

c/o Suite 2900, 595 Burrard Street Vancouver, BC, Canada V7X 1J5

# MECHANICAL SORTING YIELDS GOLD-RICH CONCENTRATES AT KARRATHA; EGINA TERRACE GRAVEL RETURNS POSITIVE GOLD RESULT

**VANCOUVER, BC**, December 20, 2018 - **Novo Resources Corp.** ("**Novo**" or the "**Company**") (TSX-V: NVO; OTCQX: NSRPF) is pleased to announce gold-rich assay results from concentrates generated by mechanical sorting trials conducted on four bulk samples from its Karratha gold project and encouraging gold recovery from its first terrace gravel bulk sample at Egina.

# Karratha mechanical sorting trial yields gold-rich concentrates:

In order to test the potential viability of mechanical rock sorting as a means of concentrating gold from conglomerates at Novo's Karratha gold project, four bulk samples were collected, crushed, screened and tested using a TOMRA mechanical rock sorter (*for further details, please refer to the Company's news release dated November 19, 2018*). High-grade assays from sorted rock concentrates provide a first indication that this technique is effective at upgrading gold into small volume concentrates (Table 1, below).

- Mechanical sorting was conducted on material ranging from 6 to 63 mm (10 to 63 mm for sample KX237. Fractions larger than 63 mm and finer than 6 mm are currently undergoing assaying. Once all analyses have returned, an assessment of the effectiveness of mechanical rock sorting will be made.
- Mechanical rock sorted concentrates range from 0.07-0.48% of total sample mass, a remarkably small fraction. Given the high-grade assays of these concentrates, ranging from 92.1-792.4 gpt Au, it appears that gold is being significantly upgraded by mechanical rock sorting.
- Optimizing crushing to reduce volumes of fines and oversize, effectively maximizing the amount of material being sorted, should further improve the potential of this technology.
- Novo believes mechanical sorting technology could be a critical component of the Karratha gold project moving forward.

"Concentrate grades received from the recent Tomra mechanical rock sorting trials are impressive, reflecting the capability of the scanning and sorting technology to differentially select gold bearing rock," commented Mr. Rob Humphryson, CEO and Director of the Company. "Total system gold recovery efficiency will be fully understood upon receipt of assay results from all process streams and feed size ranges, with these results expected during January 2019".

			Size Fraction as % of	Mass of Sorter	Mass of Sorter Concentrate	Gold Grade of Sorter
Sample	Mass		Total	Concentrate	as % of Total	Concentrate
ID	(kg)	Size Fraction	Mass	(kg)	Mass	(gpt)
KX234	5610.6	greater than 63 mm	2.2%			
		6 to 63 mm	67.8%	13.5	0.24%	792.4
		less than 6 mm	30.0%			
KX235	3989.8	greater than 63 mm	19.2%			
		6 to 63 mm	64.8%	19.1	0.48%	188.8
		less than 6 mm	16.0%			
KX236	4229.1	greater than 63 mm	9.7%			
		6 to 63 mm	61.3%	13.0	0.31%	92.1
		less than 6 mm	29.0%			
KX237	4434.0	greater than 63 mm	9.2%			
		10 to 63 mm	41.6%	3.2	0.07%	377.8
		less than 10 mm	49.2%			

Table 1: Assays of concentrates from TOMRA mechanical sorting trials conducted on bulk samples of Karratha gold-bearing conglomerate

Size fractions in *italics* are too coarse or too fine to be sorted. Once these have been assayed, the overall performance of mechanical sorting can be evaluated.

# Egina terrace gravel bulk sample returns encouraging gold recovery:

Novo recently completed processing its first bulk sample of terrace lag gravels at its new Egina gold project. As discussed in the Company's news release dated December 13, 2018, approximately 95 cubic metres of pristine lag gravel (density approximately 1.6 tonnes per cubic metre) were excavated from an area in the northeast part of mining lease M47/560. The sample was transported to nearby Station Peak camp for treatment through the Company's IGR3000 gravity gold plant (Figure 1). The IGR3000 utilizes Falcon centrifugal concentrators to capture fine and medium sized gold particles and a discharge sluice to capture large nuggets. Multiple fractions of gold generated from this sample are illustrated in Figure 2.

- A total of 107.88 grams of raw gold were recovered from 95 cubic metres of gravel. Fine gold and small nuggets recovered by Falcon concentrators account for 18.55 grams of the total. A further 49.16 grams were captured in the discharge sluice. One large nugget weighing 40.17 grams was recovered from the oversize pile using a metal detector. X-ray fluorescence analysis of gold nuggets indicates gold purities ranging from 91-93% with silver making up most of the balance.
- Assays of tailings are in process.
- Dominantly coarse gold suggests simple processing techniques can likely be employed during potential future large-scale gold recovery at Egina.
- Very little clay is present resulting in short scrubbing times and short settling times to clarify return water.
- Novo plans an aggressive program of collecting and treating similar-sized bulk samples in 2019 with the intent of establishing a first ever resource at Egina. Novo also has plans for large-scale test sampling. As described in the Company's news release dated October 30, 2018, Novo thinks lag gravels mantling the vast erosional terrace at Egina could host a significant gold deposit. The shallow nature of these gravels makes them a particularly attractive target.

"The results of our first bulk sample at Egina are very encouraging." commented Mr. Rob Humphryson, CEO and Director of the Company. "This 95 cubic metre sample was collected from a gravel horizon

between 1m and 3m below surface, requiring no drilling, blasting or crushing. The current geologic model has not constrained the gravel horizon in any direction or for any distance across the erosional terrace. In addition to ongoing bulk sampling during 2019 to confirm gold concentrations on a broader scale, exploration field work will be directed towards understanding the lateral extent and continuity of the system. We are very excited about the possibility for this system to be laterally expansive, with obvious connotations for a future large scale and low cost mining operation"

The initial mineral sorting concentrates have been analyzed via Photon assay and are subject to QA/QC and other assay techniques that are currently being performed by MinAnalytical Laboratory Services Australia in Perth, Australia.

PhotonAssay provides a non-destructive chemistry-free approach to gold assay. It bombards samples with high-energy X-rays, causing short-lived excitation of atomic nuclei of targeted elements (e.g., gold). These excited nuclei give off a characteristic signature that can be detected and used to calculate concentration. The analysis is completely non-destructive, and all samples have been retained for further analysis

Dr. Quinton Hennigh, P. Geo., the Company's, President and Chairman and a qualified person as defined by National Instrument 43-101, has approved the geological content of this news release.

#### About Novo Resources Corp.

Novo's focus is to explore and develop gold projects in the Pilbara region of Western Australia, and Novo has built up a significant land package covering approximately 12,000 sq km with varying ownership interests. For more information, please contact Leo Karabelas at (416) 543-3120 or e-mail <u>leo@novoresources.com</u>

On Behalf of the Board of Directors,

## Novo Resources Corp.

<u>"Quinton Hennigh"</u> Quinton Hennigh President and Chairman

Neither TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this news release.

## **Forward-looking information**

Some statements in this news release contain forward-looking information (within the meaning of Canadian securities legislation) including, without limitation, statements as to planned exploration activities and the expected timing of the receipt of results. These statements address future events and conditions and, as such, involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the statements. Such factors include, without limitation, customary risks of the mineral resource industry as well as the performance of services by third parties.



(Figure 1 – Novo's IGR3000 gravity gold plant in operation at Egina. Plant capacity is about 25-35 tonnes per hour. Falcon centrifugal concentrators, top middle, are employed to capture gold. A discharge sluice exits the plant on the right. Oversize material forms a pile on the left. This plant is ideally suited for treating large bulk samples of terrace gravel as part of Novo's program of exploring this expansive target. Protocols for sampling and processing have now been fully established in preparation for a much larger program treating similar-sized bulk samples in 2019 with the intent of establishing a first ever resource for the project. Plans are also being made for large-scale test sampling.)



(Figure 2 – Gold produced from the first bulk sample at Egina. Top: Fine gold panned from tabled Falcon concentrates. Second row: Small nuggets captured by the Falcon concentrators. Third row: Coarse nuggets captured in discharge sluice. Bottom row: Large gold nugget found when detecting oversize material. In total, 107.88 grams of raw gold were produced from 95 bench cubic metres of gravel. X-ray fluorescence analysis of gold nuggets indicate gold purities ranging from 91-93% with silver making up most of the balance. Container was zeroed on the scale prior to weighing the gold. Please note that gold mineralization in the above photos is not necessarily representative of the mineralization hosted on the Egina property.)