

# Erdene Intersects High-Grade Gold at Bayan Khundii Project Confirming Resource Expansion Potential

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## Press Release

Halifax, Nova Scotia  
2020.01.10

**Erdene Resource Development Corporation** (TSX:ERD | MSE:ERDN) (“**Erdene**” or the “**Company**”) announces the conclusion of and the initial results from the first phase of its 18,000 metre Khundii Gold District drill program.

### Highlights:

- Phase I Drilling complete, totaling over 10,000 metres on the Bayan Khundii License:
  - 49 holes including 4 extension holes at Bayan Khundii for 8,435 metres
  - 11 holes at Dark Horse for 1,574 metres
- Results from the first twelve expansion holes (2,016 metres) at Bayan Khundii include:
  - Midfield North: Expansion drilling on both the western and eastern sides of the proposed economic pit returned high-grade mineralized intersections:
    - BKD-302 – Eastern flank extension: 3.9 g/t gold over 22.4 metres, including 2 metres of 27.5 g/t gold beginning 127 metres down hole (vertical 115m)
    - BKD-304 – Western flank extension: 3.9 g/t gold over 12 metres, including 1 metre of 38.9 g/t gold beginning 206 metres down hole (vertical 144m)
  - Striker SW: At the southern end of the economic pit, expanded shallow areas of high-grade mineralization beyond the economic pit and outside of the current resource:
    - BKD-310 – 4.0 g/t gold over 10 metres, including 1 metre of 24.5 g/t gold beginning 14 metres down hole, and 44 metres of 1.0 g/t gold, including 1 metre of 16.2 g/t starting 64 metres down hole
    - BKD-312 – 20.8 g/t gold over 3 metres, including 1 metre of 51.7 g/t gold beginning 13 metres down hole
- Assays are pending for 48 holes totaling 7,945 metres at Midfield Southeast, Striker West, Northeast Bayan Khundii and Dark Horse
  - Visible gold reported in 10 holes (see details below)

### Quotes from the Company:

“We are encouraged by the early results from the first phase of the drill program, including high-grade gold intersections in multiple holes and visible gold in 10 drill holes with pending assays, in areas peripheral to the Bayan Khundii Gold Project economic open-pit,” said Peter Akerley, Erdene’s President and CEO. “These results demonstrate the high probability of resource expansion for the Bayan Khundii Gold Project beyond that outlined in the Feasibility Study delivered in August 2020.”

“The second phase of the 2020 drilling program will include further expansion drilling at Bayan Khundii and Altan Nar, as well as exploratory drilling at the Dark Horse, Altan Arrow and the Ulaan prospects,” continued Mr. Akerley. “We have a full pipeline of prospects to grow our resource base in advance of initial production at the Bayan Khundii Gold Project, expected in 2022.”

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## Drilling Summary & Plans

[See plan view maps below]

The company has completed the 10,000 metre first phase of an 18,000 metre drill program within the Khundii Gold District which has the following objectives:

1. Bayan Khundii Expansion:
  - a. Deliver expansion areas and increased continuity and confidence expanding ore zones beyond the boundaries of economic pit in the Midfield North, Midfield Southeast and Striker SW areas.
  - b. Further define and upgrade the Striker West resource as a potential area for major pit expansion.
2. Explore for new resources North and Northeast of the BK deposit, and at the Dark Horse, Altan Arrow and Ulaan prospects.
3. Complete initial stages of condemnation drilling over proposed processing plant and mining operation footprints.
4. Continue expansion drilling and exploration within the Altan Nar gold deposit trend.

Indications of Bayan Khundii deposit resource expansion potential have been received with the initial assay results and the visible gold reported in drill core from Midfield North, Midfield Southeast, Striker SW and Striker West, which should prove beneficial to the scale and economics of the Bayan Khundii Gold Project.

### **Bayan Khundii Gold Deposit: Extensions Beyond Economic Pit**

The current drill program has the potential to upgrade current resources to reserves expanding the economic open pit and expanding resources beyond the current boundaries. The economic pit defined in the Bayan Khundii Feasibility Study hosts 409,000 ounces of gold at 3.7 g/t gold however, significant resources exist, inclusive of reserves, totalling 521,000 @ 3.2 g/t gold M&I and 103,000 @ 3.7 g/t gold Inferred. Those resources excluded from the economic pit are in the peripheral areas of the planned open pit where there exists strong potential for a portion of these to be upgraded in continuity, confidence, and grade and in conjunction with a higher gold price, brought into a revised economic pit as the development advances towards first production. Several gold mineralized zones peripheral to the current economic open-pit host exceptionally high-grade (30 to 150 g/t gold intersections over 1 meter) gold-bearing veins and broad intervals of mineralization. In addition, the Bayan Khundii resource is an open-pit constrained resource beyond which drilling has previously intersected significant gold mineralized zones which require further exploration drilling. The following sections describe the areas tested in the current drill program.

#### **North Midfield**

North Midfield is the most northerly portion of the Bayan Khundii Deposit. Five holes (BKD-301 to BKD-305) were drilled in the current program in this area to test for extensions of gold mineralization beyond the boundaries of the currently modelled economic pit. These specific drill targets represent zones where continuity of high-grade domains are interpreted to extend beyond the currently modelled pit wall. Four of the five holes intersected anomalous gold mineralization ( $\geq 0.2$  g/t gold) outside the economic pit.

Two of these holes, BKD-302 and BKD-304, intersected high-grade gold mineralization outside of the economic pit. BKD-302, located on the east side of North Midfield zone, intersected 22.4 metres of 3.9 g/t gold followed by a thick, 39 metre mineralized interval averaging 0.38 g/t gold. Relatively wide drill spacing east and west of BKD-302 provides considerable room for possible expansion of this high-grade zone. BKD-304, located on the west side of North Midfield, intersected 12 metres of 3.9 g/t gold, including 1 metre of 38.5 g/t gold within an interval located proximally below and outside of the economic pit. BKD-302 and BKD-304 successfully demonstrate the potential for continuity

of wide, high grade zones of similar tenor to existing reserve grade outside of the current pit wall boundary. Further testing and identification of these zones may positively impact the minable reserves of Bayan Khundii should the economic pit be expanded to encompass these new extension zones.

Hole	From(m)	To(m)	Interval(m)*	g/t Gold
BKD-301	87.9	170	82.1	0.60
Incl	107	139	32	1.17
Incl	108	109	1	21.15
BKD-302	126.6	149	22.4	3.90
Incl	126.6	140	13.4	6.02
Incl	133	135	2	27.50
And	161	200	39	0.38
Incl	162	177	15	0.62
BKD-303	No significant mineralization			
BKD-304	119.2	132	12.8	1.30
And	142	196	54	0.56
Incl	144	159	15	1.35
And	206	218	12	3.87
Incl	210	211	1	38.56
BKD-305	148.5	176	27.5	0.23
And	200	203	3	1.81

### Striker Southwest Extension

Several drill holes have been completed both within and outside the economic pit boundary at the southern perimeter of the economic pit. These holes have returned intervals of intense quartz stockwork, quartz hematite and quartz adularia veining and at least one instance of visible gold. Results to date (up to BKD-311 and the upper portion of BKD-312) confirm a new zone of shallow, high-grade mineralization south of the economic pit boundary, continuing beyond the perimeter of existing resources. Initial results from BKD-312 indicate shallow, high grade gold mineralization with 3 metres of 20.8 g/t gold at only a 10 metre vertical depth.

Initial results for the Striker SW area are displayed below, with multiple assays pending. These results have the potential to expand the economic pit boundary to the south and southwest to encompass these new zones of high grade mineralization.

Hole	From(m)	To(m)	Interval(m)*	g/t Gold
BKD-306	48	53	5	0.32
And	138	161	23	0.50
BKD-307	8	12	4	1.77
And	68	88	20	0.29
BKD-308	56	60	4	0.36
And	66	69	3	0.31

\* Reported intervals are downhole widths. Drill holes were oriented to intersect SW dipping WNW trending gold veins, normal to their orientation and therefore reported widths are very close to true width. However, geologic parameters near BKD-312 may affect local vein orientations in this hole. Additional study will be required to confirm.

And	83	94	11	0.31
And	100	103	3	0.40
And	153	156	3	0.68
BKD-309	No significant mineralization			
BKD-310	10.7	30	19.3	2.33
Incl	14	24	10	4.02
Incl	14	15	1	24.52
And	64	108	44	1.01
Incl	66	68	2	16.15
BKD-311	28	37	9	0.66
And	107	124	17	0.34
BKD-312 <sup>1</sup>	13	16	3	20.79
Incl	14	15	1	51.70

### Midfield Southeast (MFSE)

Drilling in Q2 2020 discovered very high grade, near-surface gold zones in Midfield SE, with intersections of 5.5 metres of 125.9 g/t gold, including 1 metre of 581.6 g/t gold in BKD-288, beginning 11.5 metres downhole, and 40 metres to the north, 15 metres of 25.6 g/t gold including 1 metre of 338 g/t gold beginning at 14.9 metres downhole in BKD-274. In total, 16 of 18 holes drilled at Midfield SE in Q2 2020 intersected anomalous gold ( $\geq 0.2$  g/t gold) mineralization within 25 metres of surface. This discovery is interpreted as the intersection of the stacked NW trending quartz adularia veins, with a N-S trending conceptual feeder structure. The Midfield SE structure has been traced over a strike length of at least 200 metres with the Q2 drilling testing only the northern 50 metres.

Eight holes have been drilled in MFSE in the current drill program targeting the conceptual feeder structure's southeast continuation. Although results are pending, visible gold has been logged in four of the eight holes, in association with quartz adularia veining, hematite breccias and quartz vein material within conglomerate. Other holes from current drilling in the MFSE target area contain intervals of intense quartz-hematite and white mica veining, both indicators of gold mineralization in the Bayan Khundii system. These preliminary logging results confirm the MFSE zone as a new area of interest within the Bayan Khundii deposit to be further defined for high-grade gold mineralization potentially related to a feeder structure. As this area is classified as waste or low-grade stockpile material in the current resource, confirmation of mineralization has the potential to have a significant impact on early mine life economics.

### Striker West

Striker West is located approximately 210 metres west of the defined Bayan Khundii open pit and contains the largest portion of resources outside the economic pit. Drilling in 2019 confirmed and extended the Striker West target with the best intersection within this deposit area to date with 3 metres of 40 g/t gold at a vertical depth of 136 metres (BKD-265). Results from this hole also broadened the mineralized domain at shallow depth and outside the defined resource boundary with a 16-metre interval of 1.1 g/t gold, including 5 metres of 2.7 g/t gold, beginning only 28 metres from the surface. The Striker West area has received relatively little drilling compared to the main Bayan Khundii deposit area and remains open to the south, where BKD-266 was drilled in Q2 2019, approximately 250 metres west-southwest of the planned open-pit, and outside the currently defined resource boundary. This hole intersected a

<sup>1</sup> Complete assay results and screen metallic gold values for BKD-312 are pending.

high-grade, one-metre interval of 51.9 g/t gold at a depth of 264 metres within a broad zone of silica-illite and magnetite altered volcanic tuff, suggesting a down-dip continuation of high-grade gold mineralization from the currently defined Bayan Khundii pit.

Phase 1 drilling in the Striker West area includes 14 holes which aim to provide resource definition within the core of the Striker West zone and resource expansion around the perimeter of the known gold mineralization. Although assay results are pending, multiple logged intervals containing visible gold have been recorded in association with intense and in some cases thick intervals of quartz adularia and quartz hematite veins.

### **Dark Horse (Khar Mori)**

The Dark Horse prospect, and by extension, the Altan Arrow prospect, 3.5 kilometres north of the Bayan Khundii gold deposit, are included in the drill program. The Dark Horse prospect covers an approximately 1.5 by 3-kilometre area, connected to the northwesterly adjacent Altan Arrow gold prospect. Trenching and rock chip sample results have returned very high gold grades over a large target area at Dark Horse. Previous drilling along the subsidiary structures south of Altan Arrow (within 300 metres of the Dark Horse target area) have provided the highest-grade intersections to date, including 24 g/t gold and 70 g/t gold over 2 metres (AAD-03 and AAD-12) within 75 metres of surface. A series of eleven holes have been completed at Dark Horse with results pending. These reconnaissance holes will provide support for additional drilling in Q4 to establish highest priority targets in this large prospect area.

### **Altan Nar Gold Polymetallic Deposit**

At Altan Nar, approximately 16 km north of the Bayan Khundii gold deposit, a growing gold and polymetallic resource provides a significant opportunity for resource expansion. The current Altan Nar Gold resource includes 318,000 ounces of 2.0 g/t gold Indicated and 186,000 ounces of Inferred at 1.7 g/t gold in addition to significant silver and base metal content. The second phase of the drill program will target this highly prospective license for resource expansion and new discoveries.

### **COVID-19 Precautions**

Throughout the 2020 field season, Erdene has worked to deliver an injury-free, effective field exploration program, rolling out increased preventive measures in response to COVID-19. The Company has kept in place precautionary measures to protect against the spread of COVID-19. In the field, daily protocols are used to ensure basic hygiene, and daily briefing, induction and visitor reception procedures continue to include body temperature checks. Isolation facilities and personal protective equipment for emergency response have been prepared. Since late January, the Government of Mongolia has implemented a series of preventive measures in response to COVID-19, including limitations on public gatherings and international border controls. As of September 30, 2020, Mongolia has reported no cases of local transmission of COVID-19 and zero deaths from the disease. All confirmed and reported cases to date have been related to repatriated citizens.

### **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.

The Bayan Khundii Gold Resource<sup>1</sup> includes 521,000 ounces of 3.16 g/t gold Measured and Indicated (“M&I”)<sup>2</sup> and 103,000 ounces of Inferred resources at 3.68 g/t gold. Within the M&I resource, a proven and probable open-pit reserve totals 409,000 ounces at 3.7 g/t (see the full press release [here](#)), providing significant potential growth of reserves with the development of the remaining M&I and Inferred resources<sup>2</sup>.

In July 2020, Erdene announced the results of an independent Feasibility Study for the Bayan Khundii Gold Project ([press release here](#)). The Feasibility Study results include an after-tax Net Present Value at a 5% discount rate and a US\$1,400/oz gold price of US\$100 million and Internal Rate of Return (“IRR”) of 42%. The Feasibility Study envisions an open-pit mine at Bayan Khundii, producing an average of 63,500 oz gold per year, for seven years, at a head grade of 3.71 g/t gold, utilizing a conventional carbon in pulp processing plant. Production is expected to commence in early 2022 based on the current project schedule.

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 three mining licenses and two exploration 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 the Mongolian 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.

### 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 metre 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.

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<sup>2</sup> For details of the Mineral Resources see Khundii Gold Project NI 43-101 Technical Report, Tetra Tech December 4, 2019 – SEDAR

<sup>2</sup> M&I: 171,000 ounces of 3.77 g/t gold Measured, and 349,700 ounces of 2.93 g/t gold Indicated

## 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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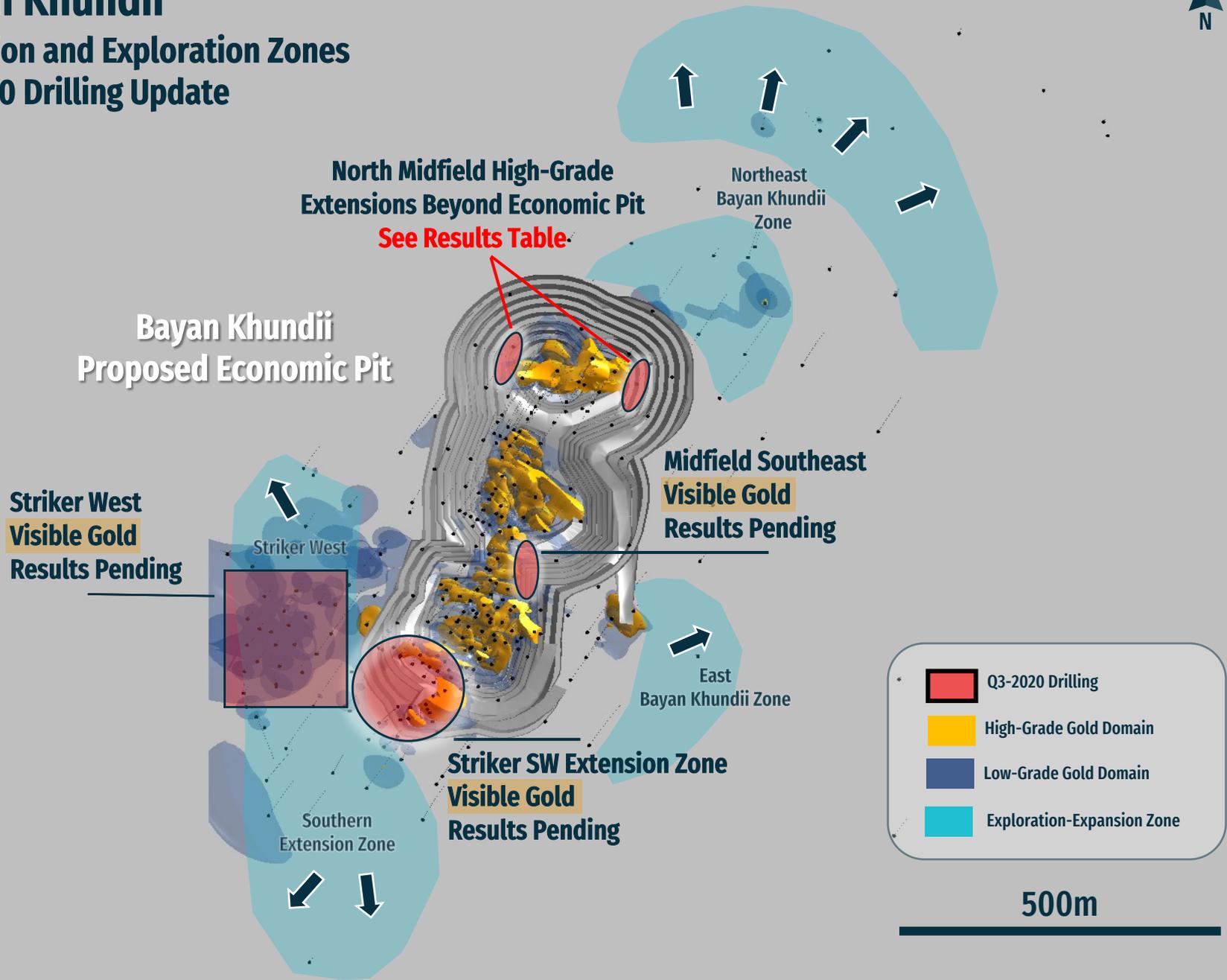
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# Bayan Khundii

## Extension and Exploration Zones Q3-2020 Drilling Update



# KHUNDII GOLD DISTRICT

Three deposits, multiple greenfield discoveries, limited exploration

*Fast tracking to production*

**Altan Nar Deposit (Au, Ag, Zn, Pb)**

Nomin Tal

Road to Shinejinst

Proposed Haulroad

Oyut Khundii

Altan Arrow

Khar Mori

Khundii North

Ulaan

**Bayan Khundii Deposit (Au)**

Khuvyn Khar

**Zuun Mod Deposit (Cu, Mo)**

0 5 10

kilometers

Exploration licenses
  Mining licenses
  Mineralized trend
  Au
  Cu
  Ag
  Mo
  Pb
  Zn

