

## 2023 Field Program Outline for the Estelle Gold Project

### **Following the release of the robust Phase 2 Scoping Study, helicopters, pad building crews and geologists are now all onsite to commence preparations for the 2023 field program**

- The Phase 2 Scoping Study, which was based on a mining scenario up-fronting the higher grade and excludes the Cathedral 2 Moz Au Inferred resource, confirmed the potential for a commercially robust mining operation at the Estelle Gold Project with an 11 month payback period and strong financial and mining metrics as detailed below (ASX Announcement: 15 May 2023)
  - Net Present Value (NPV<sub>5%</sub>) of US\$654M (~A\$981M) pre-tax
  - Internal Rate of Return (IRR) of 53% pre-tax
  - 11 month payback period
  - Undiscounted net free cashflow of US\$945M pre-tax
  - Annual free cash flow after the payback period of ~ US\$56M pre-tax
  - All in Sustaining Costs (AISC) 1st year US\$510/oz and Life of Mine (LOM) US\$1,149/oz
  - Pre-production capital of US\$385M for a central processing plant and infrastructure
  - The entire project area is situated on State of Alaska mining claims
- The study provides great exploration upside and a solid platform for growth and has identified clear opportunities for immediate improvement of metallurgical test works that would add to the bottom line
- Importantly, the study sensitivity analysis (Figure 1) also highlighted how increasing the LOM average mill feed grade above the current 0.73 g/t Au, by even a small percentage, can have a significant impact on the project's NPV and other financial metrics – a 10% increase in grade to just 0.8% g/t Au increases the NPV by ~ US\$277M. Consequently increasing this mill feed grade above 0.73 g/t Au is now the core focus for the company in the 2023 drill program
- While the company will obviously continue to seek out more very high-grade blow out zones like those encountered at RPM North, the study's sensitivity analysis has clearly shown that any significant strikes at even much lower grades (but above the current mill feed grade of 0.73 g/t Au) should have a positive impact on the project's economic metrics
- Helicopters, pad builders, and geologists are now all on site (Figures 2 and 3) to commence the preparation work and pad building for the upcoming drill season, with an average of 3 drill rigs and 15,000m to focus on the RPM and Train areas
- Nova is pleased to have now employed the services of Mr Hans Hoffman on a full-time basis as Head of Exploration. Hans was the pioneer who years ago discovered the RPM North and Korbelt deposits during Teck Resources exploration on-site

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- Most of the 2023 drill program will be focused on the RPM area (Figures 4 and 5) with the aim to further infill and expand the at surface, higher grade (to exceed the current mill feed grade of 0.73 g/t Au) resources at RPM North and RPM South and the very high priority 600m continuous target area linking the 2 deposits, where the lower parts of holes RPM-037 (ASX Announcement: 21 December 2022) and RPM-025 (ASX Announcement: 4 October 2022) intersected a 2<sup>nd</sup> large mineralized intrusive
- The remainder of the 2023 drill program will target the Train area, (Figures 6 and 7) where RPM-style mineralization was discovered (ASX Announcement: 16 January 2023), with the aim to define a 3rd gold resource in the area
- Surface exploration mapping and sampling programs will also be conducted as part of the 2023 field season. These will be primarily focused on the RPM and Train areas, as well as at the highly prospective 3km long polymetallic Au-Ag-Cu system at the Stoney prospect (Figure 8)
- Another successful winter road season has now been completed in preparation for the 2023 field season
- The company continues to support the proposed West Susitna Access Road situated on State land within the Matanuska-Susitna Borough, and which also has considerable support from both the community and local and State government, and has progressed to the permitting stage, with construction proposed to start in 2025 (Figure 9)

### Upcoming Milestones

- Commencement of drilling
- Material PFS test work results and trade-off studies as they become available
- Drilling and assay results at the RPM area
- Drilling and assay results at the Train area
- Updated global MRE following the assay results return (Improvements on mill feed grade being the focus)
- Results and potential new discoveries from the ongoing surface exploration mapping and sampling program
- Metallurgical test work ongoing
- Environmental test work ongoing
- Snow Lake Lithium MRE and PEA (SK-1300 IA)
- West Susitna access road updates

**Nova CEO, Mr Christopher Gerteisen commented:** “With the completion of the Phase 2 Scoping Study, which was a major milestone for the company and provided some clear goals going forward particularly in relation to increasing the LOM mill feed grade and optimizing the process flowsheet, we are excited to be ramping up the activity on site as we prepare for our upcoming 2023 drill program.

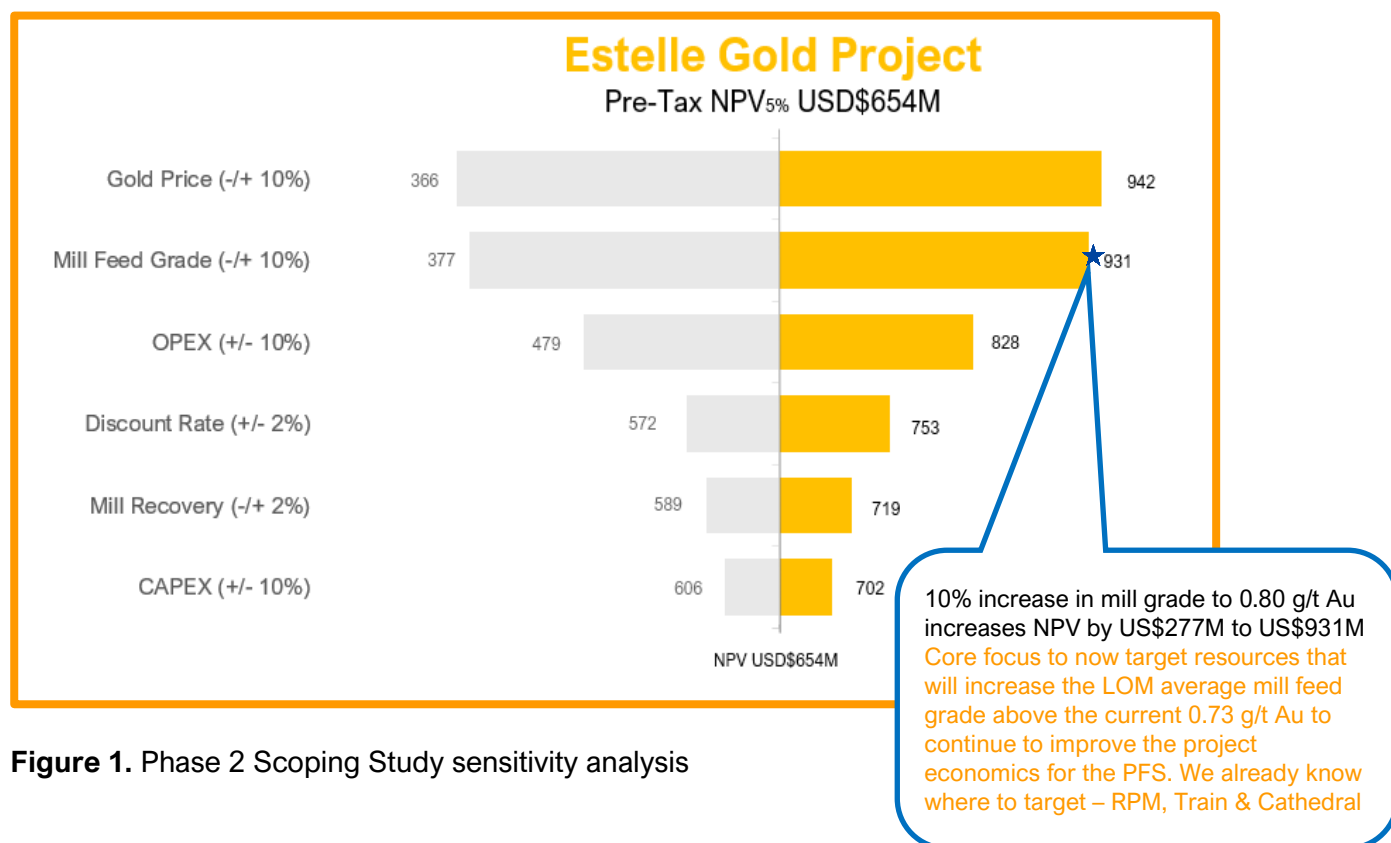
This year our drill program and test work is aimed at honing in on walk up targets to rapidly increase the mill feed grade and optimize metallurgical studies further for higher recoveries as the study has shown that any improvements in these areas has the greatest positive impact to the bottom line.



We are confident that the combination of economic and technical strengths which come from having a large, bulk tonnage project in a Tier-1 location, will drive shareholder value as we continue to unlock the Estelle Gold Project on our path towards production.”

**Nova Minerals Limited** (Nova or the Company) (ASX: NVA, OTC: NVAAF, FSE: QM3) is pleased to announce that following the completion of the robust Phase 2 Scoping Study (the Study), preparations are now well under way for the commencement of the 2023 drilling season and the combined team is committed as ever to advancing the unique opportunity we have grown in just 4 short years at the Estelle Gold Project.

The scoping study sensitivity analysis (Figure 1) has shown how sensitive the project is to improvements in the LOM mill feed grade above the current 0.73 g/t Au. Consequently, this year’s drill program will focus on the southern area of the 450km<sup>2</sup> site with a core focus to hone in on more material above this grade to potentially improve the economic metrics further in the PFS.



**Figure 1.** Phase 2 Scoping Study sensitivity analysis



## 2023 Field Season Preparation Work

Following the completion of another successful snow road season, in preparation for the upcoming drilling program, the Whiskey Bravo airstrip has been cleared, fuel and other supplies have been brought in, and helicopters and contractors have now also arrived on site and have commenced moving materials and other supplies for pad building up to the proposed drilling area (Figures 2 and 3). Three drills are also currently winterized and awaiting the completion of pads before being flown up to their initial target locations to commence drilling, subject to weather conditions.

This year the intention is to drill approximately 15,000m utilizing an average of 3 diamond rigs with PFS stage drilling focusing on both increasing the drill density of the resource, plus extensional drilling to further grow the resource, as outlined in the 2023 drill programs below. The drill rigs will be in operation 24 hours a day on rotation, 7 days a week. However, the proposed drilling program is fluid and will be consistently monitored with adjustments being made where deemed necessary based on initial drill core observations as the program progresses throughout the season.



**Figure 2.** Camp and pad building contractors on site





**Figure 3.** Camp activity with helicopters flying pad building and other supplies up to RPM





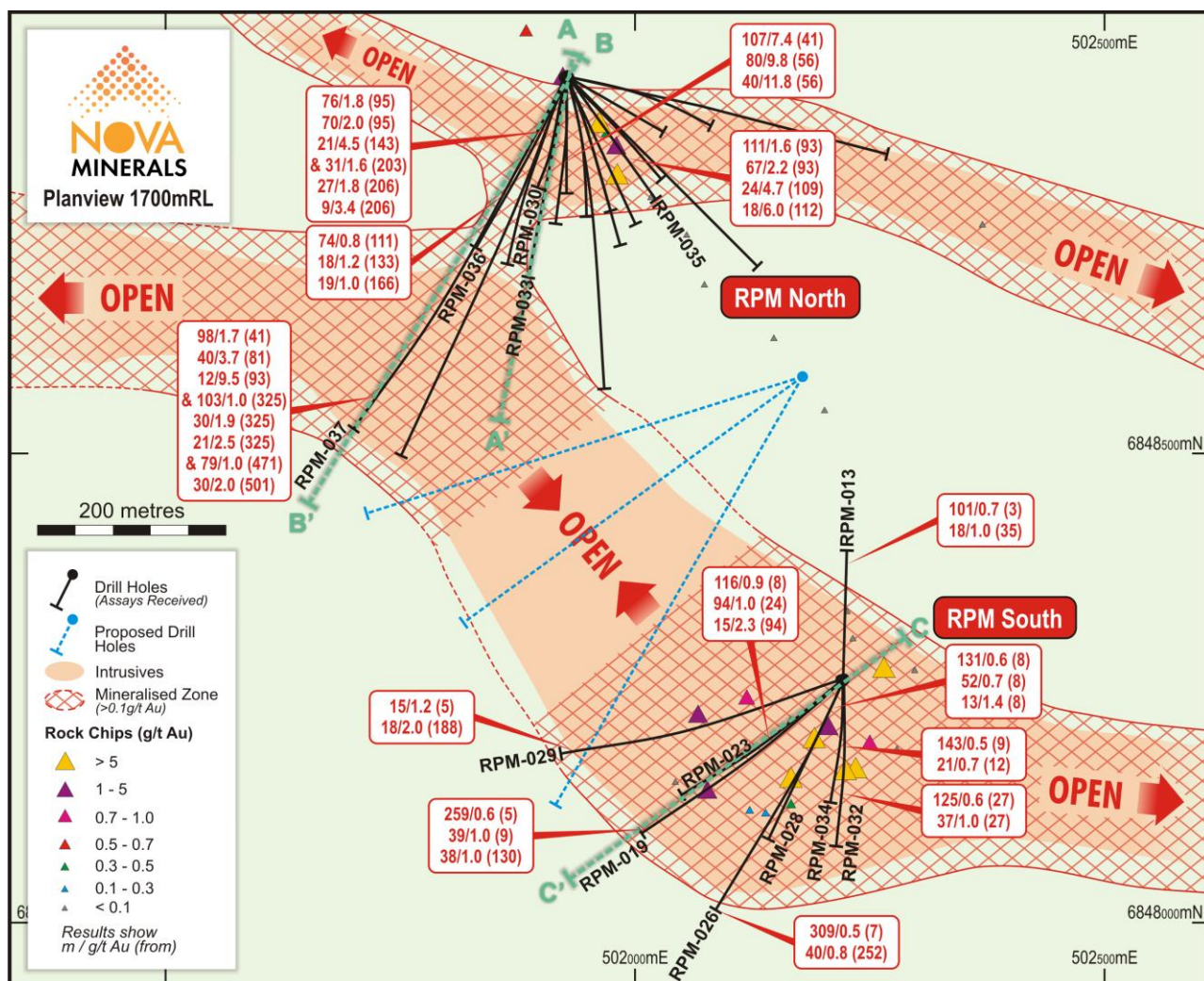
## Proposed 2023 RPM Area Drill Program

This year the core aim of approximately 12,000m drilling at the RPM area (Figure 4) is to further infill and expand the at surface high-grade (to exceed the current mill feed grade) resource around the existing deposits at both RPM North (currently 450mL x 150mW) and RPM South (currently 400mL x 250mW). In addition, drills will also target the 600m high priority continuous mineralized area linking RPM North to RPM South which intersected a 2nd large mineralized intrusive in the lower part of holes RPM-037 (ASX Announcement: 21 December 2022) and RPM-025 (ASX Announcement: 4 October 2022), with results including:

- RPM-037: 103m @ 1.0 g/t Au, incl 30m @ 1.9 g/t Au, 21m @ 2.5 g/t Au from 325m
- RPM-037: 79m @ 1.0 g/t Au from 471m, incl. 30m @ 2.0 g/t Au from 501m
- RPM-025: 76m @ 1.2 g/t Au from 440m, incl 43m @ 1.5 g/t Au from 474m



**Figure 4.** Proposed 2023 drill program target areas at RPM







## Proposed 2023 Train Area Drill Program

A maiden approximately 3,000m drill program in the Train area this year (Figure 6) will focus on exploration and resource definition drilling to target the RPM-style mineralization which has been observed at both Train and Trumpet (ASX Announcement: 16 January 2023), and in the 1.5km strike length between the 2 prospects, with the ultimate aim to define a 3<sup>rd</sup> gold resource in the Train area in 2023.

Geological observations and high-grade rock chip samples obtained from the Train and Trumpet prospects (Figure 7), including;

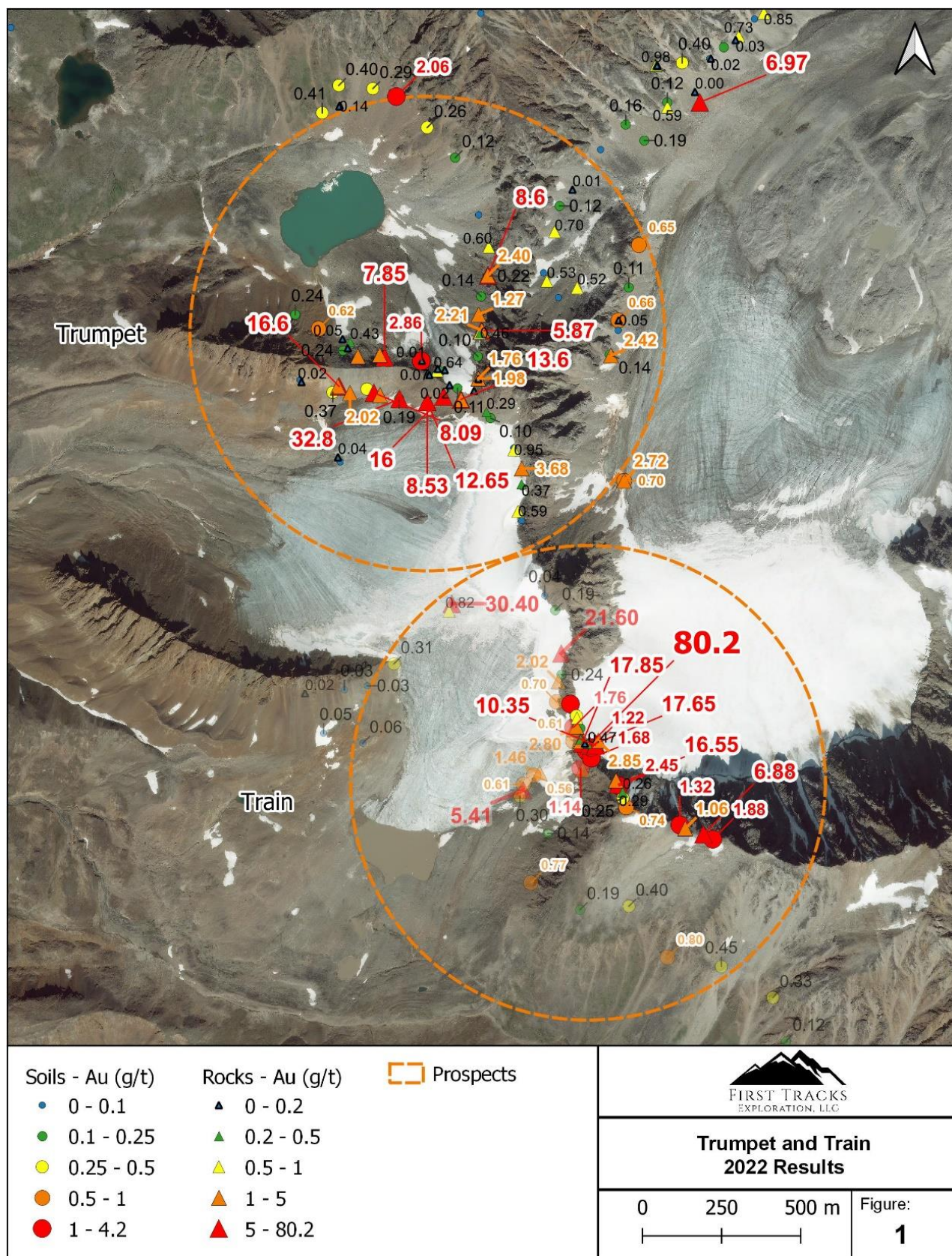
- Train - 80.2 g/t Au, 30.4 g/t Au, 24.5 g/t Au, 21.6 g/t Au and 17.9 g/t Au
- Trumpet - 32.8 g/t Au, 16.6 g/t Au, 16.0 g/t Au, 13.6 g/t Au and 12.7 g/t Au
- 1.5km link between Train and Trumpet - 30.4 g/t Au & 21.6 g/t Au

provide the potential for another very large exposed at surface intrusion related gold system (IRGS) in the area, located just 7km north of RPM.



**Figure 6.** Proposed 2023 drill program target areas at Train





**Figure 7.** Train and Trumpet area rock chip sample results map – Plan view





## Nova Head of Exploration, Hans Hoffman - Geological Engineer Experience

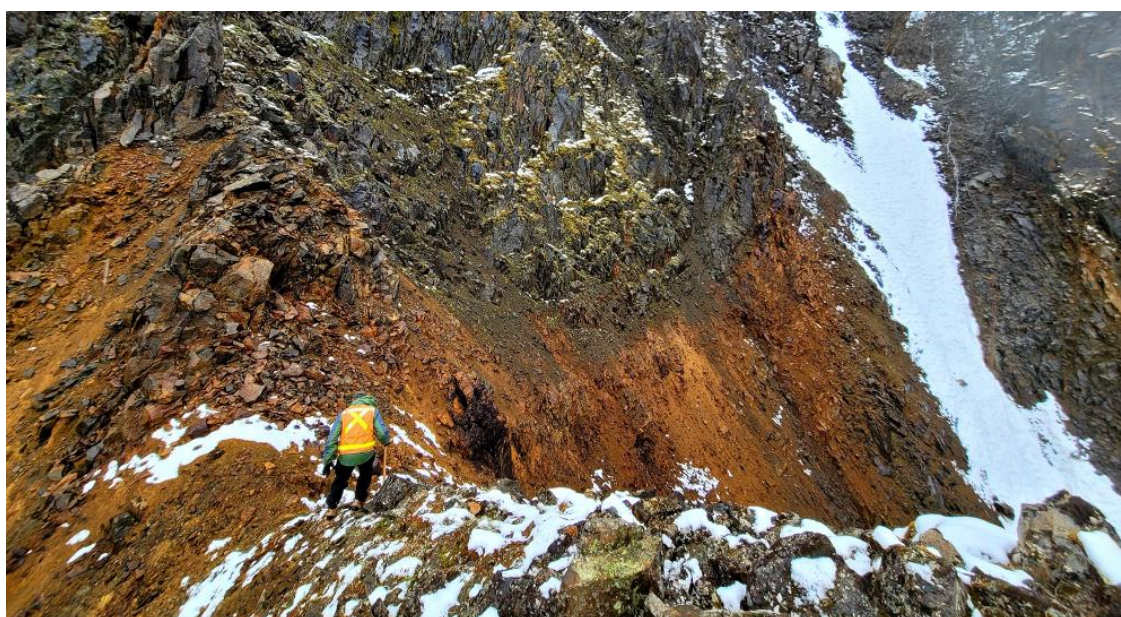
Nova is very pleased to advise that the company has now employed the services of Mr Hans Hoffman on a full-time basis as head of exploration. Hans was the pioneer who years ago discovered the RPM North and Korbel deposits during Teck Resources exploration on-site.

Hans has 15 years' experience developing, conducting, and managing geotechnical engineering and mineral exploration projects. At ASRC Energy Services (AES) since 2013, his experience has focused primarily on the mining and oil and gas industries in Alaska supporting resource development projects. He has provided geotechnical engineering and project management for roadway and pipeline alignment and design, tailings dam facilities, building foundations, and rock quarry investigations. His geology experience includes regional scale minerals reconnaissance, property scale geologic mapping and sampling, and prospect scale minerals delineation. His environmental experience includes geochemical analysis of contaminated sites and the preparation of storm-water pollution prevention plans. Throughout his career Hans has used his skills in geospatial analysis and database management to produce geologic maps, three-dimensional models, and support various technical reports. Other responsibilities have included supervising field and laboratory investigations; working with clients, regulatory agencies, and other stakeholders; and coordinating multidisciplinary design teams, support staff, and subcontractors.

## 2023 Surface Exploration Mapping and Sampling Programs

Regional surface exploration mapping, sampling and prospecting programs targeting further discoveries across the Estelle Gold Project will be undertaken in the 2023 field season. Field crews have been mobilized for an early start to provide time during the field season to follow-up and potentially identify additional drill targets.

The exploration programs will focus on the RPM, Train and Stoney (Figure 8) prospects in the southern portion of the claim block with the aim to generate new drill targets to ultimately increase the global resource inventory across the district scale Estelle Gold Project.



**Figure 8.** Geologist at the Stoney prospect from previous year's exploration in the area





## West Susitna Access Road Progresses to Permitting

An independent economic study prepared for the Alaska Industrial Development and Export Authority (AIDEA), and fully supported by the Alaska State Governor, recommends the West Susitna Access Road begins the permitting process with construction proposed to start in 2025.

AIDEA has submitted the CWA 404 permit application to the USACE for the West Susitna Access project, initiating the environmental review process through compliance with the National Environmental Policy Act. Field studies will begin this summer with further evaluation of cultural and historical sites, fish and wildlife habitat, engineering refinement, and alternative route analysis. (Figure 11).

Alaska Governor, Mike Dunleavy, who fully supports the roads construction said “The West Susitna Road is important for local residents and gaining fair access to hunting, fishing, and potential jobs.

My administration is constantly looking at ways to grow our economy and this project is a great opportunity for not only south-central Alaska but the entire state. I am committed to this project and unlocking resources that benefit all Alaskans.”

Construction of the road will scientifically decrease the capital and operating cost of a future mine at Estelle thereby allowing the Mineral Resource cut-off grade to be lowered to the Fort Knox and Dublin Gulch cut-off level.

For the full press release see below

<https://www.aidea.org/Portals/0/PressReleases/3-21-2023%20West%20Susitna%20Access%20Project%20Announcement%20Press%20Release%20Final.pdf>



**Figure 9.** Estelle Gold Project infrastructure solutions



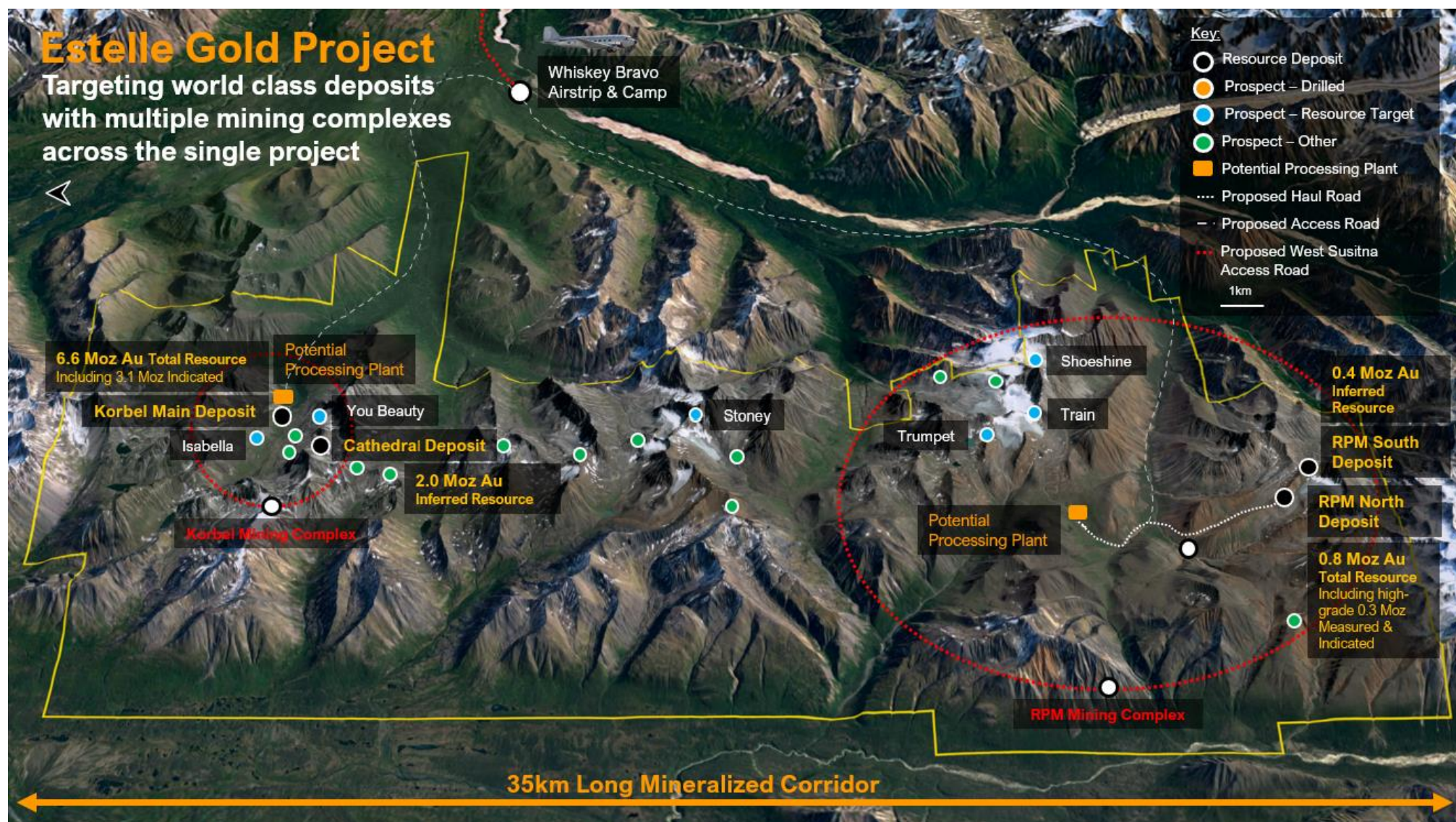


Figure 10. Unlocking the Estelle Gold Project





For further information regarding Nova Minerals Limited please visit the Company's website [www.novaminerals.com.au](http://www.novaminerals.com.au)

This announcement has been authorized for release by the Executive Directors.

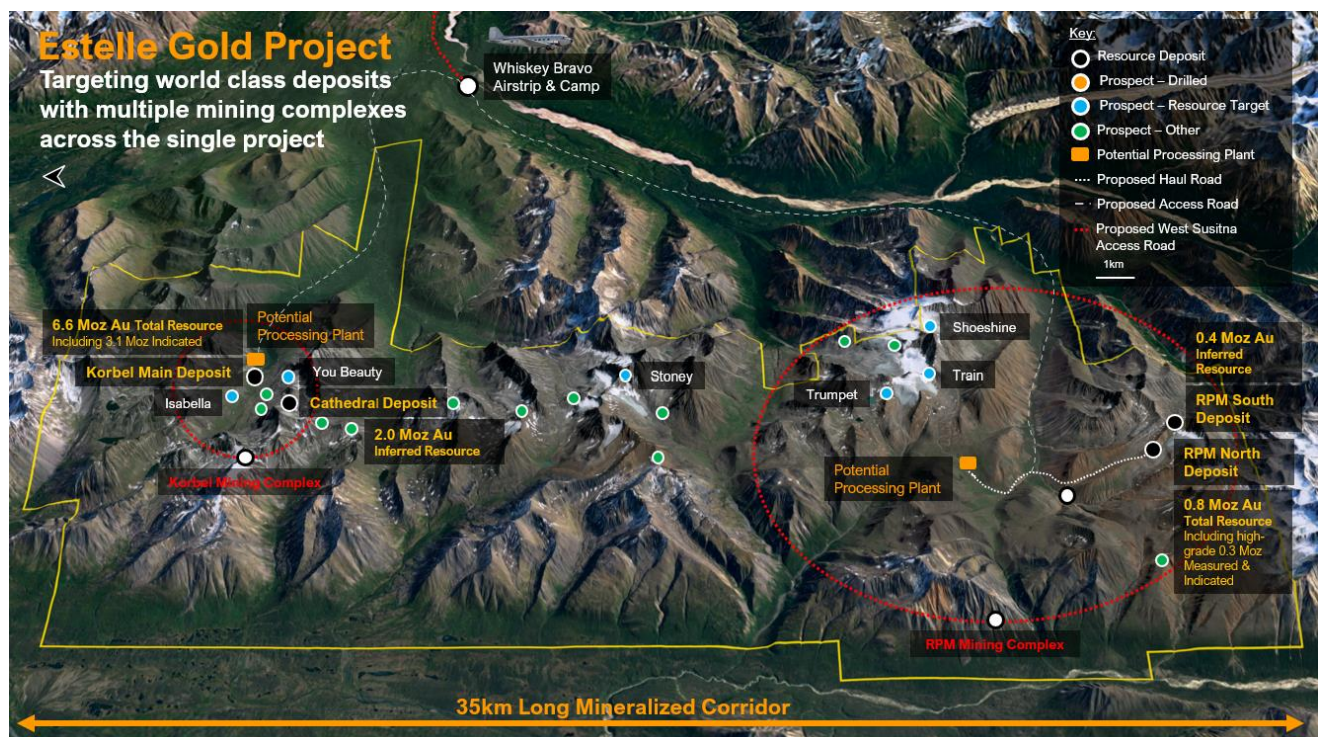
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## About Nova Minerals

Nova Minerals Limited (ASX: NVA) vision is developing North America's next major gold trend, Estelle, to become a world class, tier-one, global gold producer. Its flagship Estelle Gold Project contains multiple mining complexes across a 35km long mineralized corridor of over 20 identified gold prospects, including two already defined multi-million ounce resources across 4 deposits containing a combined 9.9 Moz Au. The project is situated on the Estelle Gold Trend in Alaska's prolific Tintina Gold Belt, a province which hosts a 220 million ounce (Moz) documented gold endowment and some of the world's largest gold mines and discoveries including Victoria Gold's Eagle Mine and Kinross Gold Corporation's Fort Knox Gold Mine.

Additionally, Nova holds a substantial interest in NASDAQ-listed lithium explorer Snow Lake Resources Ltd (NASDAQ: LITM) and a holding in Asra Minerals Limited (ASX: ASR), a gold and rare earths exploration company based in Western Australia, and a 9.9% interest in privately owned RotorX Aircraft manufacturing ([www.rotorxaircraft.com/evtol/](http://www.rotorxaircraft.com/evtol/)) who are seeking to list in the USA in the near future.





### Streamlined Competent Person Statement

Mr Vannu Khounphakdee P.Geo., who is an independent consulting geologist of a number of mineral exploration and development companies, reviewed and approves the technical information in this release and is a member of the Australian Institute of Geoscientists (AIG), which is ROPO accepted for the purpose of reporting in accordance with ASX listing rules. Mr Vannu Khounphakdee has sufficient experience relevant to the gold deposits under evaluation to qualify as a Competent Person as defined in the 2012 edition of the 'Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Vannu Khounphakdee is also a Qualified Person as defined by S-K 1300 rules for mineral deposit disclosure. Mr Vannu Khounphakdee consents to the inclusion in the report of the matters based on information in the form and context in which it appears.

### Cautionary Note Regarding Forward-Looking Statements

This news release contains “forward-looking information” within the meaning of applicable securities laws. Generally, any statements that are not historical facts may contain forward-looking information, and forward looking information can be identified by the use of forward-looking terminology such as “plans”, “expects” or “does not expect”, “is expected”, “budget” “scheduled”, “estimates”, “forecasts”, “intends”, “anticipates” or “does not anticipate”, or “believes”, or variations of such words and phrases or indicates that certain actions, events or results “may”, “could”, “would”, “might” or “will be” taken, “occur” or “be achieved.” Forward-looking information is based on certain factors and assumptions management believes to be reasonable at the time such statements are made, including but not limited to, continued exploration activities, Gold and other metal prices, the estimation of initial and sustaining capital requirements, the estimation of labor costs, the estimation of mineral reserves and resources, assumptions with respect to currency fluctuations, the timing and amount of future exploration and development expenditures, receipt of required regulatory approvals, the availability of necessary financing for the Project, permitting and such other assumptions and factors as set out herein. apparent inconsistencies in the figures shown in the MRE are due to rounding

Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward-looking information, including but not limited to: risks related to changes in Gold prices; sources and cost of power and water for the Project; the estimation of initial capital requirements; the lack of historical operations; the estimation of labor costs; general global markets and economic conditions; risks associated with exploration of mineral deposits; the estimation of initial targeted mineral resource tonnage and grade for the Project; risks associated with uninsurable risks arising during the course of exploration; risks associated with currency fluctuations; environmental risks; competition faced in securing experienced personnel; access to adequate infrastructure to support exploration activities; risks associated with changes in the mining regulatory regime governing the Company and the Project; completion of the environmental assessment process; risks related to regulatory and permitting delays; risks related to potential conflicts of interest; the reliance on key personnel; financing, capitalization and liquidity risks including the risk that the financing necessary to fund continued





exploration and development activities at the Project may not be available on satisfactory terms, or at all; the risk of potential dilution through the issuance of additional common shares of the Company; the risk of litigation.

Although the Company has attempted to identify important factors that cause results not to be as anticipated, estimated or intended, there can be no assurance that such forward-looking information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Accordingly, readers should not place undue reliance on forward-looking information. Forward looking information is made as of the date of this announcement and the Company does not undertake to update or revise any forward-looking information this is included herein, except in accordance with applicable securities laws.