NZX:SMI



22 April 2025

# **BOGP — NEW RAS OPEN PIT STAGES**

The Board of Santana Minerals Limited (SMI, 'Santana' or the 'Company') has previously advised its intent to refine its initial Pre-feasibility Study (PFS) for its Bendigo-Ophir Gold Project (BOGP) released on November 15, 2024, using the new drill results and revised Mineral Resource Estimate (MRE) announced on March 4, 2025.

These works have so far been focussed on selective and manual pit designs on the Rise and Shine (RAS) deposit with a two-fold purpose:

- 1. Improved staging of open pits in the initial years with a priority focus on the extraction of the High-Grade (HG1) domain resource subset which contains a total MRE of 1.07 million ounces of gold at an average grade of 4.7g/t with the Indicated component being 6.4 million tonnes at 4.5g/t containing 919,000 ounces.
- 2. Estimating the minimum necessary overburden removal to enable a sustainable supply of ore for processing. In doing so, lowering the pre-strip capital burden for the operations to become self-sustaining from a cash flow perspective earlier in the project.

The outcomes of these studies are:

- The revised pit staging means the volume of pre-strip to expose ore can be 7.9 million bank cubic metres (bcm) down from 15 million bcm modelled in the November 2024 PFS.
- Five initial stages of open pit mine designs result in 30.5 million bcm of total material for an undiluted 5.95 million tonnes of Indicated resource at a grade of 3.38g/t containing 617,000oz of gold (97% Indicated category).

Work on modifying factors related to ore dilution and the next phases of open pit and/or underground mining is ongoing and will be incorporated into a forthcoming PFS Update expected in the ensuing quarter. These continued efforts, focused on reducing the capital impost for development, may render the current PFS mining strategy superseded. As such, shareholders should not consider the existing PFS as the preferred development plan for the BOGP. The Company intends to present its revised development strategy in the PFS Update.

# Santana CEO, Damian Spring commented:

"This progressive step in finessing our initial PFS demonstrates the option to significantly reduce the pre-strip volume. Smarter pit staging clearly rebalances the waste removal equation in the initial stage and has the potential to re-shape the project's capital burden. Furthermore, it shouldn't be lost on the investor that the Australian dollar gold price has risen over 25% since the initial PFS which substantially enhances the robustness of the project."



#### Open Pit Mining - PFS Revisions

The initial PFS released in November 2024 assumed a much larger pre-strip as a critical path to gold production, removing approximately 15 million bcm of bulk waste overburden with large scale mining fleets. The geometry of the underlying orebody meant a significant ore stockpile and consequent glut of mill feed for future production years, with inconsistent balance of waste and ore stripping over the mining cycles.

As opposed to the global optimisation process applied in the initial PFS, a series of selective and manually designed open pits with progressive cut-backs have now been designed. These all fall within the ultimate pit design as outlined within the initial PFS and provide for a more balanced waste to ore mining process. It should be noted at this point there remains further stages of mining to be refined along with the integration of underground mine development for longer term sustainable ore production. These works are progressing and will be presented in a wholesome PFS Update this quarter.

The table below summarises the ore and waste inventories in the initial five stages of RAS manual pit designs when intersected with the current MRE.

	TOTAL CONTAINED ESTIMATE FROM MRE (undiluted)				WASTE	%
STAGE	ROUNDED TOTALS				VOLUME	INDICATED
	VOLUME	TONNES	GRADE	OUNCES		
	(bcm)	(t)	(g/t)	(oz)	(bcm)	
STAGE 1	287,400	783,600	1.56	39,350	7,920,000	93%
STAGE 2	305,000	831,000	2.23	59,600	4,112,000	100%
STAGE 3	-	ı	ı	ı	7,350,000	
STAGE 4	359,500	976,200	3.59	112,750	5,351,000	100%
STAGE 5	1,239,900	3,364,700	3.75	405,300	5,791,000	96%
TOTAL	2,191,800	5,955,500	3.38	617,000	30,524,000	97%

Table 1. Mineral inventory contained in RAS updated pit stages (1 to 5)

# **RAS Revised Open Pit - Staged Mining Sequence**

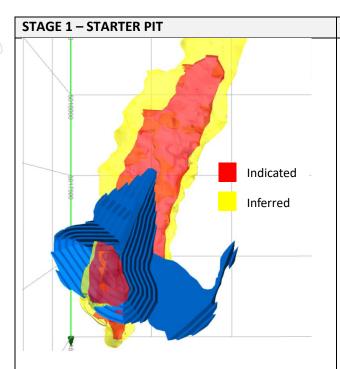
The updated RAS pit stages focus on the minimum pre-strip scenario by vectoring pit shells on near surface ore at the southern end of the RAS deposit. The designs now incorporate updated advice on geotechnical parameters which include minor wall angle improvements, achieved since the PFS.

While the average grade is lower at the southern end of RAS, this approach supports the early establishment of sustainable ore production in a balanced manner, enabling a progressive ramp-up in output. It also allows bulk stripping of subsequent pit stages to proceed in parallel without impacting overall productivity.



### **RAS PIT STAGING STRATEGIC PLAN**

Each stage of mining is defined and summarised below.

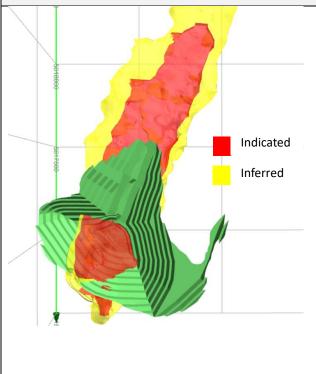


The Stage 1 Pit is designed to access nearsurface resource blocks at a grade of ~1.6g/t at RAS South. This stage will be completed by excavating ~7.9 million bcm of TZ3 waste to expose ore for commissioning the plant.

The TZ3 bulk waste overburden will be stripped off the deposit until exposure of the Thomson Gorge Fault (TGF) interface, then the ore zone beneath the TGF will undergo detailed control practices and then be selectively mined with an appropriately sized ore fleet.

The gold resource at RAS South inside Stage 1 includes 783kt at 1.56g/t of undiluted mineral resources.

### STAGE 2

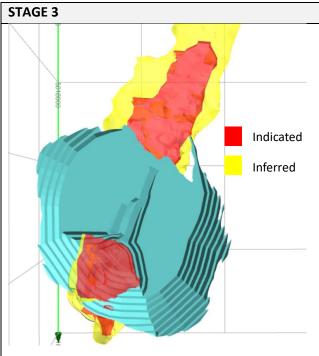


The Stage 2 Pit incorporates a new ramp to maintain access to the pit floor as the Stage 1 ramp is mined out.

The pit floor is mined down to the 590RL providing access to higher grade resource blocks. Stage 2 provides access to future pit stages (Stage 3 and 4).

Stage 2 contains 4.1M bcm of waste rock and 831kt at 2.23g/t of undiluted mineral resource.





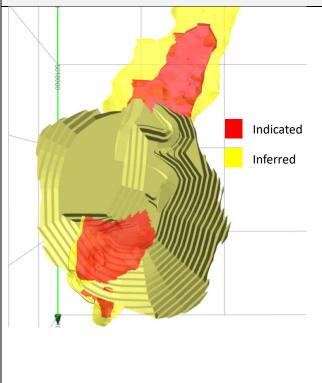
The Stage 3 Pit is excavated concurrently with Stage 2 with scheduling focussed on continuous exposure of ore.

The Stage 3 Pit is essentially the strip out of the northern section area to its full dimensions in preparation for chasing the HG1 (high-grade core) as it dips away from the pit.

Waste stripping is focused on ultimately establishing a flat floor at the 655RL, to enable easy access into the Stage 4 pit.

The Stage 3 Pit mines 7.3M bcm of waste rock to expose Stage 4 ore.

#### **STAGE 4**



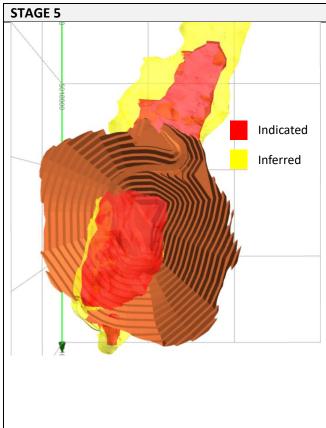
The Stage 4 Pit selectively strips waste as the move north continues to expose the upper zones of the HG1 domain.

This stage enables exposure of significantly higher grades, increasing to 3.6g/t. The pit advances 80m north down to the 570RL, excavating the high-grade core while maintaining strict control of the permanent eastern wall, situated on the western side of Battery Hill.

A permanent ramp is cut in at the 630RL servicing Stage 4 and Stage 5, exiting at a low point in Ferret Gully, to the north.

Stage 4 is mined to 570RL and contains 5.1M bcm of waste rock and an undiluted resource of 976kt at 3.59g/t.





The Stage 5 Pit mines the western side of the high-grade domain at 3.75g/t.

Mined to the 520RL, Stage 5 contains 5.7M bcm of waste rock and exposes an undiluted 3.3Mt at 3.75g/t of mineral resources.

This ore will be progressively exposed and mined to fulfill ore processing requirements whilst additional waste stripping in future stages expose additional open pit ore supply. Stage 6 is likely to continue coincident with Stage 5, however it remains subject to design considerations as part of the efficient pit stage planning toward the ultimate shell. Further, its integration with a proposed underground development also requires detailed scheduling.

The progressive and initial open pit staging as illustrated in Figure 1, shows the pre-strip required to access mill feed in Pit Stage 1 (blue line), with subsequent cut backs to access the HG1 domain (mauve shape). The LG1 domain (green shape), is classified in the Indicated JORC category, and averages 1.5g/t. Figure 1 also shows subsequent pit stages in long section, focused on extraction of the HG1 domain, while staging through LG1 to minimise the pre-strip and fund the project within 12 months from mining.



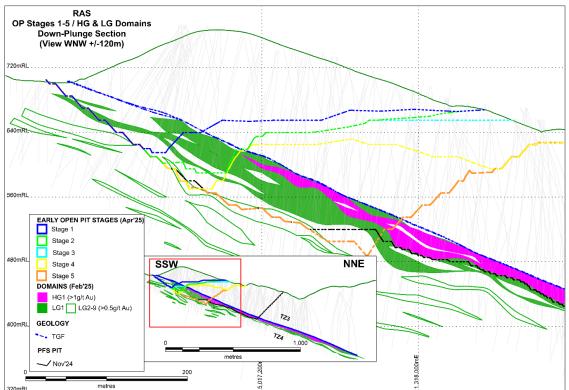


Figure 1. RAS Long Section showing pit stages and HG1/LG1 domains

Figure 2 below presents the revised pit stages in plan view, focusing on RAS South and progressively cutting back toward the HG1 domain.

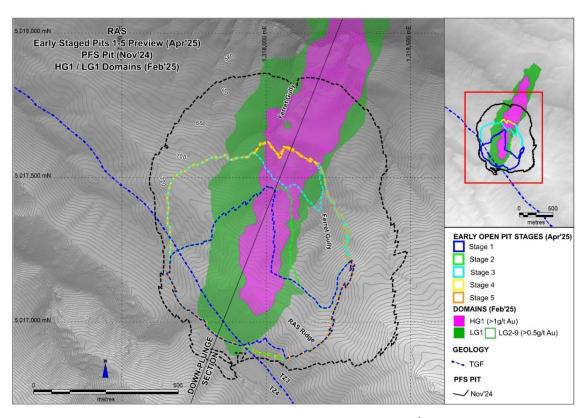


Figure 2. RAS plan view showing pit stages and HG1/LG1 domains



Figure 2 also shows the pre-strip required to access mill feed in Stage 1 (blue line), this time with reference to the JORC-category resource domains (Inferred and Indicated), showing the focus on Indicated material for all stages.

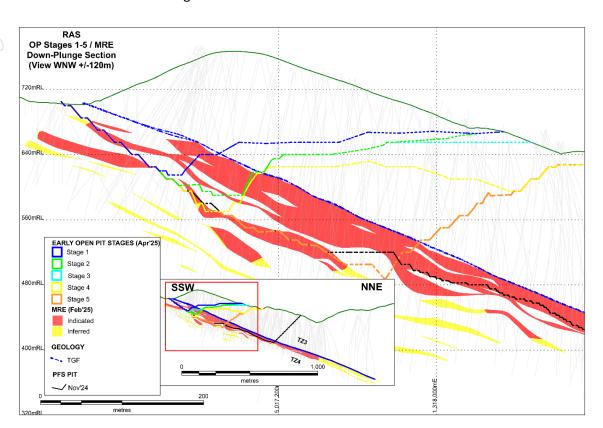


Figure 3. RAS Long Section showing pit stages and JORC resource categories

Figure 4 below shows the revised pit stages in plan-view, and shows the focus on Indicated resources that underpin the revised mine plan.



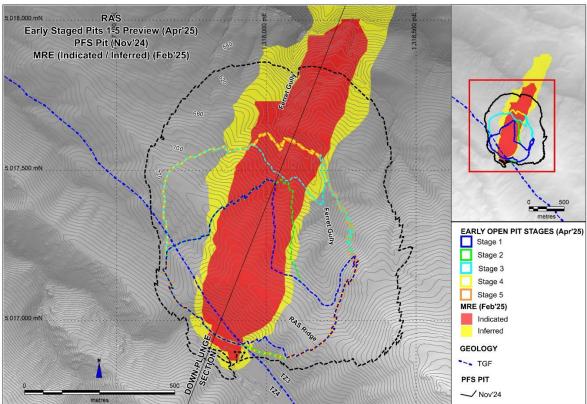


Figure 4. RAS plan view showing pit stages and JORC resource categories

### **Key Outcomes of the Revised Option**

This review of open pit staging shows there is imminent flexibility in the ultimate development strategy for the RAS orebody.

Depending on the quantity and timing of capital allocated to waste pre-strip that the Company chooses to endure, the revised options potentially allow for a more cost-effective mining ramp-up.

Under this revised plan, the first five stages intersect 617,000 ounces of the undiluted Mineral Resource model.

Santana is pleased to present this interim development pathway as part of its broader update to the initial PFS. While mining studies continue on further open pit stages and the integration of underground operations, work is also advancing on process plant sizing, flow sheet refinement, and revised capital estimates for the plant and associated infrastructure. Updates on these elements will be released as they become available in the coming weeks.

The Company remains focused on delivering a development plan that is both realistic and achievable, while continuing to seek opportunities for improvement as it progresses through the permitting process. The updated PFS, which is scheduled to be released this quarter, will provide a refined strategy for the development and funding of the project, reflecting what Santana believes will be materially improved outcomes.



This announcement has been authorised by the Board.

# **Enquiries:**

Damian Spring
Exec. Director & CEO
dspring@santanaminerals.com

Sam Smith
Exec. Director Corp Affairs & IR
ssmith@santanaminerals.com



## **Bendigo-Ophir Gold Project Mineral Resource Estimate**

The Project contains a Mineral Resource Estimate (MRE) calculated at a cut-off grade of 0.5 g/t Au with top cuts applied, as at March 2025:

Deposit	Category	tonnes (Mt)	Au grade (g/t)	Contained Gold (koz)
RAS	Indicated	18.9	2.5	1,538
KAS	Inferred	7.6	2.2	542
RAS Total	Indicated and Inferred	30.6	2.3	2,080
CIT	Inferred	1.2	1.5	59
SRX	Indicated	2.2	0.8	54.7
SRX	Inferred	2.9	1.0	90.5
SRX Total	Indicated and Inferred	5	0.9	145
SRE	Indicated	0.4	0.8	10.3
SRE	Inferred	1.1	1.2	42
SRE Total	Indicated and Inferred	1.5	1.1	52
DOCD Total	Indicated	21.5	2.3	1,603
BOGP Total	Inferred	12.7	1.8	734
BOGP Total	Indicated and Inferred	34.2	2.1	2,337

Table 2. Bendigo-Ophir Gold Project Mineral Resource March 2025

## 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 "Bendigo-Ophir Gold Project Pre-Feasibility Study" dated 15 November 2024
- ASX announcement titled "RAS Mineral Resource Estimate Review" dated 4 March 2024

A copy of such announcements is available to view on the Santana Minerals Limited website <a href="www.santanaminerals.com">www.santanaminerals.com</a>. 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 CompetentPerson'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 the March 2025 RAS Mineral Resource Estimates (MRE) and to the November 2024 SRX and SRE MRE, is based on work completed by Mr Kerrin Allwood, a Competent Person (CP) who is a Member of The Australasian Institute of Mining and Metallurgy (AusIMM). Mr Allwood is a Principal Geologist of GeoModelling Limited, Petone, New Zealand 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 Allwood consents to the inclusion in this report of the matters based on his information in the form and context in which it appears. Mr Allwood and GeoModelling Limited are independent of Santana Minerals Ltd.

The information in this report that relates to prior 2021 Mineral Resource Estimates (2021 MRE) for CIT deposit completed by Ms Michelle Wild (CP) (ASX announcement on 28 September 2021) continue to apply and have not materially changed.

The Company confirms that the form and context in which the Competent Persons' 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 materialise 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.