ASX ANNOUNCEMENT ASX: NVA, OTC: NVAAF, FSE: QM3



15 March 2021

Nova Confirms Exceptional Ore Sorting Viability at Korbel Main

Ore sorting test work on drill core demonstrates great potential for reduced processing and increased mine production at Korbel Main

- Ore Sorting results show up to 10x upgrade from a 588kg coarse rock sample
- Potential of further value-adding by processing of the reject material is also being investigated.
- Ore sorting test work programmes conducted by TOMRA in Sydney demonstrate the potential of ore sorting using X-ray transmission (XRT) technology to successfully separate the gold-bearing veins at Korbel Main

The results demonstrate the significant benefits that may be expected from the application of Ore Sorting technology at Korbel Main, including the potential to increase mine production and enhance the project economics through:

- $\circ~$ Facilitation of bulk mining to reduce unit mining costs and ore loss experienced in selective mining
- Rejection of waste material, leading to lower processing capital and operating costs and minimised environmental impact through reduced tailings placement
- Higher mill feed grade

Work is continuing on the Mineral Resource upgrade for Korbel Main which is expected to be completed imminently

- Interim scoping study is well underway
- Snow Lake Resources IPO is fast progressing update to follow

Nova's CEO said the latest test work results provide a unique opportunity for Nova to ensure an optimum mine design, schedule & processing solution for the Korbel Main deposit.

"These latest results demonstrate the potential to considerably improve project economics. Significant increases in mine productivity could be achieved through the rejection of a considerable proportion of lower grade rock before processing. By using an XRT sort, we would prospectively reduce the volume of ore and lift the grade appreciably, rejecting lower grade material ahead of the milling and processing circuit. This would minimize energy requirements, tailings generation, and would lower processing costs overall.

This provides Nova with the opportunity to operate at a lower cut-off grade, and potentially increase the ounce per annum profile of the project. By utilising ore sorting, and increasing

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production efficiency through this now proven and increasingly used technology. Nova's environmental footprint could also be reduced, in line with our ESG strategy.

With the resource upgrade due imminently and the scoping study to follow suit, it is full steam ahead as we continue on our path to production." -Christopher Gerteisen, CEO.

Brent Hilscher of ABH Engineering who is leading the ore sorting test work as well as the overall scoping study said:

"This deposit has a majority of its gold contained in discrete high grade sheeted vein rocks which are easily concentrated with existing DE-XRT ore sorting technologies. Once concentrated, we have several options to achieve higher gold recovery at a very low overall cost." -Brent Hilscher, ABH Engineering.

Nova Minerals Limited (Nova or Company) (ASX: NVA, OTC: NVAAF, FSE: QM3) is pleased to advise that it has received highly encouraging results from further ore sorting test work on mineralization from its bulk tonnage Korbel Main deposit in Alaska, confirming the potential for this technology to significantly enhance the project.

Samples for this test work were selected from KBDH-005 and KBDH-025. These holes represent the discovery holes from the South-East extension drilled in 2020. The South-East extension will be explored further in the 2021 spring drilling campaign.

Both of these holes were sampled top to bottom and split into two lots. One lot was kept at the project in Alaska for back-up and future test work, and the second lot was sent to TOMRA in Castle Hill, Sydney for XRT Sorting (Photo 1). TOMRA then blended the material together and split them into two sub-lots of 588 kg each. TOMRA will keep one sub-lot for future test work; the second lot was run through the XRT Sorting Equipment.

The sub-lot was run through the equipment in 4 Stages (See Table 1: Photo 2). Both Products and waste were sampled and sent to Bureau Veritas (Adelaide) for Fire Assay (FA0001). After each run TOMRA scanned the material checking for the higher density Arsenopyrite material at the end of each Stage (see Photo 3 and 4). Note: By Stage 4 the XRT sorter has picked out almost all material that has Arsenopyrite mineralization with the final Waste grading at 0.12 g/t Au, essential back ground gold content for the Granites at Korbel Main (Block A and B).

Table 1. S	Table 1. Sorting results for samples in the 1-3 inch range				
		Scenario	Scenario	Scenario	Scenario
	Feed	1	2	3	4
Accepts Gold					
grade (g/t)	0.67	6.1	3.4	2.1	1.3
Accepts Mass %					
of Total Mass	100	4	15	26	46
% Au					
Concentrated in					
Accepts	100%	36%	74%	82%	90%





Photo 1. TOMRA XRT Ore Sorter, Castle Hill Sydney



Photo 2. Korbel Drill Core in progress on TOMRA's XRT Ore Sorter





Photo 3. Typical Arsenopyrite sheeted vein in core from Korbel Main.



Photo 4. XRT Scan of Product after Stage 1 (6.06 g/t). Blue and Black = Arsenopyrite sheeted vein. Red = Granite Waste Rock.





Photo 5. XRT Scan of Final Waste after Stage 4 (0.12 g/t). Red = Granite Waste Rock.

Table 2. Samples collected for sorting				
	From	То	Width	Au
Hole ID	(m)	(m)	(m)	(g/t)
KBDH-005	0	456	456	0.36
KBDH-025	0	594	594	0.27
Average				0.31

Conclusion - Sensor based particle sorting tests on a 588kg sample confirmed the viability for it to be included in the upcoming Scoping Study. By concentrating the highest-grade rocks into a relatively small mass, Nova Minerals could create a high value material that is suited for high recovery extraction through to cyanidation. This method is intended to reduce cost per oz, lower cut-off grade, lower energy usages and increase gold production.

Mineral Resource Estimate

Cut-off	Inferred Mineral Resource		
	Tonnes (t)	Au (g/t)	Ounces (oz)
0.1	411,911,003	0.29	3,829,560
0.15	342,234,581	0.32	3,548,166
0.18	290,589,965	0.35	3,275,001
0.2	263,542,236	0.37	3,110,118
0.3	148,128,223	0.46	2,207,515

To learn more please visit: <u>https://novaminerals.com.au/estelle-gold/</u>.

This announcement has been authorised for release by the Board.



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Eurther information:

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Competent Person Statements

Mr Brent Hilscher P.Eng., Vice President of ABH Engineering Inc., who conducted studies and test work on behalf of Nova Minerals, compiled and evaluated the technical information in this release and is a member of the Association of Engineers and Geoscientists of British Columbia (EGBC), which is ROPO, accepted for the purpose of reporting in accordance with ASX listing rules. Mr Hilscher has sufficient experience relevant to sorting technology and gold processing 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 Hilscher consents to the inclusion in the report of the matters based on information in the form and context in which it appears.

Mr Dale Schultz P.Geo., Principle of DjS Consulting, who is Nova groups Chief Geologist and COO of Nova Minerals subsidiary Snow Lake Resources Ltd., compiled and evaluated the technical information in this release and is a member of the Association of Professional Engineers and Geoscientists of Saskatchewan (APEGS), which is ROPO, accepted for the purpose of reporting in accordance with ASX listing rules. Mr Schultz has sufficient experience relevant to the style of mineralization and type of deposit under consideration and to the activity that 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 Schultz 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 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.



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, capitalisation 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.



Appendix 1: The following tables are provided to ensure compliance with the JORC Code (2012) requirements for the reporting of the exploration results for the Estelle Gold Project – Alaska

Section 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling	 Nature and quality of sampling (eg cut channels, 	 Core is systematically
techniques	random chips, or specific specialised industry	logged from collar to EOH
	standard measurement tools appropriate to the	characterizing rock type,
	minerals under investigation, such as down hole	mineralization and
	gamma sondes, or handheld XRF instruments,	alteration. Oriented core
	etc.). These examples should not be taken as	measurements are taken
	limiting the broad meaning of sampling.	where appropriate.
	Include reference to measures taken to ensure	Geotechnical
	sample representivity and the appropriate	measurements such as
	calibration of any measurement tools or systems	recoveries and RQDs are
	used.	taken at 10-foot (3.05 m)
	Aspects of the determination of mineralisation	intervals. Samples are
	that are Material to the Public Report.	taken each 10 feet (3.05m)
	 In cases where 'industry standard' work has 	unless there is a change in
	been done this would be relatively simple (e.g.	lithology. In these cases
	'reverse circulation drilling was used to obtain 1 m	samples are broken to
	samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other	lithologic boundaries. Samples are then half cut
	cases more explanation may be required, such as	with one of the half cuts
	where there is coarse Au that has inherent	being sent to the ALS lab
	sampling problems. Unusual commodities or	in Fairbanks Alaska for
	mineralisation types (e.g. submarine nodules)	processing.
	may warrant disclosure of detailed information.	processing.
Drilling	Drill type (e.g. core, reverse circulation, open-	• HQ diamond core triple
techniques	hole hammer, rotary air blast, auger, Bangka,	tube, down hole surveys
·	sonic, etc.) and details (e.g. core diameter, triple	every 150 feet (~50m),
	or standard tube, depth of diamond tails, face-	using a Reflex ACT-III tool.
	sampling bit or other type, whether core is	
	oriented and if so, by what method, etc.).	



Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 	• Core is processed in the Fairbanks ALS laboratory Core processing room. Recoveries were recorded for all holes, into a logging database to 3cm on a
	• 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	laptop computer by a qualified geologist using the drillers recorded depth against the length of core recovered. No significant core loss was observed. • Triple tube HQ to
		maximise core recovery. • No known relationship between sample recovery and grade. As no samples have been taken as yet, no assay results are reported, visual results only.



NUQ	Logger	 Whether core and geologically a
Dersonal Dersonal		
	Sub-sampling techniques and sample preparation	 If core, whether cu quarter, half or all core taken. If non-core, whether split, etc. and whether sa For all sample type appropriateness of t

 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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged. 	Core logging is carried out by project partner qualified geologists using a project specific logging procedure. Data recorded includes, but is not limited to, lithology, structure, RQD, recovery, alteration, sulphide mineralogy and presence of visible gold. This is supervised by senior geologists familiar with the mineralisation style and nature. Inspection of the drill core by Nova Minerals Chief Geologist is monitored remotely using photographs and logs. Rock codes have been set up specifically for the project. Logging is to a sufficient level of detail to support appropriate Mineral Resource estimation and mining studies. • Drill logging is both qualitative by geological features and quantitative by geotechnical parameters in nature. Photographs are taken of all cores trays, (wet) of whole core prior to cutting.
 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is 	• Samples are taken each 10 feet (3.05m) unless there is a change in lithology. In these cases samples are broken to lithologic boundaries. Samples are then half cut with one of the half cuts being sent to the ALS lab in Fairbanks Alaska for processing. Three different types of SRM are inserted each 20 samples.



		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.	Duplicates of the reject are taken each 20 samples. One blank is inserted each 40 samples. Data is plotted and evaluated to see if the samples plot within accepted tolerance. If any "out of control" samples are note, the laboratory is notified. For the ore-sorting program TOMRA sent "Products" and "Waste" samples to Bureau Veritas for testing by Fire Assay using method code FA001.
a	Quality of assay data and laboratory ests	 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-AA25 is used to determine the over detect limit. Au-AA25 has a detection limit of 0.01 g/t and an upper limit of 100 g/t. Three different types of SRM are inserted each 20 samples. Duplicates of the reject are taken each 20 samples. One blank is inserted each 40 samples. Data is plotted and evaluated to see if the samples plot within accepted tolerance. If any "out of control" samples are note, the laboratory is notified. Ore Sorting Bureau Veritas: FA001 -Nominal 40g charge analysed. Silver used as secondary collector, Au is determined



	D		with AAS finish. Nature of the sample and/or lower sample weights may compromise detection limits. Detection limits in ppm.
	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 entryprocedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	• Assay data intercepts are compiled and calculated 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.
06130	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 Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	• Drill holes have been spaced in a radial pattern such that all dimensions of the resource model is tested. Future geo-stats will be run on the data to determine if addition infill drilling will be required to confirm continuity.
	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. 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. 	• The relationship between the drilling orientation and the orientation of key mineralised structures has not been confirmed.



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 TOMRA's testing Facility at Castle Hill Sydney, Australia by a recognised freight forwarder.
Audits or Reviews	 The results of any audits or reviews of sampling techniques and data. 	 No review has been undertaken at this time.

Section 2 Reporting of Exploration Results (Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
fineral enement and and tenure tatus	 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 security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	 The Estelle project is comprised of 507 State of Alaska mining claims consisting of 324km² for the entire claim group. 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 2% NSR (ASX Announcement: 20 November 2017) Nova owns 85% of the project through the joint venture agreement.



		• The Company is not aware of any other impediments that would prevent an exploration or mining activity.
Exploration done by other parties	 Acknowledgment 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 Mineral is primarily exploring for Intrusion Related Gold System (IRGS) type deposit within the Estelle 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. 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. 	See Appendix 1 summary table of drill hole results.
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. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation 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. 	• Widths are report as core length. Future true widths will be calculated by measuring the distance perpendicular to the dip of the mineralized zone on any given cross section that the intercept appears on. Two holes per section are required to calculate true thickness. No "Top Cap" has been applied to calculation of any intercepts. A "Top Cap" analysis will be completed during a future Resources Study and applied if applicable. Widths



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'). 	of intersection are calculated by applying a weighted average (Sum [G x W] / Sum [W]) to the gold values and reported widths within any given intercepts. The CP will visually select the intercept according to natural grouping of higher- grade assays. Zones of internal dilution my vary depending on the CP discretion as to what is geologically significant. Sub intersection of higher grades within any given intercepts may be broken out if present. • See above
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 in Figure 1 shows the hole traces of the PAD3 drilling. Holes completed and / or in progress are also marked. Cross Section in Figure 2 showing trace of Hole KBDH-001 and 002, R/C holes for 2019 Resource Drilling, and Outline of the Block Model Figure 3 showing photos of QTZ-ASP sheeted Veins with grades for assay results Figure 4 Regional Map of the Korbel Valley



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
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. 	• Diamond drilling is ongoing. Project planned is for up to 40,000 metres in 2020 and 80,000 metres in 2021.