

## ERDENE PROVIDES KHUNDII GOLD DISTRICT EXPLORATION & TECHNICAL PROGRAM UPDATE

---

### Press Release

Halifax, Nova Scotia  
2019.11.06

Erdene Resource Development Corporation (TSX:ERD | MSE:ERDN) (“Erdene” or the “Company”) is pleased to provide results from the second phase of the 2019 gold exploration program, and to announce the commencement of the Q4 2019 drill program at its 100%-owned Khundii Gold Project.

“Our exploration results, including the successful step-out drilling at the Bayan Khundii (“BK”) deposit and the new Khar Mori (Dark Horse) discovery on the Khundii Mining Licence continue to demonstrate the potential of the Khundii Gold District,” said Peter Akerley, Erdene’s President and CEO. “First identified in 2015 by Erdene, the pace of discoveries is a testament to the virgin nature of this fertile district. These new prospects provide significant opportunities to grow resources at our high grade, open-pit development.”

“The final 2019 exploration program, focused on following up on the Khar Mori discovery, drilling on the Ulaan license and completing geotechnical and metallurgical drilling will kick-off this week,” continued Mr. Akerley. “Erdene is targeting first gold production in 2021 as a first step in our journey to becoming a major regional gold producer. The Khundii Gold District provides the potential for significant growth through continued exploration and acquisition.”

### Exploration Highlights and Q4 Plans:

- > **Bayan Khundii South Extension:** Step-out drilling, under cover, 350 metres south of the BK deposit, intersected the gold mineralized altered volcanic unit characteristic of the high-grade BK gold deposit.
- > **Khar Mori Gold Discovery:** New, high-grade gold discovery on the Khundii Mining license, 4.5 kilometres north of the BK deposit, with surface rock samples grading up to 32.9 g/t gold.
- > **Bayan Khundii – Striker and Midfield Zones:** Definition drilling intersected 32 metres of 2.4 g/t gold in BKD-269 and 37 metres of 1.7 g/t gold in BKD-270 demonstrating the continuity of mineralization within the BK deposit.
- > **Ulaan Copper Target Drilling to Commence in November:** Drill testing planned below zone of sheeted to stockwork quartz-pyrite veining with elevated copper values and increasing phyllic alteration and magnetic intensity.
- > **Khundii North (“KN”) & CSZ Gold Target Results:** Drilling confirms quartz stockwork breccia body at depth (KN) and a thick sequence of sulphide-rich, altered volcanic rocks (CSZ).

### Development Highlights and Q4 Plans:

- > **Water reserve established:** Water resource drilling established a six-hole bore field expected to support the BK processing plant.
- > **Geotechnical drilling to commence in November:** Drilling will test the potential of steepening pit slope angles, which will potentially reduce the stripping ratio in the upcoming Feasibility Study.
- > **Metallurgical testing program:** Testing program underway to increase confidence and optimize grinding and processing parameters for the Feasibility Study.

### South Bayan Khundii

The Q2 drill program at Bayan Khundii intersected high-grade gold (51.9 g/t gold over 1 metre) south and outside the resource boundaries of the current deposit at a depth of 264 metres. Follow-up work, south of this new discovery, indicated the altered host unit could be traced by geophysics over 500 metres to the south under cover and appeared to be coming closer to surface. Subsequent drilling in Q3, (BKD-269) intersected a 100 metre thick sequence of altered volcanic tuff, similar to the Bayan Khundii deposit, at approximately 100 metres depth, with gold-bearing tuff units intersected up to 1 metre of 2.45 g/t gold. This discovery opens up a large area south of the deposit for additional exploration.

### Khar Mori Gold Discovery

Exploration in a previously untested area (new Khar Mori prospect), 4.5 kilometres north of the Bayan Khundii deposit and one kilometre southeast of the Altan Arrow prospect on the Khundii Mining License returned rock-chip samples of up to 32.9 g/t gold. The gold-bearing samples are characterized by quartz veins and stockwork hosted within massive tourmaline. An additional sample containing 8.4 g/t gold was collected 500m west of the 32.9 g/t gold sample, providing a sizeable target area for future exploration. Although exploration is at an early stage, this is an exciting discovery considering the very high-grade gold on surface, greenfield exploration status and relative proximity to the BK deposit. A detailed soil and rock-chip sampling and mapping program will be undertaken in the coming weeks to determine the orientation and potential of gold mineralization in advance of drilling.

### Bayan Khundii Infill Drilling

Two holes were drilled from Striker to Midfield as part of the Q3 2019 program to increase confidence in the inferred resources in this area. Results included several high-grade intersections, including 6.6 g/t gold over 6.3 metres within 32 metres of 2.4 g/t gold in BKD-269 and 4.7 g/t gold over 7 metres within 37 metres of 1.7 g/t gold in BKD-270. A summary of the results is included in Table-1.

Table-1: Bayan Khundii Drill Results Summary

Drill Hole	From (m)	To (m)	Interval (m)*	Gold (g/t)
<b>BKD-269</b>	<b>37</b>	<b>40</b>	<b>3</b>	<b>8.33</b>
Incl	38	39	1	17.6
And	61	75	14	1.31
And	142	190	48	1.89
Incl	151	152	1	17.6
Incl	175.7	182	6.3	6.56
Incl	181	183	1	32.9
<b>BKD-270</b>	<b>47</b>	<b>55</b>	<b>8</b>	<b>0.95</b>
And	139	176	37	1.68
Incl	165	172	7	4.74
Incl	171	172	1	13.7

\* Based on vein dip relative to drill dip, the true thickness of the intervals is approximately 92% of the apparent sample width.

### Ulaan Copper Target

The Ulaan copper porphyry target was initially tested to an approximate vertical depth of 350 metres by three widely spaced holes in late 2018. The holes intersected volcanic to sub-volcanic rocks exhibiting propylitic to phyllic quartz-sericite pyrite (QSP) alteration with varying concentrations of pyrite and locally low-level copper mineralization. UDH-02 provided the most encouraging results, exhibiting sheeted to stockwork quartz-pyrite veining locally, associated with elevated copper values (100 to 300ppm over 60m). UDH-02 also shows a zonation from argillic into phyllic alteration with depth. The phyllic alteration coincides with an increase in pyrite mineralization occurring both as disseminations and veinlets as well as increasing magnetic intensity and vein frequency with depth throughout

the hole. A 700-metre drilling program is planned on the 51% owned Ulaan license, including testing the potential of the alteration system by extending UDH-02 to a projected depth of 650 metres. Drilling will also be carried out on two shallower targets with 200 metre drill holes. One hole will test a quartz-tourmaline breccia zone and the second hole will test a clay alteration zone associated with a geophysical anomaly.

#### Khundii North Drilling

The Khundii North prospect is located within the northeast portion of the Khundii Mining License, approximately 4 kilometres from the proposed BK pit. Previous shallow drilling intersected mineralization, up to 2 g/t gold, within a quartz breccia and stockwork veined structural conduit in a monzonite host. Surface sampling of the Khundii North structure has returned samples containing over 20 g/t gold. In Q3 2019, a single 253 metre drill hole (AAD-38) was sunk to test the Khundii North quartz breccia body at depth. Assay results from the drill hole returned modest but anomalous gold values of up to 0.25 g/t gold over 2 metres. Gold anomalism appears to be associated within intervals of quartz stockwork veins intersected throughout the drill hole.

#### CSZ Exploration Drilling

The CSZ (Central Structure Zone) target is located approximately 800 metres northwest of the proposed BK pit. The prospect is dominantly covered by quaternary sediments and exposure is limited. Previous exploration and drilling suggested the potential for a buried target within a structural setting parallel to the BK deposit. Q3 2019 exploration drilling targeted an IP geophysical anomaly at a depth of approximately 200 metres. Drilling revealed a thick package of silicified and white mica altered volcanic rocks consisting of tuff and porphyritic dacite with moderate to intense disseminated pyrite, but results did not indicate anomalous gold.

#### Bayan Khundii Process Water Reserves

In October, Erdene's hydrogeological contractor completed drilling and testing for the process water reserve:

- A six-hole bore field has been established with a water source of sufficient rate and volume to meet the requirements of the Bayan Khundii processing plant.
- Two water wells have been established near the proposed location of the accommodation camp.
- Approval of the water reserves by state agencies is expected in late November.

#### Q4 2019 Technical Program:

Work will commence in November on the Q4 2019 technical program to support the Feasibility Study for the Bayan Khundii Gold deposit.

- A 750–800 metre geotechnical program will provide the information required to determine optimal pit slope angles for the Feasibility Study. In its Pre-Feasibility Study (PFS), Tetra Tech, Inc. used conservative assumptions in determining slope stability factors, in the absence of detailed geotechnical results. The Q4 geotechnical work should support steeper pit slopes, resulting in a lower stripping ratio and improved project economics.
- Metallurgical testing will take place to increase confidence and optimize the grinding and processing parameters in support of the detailed plant design for the Feasibility Study. This work will include grinding and rock hardness testing, such as JK Drop tests, crusher work index, abrasion index testing and SMC grindability. In addition, testing will be carried out on carbon absorption, cyanide detoxification and dewatering parameters.
- A near surface geotechnical drilling program is expected to be initiated in mid November. This program is designed to evaluate subsurface and soil conditions to inform civil engineering design of buildings and structures for the BK mine site, including the processing plant, accommodation village and other facilities.

#### Q4 2019 Exploration Drill Program:

- A 700-metre drilling program on the Ulaan license, including the extension of UDH-02 to a projected depth of 650 metres and drilling on two shallower targets with 200-metre drill holes.

- A detailed soil and rock-chip sampling and mapping program will be undertaken to determine the orientation and potential of gold mineralization in advance of drilling on the new Khar Mori Gold target.
- District scale geophysical compilation and interpretation program underway that is expected to provide new drill targets on the Khundii Mining License. This program is focused on identifying targets with the same geophysical signature as the BK gold deposit and identifying structures that could host additional significant mineral deposits
- Continued monitoring of the licensing system for acquisition targets through the government tender system and in the secondary market.

## Background on the Khundii Gold Project Development

Erdene's deposits are located in the Edren Terrane, within the Central Asian Orogenic Belt, host to some of the world's largest gold and copper-gold deposits. The Company has been the leader in exploration in southwest Mongolia over the past decade and is responsible for the discovery of the Khundii Gold District comprised of multiple high-grade gold and gold/base metal prospects, two of which are being considered for development: the 100%-owned Bayan Khundii and Altan Nar projects. Together, these deposits comprise the Khundii Gold Project.

In October of 2019, Erdene announced the results of an independent Technical Report for the Khundii Gold Project (press release [here](#)), which included a Pre-feasibility Study ("PFS") for the Bayan Khundii deposit and an updated Preliminary Economic Assessment ("PEA") for the Altan Nar deposit. The PFS and the updated PEA results include an after-tax Net Present Value at a 5% discount rate and a US\$1,300/oz gold price of US\$97 million and US\$24 million, Internal Rate of Return ("IRR") of 42% and 90% for Bayan Khundii and Altan Nar deposits, respectively. The PFS envisions an open-pit mine at Bayan Khundii from Years 0-7, producing an average of 61,000 oz gold per year at a head grade of 3.73 g/t gold, and an open-pit operation at Altan Nar during Years 7-10, for an average annual production of 48,000 oz gold at an average head grade of 3.46 g/t gold, utilizing a conventional carbon in pulp processing plant at the Bayan Khundii mine. Erdene has secured a mining license for the Bayan Khundii deposit in August of 2019 and plans to start producing gold in late 2021.

The Altan Nar PEA is by nature, a preliminary economic study, based in part on Inferred Resources. Inferred Resources are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves which is required for a prefeasibility or feasibility study. Mineral resources that are not mineral reserves do not have demonstrated economic viability and there is no certainty that the PEA will be realized.

## Qualified Person and Sample Protocol

Peter Dalton, P.Geo. (Nova Scotia), Senior Geologist for Erdene, is the Qualified Person as that term is defined in National Instrument 43-101 and has reviewed and approved the technical information contained in this news release. All samples have been assayed at SGS Laboratory in Ulaanbaatar, Mongolia. In addition to internal checks by SGS Laboratory, the Company incorporates a QA/QC sample protocol utilizing prepared standards and blanks. All samples undergo standard fire assay analysis for gold and ICP-OES (Inductively Coupled Plasma Optical Emission Spectroscopy) analysis for 33 additional elements. For samples that initially return a grade greater than 5 g/t gold, additional screen-metallic gold analysis is carried out which provides a weighted average gold grade from fire assay analysis of the entire +75 micron fraction and three 30-gram samples of the -75 micron fraction from a 500 gram sample.

Erdene's drill core sampling protocol consisted of collection of samples over 1 or 2 m intervals (depending on the lithology and style of mineralization) over the entire length of the drill hole, excluding minor post-mineral lithologies

and un-mineralized granitoids. Sample intervals were based on meterage, not geological controls or mineralization. All drill core was cut in half with a diamond saw, with half of the core placed in sample bags and the remaining half securely retained in core boxes at Erdene's Bayan Khundii exploration camp. All samples were organized into batches of 30 including a commercially prepared standard, blank and either a field duplicate, consisting of two quarter-core intervals, or a laboratory duplicate. Sample batches were periodically shipped directly to SGS in Ulaanbaatar via Erdene's logistical contractor, Monrud Co. Ltd.

## About Erdene

Erdene Resource Development Corp. is a Canada-based resource company focused on the acquisition, exploration, and development of precious and base metals in underexplored and highly prospective Mongolia. The Company has interests in four exploration licenses and two mining licenses in Southwest Mongolia, where exploration success has led to the discovery and definition of the Khundii Gold District. Erdene is listed on the Toronto and Mongolia stock exchanges. Further information is available at [www.erdene.com](http://www.erdene.com). Important information may be disseminated exclusively via the website; investors should consult the site to access this information.

## Forward-Looking Statements

Certain information regarding Erdene contained herein may constitute forward-looking statements within the meaning of applicable securities laws. Forward-looking statements may include estimates, plans, expectations, opinions, forecasts, projections, guidance or other statements that are not statements of fact. Although Erdene believes that the expectations reflected in such forward-looking statements are reasonable, it can give no assurance that such expectations will prove to have been correct. Erdene cautions that actual performance will be affected by a number of factors, most of which are beyond its control, and that future events and results may vary substantially from what Erdene currently foresees. Factors that could cause actual results to differ materially from those in forward-looking statements include the ability to obtain required third party approvals, market prices, exploitation and exploration results, continued availability of capital and financing and general economic, market or business conditions. The forward-looking statements are expressly qualified in their entirety by this cautionary statement. The information contained herein is stated as of the current date and is subject to change after that date. The Company does not assume the obligation to revise or update these forward-looking statements, except as may be required under applicable securities laws.

## NO REGULATORY AUTHORITY HAS APPROVED OR DISAPPROVED THE CONTENTS OF THIS RELEASE

## Erdene Contact Information

Peter C. Akerley, President and CEO, or  
Robert Jenkins, CFO

Phone: (902) 423-6419

Email: [info@erdene.com](mailto:info@erdene.com)

Twitter: <https://twitter.com/ErdeneRes>

Facebook: <https://www.facebook.com/ErdeneResource>

LinkedIn: <https://www.linkedin.com/company/erdene-resource-development-corp/>

YouTube: <https://www.youtube.com/channel/UCILs5s9j3SLmya9vo2-KXoA>