

# Cosa Resources Announces Results of Airborne Geophysics at the 100% Owned Ursa and Orion Uranium Projects in the Athabasca Basin, Saskatchewan

Vancouver, British Columbia, November 01, 2023 – Cosa Resources Corp. (TSX-V: COSA) (OTCQB: COSAF) (FSE: SSKU) ("Cosa" or the "Company") is pleased to announce the results of project-wide MobileMT surveys at its 100% owned Ursa and Orion uranium projects in the Athabasca Basin, Saskatchewan ("Ursa", "Orion" or the "Property").

## **Highlights**

- More than 110 kilometres of basement conductive trend defined, including over 100 kilometres at Ursa and over 10 kilometres at Orion
- Large, deeply rooted basement structures fundamental to the formation of Athabasca uranium deposits are interpreted to be present at both projects
- Multiple kilometre-scale, sandstone-hosted conductive anomalies suggest hydrothermal alteration zones characteristic of Athabasca uranium deposits are present
- Eleven initial target areas identified, none of which have been tested by historical drilling
- Follow-up will include ground geophysics to refine targets in advance of drill testing

Keith Bodnarchuk, President & CEO, commented: "Given the size and amount of unexplored land at both the Ursa and Orion Projects, we invested in a modern and comprehensive survey to highlight the most prospective areas, and we are thrilled to report that these results have exceeded our expectations for both Projects. Previous operators in the area were limited by now-obsolete airborne geophysical technology, and historical drilling targeted conductive zones based on small ground electromagnetic (EM) surveys. Cosa's new 3-D conductivity model suggests that all 15 historical drill holes were completed in low-priority areas. Our thesis that Ursa and Orion would be significantly upgraded with a full modern geophysical survey has proven correct, with the identification of 11 initial high priority target areas. Cosa is now set up to advance exploration at Ursa and Orion in 2024 and beyond."

Andy Carmichael, VP of Exploration commented: "We completed MobileMT™ surveys to rapidly develop target areas and avoid expensive, systematic exploration of these expansive and highly underexplored Projects. Having identified multiple areas with geophysical signatures consistent with known Athabasca Basin uranium deposits, Cosa has established a clear path in its strategy of targeted exploration to advance these Projects efficiently. We are encouraged that none of the historical drilling at Ursa, including the three weakly mineralized drill holes, is proximal to our initial target areas, and our confidence in the survey is bolstered by its consistency with historical drilling results. We are keen to continue exploration at Ursa and Orion and are planning ground-based geophysics for target refinement in advance of diamond drilling."

## Survey Objectives, Inversion, and Conductivity Model Interpretation

To rapidly identify and prioritize target areas throughout the Ursa and Orion projects, Cosa engaged Expert Geophysics to complete 3,104 line-kilometres of MobileMT<sup>™</sup> surveying in June and July. Unconformity-related uranium deposits in the Athabasca Basin are usually associated with conductive graphitic rocks in the basement, typically overlain by broad hydrothermal alteration zones in the sandstone that affect the conductivity of the host

sandstones. MobileMT™ is a modern, helicopter-borne, magnetotelluric (MT) survey system capable of detecting both basement-hosted electromagnetic (EM) conductors and sandstone-hosted zones of anomalous conductivity.

Following data acquisition, Cosa engaged Computational Geosciences Inc. and Convolutions Geoscience to complete an industry-leading, geologically constrained, three-dimensional (3-D) inversion of the survey dataset to produce a 3-D voxel model of conductivity consistent with known geology. Constraints applied to the inversion include distinct, overlapping ranges of conductivity for sandstone and basement, and a 3-D surface of the sub-Athabasca unconformity to domain modelled conductivity in a manner spatially consistent with the property geology.

Cosa's approach to identifying and prioritizing target areas is to search the 3-D inversion voxel for conductivity anomalies consistent with the unconformity-related deposit model. Top priority target areas are structurally complex basement conductive trends coincident with sandstone-hosted, kilometre-scale zones of anomalous conductivity with magnitudes, morphologies, and orientations which could reflect the large-scale hydrothermal alteration zones commonly associated with Athabasca uranium deposits.

#### Results - Ursa Project

Ursa covers 65 kilometres of strike length of the Cable Bay Shear Zone, a highly prospective and underexplored geological analogue to the setting underpinning major current- and past-producing eastern Athabasca uranium mines. At Ursa, the sub-Athabasca unconformity is estimated to be between 850 and 1000 metres below surface. Cosa's 2023 MobileMT™ survey covered over 90% of this expansive Project with the objective of defining and prioritizing conductive strike for follow up exploration and avoid costly systematic drilling of the entire Project.

The survey mapped over 100 kilometres of basement conductive trend strike-length within Ursa (Figure 2). The property-scale conductivity model has greatly improved Cosa's understanding of the Project's basement geology and allowed the identification of bends, splays, and interpreted stepovers along basement conductive trends, all of which suggest favourable structural complexity.

The Ursa conductivity model includes numerous zones of anomalous sandstone conductivity (Figure 3). Interpretation has identified 10 initial target areas consistent with Cosa's criteria detailed above (Figures 4 and 5) which cover an aggregate basement conductive trend length of approximately 24 kilometres. Importantly, none of the 15 historical drill holes within the Project, including the three weakly mineralized drill holes, are proximal to the initial target areas identified by Cosa.

Confidence in the conductivity model is gained from its consistency with historical drilling results. Drilling at Ursa largely failed to intersect broad, strong zones of sandstone-hosted clay enrichment and the model contains no significant zones of enhanced sandstone conductivity proximal to historical drill holes. Historical drill holes which intersected broad intervals of pervasively silicified sandstone are located within a zone of extremely low sandstone conductivity in the 3-D model, suggesting variations in conductivity related to alteration are detectable by the survey system and reflected in the conductivity model.

Cosa is highly encouraged by the survey results at Ursa and will prioritize follow-up of top priority targets with target refinement through industry-best ground EM surveying in advance of diamond drilling in 2024.

# **Orion Property Results**

The western portion of Orion covers eight kilometres of curvilinear magnetic low strike length containing historical EM conductors and flanked by magnetic highs. One drill hole has been completed within the Project outside of the survey area and the depth to the unconformity is estimated to be between 750 and 900 metres.

The 2023 MobileMT™ survey mapped more than 10 kilometres of basement conductive trend strike length at Orion. Basement conductive trends at Orion are complex, with bends and splays evident. An additional 1.5 kilometres of conductive strike length is inferred to extend beyond the surveyed area to the western Property boundary and

beyond to Orano's Parker Lake Project (Figure 2). Historical drilling at Parker Lake intersected positive results including graphitic basement beneath sandstone structures with illitic alteration and elevated uranium geochemistry.

A prominent, northwest-trending zone of anomalously high sandstone conductivity is centered above where an east-west trending basement conductive zone bends to the northwest (Figures 3 and 5). The 4-kilometre-long, 1.4-kilometre-wide feature is the highest-amplitude sandstone-hosted anomaly in the Ursa and Orion conductivity models. Northwest-trending topographic features partly coincident with the anomaly suggest post-Athabasca structural reactivation may have occurred.

As at Ursa, follow up work at Orion will include industry-best ground EM surveying for target refinement followed by drill testing. Additionally, Cosa will consider expanding MobileMT™ coverage over the eastern portion of the Project which was acquired after the 2023 survey was completed.

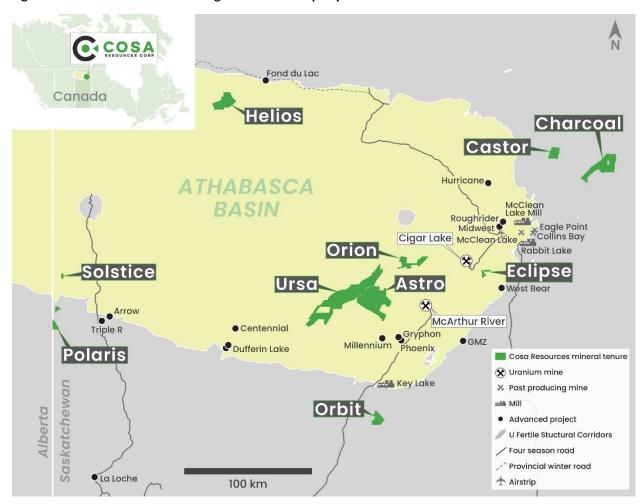
## **Astro Property Results**

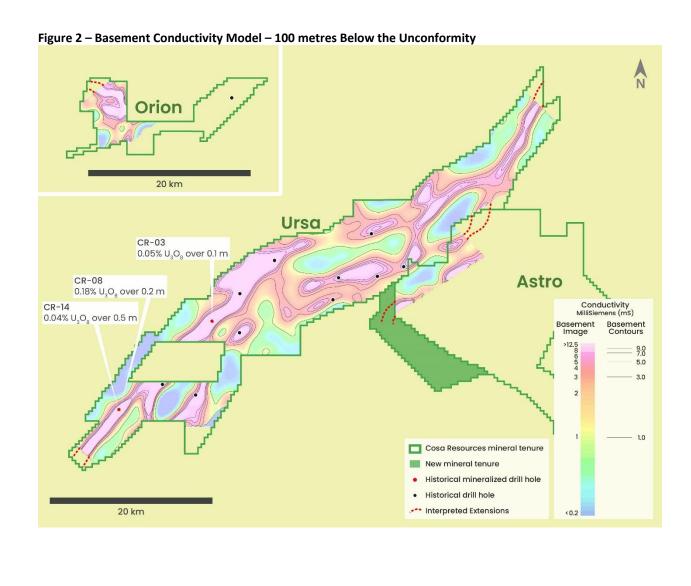
Astro covers a series of subparallel, northwest-trending magnetic low and high zones interpreted to represent prospective metasediments and buttressing granitic rocks, respectively. Historical airborne and ground EM surveying has defined approximately 20 kilometres of EM conductor strike length within the Property. The depth to the unconformity is expected to be between 800 and 1000 metres.

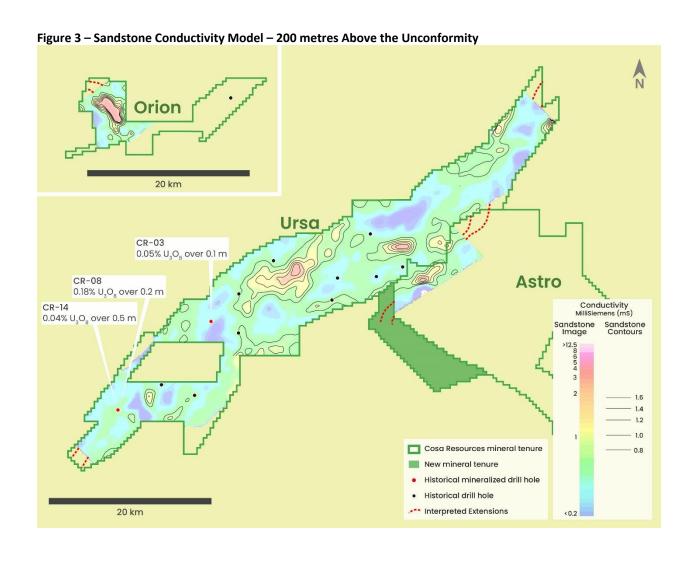
Ursa MobileMT™ surveying was extended onto Astro to cover historical conductors near the shared property boundary. The survey mapped approximately 10 kilometres of strike length of basement conductive trends, including trends extending from Ursa interpreted to be related to the Cable Bay Shear Zone (Figure 2). Surveying also identified a conductive trend extending from Astro into unclaimed ground which Cosa recently staked.

Given the success in target identification and prioritization using MobileMT™ at Ursa and Orion, future work is expected to include expanding coverage over the entire Astro Project.

Figure 1 – Cosa's Athabasca Basin Region Uranium Property Portfolio







and Target Areas Orion 20 km Ursa CR-03  $0.05\%~\rm U_{_3}O_{_8}~\rm over~0.1~m$ **Astro** CR-08 0.18% U<sub>3</sub>O<sub>8</sub> over 0.2 m Conductivity MilliSiemens (mS) CR-14 0.04% U<sub>3</sub>O<sub>8</sub> over 0.5 m Sandstone Contours Basement Image 1.6 1.4 1.2 Cosa Resources mineral tenure 1.0 New mineral tenure 8.0 Target Areas Historical mineralized drill hole Historical drill hole \*\*\* Interpreted Extensions 20 km < 0.2

Figure 4 – Basement Conductivity Model 100 m Below the Unconformity with Sandstone Conductivity Contours

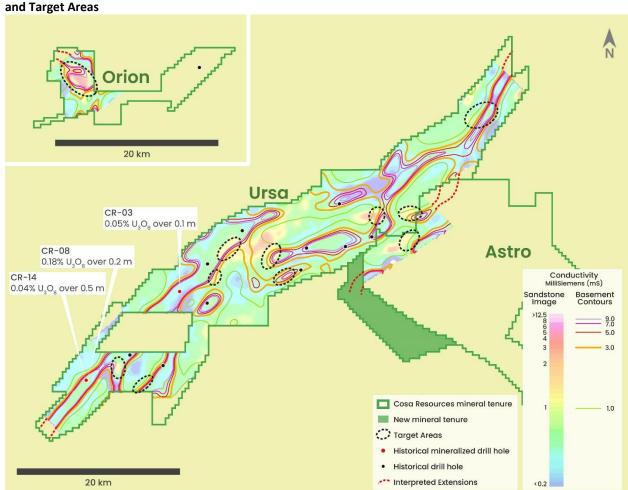


Figure 5 – Sandstone Conductivity Model 200 m above the Unconformity with Basement Conductivity Contours

#### **About Cosa Resources Corp.**

Cosa Resources Corp. is a Canadian mineral exploration company based in Vancouver, BC and is focused on the exploration of its uranium properties in northern Saskatchewan. The portfolio includes ten uranium exploration properties totaling over 165,000 ha across the Athabasca Basin region.

The team behind Cosa Resources has a track record of success in Saskatchewan, with several decades of combined experience in uranium exploration, discovery, and development in the province.

# **Qualified Person**

The Company's disclosure of technical or scientific information in this press release has been reviewed and approved by Andy Carmichael, P.Geo., Vice President, Exploration for Cosa Resources. Mr. Carmichael is a Qualified Person as defined under the terms of National Instrument 43-101. 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.

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## **Cautionary Statements**

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The information contained herein contains "forward-looking statements" within the meaning of the United States Private Securities Litigation Reform Act of 1995 and "forward-looking information" within the meaning of applicable Canadian securities legislation. "Forward-looking information" includes, but is not limited to, statements with respect to the activities, events or developments that the Company expects or anticipates will or may occur in the future, including, without limitation, planned exploration activities. 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 state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved" or the negative connotation thereof. Forward-looking statements in this news release include, among others, statements relating to: the exploration, development, and production at the Company's mineral projects.

Forward-looking statements and forward-looking information relating to any future mineral production, liquidity, enhanced value and capital markets profile of the Company, future growth potential for the Company and its business, and future exploration plans are based on management's reasonable assumptions, estimates, expectations, analyses and opinions, which are based on management's experience and perception of trends, current conditions and expected developments, and other factors that management believes are relevant and reasonable in the circumstances, but which may prove to be incorrect. Assumptions have been made regarding, among other things, the price of uranium and other commodities; no escalation in the severity of public health crises; costs of exploration and development; the estimated costs of development of exploration projects; the Company's ability to operate in a safe and effective manner and its ability to obtain financing on reasonable terms.

These statements reflect the Company's respective current views with respect to future events and are necessarily based upon a number of other assumptions and estimates that, while considered reasonable by management, are inherently subject to significant business, economic, competitive, political and social uncertainties and contingencies. Many factors, both known and unknown, could cause actual results, performance, or achievements to be materially different from the results, performance or achievements that are or may be expressed or implied by such forward-looking statements or forward-looking information and the Company has made assumptions and estimates based on or related to many of these factors. Such factors include, without limitation: the Company's dependence on one mineral project; precious metals price volatility; 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; the Company's inability to obtain insurance to cover all risks, on a commercially reasonable basis or at all; currency fluctuations; risks regarding the failure to generate sufficient cash flow from operations; risks relating to project financing and equity issuances; risks and unknowns inherent in all mining projects; contests over title to properties, particularly title to undeveloped properties; 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 public health crises; the economic and financial implications of public health crises 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 around the world; general economic factors; and the factors identified under the caption "Risk Factors" in the Company's management discussion and analysis and other public disclosure documents.

Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in the forward-looking information or implied by forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking information and statements will prove to be accurate, as actual results and future events could

differ materially from those anticipated, estimated or intended. Accordingly, readers should not place undue reliance on forward-looking statements or information. The Company undertakes no obligation to update or reissue forward-looking information as a result of new information or events except as required by applicable securities laws.