

**GRANADA GOLD HITS MASSIVE RARE EARTH AND ALKALI METALS ZONE  
1.6 KILOMETERS FROM DISCOVERY Hole GR-20-20**

**May 12, 2021**, Rouyn Noranda, Quebec, Granada Gold Mine Inc. (TSXV: GGM) (the “Company” or “Granada”) is pleased to announce that Hole GR-20-22 drilled to a depth of 1626 meters on the Big Claim of the Granada Gold Mine property, in Quebec, Canada.

Results are preliminary and full core lengths have not yet been assayed in two holes drilled at the north of the Big Claim. The company encountered unusual facies of altered rock which has been sampled in portions of the drill core. The mineralized portions of the core have been assayed for 56 metals. Additional assays are pending. Initially, portions of drill holes GR-20-20 and GR-20-22 were sampled. The company has received preliminary assay results for GR-20-22. Based on recent assays for intervals sampled, the intervening intervals are being prepared and will be sent for assay to create a complete picture.

**Highlights of drill hole GR-20-22 as of today:**

- Intercepted 21 distinct mineralized zones.
- Zones range in core length from 177 meters to 2.8 meters.
- Rare Earths and Alkali metals of note identified to date are Caesium (Cs), Rubidium (Rb), Scandium (Sc), Zirconium (Zr), Cerium (Ce), Gallium (Ga), Hafnium (Hf), Neodymium (Nd) and Strontium (Sr). Others pending.

**Highlights of Select Drill Core Intercepts:**

Length metres	From metres	To metres	Cs ppm	Rb ppm	Sc ppm	Zr ppm	Ce ppm	Ga ppm	Hf ppm	Nd ppm	Sr ppm
53.0 (I)	1053.0	1106.5	6.55	340.2	0.96	724.3	123.0	32.5	18.3	34.4	150.9
35.0 (II)	1291.0	1326.0	6.56	144.7	9.03	301.5	121.4	19.73	7.76	53.6	1285.4
30.0 (III)	1596.0	1626.0	4.83	83.4	14.8	161.7	67.8	20.4	4.35	31.3	489.3

True widths are unknown at the moment.

Complete analysis of current 21 drill intercepts can be found on the GGM website ([REE Interval Table](#)).

**Uses and Market Price Ranges of Rare Earths and Alkali Metals**

**Caesium** is used to make special optical glass, as a catalyst promoter, in vacuum tubes and in radiation monitoring equipment. One of its most important uses is in the ‘caesium clock’, or atomic clock. ([Royal Society of Chemistry](#)) with a price of 68,100 US dollars per kilogram ([Mineral Commodity Summaries 2019](#)).

**Rubidium**'s photoemissive properties make it useful for electrical-signal generators in motion-sensor devices, night vision devices, photoelectric cells (solar panels), and photomultiplier tubes. Rubidium is used as an atomic resonance-frequency-reference oscillator for telecommunications network synchronization, playing a vital role in global positioning systems with prices of 15,500 US dollars per kilogram ([USGS Mineral Commodity Summaries 2019](#)).

**Scandium** is one of the most expensive of all the natural elements. Prices for 99.99% pure scandium (RE: 99% min. | Sc/TREM: 99.99% min.) have fluctuated between US\$ 7000 and US\$ 20,000 per kilogram over the past decade. Of course, because of the limited amount of material produced globally and the limited market for scandium, there is also a wide range of prices offered for the metal at any given time ([strategic-metal.com](#) and phone conversation May 10, 2021). Applications for scandium were not developed until the 1970s, when the positive effects of scandium on aluminium alloys were discovered, and its use in such alloys remains its only major application.

The leading consumers of **zirconium** metal are the chemical process and nuclear energy industries. ([USGS zirconium-hafnium.pdf](#) ) with a price of 37.1 US dollars per kilogram. ([Shanghai Metals Market](#)).

**Cerium** metal is used in ferrocerium lighters for its pyrophoric properties. Cerium-doped YAG phosphor is used in conjunction with blue light-emitting diodes to produce white light in most commercial white LED light sources. Recent prices are 4.71 US dollars per kilogram ([Shanghai Metals Market, cerium](#)).

**Gallium** as an arsenide is used in the manufacture of devices such as microwave frequency integrated circuits, monolithic microwave integrated circuits, infrared light-emitting diodes, laser diodes, solar cells and optical windows with a price of 534.4 US dollars per kilogram ([kitco.com strategic-metals](#)).

The leading use of **hafnium** metal is in superalloys with a price of 1347.4 US dollars per kilogram ([kitco.com strategic-metals](#)).

**Neodymium** is as a component in the alloys used to make high-strength neodymium magnets—powerful permanent magnets. These magnets are widely used in such products as microphones, professional loudspeakers, in-ear headphones, high performance hobby DC electric motors, and computer hard disks, where low magnet mass (or volume) or strong magnetic fields are required. Larger neodymium magnets are used in high-power-versus-weight electric motors (for example in hybrid cars) and generators (for example aircraft and wind turbine electric generators). Price is 118.5 US dollars per kilogram ([kitco.com strategic-metals](#)).

Strontium is **used in** producing ferrite magnets and refining zinc. Modern 'glow-in-the-dark' paints and plastics contain **strontium** aluminate ([Royal Society of Chemistry - Strontium](#)). Recent prices are 6.68 US dollars per kilogram (<https://en.institut-seltene-erden.de/current-prices-of-strategic-metals/>).

### **Equivalent Range Values of Intercepts**

Equivalent Range Intercepts (I), (II), and (III) were calculated without Caesium and Rubidium as no active market for the metals could be identified at present. Inclusion into the Equivalent Range Value of intercepts would present values of 404.8 and 5,273.1 US dollars per tonne for Caesium and Rubidium respectively for Intercept (I). For comparison purposes, in gold equivalents 6.83 and 89.0 g/t over 53 meters respectively.

Equivalent Range Value for Intercept (I) is 80.8 to 93.8 US dollars per tonne. In gold equivalents 1.36 g/t to 1.58 g/t over 53 meters. Gold 59.24 US dollars per gram (<https://www.jmbullion.com/charts/gold-price/>).

Equivalent Range Value for Intercept (II) is 110.9 to 228.3 US dollars per tonne. In gold equivalents 1.87 g/t to 3.85 g/t over 35 meters.

Equivalent Range Value for intercept (III) is 133.6 to 326.0 US dollars per tonne. In gold equivalents 2.25 g/t to 5.50 g/t over 30 meters.

Ten other rare earths and/or alkali metals are pending for inclusion into Equivalent Range Values.

Currently gold is mined from underground at values down to 2 g/t gold in Ontario, Canada (<https://miningdataonline.com/property/1484/Young-Davidson-Mine.aspx#Geology>).

Granada Gold Mine target underground gold grade is 4 g/t over a mining width of 1.5 to 2 meters.

### **Processing and Refining Rare Earths and Alkali Metals**

Conventional mining, milling, separations and finishing possible at a single site with a zero discharge. Mountain Pass Mine in California, USA, which is in operation now is producing rare earth metals.

“Granada’s rare earth and alkali metal discovery was encountered during our deep drilling program for gold on the defined gold zone that is dipping at 50 degrees to the north towards the renowned Cadillac Break. Our target depth for the gold mineralization extension in the north of the Big Claim is about 2,500 meters,” said Frank J. Basa, P.Eng., “The 1.6 kilometer step out along the Cadillac Break could potentially be a massive rare earth and alkali metals mineralized zone yet to be discovered which would greatly impact the value of the property. The company has 5.5 kilometers of east-west strike length to further explore along the Cadillac Break. Drill results to date are exceptionally encouraging.”

The company is taking action on characterizing the minerals of these elements. It has sent samples to SGS Minerals in Ontario for advanced mineral analysis under the direction of Tassos Grammatikopoulos, Mineralogist at SGS Lakefield Research

Results to date are from SGS independent laboratories where NQ core samples of hole GR-20-22 were analysed. The company will proceed with sampling of the entire hole to enable disclosure of mineralized lengths associated with grades as well as investigation on the mineralogy as the grades of interest are not confined to one geological unit.

Co-ordinates of the hole have been determined by handheld GPS and will be surveyed in spring.

GR-20-22: 647 624E, 5 339 218N, 291Z, Azimuth 360N, Dip -65 and length 1,626m

### **QA/QC**

The insertion of blanks and standards by the technical team in the program were in line with expected values. The laboratory QA/QC results for these anomalous elements at the laboratory are in line with their expected values thereby allowing the public disclosure of the values.

### **Qualified person**

The technical information in this news release has been reviewed by Claude Duplessis, P.Eng., GoldMinds Geoservices Inc. member of Québec Order of Engineers and a qualified person in accordance with National Instrument 43-101 standards.

### **About Granada Gold Mine Inc.**

Granada Gold Mine Inc. continues to develop the Granada Gold Property near Rouyn-Noranda, Quebec. Approximately 120,000 meters of drilling has been completed to date on the property, focused mainly on

the extended LONG Bars zone which trends 2 kilometers east-west over a potential 5.5 kilometers of mineralized structure. The highly prolific Cadillac Break, the source of more than 75 million plus ounces of gold production in the past century, cuts through the north part of the Granada property, but is not necessarily indicative of mineralization hosted on the company's property.

The Granada Shear Zone and the South Shear Zone contain, based on historical detailed mapping as well as from current and historical drilling, up to twenty-two mineralized structures trending east-west over five and a half kilometers. Three of these structures were mined historically from four shafts and three open pits. Historical underground grades were 8 to 10 grams per tonne gold from two shafts down to 236 m and 498 m with open pit grades from 3.5 to 5 grams per tonne gold.

## Updated Mineral Resource

The updated resource at the Company's Granada Gold project in Rouyn-Noranda, Quebec was estimated by SGS Canada and outlined in a January 29, 2021 news release. The final report was filed March 15, 2021 with an Effective date of December 15, 2020. The 43-101 Technical Report is titled: Granada Gold Project Mineral Resource Estimate Update, Rouyn-Noranda, Quebec, Canada authored by Yann Camus, P.Eng. and Maxime Dupéré, B.Sc, géo. Both of SGS Canada Inc.

## Updated Mineral Resource Estimate Base Case with Details Between the Open Pit Portion and the Underground Portion

Type	Category	Tonnes	Au (g/t)	Gold Ounces
In Pit	Measured <sup>1</sup>	3,756,000	1.89	228,000
	Indicated	1,357,000	2.55	111,000
	<b>Measured+Indicated</b>	<b>5,113,000</b>	<b>2.06</b>	<b>339,000</b>
	Inferred	34,000	11.29	12,000
Underground	Measured	37,000	4.22	5,000
	Indicated	807,000	4.02	104,000
	<b>Measured+Indicated</b>	<b>844,000</b>	<b>4.03</b>	<b>109,000</b>
	Inferred	1,244,000	6.33	253,000

1. Cut-off grades are based on a gold price of US\$1,600 per ounce, a foreign exchange rate of US\$0.76 for CA\$1, a gold recovery of 93%
2. Pit constrained mineral resources are reported at a cut-off grade of 0.9 g/t Au within a conceptual pit shell
3. Underground mineral resources are reported at a cut-off grade of 3.0 g/t Au within reasonably mineable volumes

The Company is in possession of all mining permits required to commence the initial mining phase, known as the "Rolling Start", which allows the company to mine up to 550 tonnes per day. Additional information is available at [www.granadagoldmine.com](http://www.granadagoldmine.com).

"Frank J. Basa"

Frank J. Basa P. Eng.  
President and Chief Executive Officer

### For further information, please contact:

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