

Antimony Ore Sorting Results Show Significant Upgrade

Ore sorting test work on Styx antimony bulk sample shows 132% upgrade yielding 49.1% antimony trisulfide (Sb_2S_3) product

Estelle's antimony discovery could provide a strategic U.S. solution to strained supply chains

Highlights

- Conceptual flowsheet outlines clear path for onsite recovery and upgrading of antimony ore using ore sorting (
- Figure 2).
- 500kg bulk ore sorting test work on Styx sample demonstrated positive results from a single pass yielding high antimony recovery of 60.3% in 26.1% of the mass, at a grade of 35.2% Sb (49.1% Sb_2S_3) – a 2.3 times upgrade from the feed grade 15.2% Sb (24.5% Sb_2S_3) (Table 1 and Figures 1 and 2).
- Gold is beneficially rejected to the antimony ore sorting tail. Test work results demonstrate a gold recovery of 52.5%, upgrading the grade from 1.90 g/t Au to 2.99 g/t Au – an increase of 57.4% which demonstrates a strong potential for synergy between antimony and gold processing circuits at the Estelle Project (Table 1 and Figure 2).
- The test work confirms that an upgraded, saleable antimony ore concentrate can be produced for further processing, with Nova continuing to explore options to establish a U.S. domestic supply chain for antimony in Alaska.
- Beneficiation and purification test work are underway to develop and refine the rest of the downstream flowsheet.
- Ore sorting test work on the bulk Stibium sample is nearing completion and results will be reported in due course.
- Western Defense Supply Chains Under Pressure — Nova's high-grade antimony discoveries at Estelle offer a potential strategic U.S. solution.

Nova Minerals CEO, Mr Christopher Gerteisen commented: “These ore sorting results from our Styx prospect represent a significant breakthrough in the advancement of Estelle's critical minerals strategy. Achieving a 132% upgrade to produce a 49.1% antimony trisulfide concentrate from a single pass demonstrates Estelle's high-grade antimony is amenable to low-cost, scalable, on-site processing. Importantly, we've shown that 60.3% of the contained antimony can be recovered in just 26.1% of the mass, with gold beneficiating to the tailings — opening up synergies between the antimony and gold circuits at Estelle. With this success, we believe Nova is rapidly positioning itself to become the first fully integrated U.S. domestic antimony producer at scale.

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In the current geopolitical environment, where Western defense supply chains are under immense pressure, we believe our Estelle Project stands out as a truly strategic asset. With Styx and Stibium now confirmed as high-grade, near-term development prospects, and U.S. government engagement well underway through our DIBC membership and DoD grant applications, Nova is fast-tracking a solution to the critical antimony supply gap. We are proud to lead the charge in re-establishing domestic production of this defense-essential mineral, and today's results mark another key step toward potentially delivering a secure, U.S.-based supply chain — right here in Alaska.”

Nova Minerals Limited (Nova or the **Company**) (**ASX: NVA, NASDAQ: NVA, FRA: QM3**) is pleased to announce results from the Styx antimony ore sorting test work program which in our opinion is showing outstanding results and that an upgraded, saleable antimony ore concentrate can be produced for further processing.

Ore Sorting Test work

Nova and METS Engineering (METS) partnered with Steinert Mining (Steinert) to evaluate the amenability of the Estelle ore body to sensor-based ore sorting.

Nova provided 500kg of Styx prospect ore for a bulk ore sorting test. The results from the bulk test demonstrated the Estelle antimony ore is amenable to ore sort upgrading with an XRT algorithm. Table 1 shows the results of the ore sorting test work, presented as the three concentrates and tail produced from the test work's three passes. Figure 1 presents the cumulative recovery, mass pull and grades obtained from the test work.





Figure1. Ore sorted material from a single pass (See Table 1 Con 1) grading 49.1% antimony trisulfide (35.2% Sb)

Table 1. Results of ore sorting test work

Stream	Mass	Antimony			Gold	
	Recovery (%)	Grade (Sb%)	Trisulfide (Sb ₂ S ₃ %)	Recovery (%)	Grade (g/t Au)	Recovery (%)
Feed	100	15.2	24.5	100	1.90	100
Con 1	26.1	35.2	49.1	60.3	0.83	11.4
Con 2	26.8	17.1	23.9	30.1	1.48	20.8
Con 3	13.6	7.22	10.1	6.5	2.14	15.3
Tailings	33.5	1.45	2.02	3.2	2.99	52.5

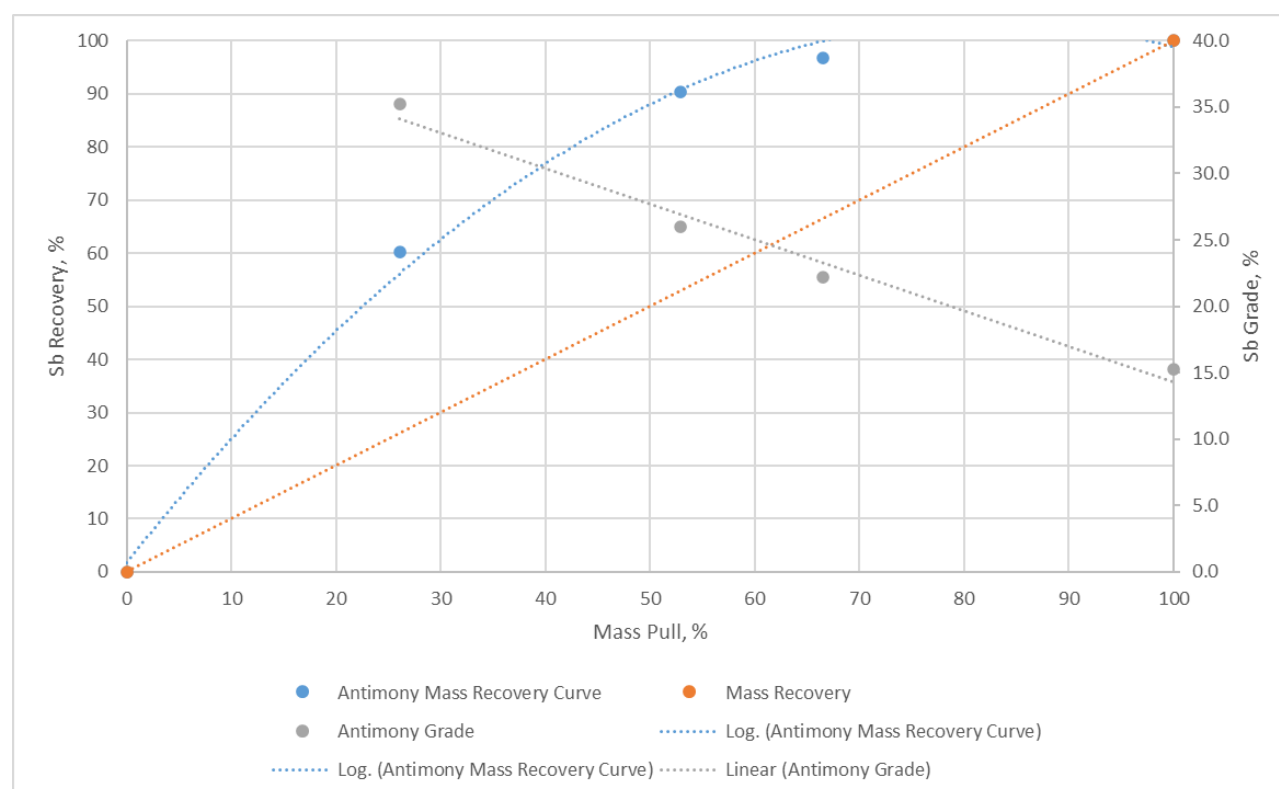


Figure 1: Recovery-mass pull and grade-mass pull curves for the Styx antimony bulk sample

The results presented in Table 1 and Figure 1 demonstrates that, a high-grade concentrate can be recovered through ore sorting in which 60.3% Sb is recovered in a mass yield of 26.1%. This generated a concentrate of 35.2% Sb (49.1% Sb₂S₃) from a 15.2% Sb (24.5% Sb₂S₃) feed - a 2.3 times upgrade from a single pass through the ore sorter.

Based on current scenarios being tested, a second pass is employed, a middling with almost the same grade as the feed can be scavenged, producing a grade of 13.8% Sb (19.2% Sb₂S₃), in 29% of the mass; the stagewise rejection of mass from the feed to the second ore sorter is 45%. The tails stream, containing 33.5% of the original feed mass also contains 52.5% of the original feed gold. This provides potential for the ore body to act as a satellite mine for RPM in addition to its merits as an antimony project.



Conceptual Antimony-Gold Flowsheet

Based on the positive results Nova is pleased to present a high-level conceptual flowsheet for Estelle antimony ore processing, with further test work and engineering underway.

This flowsheet demonstrates the suitability of ore sorting technology to maximise the value of the Estelle ore by concentrating valuables, antimony and gold into concentrates for further processing.

The flowsheet is presented in Figure 2.

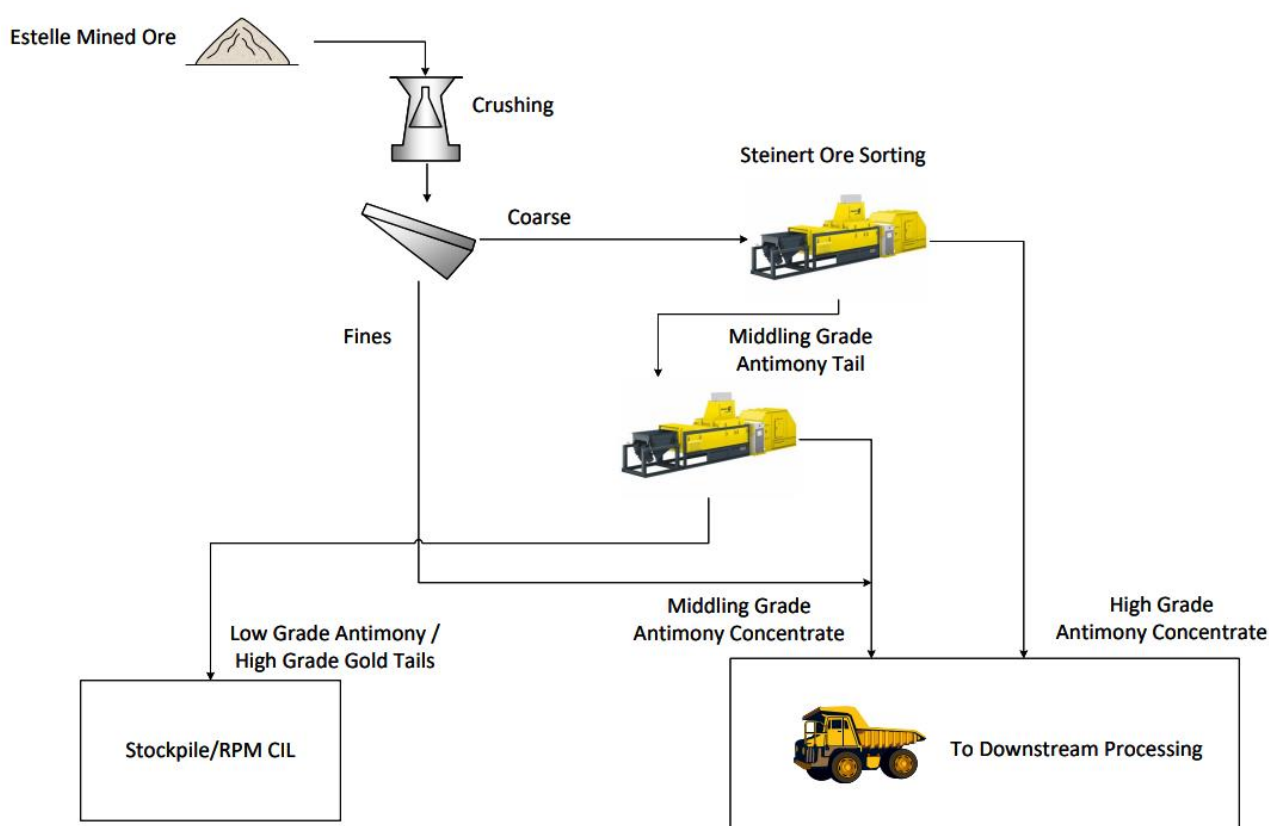


Figure 2: High Level Conceptual Flowsheet for Estelle Antimony Ore

Ore sorters will be installed at the mine site, with high-grade antimony concentrate potentially shipped off-site for downstream processing. This approach enables a low-CAPEX, straightforward on-site processing flowsheet.

By implementing ore sorting technology at the source, Nova should be able to produce a premium-grade antimony concentrate — potentially suitable for direct shipping ore (DSO). This could generate early cash flow while Nova’s downstream processing facilities are being completed.



On-site ore sorting will also make it possible to stockpile lower-grade sorted material for future processing. Once operational, Nova's potential plant is expected to process ore-sorted middlings combined with pre-screened fines.

Additionally, tailings from ore sorting at the Styx prospect may yield a high-grade gold concentrate, providing supplementary feed for the Estelle RPM CIL/CIP plant.

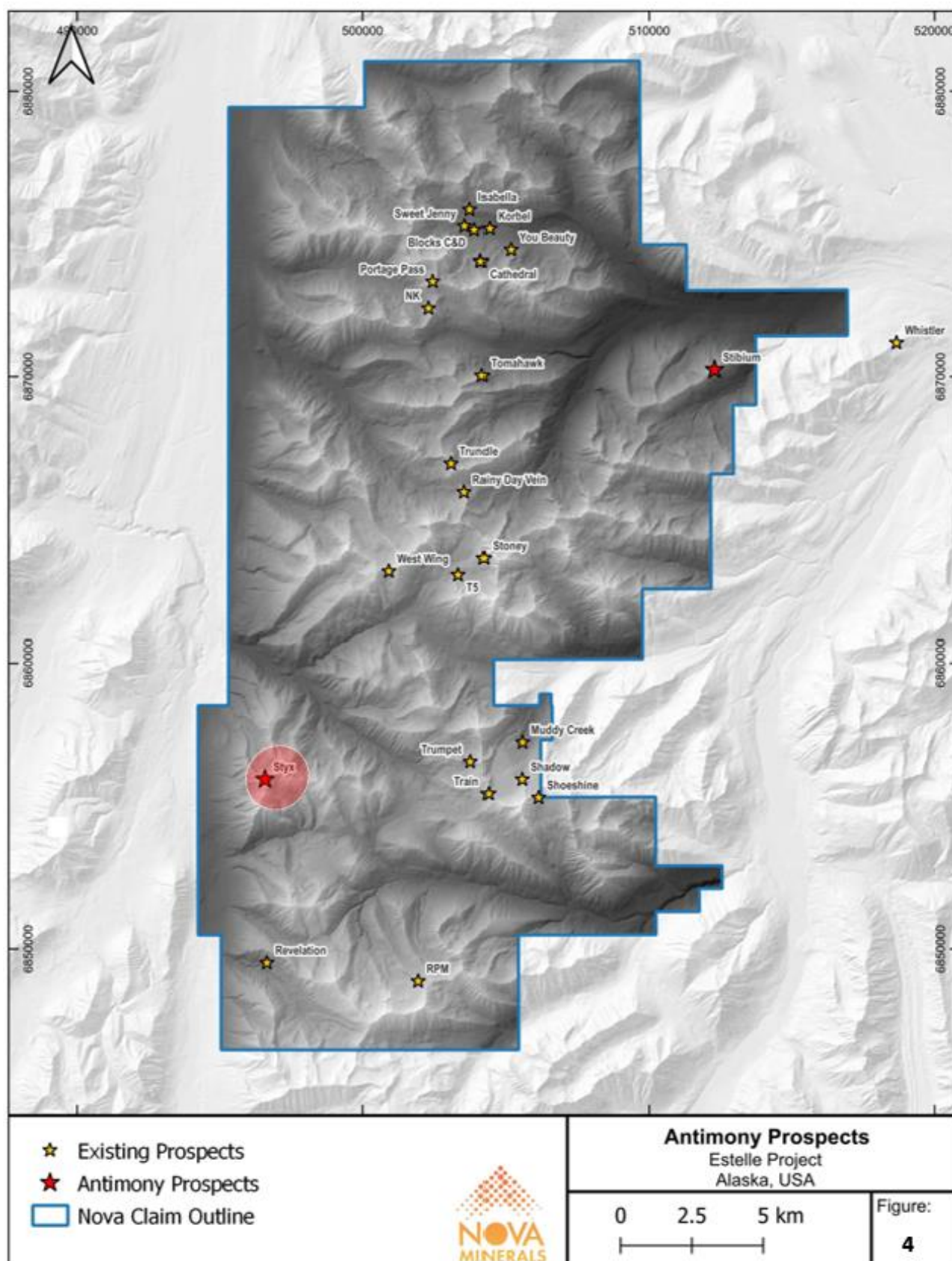


Figure 4. Estelle property map showing primary antimony prospects, with the Styx prospect highlighted, which is the source of the ore for the 500kg bulk sample used in this ore sorting test work.



Western Defense Supply Chains Under Pressure — Nova's High-Grade Antimony Discovery at Estelle Offers Strategic U.S. Solution

China's export restrictions on critical minerals have intensified pressure on Western defense supply chains, particularly for antimony — an essential material in munitions, electronics, and other strategic applications. Nova's Estelle Gold and Critical Minerals Project in Alaska has emerged as a potential U.S.-based solution, delivering high-grade antimony results from surface samples at numerous prospects across the project area. Surface sample assays from the Styx and Stibium prospects returned exceptional grades of up to 56.7% Sb (ASX Announcement: 5 December 2024), far surpassing the typical commercial range of 2 – 4% Sb, with some samples also containing high-grade gold. An independent report by RFC Ambrian in February 2025 also identified Estelle as one of only nine global projects with near-term antimony production potential.

Nova is now moving quickly to leverage this strategic opportunity. The company has joined the Defense Industrial Base Consortium and is advanced in its U.S. Department of Defense grant applications to potentially fast-track exploration, metallurgical testing, and infrastructure upgrades — aiming to initially produce direct shipping ore to potentially generate early cash flow while downstream processing facilities are completed.

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 Executive Directors.

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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/Qualified Person Statements

The information contained in this report, relating to metallurgical results, is based on, and fairly and accurately represent the information and supporting documentation prepared by Mr Damian Connelly. Mr Connelly is a full-time employee of METS Engineering who are a Contractor to Nova Minerals Limited, and a Fellow of The Australasian Institute of Mining and Metallurgy. Mr Connelly has sufficient experience which is relevant to the style of mineralisation and type of deposit under



consideration, and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Exploration Targets, Mineral Resources and Ore Reserves and as Qualified Person as defined in Regulation S-K 1300 under the Securities Act of 1933, as amended (S-K 1300). Mr Connelly consents to the inclusion in the report of the matters based on the results in the form and context in which they appear.

The Company is also listed on the NASDAQ in the United States and, as a result, is 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 disclosure requirements for U.S. registered mining, streaming and royalty companies. 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.

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 which is included herein, except in accordance with applicable securities laws. All drilling and exploration activities is subject to no unforeseen circumstances.



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

Section 1 Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling techniques	<i>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</i> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> <i>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.</i>	- Rock chip samples were collected from outcrop in-situ lithology or local float where noted - Rock 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.
Drilling techniques	<i>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,</i>	Not applicable – No drilling reported



Criteria	JORC Code Explanation	Commentary
	<i>whether core is oriented and if so, by what method, etc.).</i>	
Drill sample recovery	• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> • <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> • <i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material</i>	• Not applicable – No drilling reported
Logging	• <i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i> • <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i> • <i>The total length and percentage of the relevant intersections logged.</i>	• For rock chip samples, logging is qualitative and descriptive.
Sub-sampling techniques and sample preparation	• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> • <i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	• Rock samples were collected in dry conditions. • 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 the Ore Sorting we used the Styx 500kg bulk sample



Criteria	JORC Code Explanation	Commentary
	- 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 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 method and multi-element, including antimony using the ME-MS61r method. The Au-ICP21 method has a lower Au 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. The ME-MS61r method has a lower Sb detection limit of 0.05ppm with an upper detection limit of 10000ppm. If samples have grades in excess of 10000ppm then Sb-AA08 with a lower detection of 0.01% and an upper detection limit of 100%. - Bulk surface samples were shipped to ALS Balcatta from Nova's Estelle Project core yard for use in the metallurgical test work program. The samples were received by ALS Metallurgy in Balcatta, Perth WA on 14th April 2024. The bags were opened, laid out and inspected by METS and ALS personnel and weighed and logged. They were crushed and screen and dispatched to Steinert pilot plant in Perth for testing.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Assay data are compiled by the CP and then verified by corporate management prior to the release to the public.



Criteria	JORC Code Explanation	Commentary
	<i>The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> <i>Discuss any adjustment to assay data.</i>	
Location of data points	<i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i> <i>Specification of the grid system used.</i> <i>Quality and adequacy of topographic control</i>	All maps and locations are in UTM grid (NAD83 Z5N) and have been measured by a digital Trimble GNSS system with a lateral accuracy of <30cm and a vertical accuracy of <50cm.
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i> <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i> <i>Whether sample compositing has been applied.</i>	Rock samples were taken for areas that were previously sampled in 2023 with the focus on collecting material from Quartz-Stibnite veins and selvages.
Orientation of data in relation to geological structure	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i>	Several structural measurements were taken for the veins where possible. The veins dominant orientations at Styx striking 088 degrees dipping steeply to the southeast, and at Stibium striking 305 degrees, dipping moderately to the northeast.
Sample security	<i>The measures taken to ensure sample security</i>	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



Criteria	JORC Code Explanation	Commentary
		restricted access area for processing by Nova Minerals staff geologists.
Audit or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	Detailed QA/QC analysis is undertaken on an ongoing basis by Vannu Khounphakdee.