



Archer Exploration Provides Update on Gargoyle Ni-Cu-Co Project in Lumby Lake Greenstone Belt, Ontario

VANCOUVER, BC, December 21, 2023 – Archer Exploration Corp. (CSE: RCHR) (OTCQB: RCHRF) (FSE: 6YR0) (the “Company” or “Archer”) is pleased to announce the results of its Summer 2023 field program at the Gargoyle Ni-Cu-Co project in the Lumby Lake Greenstone Belt, located approximately 55 kilometres northeast of Atikokan, Ontario.

Highlights

- The Gargoyle property hosts a 10 kilometre long succession of favourable ultramafic rocks hosting numerous untested conductors
- Ni-Cu-Co sulphide mineralization has been traced across intermittent outcrops over a 1 kilometre strike length
- Four well-mineralized samples collected from two outcrops, contained anomalous nickel concentrations ranging from 0.54% to 0.76% Ni
- Memorandum of Understanding completed with Lac des Mille Lacs First Nations

The Gargoyle Ni-Cu-Co project consists of three separate claim blocks (Gargoyle, Goblin and Ghost properties) that together comprise 719 mineral claims totaling 15,216 hectares (Figure 1 and 2). The Gargoyle property is host to a 10 kilometre long succession of ultramafic rocks hosting numerous airborne conductors, none of which have been drill tested. Significant Ni-Cu-Co sulphide mineralization has been traced across intermittent outcrops for an approximately 1 kilometre strike length.

Tom Meyer, Archer’s Chief Executive Officer, commented: *“We are excited for our first opportunity to follow-up on the work carried out in this area by the previous landholders since we acquired the Gargoyle project in November 2022. Previous work on this highly prospective and easily accessible property identified magmatic nickel-copper-cobalt sulphide mineralization within a local abundance of favourable ultramafic rocks in the area. The focus of our current work is to further explore nickel sulphide targets and manifest the upside potential of Gargoyle within our large portfolio of Canadian nickel sulphide exploration projects.”*

John Townend, Archer’s Senior Manager of Technical Services & Exploration, commented: *“During the Spring and Summer of 2023, we targeted the highest priority VTEM conductors that were coincident with either mapped mafic/ultramafic rocks or unmapped and unexplained magnetic highs which could potentially be hosting magmatic nickel sulphide mineralization. Prospecting identified and delineated many new mafic and ultramafic outcrops (*

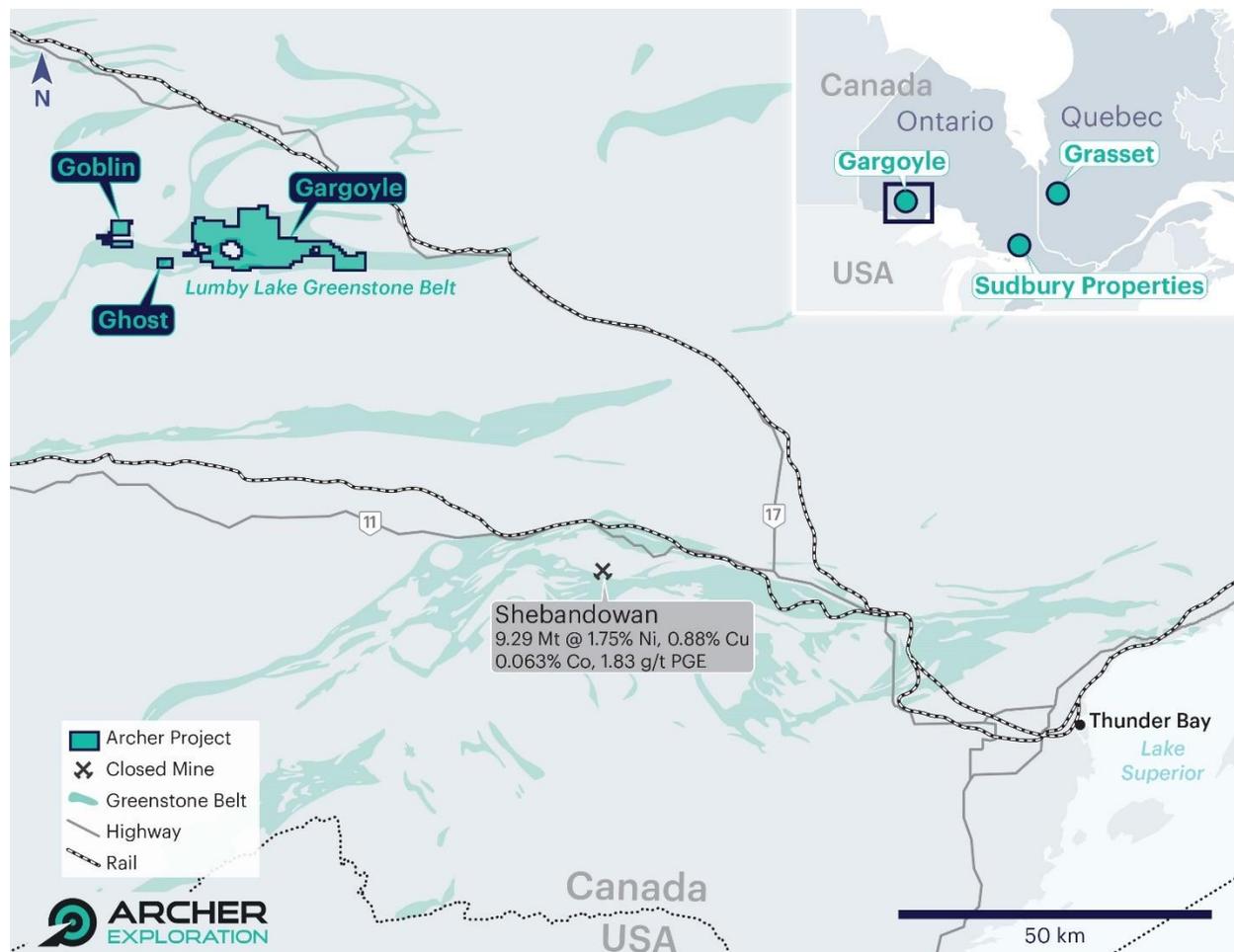
Figure 4 - Banded Iron Formation

and 3) and discovered new occurrences of iron formation that helped explain some of the geophysical targets of interest (Figures 2 and 4).”

“Prospecting also confirmed the presence of an approximately 1 kilometre strike length of disseminated nickel sulphide mineralization that makes up the original Gargoyle Lake showing outlined by previous landholders.”

The Gargoyle, Goblin and Ghost properties are situated within the Archean age Lumby Lake Greenstone Belt, approximately 90 kilometres from the former Shebandowan mine, which produced 9.29 million tons at 1.75% Ni, 0.88% Cu, 0.063% Co and 1.83 g/t PGE’s. The geology is comprised of mafic metavolcanics with lesser mafic/ultramafic intrusions, high-MgO komatiitic flows and subvolcanic intrusions (Figure 3), felsic plutons, and chemical and clastic meta-sedimentary rocks (Figure 4). The komatiitic volcanic succession contain common interflow, sulphide-bearing sedimentary units, which are an ideal sulphur source for the local formation of nickel sulphide mineralization within the adjacent komatiites. Previous work identified disseminated magmatic Ni-Cu-Co sulphide mineralization on the Gargoyle property, hosted by prospective ultramafic rocks that have a marked accumulation in the area.

Figure 1 – Goblin, Ghost & Gargoyle Project Location



Memorandum of Understanding with Lac des Mille Lacs First Nations

Archer would also like to recognize that the Gargoyle, Goblin and Ghost properties are part of the traditional territories of the Lac des Mille Lacs First Nations (the “LDMLFN”). The LDMLFN holds and exercises aboriginal and treaty rights to and over their traditional territories.

Archer is pleased to announce that the Company has entered into a Memorandum of Understanding (the “**MOU**”) with the LDMLFN whereby Archer recognizes and agrees to respect the aboriginal and treaty rights of the LDMLFN while engaged in all exploration activities within LDMLFM traditional territories. Archer and the LDMLFN both believe that effective communication, transparency, two-way learning, and engagement between the parties is essential to the success of building a long-term relationship. Archer and the LDMLFN jointly acknowledge that this MOU is mutually beneficial and provides respective understanding and obligations while working together.

2023 Summer Exploration Program

Archer’s 2023 summer exploration program on the Gargoyle property was focused on following up the 2018 discovery of magmatic Ni-Cu-Co sulphide mineralization and exploring for additional mineralization associated with the mafic and ultramafic rock units. Outcrop exposure on the eastern portion of the Gargoyle property is limited due to thick overburden and so the focus of the summer field exploration program was on the western portion of the property. Four samples collected from two outcrops near the historical showing returned strongly anomalous nickel values ranging from 0.54% to 0.76% Ni (Table 1 and Figure 2).

A review and interpretation of the electromagnetic (“**EM**”) data collected during a 2018 airborne VTEM Plus survey was highly successful and identified numerous new EM conductors across the property (see Figure 2). The EM modeling helped to identify the location, size, orientation, and conductivity of the source EM response, allowing targeted follow up for ground exploration activities.

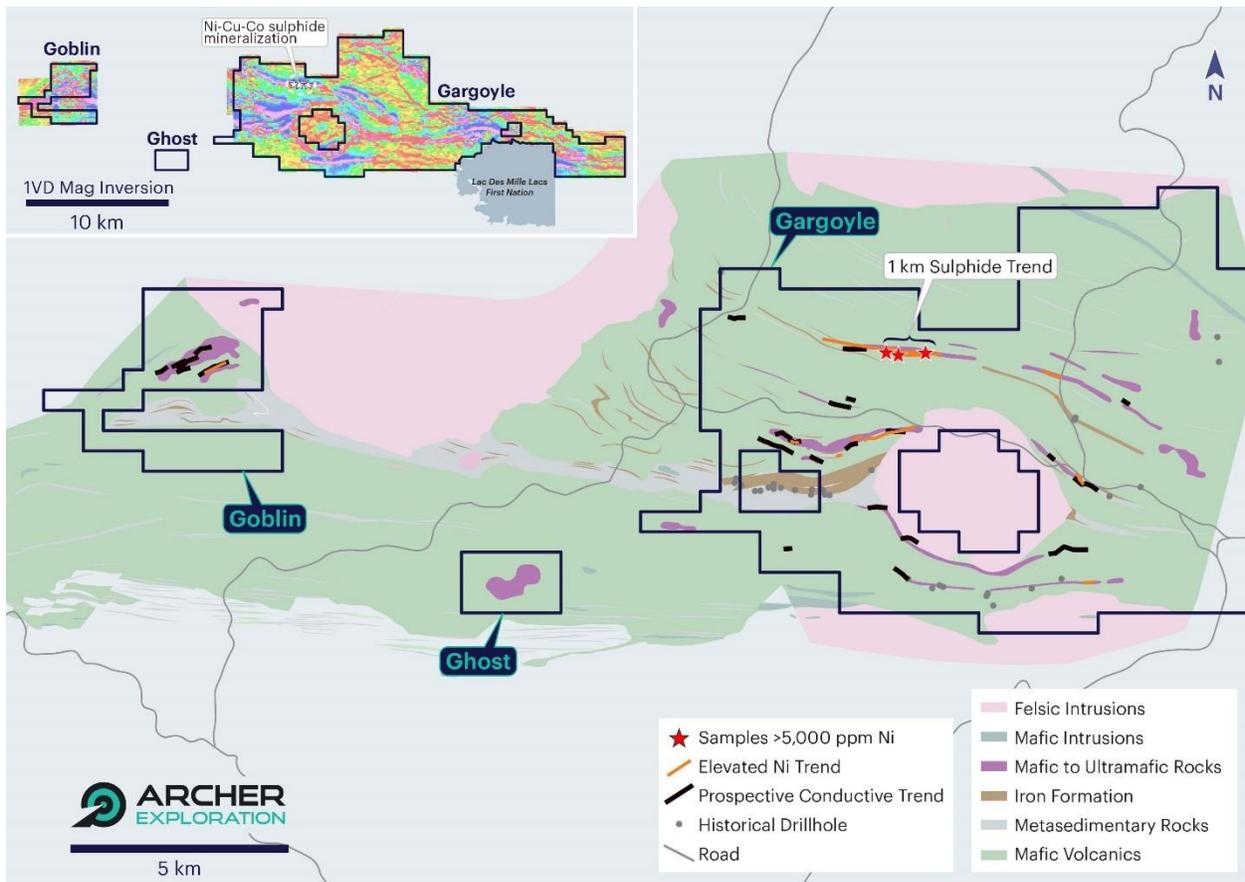
Targeted ground exploration outlined areas within mafic and ultramafic bodies which have anomalous nickel concentrations that may be indicative of contained nickel sulphides. Some of these areas with elevated nickel also have coincident, unsourced conductors which may represent higher concentrations of nickel sulphides.

The geophysical interpretation modelled numerous conductors which may represent higher concentrations of nickel sulphide mineralization. Several higher conductance anomalies have yet to be explained, with several being interpreted to be coincident with mafic/ultramafic bodies that are along strike of known ultramafic bodies. These anomalies are in areas that have never been followed up and will be a focus of future prospecting programs (Figure 2).

Table 1 – 2023 Assays > 5,000 ppm Ni

Sample	Description	Ni (ppm)	Ni (%)
F088222	7% stringer blebs of pyrrhotite>>chalcopyrite <4cm long x 8mm thick	7,580	0.76
F088223	7% stringer blebs of pyrrhotite>>chalcopyrite 5mm long x 8mm thick	5,390	0.54
F088303	Blebs and disseminated pyrrhotite with chalcopyrite mixed in blebs.	6,390	0.64
F088304	Blebs and disseminated pyrrhotite with chalcopyrite mixed in blebs.	7,290	0.73

Figure 2 - Goblin, Ghost & Gargoyle Properties



Next Steps

Further field work, sample collection, and mechanical stripping is anticipated to be conducted over the highest priority areas identified during the 2024 summer exploration program, focusing on the unexplained conductors coincident with or on strike of known mafic/ultramafic bodies and any other unexplained moderate to strong conductors. Only two thirds of the 2019 VTEM Plus geophysical survey was interpreted and further modeling may result in additional EM targets being identified, necessitating further investigation.

This systematic approach to modeling, investigating, and explaining the EM anomalies will drive further exploration towards delineating and extending the most favourable areas of known mafic/ultra mafic bodies that have the best potential for hosting nickel sulphide concentrations and may lead to future, more detailed ground geophysics, geochemistry and potential drill testing.

Given the lack of outcrops in the eastern third of the property yet to be prospected, and the large number of conductors identified to be followed up, a more reconnaissance type exploration approach, such as a property wide soil sample survey, may be effective at identifying the prospective areas for more advanced target development work. This approach is supported by the results of a historic soil survey carried out in the southwest corner of the Gargoyle claim block which successfully identified elevated nickel concentrations over areas with mapped ultramafic rocks.

Figure 3 - Spinifex Texture in Thicker Komatiite Flow



Figure 4 - Banded Iron Formation



QA/QC

Through May, June and early July, prospecting and sampling was carried out resulting in 304 rock samples being collected on the properties. These, along with 34 standards and blanks, were sent to ALS Canada prep laboratory in Thunder Bay, ON, for standard preparation (Crush to 70% less than 2mm, riffle split off 250g, pulverize split to better than 85% passing 75 microns) and the resulting pulps shipped to ALS Vancouver for assay. All samples were analyzed with PGM-ICP23 and ME-ICP61 packages and 111 of those were also analyzed with ME_XRF26.

Qualified Person

The scientific and technical content of this press release has been reviewed and approved by Mr. John Townend, P. Geo, Sr. Manager Technical Services & Exploration, who is a "Qualified Person" as defined by National Instrument 43-101 - *Standards of Disclosure for Mineral Projects*. Mr. Townend is satisfied that the analytical and testing procedures used are standard industry operating procedures and methodologies, including sampling, analytical and test data underlying the technical information disclosed in this news release. This news release refers to neighboring properties in which the Company has no interest. Mineralization on those neighboring properties does not necessarily indicate mineralization on the Company's properties.

Annual Equity Awards Grant

The Company is also pleased to announce that it has granted an aggregate of 5,269,274 incentive stock options (the "**Options**") to certain directors, officers, employees, and consultants of the Company. The Options have an exercise price of \$0.08 per common share, are exercisable for a period of five-years from the date of the grant and will vest in three equal annual instalments commencing on the grant date.

In addition, the Company has granted an aggregate of 3,036,421 restricted share units (the "**RSUs**") to certain directors, officers, employees, and consultants of the Company and 3,812,500 deferred share units (the "**DSUs**") to certain directors of the Company. The RSUs will vest in three equal annual instalments commencing on the first anniversary of the grant date and the DSUs will not vest until such time as the recipient director ceases to be a director of the Company, provided that no DSUs will vest within 12 months of the grant date. The Options, RSUs, and DSUs were granted in accordance with the Company's omnibus equity incentive compensation plan dated September 14, 2022, which was approved on February 24, 2023 by the shareholders of the Company.

About Archer

Archer Exploration is a Canadian Ni-Cu-Co-PGE focused exploration and development company with an extensive portfolio of assets in Quebec and Ontario, Canada. The Company's flagship asset is the Grasset Project, located within the Abitibi Greenstone Belt, with an Indicated Resource of 5.5 Mt @ 1.53% NiEq. In addition, the Company holds a portfolio of 37 properties and over 300 km² in the world-class mining district of Sudbury, Ontario.

The Company's growth strategy is focused on the exploration and development of its nickel sulphide properties within its portfolio. Archer's vision is to be a responsible nickel sulphide project developer in stable pro-mining jurisdictions. Archer is committed to socially responsible exploration and development, working safely, ethically, and with integrity. For more information, please visit www.archerexploration.com.

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Cautionary Note Regarding Forward-Looking Statements

Neither the CSE nor its Market Regulator (as that term is defined in policies of the CSE) accepts responsibility for the adequacy or accuracy of this release.

The information contained herein contains "forward-looking statements" within the meaning of applicable securities legislation. "Forward-looking information" includes, but is not limited to, statements with respect to the activities, events or developments that Archer expects or anticipates will or may occur in the future. Generally, but not always, forward-looking information and statements can be identified by the use of words such as "plans", "expects", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", or "believes" or the negative connotation thereof or variations of such words and phrases or statements that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved" or the negative connotation thereof.

Such forward-looking information and statements are based on numerous assumptions, including among others, that the results of planned exploration activities are as anticipated, the anticipated cost of planned exploration activities, that general business and economic conditions will not change in a material adverse manner, that financing will be available if and when needed and on reasonable terms, that third party contractors, equipment and supplies and governmental and other approvals required to conduct Archer's planned exploration activities will be available on reasonable terms and in a timely manner. Although the assumptions made by Archer in providing forward-looking information or making forward-looking statements are considered reasonable by management at the time, there can be no assurance that such assumptions will prove to be accurate.

By their nature, forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements, or other future events, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Such factors and risks include, among others: risks associated with the conduct of the Company's mining activities; regulatory, consent or permitting delays; risks relating to reliance on the Company's management team and outside contractors; risks relating to project financing and equity issuances; risks and unknowns inherent in all mining projects; laws and regulations governing the environment, health and safety; the ability of the communities in which the Company operates to manage and cope with the implications of COVID-19; the economic and financial implications of COVID-19 to the Company; operating or technical difficulties in connection with mining or development activities; employee relations, labour unrest or unavailability; the Company's interactions with surrounding communities; the Company's ability to successfully integrate acquired assets; the speculative nature of exploration and development; stock market volatility; conflicts of interest among certain directors and officers; lack of liquidity for shareholders of the Company; litigation risk; the ongoing military conflict in Ukraine; the ongoing military conflict in Israel, West Bank and Gaza Strip; general economic factors (including inflationary pressure); the price of commodities; and the factors identified under the caption "Risk Factors" in the Company's public disclosure documents.

The forward-looking information contained in this news release represents the expectations of Archer as of the date of this news release and, accordingly, is subject to change after such date. Readers should not place undue importance on forward-looking information and should not rely upon this information as of any other date. Archer does not undertake any obligation to update these forward-looking statements in the event that management's beliefs, estimates or opinions, or other factors, should change.