

October 9, 2023

# Ivanhoe Electric Reports First Drill Results from its Initial Exploration Program at the Hog Heaven Project in Montana

**Exploration Drilling Intersects Widespread Precious and Base Metal Mineralization to Significant Depth Below Historic Mining Levels** 

Exploration Drill Hole HHD-005 Intersects 311 Meters Containing 0.35 g/t Gold, 22.89 g/t Silver, 0.36% Lead, and 0.55% Zinc, from 162 to 473 Meters



Ivanhoe Electric's Proprietary Typhoon™ Geophysical Survey System Deployed to Advance the Search for Additional Epithermal Mineralization and Deep Porphyry Source at Hog Heaven

PHOENIX, ARIZONA – Ivanhoe Electric Inc. ("Ivanhoe Electric") (NYSE American: IE; TSX: IE) Executive Chairman, Robert Friedland and President and Chief Executive Officer, Taylor Melvin are pleased to provide an update on the status of ongoing exploration efforts, including the initial results of Ivanhoe Electric's exploration drilling, at the Hog Heaven exploration Project located on private land approximately 50 miles southwest of Kalispell, Montana.

Mr. Friedland commented: "We have a wonderful opportunity at the Hog Heaven Project, located on private land in the silver-rich state of Montana, to pick up where legendary miners like Anaconda left off. This region is well known for its long and rich history of silver production, and we believe there is more to the story. Our recent drilling efforts have returned promising initial results, and our geologists see potential for mineralization to continue to great depths."

Mr. Melvin commented: "We are excited by the initial results of our exploration drilling program at Hog Heaven, a high-quality exploration project on private land in Montana. The early presence of high-grade precious metal mineralization along with base metal mineralization, at depths much greater than the historical drilling and mining operations in the district, is encouraging as our team advances to the next phases of exploration

drilling. The Hog Heaven Project is emerging rapidly as one of our most interesting exploration projects in the United States."

The Hog Heaven district consists of several high sulfidation epithermal mineral deposits and prospects as well as several now-closed mines, including the Flathead Mine.

The Flathead Mine was mined by Anaconda Mining Inc. from 1929 to 1946, producing approximately 241,000 short tons of direct-ship ore averaging 26.6 troy oz/ton silver. Another operator mined the Flathead Mine from 1963 to 1975 producing 49,700 short tons averaging 9.35 troy oz/ton silver. Other previously mined high sulfidation epithermal mineral deposits within the bounds of the Hog Heaven Project include the Ole Hill and West Flathead Mines located 1 mile west of the Flathead Mine; the Margarite Mine, south of Flathead Mine; and the Martin Mine just northwest of Margarite Mine. Ivanhoe Electric's exploration team believes that the Flathead Mine is part of a much larger mineralized system that has remained unrecognized by past miners and explorers.

### 2023 Hog Heaven Drilling Program

Ivanhoe Electric's 2023 drill program at Hog Heaven commenced in June 2023. The program to date has consisted of six holes totaling 6,147 meters. Partial assays have been received for the first three holes: HHD-003, HHD-004, HHD-005, with assays pending for HHD-006, HHD-007 and HHD-008. HHD-001 and HHD-002 were drilled in early winter 2022 for a total of 1,582 meters.

Ivanhoe Electric has been drilling with two rigs at the project over the summer. The current drilling campaign is designed to search for additional silver, gold and copper-rich high sulfidation epithermal mineralization, which was the focus of these previous mining activities; and to search for potential porphyry copper mineralization located at depth, which may represent the heat and fluid source to this epithermal system.

Ivanhoe Electric's diamond drill hole HHD-005 was collared near the Flathead Mine, and oriented to test the extent of known mineralization by drilling along the margin of the volcanic pipe to depth. Observations and assay results demonstrate that mineralization is widespread, extending from surface to over 900m depth.

# Initial drilling returns encouraging early results with widespread precious and base metal mineralization

Mineralization intersected in HHD-005 is typified by disseminated pyrite typically carrying gold grades of 0.15-0.75 g/t, cut by a series of flat-lying 0.05-0.5-meter pyrite-sulfosalt veins that carry high-grade silver, copper and other base metal mineralization. This mineralization is interpreted to be outboard to one or more structural feeder zone(s) which may exist laterally to the west or east with potential to contain higher-grade mineralization.

Drilling has been underway with two drill rigs. The drill rigs are currently being exchanged for track mounted equipment more appropriate for winter conditions. Drilling will continue at the Hog Heaven Project with two drill rigs subject to winter conditions, which may necessitate a slowdown in operations. This change in equipment will allow for continued exploration for high-grade feeders, and testing porphyry target areas as further assay results and data continue to be received.

Figure 1. Hog Heaven Project map showing geophysical data and location of Ivanhoe Electric exploration drilling.

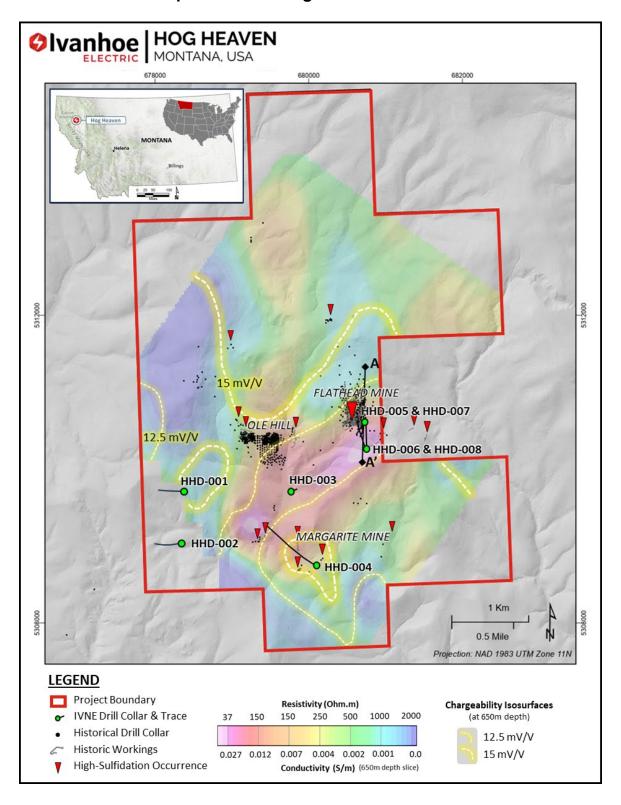
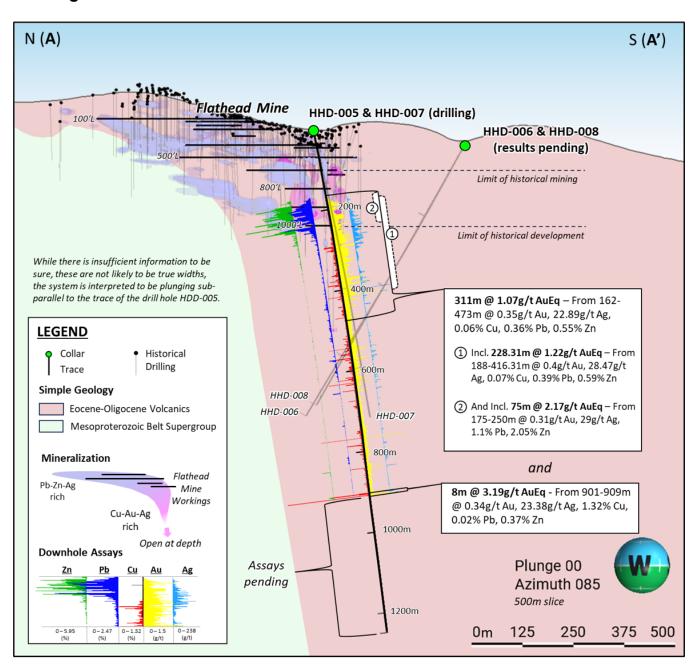


Figure 2. Cross section showing geology, drill hole locations and historical mine workings.



Drilling provides increasingly stronger evidence supporting the existence of a deeper porphyry copper system

Mineralization at the Hog Heaven Project area is comprised of gold-silver-copper-lead-zinc high sulfidation epithermal replacement, veins and breccia deposits.

One of Ivanhoe Electric's goals, in addition to discovering additional base and preciousmetal rich high sulfidation mineralization, is to search for the porphyry copper source believed to be the source of these systems and the deposits that were historically mined.

Diamond drillholes HHD-003, HHD-004, and HHD-005 all intersected increasing copper as a proportion of mineralization with increasing depth. Copper mineralization is dominantly comprised of enargite and chalcopyrite, which are approximately 48% and 35% copper by weight, respectively. HHD-004 notably intersected quartz-molybdenite veins at depth. Molybdenite is approximately 59% molybdenum by weight.

Furthermore, copper-molybdenum mineralization was observed as early stockwork veins present within clasts hosted in breccia, which were subsequently mineralized by later gold-silver-copper-lead-zinc rich fluids. These relationships point to multiple mineralizing events over extended periods of time, reflecting the potential for a robust mineralizing system at depth. Stockwork quartz, chalcopyrite, and molybdenite veins are common features of porphyry copper systems globally. These observed geological features support the potential for porphyry copper mineralization at depth at the Hog Heaven Project.

Photo of HHD-005 drill core at 903.5 m displaying a sub-vertical pyrite-enargite vein cutting diatreme breccia. The presence of gold- and copper-rich veins at depth in HHD-005 are indicative of a vertically extensive hydrothermal system and suggests proximity to a high-grade feeder zone.



Photo of fine early quartz veins with clear alteration halos cut by later molybdenite-pyrite veins observed in drill core from HHD-004 at 1241.9 meters depth. Molybdenite veins such as this are commonly observed in the outer portions of mineralized porphyry systems.



Photos of a breccia fragment comprised of a porphyritic intrusion cut by porphyry stockwork quartz-pyrite veins observed in drill core from HHD-003 at 943.9 meters depth (left) and HHD-007 at 772 meters depth (right). Stockwork veins in fragments provide strong evidence of a potential deep porphyry system at Hog Heaven.



# Typhoon<sup>™</sup> deployed at the Hog Heaven Project to advance the search for deep porphyry sources

In late September 2023, Ivanhoe Electric deployed Typhoon™ at the Hog Heaven Project site to conduct surface electromagnetic surveys to better map the semi-massive and massive sulfide epithermal mineralization that contains the precious and base-metal mineralization down to over 700 meters below surface. Typhoon™ will continue surface electromagnetic survey loops, which will be followed by additional 3D induced polarization surveying and the downhole electromagnetics.

Typhoon™ is Ivanhoe Electric's proprietary electrical geophysical surveying transmitter system. The Typhoon™ system can detect the presence of sulfide minerals containing copper, nickel, gold and silver (as well as water and oil) and was specifically developed to conduct large surveys and identify deep geophysical anomalies in environments that have highly resistive surface conditions, where potential deposits are hidden by gravel cover and where target depths exceed 1 kilometer (0.62 miles), considerably deeper than the range of conventional geophysical surveying systems.

Typhoon™ achieves its results through its unique specifications, which include an electrical output of up to 200 amps and 10,000 volts. The transmitter uses switches and capacitance systems in a proprietary platform that generates a very pure and stable transmitted signal, resulting in an extremely high signal-to-noise ratio. Typhoon™ is also capable of transmitting both induced polarization and electromagnetic signals, meaning that the same transmitter can be used to search for a wide variety of mineral deposit types.

Typhoon's ™ ability to identify mineralization at these depths has already been proven in the United States. In November 2022, Ivanhoe Electric announced that it had identified deep copper mineralization at the Far Southwest Anomaly (now known as the Southwest Exploration Area) at the Santa Cruz Project near Casa Grande, Arizona. The anomaly was identified by Typhoon™ and confirmed by exploration drilling with the exploration hole collared approximately 1,000 meters (0.62 miles) southwest of the nearest drill hole in the Santa Cruz resource area. At 1,059 meters deep (over 3,400 feet) of basin-fill gravel cover, Ivanhoe Electric's drill crossed a fault and entered primary chalcopyrite and pyrite mineralization within intrusive rocks in the anomaly identified by Typhoon™.

# Ivanhoe Electric's proprietary electrical geophysical surveying system Typhoon™ in action at the Hog Heaven Project, Montana



## Lucas Forster, Geologist (foreground) and Kurt Tagliareni, Geologist (background), logging drill core at the Hog Heaven Project, Montana



Table 1. Highlighted intercept from Hog Heaven exploration drill hole HHD-005 (refer to Ivanhoe Electric's website for complete details of all reported drill holes https://ivanhoeelectric.com/electric-metals/hog-heaven)

DRILL HOLE	FROM (M)	TO (M)	INTERVAL LENGTH (M)	AuEq* (g/t)	Au (g/t)	Ag (g/t)	Cu (%	Pb (%)	Zn (%)
HHD-005	162	473	311	1.07	0.35	22.89	0.06	0.36	0.55
Including	175	250	75	2.17	0.31	28.99	N/A	1.10	2.05
Including	188	416.31	228.31	1.22	0.40	28.47	0.07	0.39	0.59
And	901	909	8	3.19	0.34	23.38	1.32	0.02	0.37

<sup>\*</sup>The following long term metal prices were used: 3.80\$/lb Cu, 1,707\$/oz Au, 22.42\$/oz Ag, 0.93\$/lb Pb, and 1.19\$/lb Zn.

\*The specific formula used to report AuEq(g/t) is Au(g/t)\*(0.65) + ((1.87875425724906) \* Cu (%)) ((0.0121238339867514) \* Ag(g/t)) + ((0.431062860010269) \* Pb (%)) + ((0.551575057432494) \* Zn (%))

<sup>\*</sup>Recoveries are informed by historical preliminary metallurgical flotation tests and are considered conservative: 80% Cu; 65% Au; 60% Ag; 75% Pb, 75% Zn.

<sup>\*</sup>Intervals were derived on a AuEq basis with a cutoff of 0.25g/t AuEq

<sup>\*</sup>Maximum internal dilution of 5m was applied

<sup>\*</sup>These are not true widths, and the system is interpreted to be plunging sub-parallel to the trace of the drill hole HHD-005.

### Ivanhoe Electric is earning into a 75% interest in the Hog Heaven Project

Ivanhoe Electric and Brixton Metals Corporation ("Brixton") entered into an earn-in agreement in 2021 covering an area of approximately 24 km² of the Hog Heaven Project. Under the earn-in agreement, Ivanhoe Electric may earn up to a 75% interest in the Brixton land constituting the Hog Heaven Project by making cash payments totaling \$4.5 million and incurring an aggregate of \$40 million in exploration expenditures by 2032. Ivanhoe Electric will earn an initial a 51% interest by making a total of \$4.5 million in cash payments and incurring \$15 million in exploration expenditures.

#### **Qualified Persons**

Disclosures of a scientific or technical nature included in this news release, including the sampling, analytical and technical data underlying the information, have been reviewed, verified and approved by Shawn Vandekerkhove, P.Geo, who is a Qualified Person 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. Vandekerkhove is an employee of Ivanhoe Electric.

#### Other Technical Information

Ivanhoe Electric employs industry standard QA/QC and data verification protocols. The diamond drill holes were completed using PQ and HQ diameters. The drill core was cut lengthwise into halves using a diamond-bladed saw, with one-half used for the assay sample and the other half retained in core boxes and archived at site. Pulps and rejects are also stored on site for archival purposes. Mineralized zones were generally sampled on 2m intervals. Each core sample was placed into a bag with a unique numbered sample identification tag. Quality control samples were inserted between core samples using the same numbering sequence. Then samples were grouped into batches for shipping and laboratory submissions. Chain of custody records are maintained for sample shipments and the custody is transferred from Ivanhoe Electric expeditor to the laboratory upon delivery.

Samples were shipped to ALS Laboratories in Twin Falls, Idaho, for sample preparation and analysis. Samples were analyzed using customary four acid digestion and ICP-MS finish. A standard gold fire assay package was used to analyze for gold. Silver content was assessed using either HCI leach and ICP-AES finish or fire assay with gravimetric finish was performed depending on silver values.

A limited amount of core was shipped, logged, cut, and sampled at Ivanhoe Electric's Santa Cruz Project in Casa Grande, Arizona. Sampling methods were identical at both the Hog Heaven and Santa Cruz locations. Samples were then shipped to ALS Laboratories in Tucson, Arizona, where they were subjected to the same preparation and analytical methods. ALS Minerals Tucson and ALS Minerals Twin Falls are both

independent laboratories certified under ISO 9001:2008 and accredited under ISO/IEC 17025:2005 by the Standards Council of Canada.

#### **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<sup>2</sup> of underexplored Arabian Shield in the Kingdom of Saudi Arabia. Website: www.ivanhoeelectric.com.

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Ivanhoe Electric's investor relations website located at <a href="www.ivanhoeelectric.com">www.ivanhoeelectric.com</a> 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 US 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 the 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, timing and results of drilling operations, the timing of receipt of assay results, the potential for porphyry copper mineralization and source at depth at the Hog Heaven Project, the potential to find higher-grade mineralization, the number of drill rigs operating at the project, 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 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 US 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 filed with the U.S. Securities and Exchange Commission.

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.