



## **ERDENE RESOURCE DEVELOPMENT CORP.**

### **Erdene Reports 99% Gold Recovery from its New High-Grade Bayan Khundii Gold Discovery**

**Halifax, Nova Scotia – February 16, 2016 - Erdene Resource Development Corp. (TSX:ERD)** ("**Erdene**" or "**Company**"), is pleased to announce excellent results from preliminary metallurgical testing conducted by Blue Coast Research Ltd. ("BCR") on drill core composites from its wholly-owned Bayan Khundii gold project ("Bayan Khundii") in southwest Mongolia.

#### **Highlights of the BCR Report**

- Gold from Bayan Khundii is free milling and amenable to conventional processing techniques
- Gravity concentration and cyanidation of the gravity tails yields very good overall gold recoveries for both high-grade and low-grade composites
- 99% recovery of gold from high-grade (24.9 g/t Au) composite using gravity plus cyanide leach methods
- 92% recovery of gold from low-grade (0.7 g/t Au) composite using gravity plus cyanide leach methods

"From the initial drill results received just two months ago, to these very encouraging metallurgical results, Bayan Khundii is proving to be an exceptional gold discovery when you consider the high-grade, large size potential, proximity to surface, and now high gold recoveries," said Peter Akerley, Erdene's President and CEO. "We have a number of studies underway geared towards a quick ramp-up for this project as we move into Q2 2016."

#### **Metallurgical Program Summary**

The metallurgical testing program was carried out by BCR of Parksville, British Columbia and was designed to provide an initial scoping level characterization of both gravity and cyanide recovery techniques.

In December 2015, the Company announced initial drill results for a new gold discovery identified during the 2015 exploration season, named Bayan Khundii (Rich Valley), located within the prolific Tian Shan gold belt in southwest Mongolia. Results included several very high-grade intersections enveloped by wide zones of lower grade gold in a series of parallel structures exposed at surface. Gold mineralization has been identified in three separate areas over a 1.7 km southwest-northeast trend, with detailed exploration only taking place in the southwestern-most area where 15 shallow

holes were completed over a 475 by 300 area (average drill depth of 46 m). Geophysical targets have been established under cover to the east and north of this area, and two zones of gold mineralization have been identified 700 m and 1.2 km along trend to the northeast. Mineralization remains open along strike and at depth.

Highlights of the 15-hole, shallow drill program were reported in a previous press release ([link here](#)) and are summarized in Table 1 below:

Table 1. Bayan Khundii drill results

Drill Hole	From (m)	To (m)	Interval (m)*	Gold (g/t)
BKD-01	14	21	7	27.5
incl	15	16	1	187.0
BKD-03	7	22	15	2.0
incl	9	12	3	9.4
incl	11	12	1	25.3
BKD-04	4	12	8	2.0
incl	4	6	2	7.5
BKD-08	14	24	10	2.4
incl	22	24	2	7.4
BKD-09	33	59.4	26.4	5.9
incl	34	49	15	9.9
incl	34	36	2	48.9
incl	45	46	1	38.9
BKD-10	0	35	35	5.7
incl	11	23	12	16.2
incl	21	22	1	167.0

\* Reported intervals are not true width. They represent drill intersection widths from holes drilled at a 45 to 60 degree angle. The Bayan Khundii mineralization is moderately dipping (approximately 40 to 50 degrees) perpendicular to the drill hole angle.

### Metallurgical Sample Selection

As an initial approach to metallurgical testing, two 75 kg composite samples were prepared from coarse reject material from individual one-metre drill core samples. The composites are representative of high and low grade gold mineralization within the main mineralized zones over the entire 475 m by 300 m area. The first sample, BK-MET-15-01, is a high-grade composite sample with a head grade of 24.9 g/t Au that included 25 one-metre intervals, with representation from 11 of the 15 holes. The second sample, BK-MET-15-02, is a low-grade composite with a head grade of 0.7 g/t Au that included 25 one-metre intervals, with representation from all 15 holes.

Composite head-grades reported by BCR matched the average of the original individual sample assays very closely at 24.9 g/t Au and 0.7 g/t Au versus the average of the original assays which were 25.3 g/t Au and 0.7 g/t Au for the high- and low-grade samples, respectively.

### Gravity Results

Extended Gravity Recoverable Gold tests (E-GRG) were conducted on both high and low grade composites. Gravity tests were conducted using a laboratory scale Knelson MD-3 centrifugal concentrator. The high-grade composite had a high response to gravity separation. Gold recoveries are presented in Table 2 below. The high-grade gravity concentrate represents 1.2% of the original sample mass and contains 1380.9 g/t Au and 200 g/t Ag.

Table 2. Gravity recoverable gold

Composite	Au Recovery (%)
High-Grade (BK-MET-15-01)	71
Low-Grade (BK-MET-15-02)	32

The low-grade gravity concentrate represents 1.1% of the original sample mass and contains 21.2 g/t Au and 11.9 g/t Ag. The lower grade composite (BK-MET-15-02) displayed a low to average gravity response.

### Bottle Roll Tests (cyanidation)

Standard bottle roll tests were completed on the gravity tails of each composite. The high-grade composite (BK-MET-15-01) tails represent 98.8% of the original sample mass and had an average grade of 6.8 g/t Au. The low-grade composite (BK-MET-15-02) tails represent 98.9% of the original sample mass and had an average grade of 0.5 g/t Au.

Results are very encouraging with very high recoveries noted in both the high-grade and low-grade composites. Leach extractions of the gravity tails are summarized in Table 3 below.

Table 3. Bottle roll recovery for gold

Test	Composite	Au Recovery (%)
CN-1	High-Grade (BK-MET-15-01)	95
CN-2	Low-Grade (BK-MET-15-02)	86

### Overall Recovery Measurement for a Gravity plus Cyanidation Flowsheet

A flowsheet employing both gravity concentration and cyanidation of the gravity tails yields very good overall gold recoveries for both the high-grade and low-grade composites. This suggests that gold from Bayan Khundii is free milling and amenable to conventional processing techniques. Overall circuit recoveries are summarized in Table 4 below.

Table 4. Overall recovery for a gravity plus cyanidation flowsheet

Composite	Overall Au Recovery (%)
High-Grade (BK-MET-15-01)	99
Low-Grade (BK-MET-15-02)	92

## **Bayan Khundii Project Update**

The maiden drill program at Bayan Khundii, with results announced in December of 2015, targeted multiple parallel structures over a 475 m by 300 m area where quartz veining and breccia exposed at surface contained visible gold. Drilling intersected gold-bearing zones of quartz breccia, comb-quartz veins, and hypogene hematite veins and fine fracture veinlets, within pervasively silica- and sericite-altered volcanic host rocks. Visible gold was observed in 10 of the 15 drill holes, mostly as finely disseminated grains, with some individual grains up to 2 mm. The gold mineralization is typically associated with quartz veins and/or hematite within, or along, the boundary of quartz-hematite veins and veinlets. The main mineralized veins are in zones ranging in width from approximately 1 m to 35 m with dips ranging from 40 to 50 degrees to the southwest. The intensely-altered host volcanic units in these zones also carry anomalous gold mineralization (varying from 0.1 to 1.0 g/t Au over wide areas) associated with fine quartz and/or hematite veinlets. The strong, pervasive alteration and widespread hypogene hematite indicate a large intense alteration system that has positive implications for the potential size of the system. All mineralized zones were intersected within 50 m of surface and remain open along strike and at depth. The Company completed an induced polarization geophysical program over the Bayan Khundii prospect in Q4-2015 that indicates the mineralization is located at the apex of broad positive chargeability and resistivity anomalies.

Included with this news release are maps, cross-sections and photos highlighting results of the Bayan Khundii drill program.

To read Erdene's December 14, 2015 news release announcing Bayan Khundii drill results, please [click here](#).

## **Qualified Person**

Results for the metallurgical test program summarized in this release were reviewed and approved by Andrew Kelly, P.Eng., of Blue Coast Research Ltd., a Qualified Person for the purpose of National Instrument 43-101. All other technical information in this news release has been reviewed and approved by Michael MacDonald, P.Geo. (Nova Scotia), Director of Exploration for Erdene, a Qualified Person as that term is defined in National Instrument 43-101.

All drill result 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 metallurgical testing and analysis was carried out by Blue Coast Research Ltd. at their facility in Parksville, British Columbia.

## **About Blue Coast Research Ltd.**

BCR specializes in metallurgical flowsheet development, from conceptual through prefeasibility to full feasibility level studies as well as in-plant consulting services supporting the start-up and optimization of mining production plants. Their metallurgists have significant experience with polymetallic base and precious metal concentrates globally.

## **About Erdene**

Erdene Resource Development Corp. is a Canada-based resource company focused on the acquisition, exploration, and development of base and precious metals in underexplored and highly prospective Mongolia. The Company holds four exploration licenses and a mining license located in southwest Mongolia. These include: Altan Nar – an extensive, high-grade, near-surface, gold-polymetallic project; Bayan Khundii – a high-grade gold discovery made in Q2-2015 that the Company is currently exploring; Khuvyn Khar – an early-stage, copper-silver porphyry project with multiple drill targets and significant copper intersections; Zuun Mod – a large molybdenum-copper porphyry deposit; Altan Arrow – an early-stage, high-grade, gold-silver project. In addition to the above properties, the Company has an Alliance with Teck Resources Limited on regional, copper-gold exploration in the prospective Trans Altay region of southwest Mongolia. For further information on the Company, please visit [www.erdene.com](http://www.erdene.com). Erdene has 105,060,005 issued and outstanding common shares and a fully diluted position of 124,720,102 common shares.

## **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 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**

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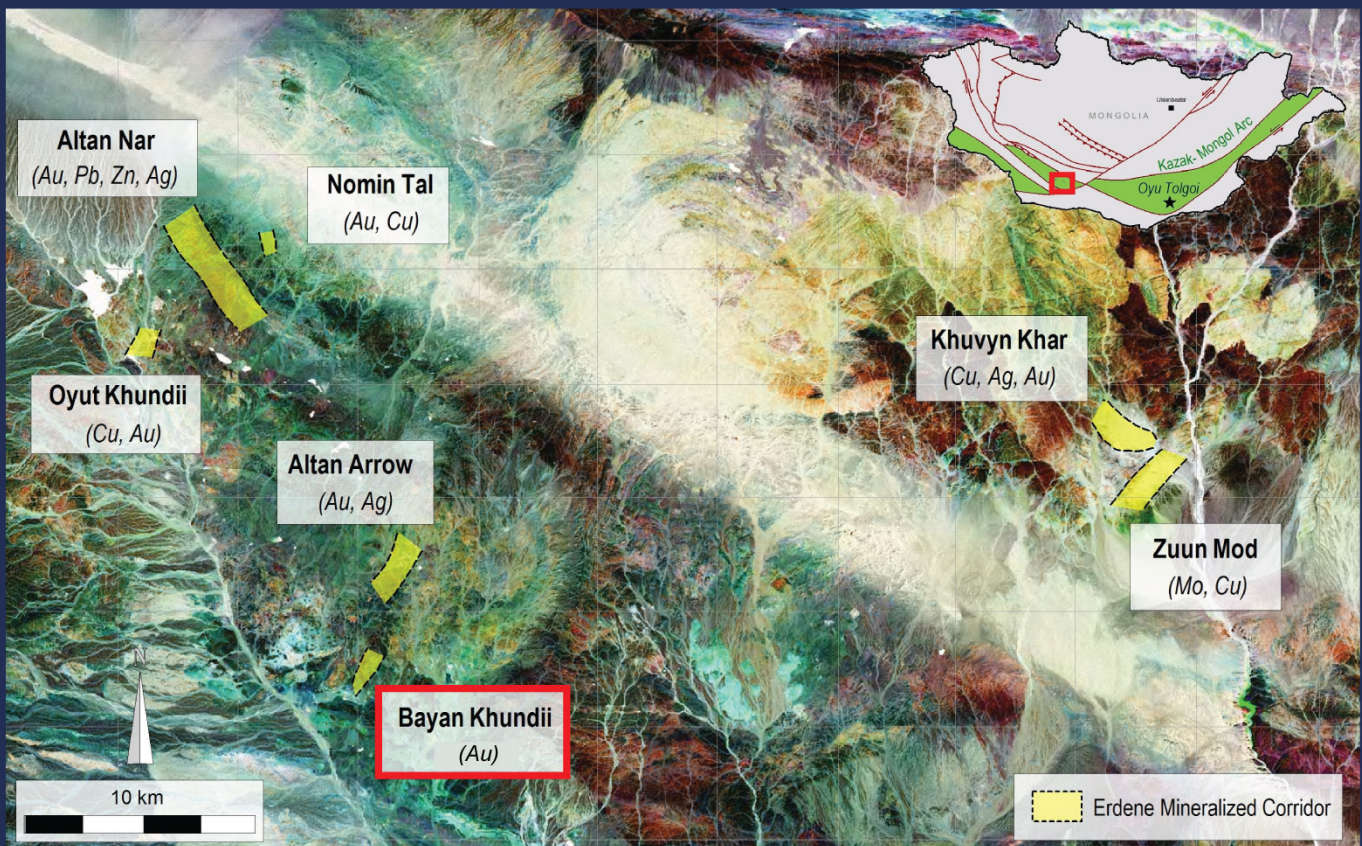
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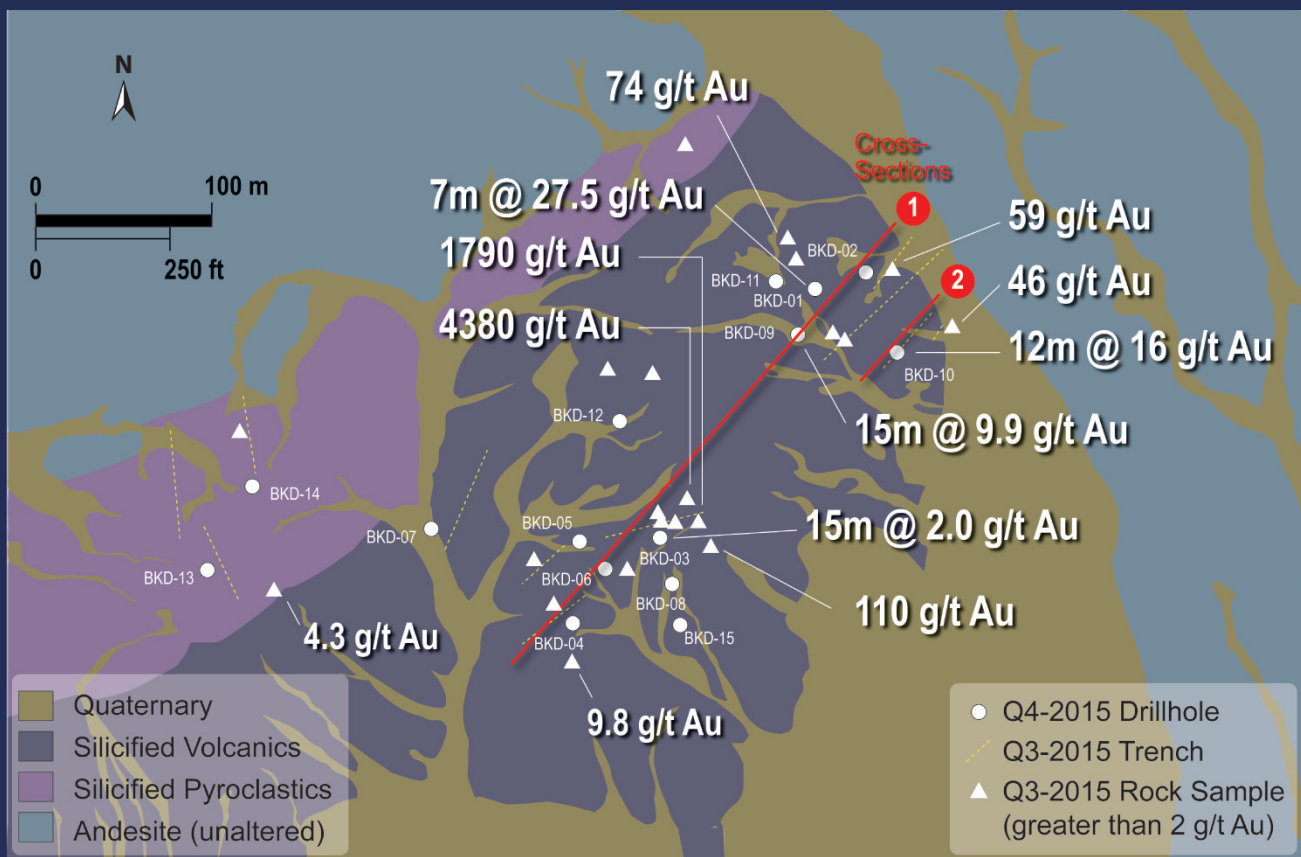
# Bayan Khundii High-Grade Gold Discovery

Erdene's Emerging Gold District in Southwest Mongolia



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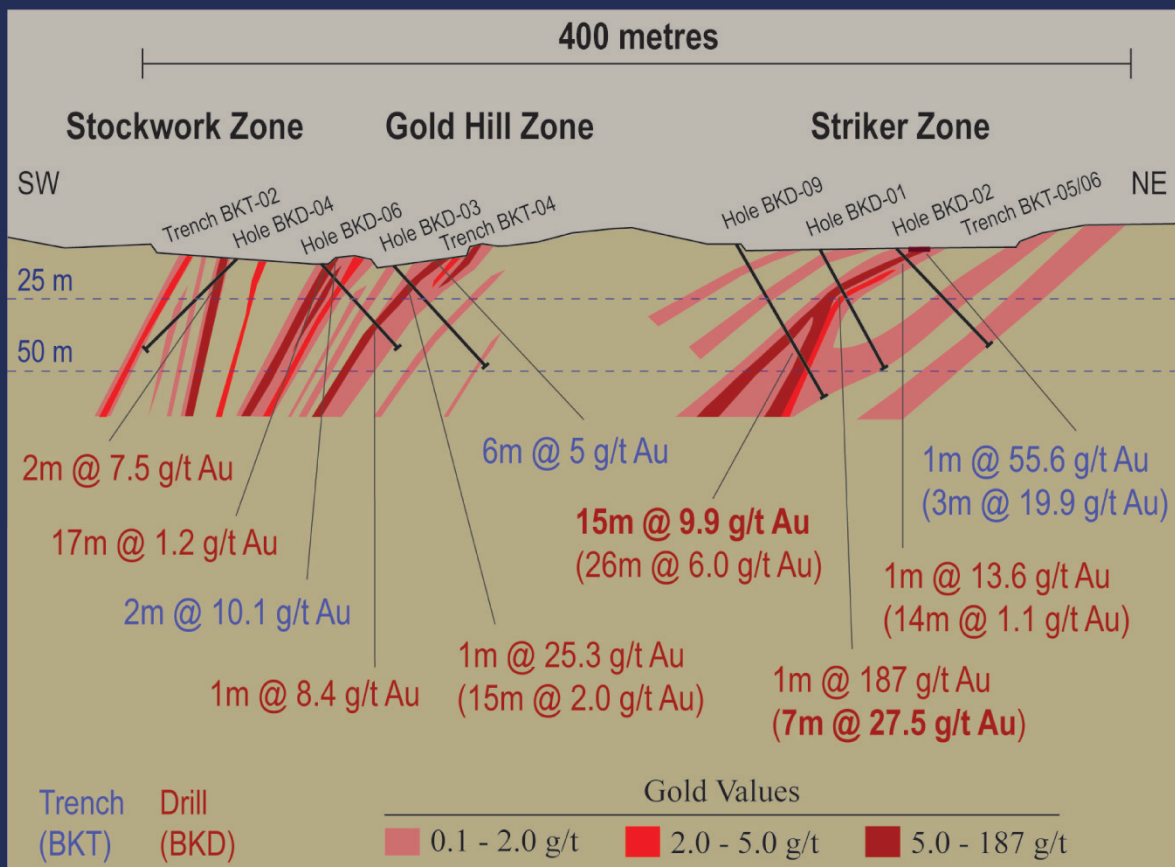
## Plan Map of 2015 Exploration Highlights





# Bayan Khundii High-Grade Gold Discovery

Cross-Section #1 - Open at Depth and Along Strike



# Bayan Khundii High-Grade Gold Discovery

Cross-Section #2 - Step-Out Hole 60m South of Cross-Section #1



Photos of Visible Gold from BKD-10

