Nova Minerals 2024 Sampling Finds up to 54.1% Antimony at the Styx Prospect on its Estelle Gold and Critical Minerals Project

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Nova Minerals Ltd. ("Nova" or the "Company") (NASDAQ: NVA) (ASX: NVA) (FRA: QM3) is pleased to announce soil and rock chip assay results from its 2024 exploration season confirming a continued abundance of high-grade antimony at its Styx prospect, within its over 500km2 flagship Estelle Gold and Critical Minerals Project located in the Tintina Gold Belt in Alaska.

Highlights

- Follow-up reconnaissance mapping and sampling has proven an extensive antimony rich quartz-stibnite vein system with grades up to 54.1% Sb.
- Best 2024 surface sampling results at Styx include (Table 1 and Figures 5 and 6):
  - 54.1% Sb
  - 39.1% Sb
  - 28.0% Sb, 2.8 g/t Au
  - 20.7% Sb
  - 3.0% Sb, 5.6 g/t Au
  - 1.0% Sb, 5.5 g/t Au
  - 0.3% Sb, 9.8 g/t Au
- The main Styx occurrence is a ~1m thick quartz-stibnite vein (50% stibnite) with excellent outcrop exposure over 20m (Figure 2).
- Samples from the main vein occurrence in 2023 measured 19% and 21.7% Sb (ASX Announcement 10 October 2023). Additional sampling of splays around this occurrence show the anomaly likely extends over a 150m strike length (Figure 5).
- A 500kg bulk sample was also collected for metallurgical test work (Figure 4).
- Nova Minerals, through its 100% owned subsidiary Alaska Range Resources LLC, became a member of the Defense Industrial Base Consortium (DIBC) over 6 months ago, and as an early mover is well advanced with the Dept of Defense (DoD) grant application process.
- Antimony is listed as a critical and strategic mineral to US economic and national security interests by the US Department of Interior. The European Union also has antimony on their critical materials list and both are 100% import reliant.

Nova Head of Exploration, Mr Hans Hoffman commented: "Field crews visited the Styx prospect this year to follow-up on the initial Antimony discovery made in 2023. There was so much stibnite just sitting on surface that we soon realized this would be too much to carry out, but it was also too impressive to leave behind. We were sitting on 500kg of potentially high-grade material in no time and brought it back to camp for metallurgical test work. We believe that plenty more remains as we look deeper into the Styx occurrence."

Figure 1. Estelle property map showing the sampling program undertaken in 2024

2024 Exploration Mapping and Sampling Program Results

During the 2024 field season Nova's Head of Exploration, Mr. Hans Hoffman, continued the surface exploration mapping and sampling program across the Estelle claim block with a particular focus on following up results at prospects identified in the 2023 season. 511 soil samples, 225 rock samples, and approximately 5 tons of bulk sample material were collected across the property (Figure 1).

Assay results from soil and rock chip samples collected from the Styx prospect have all been received and are reported in this announcement. Further results from the soil and rock chip samples taken from across the project area in 2024 will be reported once received and processed.

Styx Surface Sampling

Field crews collected a total of 11 rock samples at Styx, 6 of which were greater than 1 g/t Au or 1% Sb, including a high of 9.8 g/t Au and 54.1% Sb. 10 soil samples were also collected in the vicinity of Styx. Table 1 provides a summary of the gold, antimony, and gold equivalent grades for the 11 rock samples collected.

Sample_ID	Au_ppm	Sb_ppm	AuEq_ppm*	Easting	Northing
E406795	2.8	280000	90.1	496477	6856006
E406796	5.6	30200	15.1	496473	6856005
E406797	0.0	457	0.2	496416	6855921
E406798	1.0	481	1.2	496349	6855964
E406799	2.4	9860	5.6	496244	6855886
E406936	9.8	3170	10.9	496460	6856026
E406937	5.5	10300	8.8	496461	6856022
E406938	0.4	391000	122.5	496461	6856023
E406939	0.0	1155	0.4	496466	6856011
E406940	0.9	207000	65.3	496336	6855965
E406941	0.1	541000	168.4	496334	6855967

Table 1. Top antimony rock sample results at Styx (*Refer gold equivalent calculation below)

The majority of the sampling focused on the main vein occurrence (Figure 2) and splays running oblique to it. The quartz-stibnite veins are hosted in the hornfelsed Kahiltna flysch sedimentary rocks. A quartz diorite intrusive rock (E406939) containing mm-scale quartz calcite veins was sampled close to the main stibnite occurrence. Quartz monzonite dikes were sampled further to the west and to the south (E406797) of occurrence but were weakly mineralized.

Figure 2. Styx quartz-stibnite vein (~1m x 20m exposure)

Sample E406941 had the highest antimony content at 54.1%. As shown in Figure 3, it exhibits well-developed crystals with shiny metallic luster. This sample was from a newly discovered outcropping quartz vein located approximately 130 meters southwest and 100 meters in elevation below the main occurrence. This may be an extension of the main occurrence, but is difficult to determine due to the undulating nature of both the veins (Figure 5).

Figure 3. Sample E406941: 54.1% Sb

In addition to the sampling shown above, a 500kg bulk sample was collected for metallurgical testing. It was collected from surface material at the main vein and from splays above it. This sample material is shown in Figure 4 below.

Figure 4. Styx bulk sample material (500kg)

The 2024 sampling results - along with 2023 shown as transparent - are shown below in Figure 5 (antimony) and Figure 6 (gold equivalent). Gold equivalent values were calculated using updated metals prices described below.

Gold Equivalent Calculation

Gold equivalent (AuEq) values were calculated using the formula below:

AuEq g/t= Au g/t + (Ag_ppm* X_{Ag}) + (Cu_ppm* X_{Cu}) + (Sb_ppm* X_{Sb})

AuEq values were calculated using a gold price of $2,500/oz, a silver price of $30/oz, a copper price of $4/lb, and an antimony price of $25,000/ton, all with recovery rates of 90% as shown below.

Gold Equivalent Factors (X_{Xx}):

(X_{Ag})= [US$30/oz silver price x 0.90 silver recovery] / [US$2,500/ troy ounce gold price x 0.90 gold recovery] = 0.012

(X_{Cu})= [US$4/lb copper price x (1lb/14.583 troy ounces) x 0.90 copper recovery] / [US$2,500/ troy ounce gold price / 31.10348 grams per troy ounce x 0.90 gold recovery] = 0.000109715

(X_{Sb})= [US$25,000/tonne antimony price x (1tonne/1000000grams) x 0.90 antimony recovery] / [US$2,500/ troy ounce gold price / 31.10348 grams per troy ounce x 0.90 gold recovery] = 0.000311035

Cautionary Statement: For many projects at the exploration results stage, metallurgical recovery information may not be available or able to be estimated with reasonable confidence. In such cases reporting of metal equivalents may be misleading.

Defense Industrial Base Consortium (DIBC) Membership and Grant Application Progress

Nova Minerals, through its 100% owned subsidiary Alaska Range Resources LLC, has been a member of the DIBC for over 6 months and has positively progressed with the resources and synergies it provides. The DIBC enables rapid research, access to commercial solutions for defense requirements, and innovations from industry, academia, and non-traditional contractors. DIBC members focus on identifying, developing, and testing cutting-edge capabilities at the speed of innovation.

Recognizing the potential of its antimony discovery early on, Nova is now well advanced within the Dept of Defense (DoD) grant application process to potentially rapidly develop its antimony and other critical minerals prospects identified across the Estelle Gold and Critical Minerals District. The Company looks forward to keeping the market updated on this progress.

Figure 5. Styx Antimony Results

Figure 6. Styx Gold Equivalent Results

The 3D Vrify decks on the company's website will be updated with the 2024 surface sampling exploration results when all the assays for the soil and rock chip samples taken across the entire Estelle Gold and Critical Minerals Project have been received back from the laboratory.

Qualified Persons

Vannu Khounphakdee, Professional Geologist and member of Australian Institute of Geoscientists contracted by Nova Minerals to provide geologic consulting services. Mr. Khounphakdee holds a Master of Science in Mine Geology and Engineering. He is a qualified person with at least 5 years experience with this type of project. By reason of education, affiliation with a professional association, and past relevant work experience, Mr. Khounphakdee fulfills the requirements of Qualified Person (QP) for the purposes of Securities and Exchange Commission (SEC) Regulation S-K1300 for data QA/QC checks relevant to this announcement.

Hans Hoffman is a State of Alaska Certified Professional Geologist contracted by Nova Minerals to provide geologic consulting services. Mr. Hoffman is a member of the American Institute of Professional Geologists and holds a Bachelor of Science degree in Geological Engineering with a double major in Geology and Geophysics. He is a qualified person with at least 5 years of experience with these types of projects. By reason of education, affiliation with a professional association, and past relevant work experience, Mr. Hoffman fulfills the requirements of Qualified Person (QP) for the purposes of SEC Regulation S-K 1300 for the technical information presented in this announcement.

Christopher Gerteisen, Chief Executive Officer of Nova Minerals, is a Professional Geologist and member of Australian Institute of Geoscientists, and has supervised the preparation of this news release and has reviewed and approved the scientific and technical information contained herein. Mr. Gerteisen is a "qualified person" for the purposes of SEC Regulation S-K 1300.

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 km^2 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, Barrick's Donlin Creek Gold Project and Kinross Gold Corp.'s Fort Knox Gold Mine. The belt also hosts significant Antimony deposits and was a historical North American Antimony producer.

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

Forward Looking Statements

This press release contains "forward-looking statements" that are subject to substantial risks and uncertainties. All statements, other than statements of historical fact, contained in this press release are forward-looking statements. Forward-looking statements contained in this press release may be identified by the use of words such as "anticipate," "believe," "contemplate," "could," "estimate," "expect," "intend," "seek," "may," "might," "plan," "potential," "predict," "project," "target," "aim," "should," "will" "would," or the negative of these words or other similar expressions, although not all forward-looking statements contain these words. Forward-looking statements are based on Nova Minerals Limited's current expectations and are subject to inherent uncertainties, risks and assumptions that are difficult to predict. Further, certain forward-looking statements are based on assumptions as to future events that may not prove to be accurate. These and other risks and uncertainties are described more fully in the section titled "Risk Factors" in the Company's Annual Report on Form 20-F for the year ended June 30, 2024 filed with the SEC. Forward-looking statements contained in this announcement are made as of this date, and Nova Minerals Limited undertakes no duty to update such information except as required under applicable law.

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