is up to 250 metres with extrapolation beyond the broad drilling envelopes no more than 50 metres.

During the validation phase of the first RAS model, grade distortion of the MRE became evident due to the influence of some widespread, very high grades above those of previously intersected RSSZ mineralisation. A search limit of 50 metres was applied to the samples with values above 10g/t Au to reduce excessive high-grade influence in the block model.

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.*	Sampling includes riffle split reverse circulation (RC) drilling samples, composited RC samples, continuous channel and trench samples, blasthole rig samples and diamond drill (DD) core samples. Samples for laboratory assay are typically 1 metre lengths with DD samples saw cut ½ diameter core (¼ core where a duplicate is to be inserted in the batch). Where distinct mineralisation boundaries are logged, sample lengths are adjusted to the respective geological contact. Samples (since 2019) 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 with AAS finish. Routine portable XRF (pXRF) multielement analyses are conducted on samples using an Olympus Delta instrument (model DPO-4000) with daily calibration and QAQC analyses of SiO2 blank and NIST standards (NIST 2710a & NIST2711a). The field pXRF analyses are a preliminary routine procedure to determine indicative levels of arsenic (as a gold pathfinder element) to aid in sample selection for gold assays, chip logging, assist early modelling and follow-on drillhole planning. The field pXRF multielement analyses are repeated on the sample pulps returned from the laboratory with a suite of 31 elements reported. Samples for assay are selected to include approximately 5 one metre samples of barren schist above mineralisation. Field duplicates are included in sample batches and are 1m riffle split RC samples or ¼ core DD samples. Field duplicates, umpire assays and screen fire assay checks show no statistically significant bias but high variance due to presence of free gold, including visible gold up to 1-2 mm diameter in some high-grade samples. The absolute percentage difference from the mean of paired samples averages between 14 and 19% with good correlation between pairs overall (correlation coefficient generally 0.90 to 0.95). Outliers are due to coarse grains of gold.

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).*	Drilling techniques for the 2021 MRE were blasthole (22 holes, 315 metres), RC (155 holes, 11,969 metres) or DD (10 holes, 1,851 metres). Since 2005, face-sampling bits were used in the RC drilling. Prior to that it is not known whether cross-over subs were used and for the blastholes it is assumed they were similar to RAB and sample return was between the drill rods and hole walls. DD coring is recovered via PQ3 and HQ3 size triple tube. PQ3 core size (83mm diameter) is maintained throughout the DD hole until drilling conditions dictate reduction in size to HQ. Most DD holes were drilled open hole through the barren overburden (TZ3 unit) before coring commenced. Angled drillholes were oriented to intersect known mineralised features in a nominally perpendicular orientation when the shoot orientation was considered to be NW to SE. It has now become clear this was not an optimal direction, as shoots have been shown to be more north-south aligned. Future angled holes will be oriented to be perpendicular to the north-south plunging shoots. 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.*	RC sample recoveries are visual estimates made by the geologist from the volume of cuttings in the bulk residue bags. There is no sample recovery data for pre-2005 holes. Since 2005, every effort has been made to reduce contamination and sample loss by cleaning the cyclone and splitter at regular intervals, drill 1m at a time and blow the sample into the cyclone. RC sample recovery was mostly 100% except for lower recoveries in patches of wet and damp ground. Wet samples were generally caused by drilling through a water-bearing structure such as a fault. Since 2005, no relationship between sample recovery and grade has been noted. No preferential losses of sample have occurred except in certain wet drilling/sampling cases. These cases were inspected and found to have no influence on the grade estimation. Prior to 2005 some of the drilling encountered sample recovery issues.

Criteria	JORC Code explanation	Commentary
		DD core sample recoveries are recorded by the drillers at the time of drilling by measuring the distance of the drill run against the actual core recovered and is 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.
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* *The total length and percentage of the relevant intersections logged.*	Logging of RC drill chips is on paper logs, with data transcribed into spreadsheets and then imported into an Access database. RC chips have been washed and stored in chip trays since 2005. All RC holes have been logged along their entire length. All DD holes have been logged for their entire sampled length below upper open hole drilling (nominally 0-140 metres below collar). DD data is transcribed from paper logs into spreadsheets and then imported into the Access database. Drillhole logging is mostly qualitative but there are estimations of quartz and sulphide content and quantitative records of geological / structural unit and water table boundaries. Sufficient detail has been captured to support Mineral Resource estimations (MRE). Oriented DD core allows alpha / beta measurements to determine structural element detail (dip / dip direction) to supplement routine recording of lithologies / alteration / mineralisation / structure / weathering / colour and other features. All DD core is photographed wet and dry before cutting. RC chip trays are photographed and catalogued.
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.* *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* *Measures taken to ensure that the sampling is representative of the in situ*	RC drilling samples were predominantly riffle split, with some historic holes (in 1988) spear sampled. Most were sampled dry however there were some cases of wet drilling. 8% of samples used in the MRE were sampled wet, prior to 1997. Post 1997 only 1.2% of samples were wet. Large diameter (83mm) PQ3 DD core is maintained (where conditions allow) to provide the largest sample cross-section possible for sample representativeness and for metallurgical testwork. DD core drill samples are sawn in ½ along the length of the core

Criteria	JORC Code explanation	Commentary
	material collected, including for instance results for field duplicate/second-half sampling. *Whether sample sizes are appropriate to the grain size of the material being sampled.*	perpendicular to structure / foliation. Intervals required for QC checks are ¼ core from ½ sections of core to be sent for assay. Sample preparation methods involve, oven drying, crushing and splitting of samples to 1kg for pulverising to -75um. Pulps are fire assayed using a 50g charge. A single 50g charge is not optimal for the coarse nature of the gold, as shown by the poor repeatability (field duplicates correlation coefficient 0.6, 59% of pairs outside +/- 20% RD). Larger screen fire assays and 1kg Leachwell determinations are conducted periodically as a QC check. QAQC procedures include field duplicates, certified standards, and blanks at a frequency of ~4% each, along with cross-lab assay checks on pulps at an umpire laboratory. The fine crush residue samples have been submitted as QC samples for screen fire assay and 50g fire assay. Results are pending.
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.*	All drill samples 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. Assaying and laboratory procedures are suitable for global MRE. Fire assay is a total gold analysis method. 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). pXRF results have not been used quantitatively in the MRE. QC samples (3*certified standards, coarse blanks and field duplicates) are inserted into laboratory batches at a frequency of ~4% and ~5% respectively. Pulp samples are selected at the end of each drilling campaign to be sent to an umpire laboratory for cross-lab check assays.

Criteria	JORC Code explanation	Commentary
		Pulp samples are also submitted blind to the SGS laboratory as a check on original assays. Laboratory in-house QC samples are inserted in each batch and include certified standards, pulp prep duplicates, pulp replicates and solution blanks. These are monitored along with the company QC results as assay results are returned. Acceptable levels of accuracy and lack of bias have been demonstrated. Precision is low because of the coarse particles of gold and is common in gold deposits of this nature.
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 re-assay or screen fire assays, larger sample results are adopted. To date results are accurate and fit well with the mineralisation model. 7 twinned pre-2018 RC holes are available with 1 twin drilled in 2018. From 2020 a total of 5 DD core holes have been sited adjacent to previous RC drillholes to provide comparative data. Holes are logged on paper logs, transcribed into spreadsheets and imported to an Access database. Since 2021 holes were logged directly into Notebook spreadsheets in the field. Assays directly from the laboratory files are merged with sample details and appended to the database. PDF files were obtained from the laboratory for all assay reports. Hole locations (surveys) are merged with hole ids after receipt from the surveyor. 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.
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.*	Drillhole collar surveys from 2018 onwards are accurate (+/- 50mm) having been surveyed by surveyors using RTK-GPS equipment. Historic holes (where sites are evident) were also re-surveyed, and the database updated.

Criteria	JORC Code explanation	Commentary
	Quality and adequacy of topographic control.	Collar surveys for pre-2018 holes were either GPS surveyed or measured off a local grid. The GPS surveyed holes should be within +/- 0.8m accuracy. Older holes are of unknown location accuracy. All historic holes that have not been re-surveyed were RL corrected to the 2018 LiDAR survey DTM surface with an RL accuracy to +/- 0.5m. Trenches and channels were photo-located from the 2018 LiDAR survey and corrected in the database. The channels and trenches were draped over the LiDAR topography and new azimuth and dip obtained for each sample segment. Underground workings channels are of unknown accuracy as there are no digital models of the workings to enable location. Downhole surveys have been taken from the commencement of 2020 drilling, recorded at 12m intervals using a Reflex multi-shot camera. This is a magnetic north referencing tool. Magnetic azimuths are converted to grid azimuths by the addition of 22.5°. All drill holes, channels and trenches co-ordinates reference the NZTM2000 map projection and the NZVD2016 vertical datum for RL. Topographic control is excellent with the 2018 LiDAR survey data complimented by another extended LiDAR survey in April 2021. Topographic surfaces were generated using 0.5m contours from the LiDAR data.
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.*	Data spacing is variable however good continuity is demonstrated in those areas that have reasonable drill spacing. Geological and grade continuity have been assumed in areas of sparse drilling however there is sufficient drill hole and trench/channel sampling for Inferred Resource classification. Drill site locations are dictated by availability of existing access tracks and gentler topography to allow safe working drill pad excavations in otherwise steep terrain. Some pre-2018 drillhole and trench/channel original sample lengths were 2m or 5m. All samples have been composited to 1m for statistics and grade estimation
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.*	Most pre-2020 drill holes were vertical and intersect the mineralisation at a reasonable angle. Trench and channel samples are clustered in places and may bias the oxide resource estimate. In addition, the trench and

Criteria	JORC Code explanation	Commentary
	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.	channel samples are longer (2-5m) than most drill samples. The degree of bias introduced with the trench/channel samples is not considered material in the Inferred Resource estimate, and further drilling in the oxide zone where the resource daylights will reduce the trench and channel sample influence. The majority of drillholes in the 2020-2021 campaign are inclined to intersect mineralisation at a reasonable angle and for DD holes to facilitate core orientation measurements. There is not anticipated to be any significant sampling bias for resource estimates. The mineralisation plunge and plunge direction is the direction of maximum continuity and in 2021 is aligned north-south, whereas previous models were aligned NW-SE and drilling was oriented to intersect the previous interpretation at optimal angles.
Sample security	*The measures taken to ensure sample security.*	Sample security is documented from 2005 with prior sample security assumed. Since 2005 RC samples were tied securely closed after being removed from the drill rig splitter. They were put into polyweave bags, cable tied closed and at the end of the day removed to a secured and locked area off site until they were dispatched to the laboratory. 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 also 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 a local freight distributer for delivery to the laboratory. The laboratory is emailed a sample submission form. 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.*	Sampling and the QAQC protocols were first reviewed in 2017 with the database reviewed and verified in 2017-2018. A review of procedures in 2019 for the previous MRE resulted in recommendations that were

Criteria	JORC Code explanation	Commentary
		adopted for all subsequent 2019 and current drilling. An independent Competent Person (CP) conducted a site visit in January 2021 and reported on all sampling techniques, procedures and data management. No major issues were identified, but there were recommendations, and these have been followed. The MRE CP was not able to attend due to Covid-19 travel restrictions. Sampling techniques, QC and data collection and storage are reviewed on an ongoing basis to continually improve practices.

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.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	The Mineral Resources are within Mineral Exploration Permit (MEP) 60311 registered to Matakanui Gold Ltd (MGL) for a 5 year term with an initial renewal date of 12/04/2023. MGL has the gold rights for this tenement. There are no material issues with third parties. The tenure 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 EP60311 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 in 2020.
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, 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 Rise And Shine Shear Zone (RSSZ). Drilling has 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 Inferred Resource area), 5 RC holes by Macraes Mining Company Ltd in 1991, 22 shallow holes (probably blasthole) 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.
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 in the deposits occur along micro-shears, and in brecciated / laminar quartz veinlets within the

Criteria	JORC Code explanation	Commentary
		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) with visible gold (VG) occur deeper in the RSSZ. Unlike Macraes, the gold mineralisation in the oxide and transition zones is characterised by 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:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *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.*	There are no exploration results being reported.
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.*	There are no exploration results being reported.

Criteria	JORC Code explanation	Commentary
	• *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	
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').*	There are no exploration results being reported.
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.*	There are no exploration results being reported.
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.*	There are no exploration results being reported.
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.*	There are no exploration results being reported.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Further work includes continuation of both step out and infill resource evaluation drilling, metallurgical testwork, preliminary feasibility studies and further MRE upgrades.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	*Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* *Data validation procedures used.*	In 2017 data compiled in spreadsheets were imported to a Microsoft Access database. All historic sampling and assay data (pre-2005) were verified against hard copy reports. Laboratory assay reports were present in these reports and were used in the verification process. For the 2005 sampling onwards, assay results were imported directly from laboratory files and merged with the sample data. Geological logging data are imported from spreadsheets. The database is managed by an external consultant and supplied to MGL after each data update. Data validation procedures include checking the imported data against the original spreadsheet files, checking for missing data, checking hole depth against sampling and logging depths, plotting drill holes on screen to check spatial location and orientation, including downhole surveys. Downhole intervals – whether sampled or not, are recorded in the database to ensure no interval data are missing. Assay reports in pdf, directly from the laboratory, are available for all holes since 2018 for audit purposes. The Access database is a relational database and has sufficient primary keys and relationships between tables and fields to prevent duplicated data.
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* *If no site visits have been undertaken indicate why this is the case.*	An independent Competent Person (CP) conducted a site visit in January 2021 and reported on all sampling techniques, procedures, QC and data management. No major issues were identified, but there were recommendations made and these have been followed. The MRE CP was not able to attend due to Covid-19 travel restrictions.
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* *Nature of the data used and of any assumptions made.* *The effect, if any, of alternative interpretations on Mineral Resource estimation.* *The use of geology in guiding and controlling Mineral Resource estimation.*	Confidence is moderate to high in the mineralogical interpretation although this will be enhanced with more closely spaced drilling data. No geological model has been constructed to date. Geological and grade continuity have been assumed in areas of sparse drilling. All drill holes, channels and trench data were used in the mineralisation model. There are not expected to be any alternate interpretations that would

Criteria	JORC Code explanation	Commentary
	The factors affecting continuity both of grade and geology.	significantly alter the Mineral Resource estimates; however, modelling of the structures controlling mineralisation may limit continuity up/down dip and thus affect tonnage. The only guide has been the RSSZ TGF model where most mineralisation is sub-parallel and beneath it. The TGF is more or less coincident with the top of the RSSZ and readily recognisable in all holes drilling through the hanging wall of the RSSZ. Mineralisation is concentrated in the strongly sheared top 10-20 metres of the RSSZ and shows good continuity within the deposits. Higher grade mineralisation lower in the system is within both shears and stockwork swarms. Low grade mineralisation extends well into the foot wall and grades drop off laterally from the plunging cores of the deposits. Continuity down plunge seems to be very good in all 4 deposits but needs confirmation with infill drilling. Structural modelling may allow better definition on the orientation of these higher-grade zones.

Criteria	JORC Code explanation	Commentary
Dimensions	*The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	The 4 deposits occur over a RSSZ strike length of 4 kilometres. SHR has the largest footprint of the 4 deposits with a strike length of 750 metres and daylights for most of its length. It dips gently north-east and may comprise multiple higher-grade shoots plunging to the north. The down plunge extent is currently 1000 metres. Overburden extends to 180 metres vertical depth at the deepest position in the north. SRE is a newly defined deposit that has been faulted off from the main SHR mineralisation. As currently drilled, it daylights in the south and extends for 300 metres to the north with a gentle plunge of around 20°. Average width is 180 metres in plan view. Overburden is about 60m vertical depth at the northernmost end with mineralisation modelled to 90 metres vertical depth below surface. The RAS deposit has a strike length of 300 metres and plunges moderately NNE with the RSSZ. The shoot is up to 200 metres wide with mineralisation in stacked zones over a vertical interval of 80 metres. The shoot extends at least 600 metres down plunge, remaining open down plunge with grades appearing to strengthen with depth. Overburden extends to 180 metres vertical depth at the deepest position in the north. CIT has been drilled 500 metres down plunge and remains open with depth. The shoot is at least 150 metres wide but has not been closed off to the east. Mineralisation is concentrated in the top 10-20 metres of the shear zone. It daylights in the south end and overburden extends to 100 metres vertical depth in the north.
Estimation and modelling techniques	*The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*	Wireframe modelling used a cut-off grade of 0.1g/t Au for the low-grade halo mineralisation. The lenses were sub-domained using cut-off grades of 0.25g/t and 0.5g/t Au to limit the overestimation of grade into the lower grade areas. Ordinary kriging was used for grade estimation and is considered suitable for Mineral Resource estimation for this type of deposit. Top-cuts were applied to wireframe domains where the Coefficient of Variation (CV) was > 1.4. Top-cuts varied by domain and ranged between 2.6-17g/t Au. They were selected based on the CV, log-probability plots, histograms and log histograms. No top-cuts were below the 97.5th percentile. Both top-cut and uncut grades were estimated into the block models. Maximum search distances varied in each deposit and were based on variography and KNA, ranging from 100 - 160m in the major direction of continuity for Pass 1. The minimum number of

Criteria	JORC Code explanation	Commentary
		samples was ideally 8-10 with a maximum of 45, based on KNA. The number of samples per hole was limited to 4. Some domains didn't have enough samples to meet the minimum number of 8-10 so in some cases this was reduced to 4 or 2. Blocks that were not populated in Pass 1 were estimated in Pass 2 with a greater search distance (1.5-2x). During the validation phase of the first RAS model, the high-grading of the MRE due to the influence of some very high grades (for the RSSZ mineralisation) was evident. A search limit of 50m was applied to the samples with values above 10g/t Au to combat the excessive influence of the high-grades in the block model due to the sparse drilling at the north end of RAS. The parent block size was determined from KNA for the 3 larger deposits. CIT 20mY x 10mX x 5mZ RAS 20mY x 10mX x 5mZ SHR 25mY x 20mX x 5mZ SRE 10mY x 10mX x 5mZ Sub-celling to 2.5mY x 2.5mX x 1.25mZ was allowed. The search orientations were based on variogram results, ranging from a bearing of 325° through to 015° and plunge of 20°. Each wireframe was checked against a search ellipse in this orientation and minor changes were made to better match the wireframes. Whilst extrapolation beyond the broad drilling envelopes is no more than 50m, within those envelopes there are large extrapolation distances. Down-plunge extrapolation between data points can be up to 250m. The broad drilling envelopes indicate that mineralisation will be continuous but at this stage it has been assumed or has been partially demonstrated. Infill drilling is planned for a late stage to confirm grade continuity and upgrade the classification. The block models were not rotated. Surpac software v2021 Refresh 1was used for the modelling and Supervisor v8.14.2 for the variography, KNA and validation. GeoAccess was used for summary statistics. A previous estimate from 2019 was compared with the 2021 estimates and there has been a large increase in tonnage and slight increase in grade. No recent mining has been completed therefore no production data was
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. *The assumptions made regarding recovery of by-products.* *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* *Any assumptions behind modelling of selective mining units.* *Any assumptions about correlation between variables.* *Description of how the geological interpretation was used to control the Mineral Resource estimates.* *Discussion of basis for using or not using grade cutting or capping.* *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	

Criteria	JORC Code explanation	Commentary
		available for reconciliation. No by-product recovery was applicable. No estimation of sulphur or arsenic took place. The parent block sizes for CIT, RAS and SHR are larger in this estimate than in 2019 based on the selection chosen from the KNA process. They reflect the wide spacing of drill holes. No SMU correction has been applied at this early stage. Arsenic was not modelled but there is a correlation between arsenic and gold grades. The block model was flagged for each wireframe domain and only samples from within that domain were used for grade estimation. Top-cutting was applied and has been discussed above. Uncut grades were also estimated. Both are reported in the Mineral Resource estimate. The block model grades were compared visually on screen with the drilling assays and composited samples. Reasonable correlation existed between all 3 but there was evidence of grade smoothing in some areas, particularly at the extremities of the wireframes where drilling was sparse. Block model mean grades were compared with composite mean grades for each major wireframe domain. In general, the comparison was quite good with block model grades slightly lower than the input composite grades. There has been some upgrading of the RAS block model grades compared with the composites, mostly in areas where drilling was sparse and there were not enough drill holes to limit the extrapolation of higher-grades over long distances to the wireframe limits. The 50m search limit applied to extreme grades went some way towards mitigation. This is one of the pitfalls of the irregular and sparse drill hole spacing. Swath plots were produced for Y, X and Z directions and showed reasonable correlation between block model grades and composites, with peaks and troughs following the same trends.
Moisture	*Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Tonnages are estimated on a dry tonnage basis.

Criteria	JORC Code explanation	Commentary
Cut-off parameters	*The basis of the adopted cut-off grade(s) or quality parameters applied.*	The reporting cut-off grade of 0.25g/t Au is based on preliminary financial analysis, metallurgical results for recovery and comparison with heap leach operations in other parts of the world.
Mining factors or assumptions	*Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	An open cut mining method has been assumed given the low grades and proximity of the mineralisation to the natural surface. Minimum mining width and mining dilution have not been taken into account. Criteria used to define the mineralisation drill intercepts included 2m minimum length downhole and up to 4m internal waste inclusion.
Metallurgical factors or assumptions	*The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	Recent preliminary metallurgical work by MGL has demonstrated the amenability to heap leach processing. Preliminary recoveries of 68% are reported in 85-day column leach tests of fresh sulphide-bearing mineralisation from 60-80m below surface. Earlier tests on oxide and transitional mineralisation showed the rock is low in clay content and is amenable to agglomeration. Recoveries up to 93.8% were achieved at CIT. Mineralisation in the deposits reported might have a small refractory component in sulphides as seen in leach residues, however, it is unlike the nearby Macraes deposit. The heap leach processing would focus on all oxidation types, oxide, transitional and fresh.
Environmental factors or assumptions	*Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	No environmental factors have been taken into account. It has been assumed there will be no environmental hurdles to Project development.
Bulk density	*Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*	A total of 197 measurements have been used for density assessment. Bulk density was measured for 25 sites in the Project area. At each site, 4-5 rock samples were measured. Samples were dry weighed then suspended in a bucket of water that had been tared. Density was calculated by dividing the sample mass in air by the suspended mass (mass in water).

Criteria	JORC Code explanation	Commentary
	The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	Density measurements were then averaged over the site. Oxidation state for each site was recorded along with rock-type and deformation. Drill core measurements in fresh rock have been added to the database from the 2021 drilling campaign. 10-15cm core pieces were selected and the same method applied as described above. Results were summarised into deposit and oxidation state and averaged. Outliers were removed prior to averaging. Oxide material densities averaged 2.55g/cm^3 for all deposits. Transitional material densities averaged 2.62g/cm^3 and fresh rock densities averaged 2.72g/cm^3. Void space has been included in the measurements.
Classification	*The basis for the classification of the Mineral Resources into varying confidence categories.* *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* *Whether the result appropriately reflects the Competent Person's view of the deposit.*	The Mineral Resource has been classified as Inferred. This is due in the most part to the irregularly spaced and sparse drilling in places, plus the use of trench and channel samples which had longer composite lengths (2-5m). Some of the historic drilling used inferior drilling equipment and/or sampling practices. There is a lack of QC data in the historic drilling and no standards submitted in the 2018 drill sampling. Some of the wireframe domains contain low numbers of samples. Some of the sections at RAS are based on only 2 drill holes. Kriging efficiency and conditional bias slope values are low for all deposits. Whilst there is confidence in the mineralisation continuity there is less confidence in the quality of the drilling and sampling in the historic holes. With more recent MGL/Santana drilling, these are becoming a smaller percentage of the resource drilling compared with the 2019 MRE. There is also less confidence in the grade estimation due to the irregular data spacing, sparseness and the effect of higher-grade samples in these areas. QC practices have dramatically improved in the 2020-2021 drilling and there is greater confidence in these results. The Inferred Mineral Resources classification reflects the view of the Competent Person. Infill drilling and replacement of the historic holes, trench and channel samples with new drill holes is expected to improve estimation quality.
Audits or reviews	*The results of any audits or reviews of Mineral Resource estimates.*	There have been no audits or reviews of the Mineral Resource estimates.
Discussion of relative accuracy/confidence	*Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the*	Factors that could affect the relative accuracy of the Mineral Resource estimate have been detailed in the points above. These factors are reflected in the classification of the estimate.

Criteria	JORC Code explanation	Commentary
	application of statistical or geostatistical procedures to quantify the relative accuracy of the Mineral Resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	The Mineral Resource estimates are global estimates. No relevant production data are available as the deposits have not been mined since the 1930's.