



# Globex Mining Enterprises Inc.

“At Home in North America”

55,263,336 shares issued and outstanding

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## Globex Exploration Update on Virgin Mountain Rare Earth & Beryllium Project, Arizona, USA

Rouyn-Noranda, Quebec, Canada. GLOBEX MINING ENTERPRISES INC. (GMX – Toronto Stock Exchange, G1MN – Frankfurt, Stuttgart, Berlin, Munich, Tradegate, Lang & Schwarz, LS Exchange, TTMzero, Düsseldorf and Quotrix Düsseldorf Stock Exchanges and GLBXF – OTCQX International in the US) is pleased to provide to its shareholders an update on geology and mineralization of its [Virgin Mountain Project](#). In May and December 2022, the project area had been acquired by staking 23 unpatented lode claims totaling a surface area of 192.28 ha in Mohave County, northwestern Arizona, USA.

The Virgin Mountain rare earth & beryllium property is located in the Arizona portion of the Virgin Mountain range, about 120 km northeast of Las Vegas, Nevada. It is easily accessible from Las Vegas via highway 15 toward the northeast until the village of Mesquite, NV, from here a 16 km long gravel road leads to the project area.

Past exploration activities for uranium and later for rare earth elements (REE) initiated in the 1940's and ended in 1991. Numerous small exploration pits, one collapsed adit, 2 collapsed shafts and a number of old access roads resulted from these exploration efforts. During that time several companies conducted exploration work, including American Smelting and Refining Company (ASARCO), which sank a 25 m deep shaft and finally the Blandsell Mining Company, abandoning the area in 1991. In the 1950's and 1960's the Virgin Mountains Be-bearing pegmatites had been explored intensely for beryllium, but never came into production.

Globex carried out geological mapping and collected a total of 25 rock samples.

The Virgin Mountains represent a northeast trending range, consisting of a core of Precambrian (1.7-1.8 billion years) metamorphic and intrusive rocks, flanked by Paleozoic to Cenozoic sedimentary rocks. Rocks occurring in, or in the vicinity to the property area include felsic migmatite, ortho- & paragneiss, basic & ultrabasic metamorphics, schist and pegmatites. Meta-igneous and meta-sedimentary rocks exhibit intense shear deformation and evidence of high temperature/high pressure and possibly ultra-high-pressure metamorphism.

Rare Earth (REE) ± U & Th mineralization is hosted in migmate-gneiss and interlayered thin schist layers, locally also in pegmatite dikes. Beryllium (Be) ± Nb & Ta mineralization is hosted exclusively in pegmatite dikes unrelated to the REE mineralization.

REE mineralization is always associated to anomalous or elevated radioactivity and principal ore minerals are the phosphate minerals xenotime and monazite. Within the project area numerous linear REE target zones had been defined.

The principal REE mineralization, named herein the **Hummingbird Zone**, could be followed-up over a distance of **250 m**. It is contained in steeply dipping parallel and en-echelon mineralized zones along a 30-40 m wide corridor trending in average 65° NE. Strong faulting, shearing and brecciation can be observed in some of the mineralized structures, mostly concordant to foliation of the metamorphic wall rock, chiefly felsic migmatite-gneiss. Globex confirmed minimum high-grade widths (with assays) between 0.9 m and at least 1.45 m, however widths of radioactive anomalies related to REE mineralization may approach 5 to over 10 m width (full widths not yet sampled). Globex collected 7 channel samples from outcrops of this principal REE structural trend. The **Hummingbird Zone is open to the east (300 m additional length possible)**, where it is concealed by rather shallow fluvial sand and gravel. Lateral extension for about 300 m to the west is possible as well, where most of the structure is hidden under shallow overburden and slope scree.

Sample	Description	Ce2O3 %	La2O3 %	Th ppm	U ppm	Y2O3 %	Dy2O3 %	Er2O3 %	Eu2O3 %	Gd2O3 %	Ho2O3 %	Lu2O3 %	Nd2O3 %	Pr2O3 %	Sm2O3 %	Tb2O3 %	Tm2O3 %	Yb2O3 %	TREO %
AGL-7	channel sample, 0.15 cm	0.374	0.162	718.5	225.4	0.254	0.053	0.026	0.001	0.046	0.008	0.002	0.209	0.039	0.041	0.007	0.003	0.016	1.240
AGL-8	channel sample, 1.10 cm	0.131	0.054	618.2	191.8	0.233	0.041	0.024	0.001	0.028	0.008	0.002	0.079	0.017	0.019	0.005	0.003	0.017	0.662
AGL-10	channel sample, 1.07 m	0.149	0.064	496.7	92.6	0.108	0.020	0.009	0.000	0.018	0.003	0.001	0.087	0.021	0.022	0.007	0.001	0.008	0.519
AGL-11	channel sample, 0.89 m	0.157	0.070	463.7	93.2	0.067	0.013	0.006	0.000	0.018	0.002	0.000	0.095	0.023	0.024	0.005	0.000	0.004	0.485
AGL-12	channel sample, 0.20 m	0.181	0.072	576.8	128	0.113	0.023	0.011	0.001	0.025	0.004	0.001	0.101	0.027	0.026	0.010	0.001	0.009	0.604
AGL-13	channel sample 1.45 m	0.238	0.097	828.4	99.2	0.101	0.023	0.010	0.001	0.026	0.005	0.001	0.127	0.033	0.032	0.008	0.001	0.008	0.710
AGL-14	channel sample, 1.30 m	0.096	0.042	336.5	46.5	0.063	0.012	0.006	0.000	0.012	0.002	0.000	0.057	0.015	0.015	0.004	0.001	0.005	0.328

*REE + U, Th assay results for 7 channel samples collected at the Hummingbird Zone*

All 7 channel samples collected from the Hummingbird structure returned high grades of light (LREE) and heavy (HREE) rare earth elements ± thorium and uranium. Total Rare Earth oxide contents (TREO) vary between **0.328%** and **1.24%**. Uranium could represent a by-product of the REE mineralization; higher grades below the oxidation level can be expected.

The Hummingbird Zone sticks out with **enrichment of the (more valuable) heavy rare earth elements** against most other worldwide REE deposits/occurrence (except similar Wolverine deposit in Australia). These elements include the high-value HREE gadolinium, **terbium, dysprosium**, holmium, erbium, lutetium (and even thulium). Furthermore, mineralization contains **abundant yttrium** (lower value), ytterbium and the valuable LREE **neodymium**. **Terbium** is the most valuable HREE, assays returned up to **96 g/t (0.01%) Tb2O3**.

The deposit type of the HREE-dominated mineralization at the Hummingbird Zone, Virgin Mountain Project is not yet well understood, could however represent a combination of pre-metamorphic enrichment in protolith rocks and hydrothermal processes.

Pegmatites, up to 6 m thick, highly enriched in beryllium occur within the Globex claim block over a strike length of about 2.5 km. Be-pegmatites are composed of feldspar (microcline, albite, plagioclase), muscovite, locally garnet, in places minor tourmaline, beryl and/or chrysoberyl. In addition to beryllium these pegmatites carry locally also minor amounts of the critical metals niobium & tantalum. In the 1950's and 1960's BeO grades had been analysed from 135 rock samples (bulk, channel and grab), grades ranged widely between 0.02% and 2.98%, corresponding to Be values between 0.072 and 10.736 kg/t. Globex collected four samples from these pegmatites, they returned **between 0.325 and 7.577 kg/t beryllium**.

Sample	Description	Be kg/t	BeO %	K %	Na %	Rb ppm	Li ppm	Nb ppm	Ta ppm	P ppm	Sn ppm
AGL-18	chip channel sample; 1.0 m	0.325	0.090	2.791	1.966	507.7	109.0	60.7	4.23	1320	24.21
AGL-22	channel sample; 0.6 m	1.156	0.321	1.226	2.005	146.9	73.0	41.1	3.35	612	17.73
AGL-23	channel sample; 0.1 m	7.577	2.103	6.409	1.168	91.3	59.0	43.2	5.20	114	19.85
AGL-24	chip channel sample, 1.5 m	0.342	0.095	1.307	4.736	85.3	21.0	299.6	12.18	1133	3.34

*Assay results of chrysoberyl-bearing pegmatite dikes*

In contrast to most other Be-bearing pegmatites in the world the dominant Be-mineral in the Virgin Mountain pegmatites is chrysoberyl. Chrysoberyl (formula:  $\text{BeAl}_2\text{O}_4$ ) occurs mostly as subhedral to euhedral tabular yellowish-green crystals up to 3 cm in size. Chrysoberyl contains 7.1% Be (against 5.03% Be in beryl). The average density of chrysoberyl is 3.67 g/cm<sup>3</sup> (in contrast to beryl with 2.76 g/cm<sup>3</sup>). Consequently, it is possible to concentrate chrysoberyl by a simple gravity process. That is not possible with beryl, beryl must be separated either by hand-cobbing or by flotation.

Nowadays the mineral bertrandite is the source mineral for more than 90 percent of the beryllium produced globally. Spor Mountain, the world-largest beryllium deposit, located in the state of Utah, USA produced about 170 tons beryllium from the total yearly worldwide production of 260 tons in 2021. However the bertrandite ore from Spor Mountain is not suitable for ultra-high-purity beryllium products, due its high content of F and U. **Ultra-high-purity beryllium is made exclusively from the mineral beryl (formula:  $\text{Be}_3\text{Al}_2\text{Si}_6\text{O}_{18}$ ). High-purity beryllium produced from a chrysoberyl concentrate could represent a low-cost alternative.**

#### Analytical Methods

Samples were placed in labelled plastic bags, sealed with a plastic zip and shipped to American Assay Laboratories (AAL) in Sparks, Nevada, USA for preparation and geochemical analysis. AAL is an ISO 17025 certified laboratory. Samples are crushed and a 300 g subsample pulverized. All samples underwent ICP-OES/MS analysis of a 0.5 g sub-sample after 5-acid digestion for 60 elements including silver and all rare earth elements (Assay lab code: ICP-5AM60 or IO-4AB61). For samples assayed for beryllium a 0.5 g sub-sample is digested via sodium peroxide fusion followed by ICP-OES (lab code: IO-NFBe). Typical internal standards and checks were completed by AAL during analysis.

It should be noted that 5-acid digestion method might not dissolve all REE-bearing mineral phases completely. Also, columbite (niobium-tantalum mineral) is not well dissolved with the 5-acid method.

This press release was written by Matthias Jurgeit, Eurogeologist under the supervision of Jack Stoch, Geo., President and CEO of Globex in his capacity as a Qualified Person (Q.P.) under NI 43-101.

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