Ivanhoe Electric's Typhoon(TM) Technology Quickly Proves its Power with Discovery in Saudi Arabia

13.01.2025 | Newsfile

- Drilling Intersected Copper Mineralization in Three Holes to a Depth Beyond 700 Meters and Remains Open
- The Joint Venture Has Three Typhoon™ Units Active in Saudi Arabia

Riyadh, January 13, 2025 - Ivanhoe Electric Inc. (NYSE American: IE) (TSX: IE) ("Ivanhoe Electric") Executive Chairman Robert Friedland and President and Chief Executive Officer Taylor Melvin are pleased to provide initial drill results from the Company's 50/50-owned joint venture with Saudi Arabian Mining Company Ma'aden ("Ma'aden") (Saudi Stock Exchange Tadawul: 1211). The Joint Venture's initial drill program focused on the Umm Ad Dabah prospect, near Ma'aden's existing Al Amar gold-copper-zinc mine. The Joint Venture is using Ivanhoe Electric's advanced Typhoon™ geophysical surveying systems and Computational Geosciences Inc.'s ("CGI") industry-leading inversion software to guide exploration activities.

Mr. Friedland commented: "The rapid drill results achieved by our Joint Venture with Ma'aden illustrate the powerful capabilities of Ivanhoe Electric's technology-driven exploration platform. The power and accuracy of our Typhoon™ geophysical surveying technology and Computational Geosciences' software and algorithms enabled us to discover quickly a new copper zone near the Al Amar district. Imagine what would happen if we took the power of our technologies to explore all of Saudi Arabia for copper, gold, nickel, lithium and other metals."

Mr. Melvin commented: "Our Joint Venture has the right people and technologies to explore rapidly and accurately for new sources of copper, gold, and other minerals at depths exceeding one kilometer. We are excited by the initial results at Umm Ad Dabah."

Ma'aden CEO Bob Wilt commented: "Ivanhoe Electric's Typhoon™ technology has been a significant asset to our exploration program and these initial surveys and drill results demonstrate that these cutting-edge technologies are the right tools to unlock the vast mineral potential of the Kingdom."

Typhoon™ and CGI technologies allow for successful, rapid, large-scale and deep-penetrating geophysical surveys

The Joint Venture's first Typhoon™ survey covered 76 square kilometers near Ma'aden's Al Amar gold-copper-zinc mine. It was completed in March 2024. Subsequent Typhoon™ surveys have covered an additional 162 square kilometers of the Al Amar exploration licenses.

Ivanhoe Electric's 94%-owned subsidiary, Computational Geosciences Inc., is headquartered in Vancouver, Canada, near the University of British Columbia. CGI offers world class geophysical data processing capabilities to model a broad range of surveys in three dimensions. The world-leading performance of its superior algorithms is driven by adaptive meshes and the ability to identify relevant structures in high resolution to support geological interpretation and drill hole targeting. Through advanced research and development, CGI uses machine-learning methods to develop innovative quality assurance and quality control tools that have been fully integrated with the Typhoon™ system.

These tools have revolutionized workflow efficiency, enabling CGI to complete tasks that previously took weeks in just minutes. Importantly, CGI is now able to deliver complex three-dimensional inversion results

within 24 hours of receiving terabytes of raw data from Typhoon™ geophysical surveys.

The image below highlights the first three areas quickly identified for drilling by the Joint Venture team, using Typhoon™ and CGI. The Joint Venture team will be seeking similar and larger anomalies as exploration activities expand across the 48,500 square kilometers of prospective land included in the Joint Venture.

Figure 1. Plan view map of the Umm Ash Shalahib license area, showing Typhoon™ chargeability anomalies at Umm Ad Dabah, Area B, and Area C.

To view an enhanced version of this graphic, please visit:
https://images.newsfilecorp.com/files/3868/236905_5acc114c146e5bdd_001full.jpg

Copper mineralization intersected at Umm Ad Dabah associated with significant Typhoon™ anomaly

The Umm Ad Dabah prospect is located 6 kilometers to the northeast of Ma'aden's Al Amar Mine. The prospect was identified during the initial 76 square kilometer Typhoon™ survey. CGI rapidly processed and inverted the Typhoon™ geophysical data, identifying two significant chargeability anomalies that span approximately 4.5 kilometers in length. The southern anomaly, beginning around 200 meters below the surface and extending beyond 1,000 meters in depth, has a strike length of 1.8 kilometers (Figure 2).

Figure 2. Cross-section through Umm Ad Dabah, looking west, showing the southern Typhoon™ chargeability anomaly, the location of Joint Venture drill hole collars, their traces, and total sulfide minerals abundance.

To view an enhanced version of this graphic, please visit:
https://images.newsfilecorp.com/files/3868/236905_5acc114c146e5bdd_002full.jpg

Exploration drilling commenced in August 2024, with a total of 5,490 meters drilled across eight completed holes (Figure 2). Three of the drill holes intersected copper mineralization in the southern anomaly, including:

- Hole UAD-005: 13.1 meters @ 1.31% copper and 4.5 grams per tonne of silver from 717.9 meters
- Hole UAD-006: 5.9 meters @ 0.79% copper and 1.9 grams per tonne of silver from 374.5 meters

Mineralization is present as semi-massive to massive accumulations of precious metal-bearing iron and copper sulfides hosted in altered volcanic and volcaniclastic rocks. Drilling to date has defined a mineralized system extending over 250 meters in strike length and 400 meters down dip.

Photo 1. Drill core from discovery hole UAD-005 at Umm Ad Dabah from 725.7 to 729.1 meters showing semi-massive to massive brassy pyrite (an iron sulfide mineral) and brassy-yellow chalcopyrite (a copper sulfide mineral that is approximately 35% copper by weight) detected by Typhoon™ .

To view an enhanced version of this graphic, please visit:
https://images.newsfilecorp.com/files/3868/236905_5acc114c146e5bdd_003full.jpg

2025 exploration activities will focus on Al Amar district, Wadi Bidah, and Bir Umq license areas

Drilling will continue in the Al Amar Belt to explore for additional accumulations of massive sulfide mineralization, guided by results from an ongoing Typhoon™ survey and receipt of outstanding assays. Drilling has now moved to Areas B and C south of the Al Amar Mine (Figure 1).

There are three Typhoon™ systems operating in Saudi Arabia. Two units in the Al Amar Belt, and the third

unit at the Gehab prospect in the Wadi Bidah Belt.

Figure 3. Plan view map of southwest Saudi Arabia, showing the Umm Ash Shalahib, Al Amar, Wadi Bidah, and Bir Umq license areas.

To view an enhanced version of this graphic, please visit:
https://images.newsfilecorp.com/files/3868/236905_5acc114c146e5bdd_004full.jpg

Highlighted new drill intercepts from Umm Ad Dabah at the Umm Ash Shalahib exploration license.

DRILL HOLE	LOCATION	FROM (m)	TO (m)	INTERVAL LENGTH (m)	COPPER (%)	SILVER (g/t)
UAD-005	Umm Ad Dabah	699.0	704.0	5.0	0.67	3.4
	AND	717.9	731.0	13.1	1.31	4.5
UAD-006	Umm Ad Dabah	344.6	347	2.4	0.51	1.0
	AND	351.0	353.2	2.2	0.41	0.8
	AND	374.5	380.4	5.9	0.79	1.9

* Reported intervals are calculated at a cut-off grade of 0.3% copper.
*True width is approximately 50% of interval length.
*Some rounding errors may occur.

Photo 2. Typhoon™ deployed on the Umm Ash Shalahib exploration license.

To view an enhanced version of this graphic, please visit:
https://images.newsfilecorp.com/files/3868/236905_5acc114c146e5bdd_005full.jpg

Other Technical Information

The Joint Venture employs a comprehensive industry standard Quality Assurance/Quality Control ("QA/QC") program. PQ, HQ, and NQ diamond drill core is cut lengthwise into 2 halves, 1/2 is sent to for assay, and 1/2 is left behind in a secure facility for future assay verification.

The Joint Venture uses ALS Minerals Laboratory in Jeddah, Saudi Arabia. This laboratory operates in accordance with ISO/IEC 17025. Gold is assayed by a 50 g fire assay with an atomic absorption finish. An initial multi-element suite including copper, molybdenum, silver, and additional elements are analysed by four-acid digestion with an ICP-MS finish. All samples with copper values over 10,000 ppm and gold greater than 10 ppm are subjected to an overlimit method for higher grades, which also uses a four-acid digest with an ICP-ES finish, and fire assay with gravimetric finish. Certified reference materials, blanks, and duplicates are randomly but consistently inserted at the geologist's discretion and QA/QC geologist's approval into the sample stream to control laboratory performance.

Qualified Persons

Disclosures of a scientific or technical nature included in this news release have been reviewed, verified and approved by Charles N. Forster, P.Geo., and Mark Gibson, P.Geo., both who are Qualified Persons as defined by Regulation S-K, Subpart 1300 promulgated by the U.S. Securities and Exchange Commission and by Canadian National Instrument 43-101. Mr. Forster is a Senior Advisor to Ivanhoe Electric and Mr. Gibson is Chief Geophysics Officer of Ivanhoe Electric.

About Ivanhoe Electric

We are a U.S. company that combines advanced mineral exploration technologies with electric metals exploration projects predominantly located in the United States. We use our accurate and powerful Typhoon ™ geophysical surveying system, together with advanced data analytics provided by our subsidiary, Computational Geosciences Inc., to accelerate and de-risk the mineral exploration process as we seek to discover new deposits of critical metals that may otherwise be undetectable by traditional exploration

technologies. We believe the United States is significantly underexplored and has the potential to yield major new discoveries of critical metals. Our mineral exploration efforts focus on copper as well as other metals including nickel, vanadium, cobalt, platinum group elements, gold and silver. Through the advancement of our portfolio of electric metals exploration projects, headlined by the Santa Cruz Copper Project in Arizona and the Tintic Copper-Gold Project in Utah, as well as other exploration projects in the United States, we intend to support United States supply chain independence by finding and delivering the critical metals necessary for the electrification of the economy. We also operate a 50/50 joint venture with Saudi Arabian Mining Company Ma'aden to explore for minerals on ~48,500 km^2 of underexplored Arabian Shield in the Kingdom of Saudi Arabia.

Website: www.ivanhoeelectric.com

About Ma'aden

Ma'aden is the largest multi-commodity mining and metals company in the Middle East and among the fastest-growing mining companies in the world, with revenues of SAR 40.2 billion (US$10.7 billion) in 2022. Ma'aden is developing the mining industry into the third pillar of the Saudi economy in line with Vision 2030 and aims to be a role model in responsible and sustainable operations. Ma'aden operates 17 mines and sites, has 6,000+ direct employees and exports products to over 30 countries. Ma'aden is embarking on massive growth over the next 18 years across phosphate, aluminum, gold, copper and new minerals. Ma'aden is also Ivanhoe Electric's second largest stockholder holding approximately 9.9% of the currently issued common stock.

Website https://www.maaden.com.sa/

Contact Information

Mike Patterson
Vice President, Investor Relations and Business Development
Email: mike@ivnelectric.com
Phone: 1-480-601-7878

Follow Us On X

Ivanhoe Electric's Executive Chairman Robert Friedland: @robert_ivanhoe

Ivanhoe Electric: @ivanhoeelectric

Ivanhoe Electric's investor relations website located at www.ivanhoeelectric.com should be considered Ivanhoe Electric's recognized distribution channel for purposes of the Securities and Exchange Commission's Regulation FD.

Forward-Looking Statements

Certain statements in this news release constitute "forward-looking statements" or "forward-looking information" within the meaning of applicable U.S. and Canadian securities laws. Such statements and information involve known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements of Ivanhoe Electric, its projects, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements or information. Such statements can be identified by the use of words such as "may", "would", "could", "will", "intend", "expect", "believe", "plan", "anticipate", "estimate", "scheduled", "forecast", "predict" and other similar terminology, or state that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved. These statements reflect Ivanhoe Electric's current expectations regarding future events, performance and results and speak only as of the date of this news release.

Such statements in this news release include, without limitation statements regarding the timing and results

of drilling activities and assays, continued drilling at Umm Ad Dabah and in the Al Amar district, the continued use of two Typhoon™ units in the Al Amar Belt and one Typhoon™ unit at the Gehab prospect in the Wadi Bidah Belt, the functioning of our technology, CGI's ability to continue to advance data processing capabilities, and other planned or potential developments in the businesses of Ivanhoe Electric.

Forward-looking statements are based on management's beliefs and assumptions and on information currently available to management. Such statements are subject to significant risks and uncertainties, and actual results may differ materially from those expressed or implied in the forward-looking statements due to various factors, including any inability to negotiate and sign mutually agreeable definitive agreements; any inability to satisfy all applicable closing conditions; changes in the prices of copper or other metals Ivanhoe Electric is exploring for; the results of exploration and drilling activities and/or the failure of exploration programs or studies to deliver anticipated results or results that would justify and support continued exploration, studies, development or operations; the final assessment of exploration results and information that is preliminary; the significant risk and hazards associated with any future mining operations, extensive regulation by the U.S. government as well as local governments; changes in laws, rules or regulations, or their enforcement by applicable authorities; the failure of parties to contracts with Ivanhoe Electric to perform as agreed; and the impact of political, economic and other uncertainties associated with operating in foreign countries, and the impact of the COVID-19 pandemic and the global economy. These factors should not be construed as exhaustive and should be read in conjunction with the other cautionary statements and risk factors described in Ivanhoe Electric's Annual Report on Form 10-K and other filings with the U.S. Securities and Exchange Commission at www.sec.gov.

No assurance can be given that such future results will be achieved. Forward-looking statements speak only as of the date of this news release. Ivanhoe Electric cautions you not to place undue reliance on these forward-looking statements. Subject to applicable securities laws, Ivanhoe Electric does not assume any obligation to update or revise the forward-looking statements contained herein to reflect events or circumstances occurring after the date of this news release, and Ivanhoe Electric expressly disclaims any requirement to do so.

To view the source version of this press release, please visit https://www.newsfilecorp.com/release/236905