21 July 2025



Drilling Programs Ramp Up at RPM

RPM Drilling Underway with Two Diamond Rigs and One RC Rig

Highlights

- Diamond drilling at RPM North (Figure 1) is focused on testing extensions to the east and west, with the goal of connecting to the RPM Valley zone. An additional rig at RPM Valley is targeting resource expansion and definition (Figure 2). While assay results are pending, early geological observations from the initial drillholes are highly encouraging, showing similar characteristics to those previously encountered at RPM North.
- The reverse-circulation (RC) rig has successfully demonstrated its capability to drill through glacial till, with the first hole achieving 30 meters of penetration within just a few hours (Figure 3).
- Significant resource upside exists within the highly mineralised valley-fill material, which is believed to be derived from erosion of the high-grade RPM North deposit, where a >1g/t goldin-soil anomaly extending over 1.7km has been identified, with estimated mineralised thickness of nearly 40 meters (ASX Announcement: 3 February 2025).
- An additional rig is also continuing a maiden program at the Stibium antimony-gold prospect (Figure 4) with near-surface mineralization observed in initial drillholes.
- Initial closed spaced RC drilling in the Korbel starter pit area has been completed, with samples to be sent to the laboratory for analysis shortly.
- Further exploration mapping and sampling, environmental baseline studies, access road projects, and various technical studies are also underway as part of the ongoing PFS.
- Progress continues on the potential U.S. Department of Defense grant to fast-track development of the Antimony Project, with the Company anticipating an update in the near term.

Nova Minerals Exploration Manager, Mr Hans Hoffman commented: "We are excited to be back at RPM this season, advancing our efforts to grow and upgrade the Valley zone resource to the west, while also testing a compelling conceptual target to the east that could significantly expand the RPM footprint. The first drillhole into the RPM Valley zone has already delivered some of the most promising sulfide mineralisation and quartz veining observed at RPM to date. Encouragingly, it has also extended our understanding of the mineralised intrusive body further north within the Valley zone. We are optimistic that the intrusive/hornfels contact intersected may represent an extension or offset of the high-grade RPM North zone located on the ridge above.

Our RC drilling program is also performing well, rapidly penetrating glacial till and confirming its effectiveness in testing the mineralised valley-fill material derived from RPM North. This material, averaging over 1g/t gold across surface samples, extends for approximately 1.7 kilometers with estimated thickness nearly 40 meters — offering substantial potential for near-surface resource

Phone +61 3 9537 1238

Australia

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upside. Drilling activities at RPM are progressing at full pace, and we look forward to receiving assay results in the near term."

Nova Minerals Limited (Nova or the Company) (ASX: NVA, NASDAQ: NVA, FRA: QM3) is pleased to announce that the 2025 drilling program has commenced at the high-grade RPM deposit, with two diamond drill rigs and one RC rig operating around the clock under Alaska's continuous daylight. Initial geological observations from the first drillholes are highly encouraging and showing similar characteristics to those previously encountered at RPM North. We eagerly await assay results which are expected in the coming months.



Figure 1. Drilling well underway at RPM North





Figure 2. Drilling underway at the highly encouraging RPM Valley zone





Figure 3. RC rig drilling the highly prospective glacial till > 1 g/t Au material





Figure 4. Drilling at pad 2 at the Stibium antimony-gold prospect

Further discussion and analysis of the Estelle Project is available through the interactive Vrify 3D animations, presentations, and videos, all available on the Company's website. www.novaminerals.com.au

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

Christopher Gerteisen
CEO and Executive Director
E: info@novaminerals.com.au

Craig Bentley
Director of Finance & Compliance
E: craig@novaminerals.com.au
M: +61 414 714 196

About Nova Minerals Limited

Nova Minerals Limited is a Gold, Antimony and Critical Minerals exploration and development company focused on advancing the Estelle Project, comprised of 514 km² of State of Alaska mining claims, which contains multiple mining complexes across a 35 km long mineralized corridor of over 20 advanced Gold and Antimony prospects, including two already defined multi-million ounce



resources, and several drill ready Antimony prospects with massive outcropping stibnite vein systems observed at surface. The 85% owned project is located 150 km northwest of Anchorage, Alaska, USA, in the 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, Nova Gold and Paulson Advisors Donlin Creek Gold Project and Kinross Gold Corporation's Fort Knox Gold Mine. The belt also hosts significant Antimony deposits and was a historical North American Antimony producer.

Competent Person Statements

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.

The information in the announcement dated today that relates to exploration results and exploration targets is based on information compiled by Mr. Hans Hoffman. Mr. Hoffman, Owner of First Tracks Exploration, LLC, who is providing geologic consulting services to Nova Minerals, compiled the technical information in this release and is a member of the American Institute of Professional Geologists (AIPG), which is ROPO, accepted for the purpose of reporting in accordance with ASX listing rules. Mr. Hoffman has sufficient experience relevant to the style of mineralization and type of deposit under consideration and to the activity which he is undertaking 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. Hoffman consents to the inclusion in the report of the matters based on information in the form and context in which it appears.

The Exploration results were reported in accordance with Clause 18 of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (2012 Edition) (JORC Code).

The Company is also listed on the NASDAQ in the United States and, as a result, is required in respect of its exploration and resource reporting to comply with the US Securities and Exchange Commission (SEC) requirements in respect of resource reporting in the USA. This requires compliance with the SEC's S-K 1300 resource regulations. Investors accessing the Company's NASDAQ press releases should be aware that S-K 1300 statements made in those releases are not JORC Code compliant statements.

Nova Minerals confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements, and in the case of the exploration results, that all material assumptions and technical parameters underpinning the results in the relevant market announcement continue to apply and have not materially changed.

Forward-looking Statements and Disclaimers

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 labour 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 labour 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 which is included herein, except in accordance with applicable securities laws.



Appendix 1: JORC Code, 2012 Edition – Table 1 Estelle Gold Project - Alaska

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 (e.g. '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 Au that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information. 	 Soil samples were collected from outcrop in-situ lithology or local float where noted Soil samples collected were representative Sampling practice is appropriate and complies with industry best practice. Sample preparation and analysis was performed by ALS laboratories in Fairbanks, following industry best practice standards. The majority of soil samples were collected at predetermined spacing of 400m, 200m, 100m, and 50m distances. Slight deviations are made due to terrain or insufficient soil. Samples are sorted by hand to remove coarser fraction. Typical sample volume is 0.5-1kg. Talus fine sampling is representative of the outcrop above.
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.).	Not applicable – No drilling reported

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Criteria	JORC Code Explanation	Commentary
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Not applicable – No drilling reported
	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	
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.	For soil samples, logging is qualitative and descriptive.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	
	The total length and percentage of the relevant intersections logged.	
Sub-sampling techniques and	If core, whether cut or sawn and whether quarter, half or all core taken.	Soil samples were collected in variable conditions.
sample preparation	 If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. 	 Insertion of standards and blanks by the company was not necessary for the type of sampling undertaken. Routine QA/QC processes at the ALS Laboratory included insertion of duplicates, blanks and standards as per standard procedures.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Startatia production
	 Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples. 	



Criteria	JORC Code Explanation	Commentary
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	
	Whether sample sizes are appropriate to the grain size of the material being sampled	
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. 	 Samples are tested for gold using ALS Fire Assay Au-ICP21 technique. This technique has a lower detection limit of 0.001 g/t with an upper detection limit of 10 g/t. If samples have grades in excess of 10 g/t then Au-GRA21 is used to determine the over detect limit. Au-GRA21 has a detection limit of 0.05 g/t and an upper limit of 1000 g/t. Soil samples are dried at <60degC/140degF and sieved to -180micron/80mesh. Samples are tested for gold using ALS fire assay Au-ICP21. If samples have grades in excess of 10g/t then Au-GRA21 is used. Soil samples are also analysed for 61 other elements using ALS ME-MS61r.
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. 	Assay data are compiled by the CP and then verified by corporate management prior to the release to the public
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control 	 All maps and locations are in UTM grid (NAD83 Z5N) and have been measured by hand-held GPS with a lateral accuracy of ±4 metres and a vertical accuracy of ±10 metres.
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 	 Soil samples were taken from areas across the Estelle Gold and Critical Minerals Project with the focus on collecting material from Quartz- Arsenopyrite Veins. The interpolation of the soils data highlights three main pods of high-grade antimony (> 1,000ppm Sb). High-grade antimony was observed in stibnite veins in outcrop above the two



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	Ore Reserve estimation procedure(s) and classifications applied.	southern anomalies. It is anticipated these veins will be intersected in the proposed 2025 drill core while targeting the soil geochemical anomalies.
	Whether sample compositing has been applied.	Soil samples are collected at intervals ranging from 50m to 400m to provide representative geochemical data across the Estelle property.
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.	Several structural measurements were taken for the veins where possible. The veins dominant orientations were 320 degrees dipping steeply to the southwest
	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.	
Sample security	The measures taken to ensure sample security	 A secure chain of custody protocol has been established with the site geologist locking samples in secure shipping container at site until loaded on to aircraft and shipped to the secure restricted access room at Fairbanks ALS Laboratory for processing.
Audit or reviews	The results of any audits or reviews of sampling techniques and data.	Detailed QA/QC analysis is undertaken on an ongoing basis by Qualitica Consulting.

Section 2 Reporting of Exploration Results

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenement 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 Estelle Gold and Critical Minerals Project is comprised of 514km² State of Alaska mining claims The mining claims are wholly owned by AKCM (AUST) Pty Ltd. (an incorporated Joint venture (JV Company between Nova Minerals Ltd and AK Minerals Pty Ltd) via 100% ownership of Alaskan incorporate company AK Custom Mining LLC. AKCM (AUST) Pty Ltd is owned 85% by Nova Minerals Ltd, 15% by AK Minerals Pty Ltd. AK Minerals Pty Ltd holds a 2%



Criteria	JORC Code Explanation	Commentary
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a	NSR (ASX Announcement: 20 November 2017). Nova owns 85% of the project through the joint venture agreement.
	licence to operate in the area.	 The Company is not aware of any other impediments that would prevent an exploration or mining activity.
Exploration done by other parties	Acknowledgement and appraisal of exploration by other parties	Geophysical, Soil testing, and drilling was completed by previous operators in the past. Nova Minerals has no access to this data.
Geology	Deposit type, geological setting and style of mineralisation	Nova Minerals is primarily exploring for Intrusion Related Gold System (IRGS) type deposits, as well antimony bearing stibnite vein systems, within the Estelle Gold and Critical Minerals Project
Drill hole information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 	Not applicable – No drilling reported
	 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. 	
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. 	Raw assay information was reported without any aggregation for surface samples.
	 Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation 	



Criteria	JORC Code Explanation	Commentary
	should be stated and some typical examples of such aggregations should be shown in detail.	
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	
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') 	Not applicable – No drilling 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.	 Plan view map shows the location of the prospects with respect to other prospects within the Estelle Gold Project.
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.	Does not apply. All Nova results have been disclosed to the ASX via news releases.
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.	No other substantive exploration data has been collected.



Criteria	JORC Code Explanation	Commentary
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. 	Drilling for 2024, and all assay results from it, have been received and announced. Results of rock and soil samples from the 2024 surface exploration have also all been received and announced. This announcement details the drilling and exploration plan for the 2025 field season only.