

HARFANG DISCOVERS SPODUMENE (LITHIUM) IN PEGMATITE DYKES AT SERPENT-RADISSON PROPERTY, EEYOU ISTCHEE JAMES BAY, QUÉBEC

September 13, 2023 – Montreal, Québec. Harfang Exploration Inc. ("**Harfang**" or the "**Company**") (TSX-V: HAR) is pleased to announce that its field crew has discovered several spodumene occurrences in pegmatites in the eastern part of the Serpent-Radisson Property (the "**Property**") located in the Eeyou Istchee James Bay region, Québec. This discovery was made in the initial days of prospecting and, as a result, Harfang intends to devote most of its efforts for the remaining prospecting season to the Property which is already known for its gold and copper potential (**Figures 1 and 2**).

Highlights

- Discovery of several pegmatite dykes with up to 50% spodumene crystals mapped at several localities spread over at least 1 kilometre;
- Boulder field containing only angular spodumene-bearing pegmatite floats of cubic metre dimensions down-ice of the discovery outcrop;
- The discovery occurred at the early stages of the field program on the Property and surface work is ongoing until the end of the prospecting season.

Mr. Ian Campbell, President and CEO, commented: "We are excited about today's announcement which represents one of the very first discoveries of spodumene-bearing pegmatites since the beginning of the lithium rush in the emerging James Bay district. We are off to a superb start as our team has only been on this Property for a few days following the lifting of the lengthy fire ban and there is a lot of ground to cover. We have felt since last year that the area of this discovery had excellent potential for the discovery of LCT pegmatites based on our initial sampling results combined with the overall favourable geological environment which contains similarities to the major lithium deposits in James Bay. This

discovery area also contains several high-grade gold showings as well as the compelling Mista copper target which is drill-ready."

From LCT Pegmatites to the Spodumene Discovery

The current program confirms, for the first time, the presence of major lithium mineralization in pegmatite outcrops and boulders. The lithium mineralization consists of light grey to greenish elongated spodumene crystals ranging from centimetre size up to 1.40 metres in length. The spodumene content is highly variable and reaches up to 50% locally (Figures 3 to 6). Mapping to date has confirmed that several pegmatite dykes contain spodumene at different localities spread over at least 1 kilometre. Harfang has accelerated its efforts to test the extensions of this discovery before the prospecting season ends. Pegmatites in the area contain muscovite with accessory minerals such as tourmaline, garnet, apatite and beryl. The beryl content reaches up to 10% locally in the surrounding pegmatites.

The spodumene-bearing boulder field measures about 10-30 metres in size and is located 30 metres southwest of the discovery outcrop. The floats in the boulder field are angular, have a cubic metre size and are exclusively composed of spodumene-bearing pegmatite (Figure 6). Harfang believes that the boulders have not been transported by the glacier and hence could indicate the presence of Lithium-Cesium-Tantalum pegmatites ("LCT pegmatites") in the underlying bedrock.

Harfang has just started its field campaign on Serpent-Radisson as part of a follow-up on a reconnaissance campaign done in the eastern part of the Property during summer 2022 to evaluate the lithium potential of pegmatites. Grab samples collected during that campaign showed that these intrusive rocks, which contain highly anomalous beryllium (up to 25,000 ppm), lithium (up to 1,420 ppm), cesium (up to 998 ppm), tantalum (up to 173 ppm), niobium (up to 278 ppm) and rubidium (up to 1,095 ppm), fall in the category known as LCT Pegmatites (see news release dated October 5, 2022).

The field crew is still collecting rock samples on the Property. Analytical results will be disclosed as soon as available.

Polymetallic Mineralization in Eastern Serpent-Radisson

Over the years, diverse styles of mineralization have been highlighted by Harfang in the eastern part of the Property (Figure 2). Mista is the most significant showing in the area with up to 0.99% Cu, 0.20 g/t Au and 7.7 g/t Ag over 11.7 metres in width from channel sampling.

This showing consists of a quartz-rich arenite/wacke horizon injected by quartz veins mapped at the surface over 350 metres in length and is coincident with an induced polarization chargeability anomaly obtained from an induced polarization survey. That survey suggests that the mineralized horizon could be as long as 700 metres with its strongest chargeability zone, probably related to a higher content in sulphides, hidden under the overburden cover.

Moreover, the area hosts many high-grade gold occurrences discovered by Harfang such as Lawr (189 g/t Au, 200 g/t Ag and 1.7% Pb [grab], and 9.79 g/t Au over 1.25 m [channel]), Anaconda Ouest (117 g/t Au), and Couleuvre (38.40 g/t Au) (see news releases dated October 17, 2019 and December 10, 2019).

The recent lithium discovery coupled with the already known gold, copper and silver occurrences considerably enhances the mineral potential in the eastern part of Serpent-Radisson. This portion of the Property has received limited field work as the previous focus of the Company was oriented toward the western half where most of the exploration work has been conducted since 2020 based on the discovery of gold-rich till and soil and abundant associated gold occurrences in bedrock.

The Eeyou Istchee James Bay region is rapidly emerging as a North American lithium province comparable to some of the largest districts globally based on the occurrence of several deposits and is experiencing an exploration rush. Harfang's Serpent-Radisson Property consists of 988 claims totalling 50,843 hectares and is located proximal to the La Grande – Opinaca subprovince boundary which is a similar geological setting to the majority of the lithium deposits in James Bay. A recent maiden resource estimate by Patriot Battery Metals ("Patriot") on its CV5 pegmatite (see Patriot's news release dated July 30, 2023) yielded inferred resources of 109.2 Mt at a grade of 1.42% Li₂O with a cut-off grade of 0.40%, establishing CV5 as the largest lithium pegmatite resource in the Americas.

Qualified Person

The technical information in this news release was prepared and approved by François Huot, professional geologist and Vice President Exploration of Harfang, who is a non-independent qualified person for the technical disclosure as defined by the *National Instrument 43-101 Standards of Disclosure for Mineral Projects* ("NI43-101").

About Harfang Exploration Inc.

Harfang Exploration Inc. is well financed with approximately \$6.2 M in the treasury as of

September 1, 2023 and is a technically driven mineral exploration company with the primary

mission to discover ore deposits in Québec and Ontario. The Company is managed by an

experienced team of industry professionals with a proven track record of success, controls a

portfolio of highly prospective projects and has a strong financial position. Harfang is dedicated

to best practices through engagement with all stakeholders and commitment to the

environment.

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forward-looking statements or otherwise.

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