

ERDENE INTERSECTS 23 METRES OF 17 g/t GOLD AT ALTAN NAR AND EXPANDS NEW KHAR MORI GOLD PROSPECT ON KHUNDII LICENSE

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Erdene Resource Development Corp. (TSX:ERD; MSE:ERDN) ("Erdene" or the "Company") is pleased to report results from the Q4-2019 exploration program on its Altan Nar, Khundii and Ulaan licenses.

"We are very encouraged by the results of the December 2019 drilling at Altan Nar which returned multiple shallow intersections in excess of 50 g/t gold," said Peter Akerley, Erdene's President and CEO. "These results expand the high-grade core of the Discovery Zone deposit and open up new areas for future drilling that should positively impact Altan Nar resources."

"These results, combined with the expansion of the new Khar Mori gold prospect area and the extension of gold mineralization south of Bayan Khundii in Q3-2019, continue to demonstrate the prospectivety of Erdene's Khundii Gold District," stated Mr. Akerley. "We are maintaining a dual focus on advancing our high-grade, open-pit, 60,000 ounce per year Bayan Khundii Gold Project to production, while drilling targets on adjacent prospects to grow our resource base."

Highlights [see attached figures for reference]:

- Altan Nar (Gold-Polymetallic Resource):
 - o Drilling expands high-grade core of the Discovery Zone:
 - 45.7 g/t gold, 93.4 g/t silver, 1.54% lead and 3.40% zinc over 7 metres beginning at ~ 70 metres vertical depth, within 23 metres grading 17 g/t gold (TND-135)
 - 12.2 g/t gold over 10 metres (TND-134) including 2 metres of 52.9 g/t gold confirming high-grade gold mineralization south of the "Gap Zone"
 - 10 metres of 4.68g/t (TND-138) confirming high-grade gold mineralization north of the "Gap Zone"
 - o TND-136 confirms continuity of mineralization now open to the south
- Khar Mori (Gold):
 - o Rock chip samples of 87.8 g/t gold, 18.2 g/t gold, 15.3 g/t gold and 12.1 g/t gold near the 32.9 g/t gold rock chip collected in early Q4-2019
 - o Geochemical sampling and mapping expand prospect area to 1.5km X 2km
- Ulaan (Copper-Gold):
 - o Gold bearing tourmaline breccia pipe intersected

Q42019 Exploration Program Summary

As the Bayan Khundii gold deposit advances through studies and permitting, the exploration team shifted focus in late 2019 to expanding resources throughout the District with follow up work on three priority targets: Altan Nar (Golden Sun), Khar Mori (Dark Horse) and the area surrounding the Bayan Khundii (Rich Valley) Deposit.



Following a detailed review and modelling of the Discovery Zone deposit at Altan Nar, 16 km north of the Bayan Khundii gold development, the exploration team developed a plan to test a concept for a preferred gold mineralized horizon believed to represent an epithermal boiling zone that could host continuity of the very high grades intersected during the most recent drilling campaign in 2017. Additionally, the Khar Mori prospect identified earlier in Q4-2019 was expanded to a 1.5km X 2km zone with multiple high grade grab samples of up 89g/t gold, bordering the Altan Arrow prospect to the north where shallow drilling previously intersected up to 2 metres of 70 g/t gold.

The focus of the exploration team in 2020 will be on expanding resources within these three highest priority areas including incorporating today's results into a comprehensive review and interpretation program in advance of fieldwork in Q2-2020 and further drilling in mid-2020.

<u>Altan Nar Deposit</u>

In late Q4-2019, the company drilled five holes totaling 667 metres in the Discovery Zone ("DZ"), one of 18 high-priority targets along a 5.6 kilometre mineralized trend on its 100% owned Altan Nar project. The Q4-2019 program successfully tested a concept of a preferred high gold mineralized horizon believed to represent an epithermal boiling zone. Four holes tested the high-grade core area of the Discovery Zone, over a 130 metre strike length, 70 metres of which remains untested by drilling ("Gap Zone"). The fifth hole tested the southern extension of the deposit.

Table 1 – Summary of Altan Nar Drilling Results

Hole ID	From	То	*Measured Width (m)	Au g/t	Ag g/t	Pb %	Zn %
TND-134	101.0	111.0	10.0	12.2	21.0	0.55	1.18
Incl	105.0	107.0	2.0	52.9	59.5	1.77	3.80
TND-135	97.0	120.0	23.0	17.0	44.7	0.75	1.47
Incl	105.0	112.0	7.0	45.7	93.4	1.54	3.40
incl	105.0	106.0	1.0	108.0	81.0	1.16	2.79
incl	106.0	107.0	1.0	52.9	135.0	3.80	6.22
incl	108.0	109.0	1.0	52.8	149.0	1.50	3.10
Incl	117.0	120.0	3.0	14.5	23.3	0.83	0.98
TND-136	84.0	86.0	2.0	0.99	0.0	0.14	0.24
and	110.0	126.0	16.0	0.37	0.9	0.11	0.24
TND-137	6.0	13.0	7.0	2.64	11.1	0.66	0.43
and	20.4	23.0	2.6	0.89	5.4	0.28	0.38
and	69.0	73.0	4.0	1.76	9.0	0.10	0.24
TND-138	20.0	28.0	8.0	1.72	1.8	0.03	0.09
and	40.0	44.0	4.0	1.54	4.3	0.17	0.17
and	56.0	66.0	10.0	4.68	50.8	0.31	0.73

^{*}Projected true width for TND-134, TND-135 and TND-136 is ~72% of the measured width and for TND-137 and TND-138 is ~45% of the measured width.

Hole TND-134 targeted the northeast strike extension of the DZ core along a newly identified high-grade ore horizon. TND-134 intersected 10 metres grading 12.2 g/t gold, 21.0 g/t silver, 0.55% lead and 1.18% Zinc (see Table 1 for summary of results) hosted within a sulphide rich, chalcedonic quartz epithermal breccia.



TND-134 has provided a 20-metre extension along strike of the DZ high-grade core indicating consistency in high-grade mineralization within the identified ore horizon, expected to positively impact the resource at Altan Nar and opening the way for further expansion along strike to the north.

Hole TND-135 targeted a previously untested area of the DZ high-grade core. TND-135 intersected 23 metres of 17 g/t gold, 44.7 g/t silver, 0.75 % lead and 1.47 % zinc within a black, sulphide rich epithermal breccia. Drill results from TND-135 demonstrate continuity in size and grade within the high-grade DZ core, providing confidence in future expansion of the DZ high-grade core.

Hole TND-136 targeted the southwest strike extension to the DZ deposit. TND-136 intersected multiple anomalous intervals including 2 metres of 0.99 g/t gold and 16 m of 0.37 g/t gold. These intersections provide the strongest indications to date of the southwest extension of the Discovery Zone, establishing the potential to expand resources along the southwest structural trend.

Hole TND-137 was designed to test a projected zone of near surface, high-grade mineralization which would extend the DZ North mineralization along strike to the southwest. TND-137 intersected 7 metres of 2.64 g/t gold, 11.1 g/t silver, 0.66% lead and 0.43% zinc beginning 5 metres from surface. Strongly anomalous intersections up to 1.76 g/t gold over 4 metres located deeper in TND-137 once again confirmed the multiple zones of mineralized epithermal breccia hosted within the DZ deposit.

Hole TND-138 was designed to establish continuity of gold mineralization and grade within the northern portion of the DZ by drilling a previously untested portion of the zone. The drill hole intersected three separate intervals of gold mineralization highlighted by 10 metres grading 4.68 g/t gold, 50.8 g/t silver, 0.31% lead and 0.73% zinc hosted within a quartz vein stockwork and epithermal breccia. TND-138 has further established the continuity of high-grade mineralization within the northern portion of the DZ which should positively impact the Altan Nar resource. Furthermore, it confirms the continuity of high grades on the northern side of the "Gap Zone", an untested area of central Discovery Zone open for 70 metres to the south where it meets TND-134 and TND-101.

Altan Nar Background

Altan Nar is located 16 kilometres north of the Erdene's Bayan Khundii gold development, currently progressing through a bankable feasibility study and permitting. Altan Nar is an intermediate sulphidation, carbonate-base metal gold ("CBMG") deposit, that remains open at depth and along the known 5.6-kilometre trend of the system. This deposit type includes prolific gold deposits such as Barrick Gold's Porgera mine (Papua New Guinea), Rio Tinto's formerly producing Kelian mine (Indonesia), Lundin's Fruta Del Norte deposit, and Continental Gold's Buritica project (Colombia). CBMG deposits generally occur above porphyry intrusions in arc settings and may extend for more than 500 metres vertically.

Only a small portion of the Altan Nar licence has been drill tested and 90% of the NI 43-101 Mineral Resource prepared by RPM Global in 2018 is within 150 metres of surface and largely contained within 2 of the 18 targets with all zones open along strike and at depth.

The current resource* based on data collection up to May 7, 2018 includes:

- Indicated Resource includes 317,700 oz gold (at 2.0 g/t gold), 31,600 tonnes ("t") zinc, 29,000 t lead, and 2.35 million oz silver; and
- Inferred Resource contains 185,700 oz gold (at 1.7 g/t gold), 23,700 t zinc, 22,300 t lead, and 865,800 oz silver.

*Altan Nar Gold Project Bayankhongor Aimag, Southwest Mongolia NI 43-101 Technical Report. June 21, 2018



Altan Nar has received limited exploration over the past two years as the Company's resources were focused on the Bayan Khundii discovery. The most recent program, conducted in late 2016 and early 2017, successfully tested a structural intersection which returned the highest grade intersection at Altan Nar – 14 metres (measured width) of 55.6 g/t gold (TND-101). The structural intersections or zones of dilation provide the setting for the emplacement of broader zones of mineralization along the main NNE trending structural corridor. However recent interpretation shows that the highest grades were hosted in a preferred, near horizontal zone, now believed to represent an epithermal boiling event. It is this combination of factors that creates the optimum conditions for the deposition of these high grades as witnessed in the results of the late-2019 drilling and which will help guide future exploration in this deposit and throughout the 5.6 km trend.

Many of the Q4-2019 high-grade intersections are locally outside or in areas of previously low grade resource blocks and therefore expands the DZ high-grade core indicating consistency in high-grade mineralization within the identified ore horizon, and are expected to positively impact the resource at Altan Nar and opening the way for further expansion along strike and elsewhere in the district. The program also demonstrated continuity of anomalous gold and base metals along the structural corridor to the south of the DZ, which will be tested further in upcoming programs.

Khar Mori Gold Prospect

The Khar Mori prospect is located 4.5 kilometers northeast of the Bayan Khundii gold deposit and one kilometre southeast of the Altan Arrow prospect on Erdene's 100% owned Khundii Mining License. The Khar Mori gold prospect was discovered in early Q4-2019 with the collection of a 32.9 g/t gold rock chip sample hosted by massive tourmaline cut by quartz stockwork veins. Follow-up surface exploration in late Q4-2019, consisting of detailed geologic mapping and geochemical sampling (rock chip and soil) identified multiple samples grading greater than 5 g/t gold including an 87.8 g/t gold rock chip sample hosted within a comb quartz-adularia veins. The Q4-2019 program has expanded the Khar Mori prospect westward to an area approximately 1.5km by 2km area, connecting with the adjacent Altan Arrow gold prospect to the northwest.

<u>Ulaan Copper-Gold Prospect</u>

The 51% owned Ulaan exploration license is located immediately west of Erdene's Khundii mining license. Ulaan is a porphyry copper prospect primarily based on the broad (5km by 4km) zone of phyllic (quartz-sericite-pyrite) alteration at surface. A 702-metre, three hole, drilling program was completed in late Q4-2019, testing the alteration system at depth by extending the previous hole UDH-02 from 350 metres to a depth of 640 metres. Additionally, two scout holes were completed peripheral to the main phyllic alteration zone with targets that included a zone of clay alteration associated with a geophysical anomaly (UDH-04) and a sericite-quartz-tourmaline breccia body suggestive of an intrusion or porphyry related environment (UDH-05).

Results from the Q4 2019 extension of UDH-02 showed a continuity at depth of the phyllic style alteration with an abundance of anhydrite-quartz-magnetite veining within volcanic-subvolcanic lithologies. The drill hole ended within elevated copper values averaging 130 ppm over 22 metres within a syenite porphyry.

Hole UDH-04 was drilled to test a geophysical target which passed between two IP chargeability high signatures residing above a resistivity high signature. The entire hole exhibited sericite alteration and pyrite mineralization with localized zones of tourmaline alteration and quartz veining within an andesite host. No anomalous geochemistry was encountered.



Hole UDH-05 was drilled to test a tourmaline breccia, a new geological target within the Ulaan exploration license. A zone approximately 850 metres by 900 metres hosting multiple silicified and sericite altered quartz tourmaline breccia bodies was identified by spectral remote sensing and surface mapping. UDH-05 intersected a broad zone of intense tourmaline-silica-sericite alteration which hosts localized gold bearing quartz-tourmaline breccia and breccia veins from 140 to 202 metres (end of hole). Anomalous gold bearing intervals include: 2m of 1.3 g/t gold, 4m of 0.29 g/t gold, 2m of 0.5 g/t gold and 2m of 0.23 g/t gold or 40m of 0.15 g/t gold average grade. Anomalous copper, >400ppm, was also intersected within the anomalous zone. The Erdene technical team is reviewing these results along with associated geology, geochemistry and geophysics to establish the basis for future drill testing on the Ulaan license.

Khundii Gold District

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.

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 Resource Development Corp. is listed on the Toronto and Mongolian stock exchanges. Further information is available at www.erdene.com. Important information may be disseminated exclusively via the website; investors should consult the site to access this information.

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 Bayan Khundii 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.

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.

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KHUNDII GOLD DISTRICT

Three deposits, multiple prospects, limited exploration

Fast tracking to production









