



# ERDENE ANNOUNCES POSITIVE UPDATED FEASIBILITY STUDY FOR THE BAYAN KHUNDII GOLD PROJECT

Expanded reserves from Bayan Khundii and Maiden Dark Horse Resource result in 25% increase in production and strong NPV and IRR

### NI 43-101 Technical Report Highlights (US\$1,800/oz Gold Price)

- Base Case after-tax Net Present Value of US\$170 million (NPV<sub>5%</sub>) and 35.3% Internal Rate of Return (IRR), increasing to US\$196 million and 38.95% IRR, respectively, at current gold price of US\$1,900/oz
- Life of Mine Earnings Before Interest, Taxes and Depreciation of US\$451 million, increasing to US\$495 million at a US\$1,900/oz gold price
- Total recovered gold of 476,000 ounces, a 25% increase compared to the 2020 Feasibility Study from an average gold recovery rate of 93%
- All-in sustaining cost ("AISC") of US\$869 per ounce and upfront capital costs of US\$88 million, plus a 12% contingency, and \$2 million of pre-production costs
- Measured and Indicated Resources of 674,700 ounces gold at an average grade of 2.6 g/t gold, and 319,000 ounces silver at an average grade of 1.38 g/t silver
- Proven and Probable Reserves of 513,700 ounces gold at an average grade 4.0 g/t gold, and 220,500 ounces silver at an average grade of 1.7 g/t silver
- Average annual gold production of 86,900 ounces during years 2 through 5 Life of Mine annual average production of 74,200 ounces gold
- Eight-year project, comprising one-year pre-production, six and three quarter-year operating life and one-year mine closure period
- Adjacent high-grade resources and recent discoveries provide high probability growth options
- Significant benefits to Mongolia, including Life of Mine royalties and taxes of US\$143 million and approximately 500 new jobs in Bayankhongor Province
- Equity capital for the Bayan Khundii Gold Project to be provided by Mongolian Mining Corporation ("MMC") under the terms of the previously announced Strategic Alliance

Press Release Halifax, Nova Scotia 2023.08.15

Erdene Resource Development Corp. (TSX:ERD; MSE:ERDN) ("Erdene" or the "Company") is pleased to announce results of an updated independent Feasibility Study ("FS") for the high-grade, open-pit Bayan Khundii Gold Project ("BK" or "Project") in southwest Mongolia. The FS was prepared in accordance with National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and incorporates updated mineral resources and reserves, including maiden resources and reserves from the high-grade Dark Horse Mane deposit ("DH"), as well as current capital and operating cost estimates and metals prices. The updated FS has been prepared by a consortium of International and Mongolian firms with significant experience



operating in Mongolia and internationally. The Technical Report, prepared by O2 Mining Limited, pursuant to NI 43-101 guidelines, will be filed on SEDAR within 45 days.

# **Quotes from the Company:**

"The Bayan Khundii Gold Project will be one of the highest grade open-pit gold mines in the world, and Mongolia's largest primary gold producer, when it comes on stream in 2025. This updated Feasibility Study confirms the Project's strong economics, supported by a 25% increase in recovered gold due to the incorporation of additional resources from Bayan Khundii and the Dark Horse Mane deposit," said Peter Akerley, President and CEO. "As a low cost project utilizing conventional mining and processing techniques with significant growth potential, Bayan Khundii offers investors and stakeholders exposure and leverage to gold."

"Bayan Khundii is the first development in what we expect to be a large-scale mining complex in Southwestern Mongolia. We have a multitude of expansion opportunities in our pipeline as we continue to add precious and base metal resources through exploration," continued Mr. Akerley. "Through our Strategic Alliance with MMC, Mongolia's largest independent miner, we are moving rapidly towards production. Early construction works are underway and we look forward to achieving first gold and cash flow in 2025, while we continue to explore, discover and develop the other mineral deposits in our Khundii Minerals District."

"With MMC's investment under the Strategic Alliance agreement, we have secured the equity component of Project Finance. We are also well progressed on debt funding for the Project," concluded Mr. Akerley. "Leading international financial institutions have completed the bulk of the technical, environmental and social due diligence on the project over the past couple of years. With the delivery of the updated feasibility study, we expect to receive firm commitments in the coming months."

### NI 43-101 Technical Report Overview

The Technical Report incorporates an updated reserve estimate for the BK Gold Deposit as well as the maiden mineral reserve estimate from the very high-grade Dark Horse Mane Gold Deposit. The FS includes 3.8 million mineable tonnes from the Bayan Khundii resource at an average diluted head grade of 3.8 g/t gold and 1.7 g/t silver, and 0.2 million mineable tonnes from the Dark Horse resource at an average diluted head grade of 7.0 g/t gold, all of which are Proven and Probable Reserves.

The Technical Report envisions a high-grade, open-pit mine, beginning at surface in the southern portion of the BK Gold Deposit (Striker and Gold Hill), and expanding northward into adjacent zones at Midfield and Midfield NE. Dark Horse open pit will commence in Year 3 and will be processed concurrently with BK Gold Deposit ore. The development incorporates conventional crushing and grinding, leach and a Carbon in Pulp ("CIP") plant with processing capacity of 1,935 tonnes per day.

The base case assumes a gold price of US\$1,800/oz. All references to dollars within this release are US Dollars (US\$), unless stated otherwise. The Technical Report, pursuant to NI 43-101 guidelines for the Bayan Khundii FS will be filed on SEDAR within 45 days. Key metrics from the Technical Report are presented in Table 1 below.



Table 1. Bayan Khundii Gold Project Key Metrics

		BK FS
Gold Price	US\$/oz	1,800
Production Profile		
Average Head Grade Over Life of Mine <sup>1</sup>	g/t gold	4.0
Project Life <sup>2</sup>	years	8
Operating Life	years	6.75
Target Plant Feed Rate Per Day <sup>3</sup>	tpd	1,935
Average Annual Saleable Gold	OZ	74,200
Peak Annual Saleable Gold	OZ	88,100
Average Gold Recovery Rate Over Life of Mine	%	93%
Strip Ratio	t:t	10.9
Operating Costs		
Life of Mine ("LOM") Average Cash Cost <sup>4</sup>	US\$/oz	851
LOM Cash Cost plus Sustaining Cost (AISC) <sup>4</sup>	US\$/oz	869
Pre-Tax Net Present Value		
5% discount rate	US\$M	245
7.5% discount rate	US\$M	207
10% discount rate	US\$M	175
Pre-Tax Internal Rate of Return	%	44%
After-Tax Net Present Value		
5% discount rate	US\$M	170
7.5% discount rate	US\$M	141
10% discount rate	US\$M	117
After-Tax Internal Rate of Return	%	35%
Payback Period (After tax)	years	2.4
Capital Requirements		
Pre-production Capital Cost, including contingency	US\$M	100
Life of mine ("LOM") Remaining Capital Cost	US\$M	9

#### Notes:

- 1. Average diluted head grade of mineralized rock fed to process plant.
- 2. Project life comprising one-year pre-production period, approximately six and three quarter-year operating life and one-year mine closure period.
- 3. Assumes process plant operates for 8,000 hours per annum to achieve the target production rate of 650 ktpa.
- 4. Operating costs reported in terms of saleable gold ounces for Bayan Khundii; costs include Royalty and Charges of US\$108/oz.

### **Technical Report Sensitivities**

The following table shows changes in the after-tax NPV and IRR over a range of gold prices and discount rates, demonstrating the impact of higher gold prices and the Project's resiliency to lower prices.



Table 2. Technical Report Sensitivities – After-Tax Gold Price Sensitivity Analysis

Gold Price Sensitivity Analysis	Units	US\$1,400	US\$1,600	US\$1,800	US\$2,000	US\$2,200
NPV (5% discount rate)	US\$M	65	118	170	223	275
NPV (7.5% discount rate)	US\$M	48	95	141	188	234
NPV (10% discount rate)	US\$M	34	76	117	158	200
IRR	%	18%	27%	35%	42%	49%

# **Bayan Khundii Mineral Resource and Reserve Estimate**

### **BK Gold Deposit Mineral Resource Estimate**

The BK Gold Deposit Mineral Resource Estimate ("BK Mineral Resource") was prepared in accordance with NI 43-101 and CIM standards by AGP Mining Consultants Inc. ("AGP") with an effective date of April 20, 2023. The BK Mineral Resource was prepared by Paul Daigle, P.Geo., who is a qualified person ("QP") as defined by NI 43-101.

The Mineral Resource has been constrained to a conceptual pit shell and is reported at a cut-off grade of 0.40 g/t gold. The assumptions and parameters utilized to establish the cut-off grade and pit shell are reported below in notes to Table 3. AGP recommends reporting the Bayan Khundii Mineral Resource at a 0.40 g/t gold cut-off.

Table 3. BK Gold Deposit – Mineral Resource Estimate Summary, April 2023

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Resource Classification	Quantity (Mt)	Gold Grade (Au g/t)	Ounces Gold (Koz)	Silver Grade (Ag g/t)	Ounces Silver (Koz)
Measured	4.0	3.03	394	1.44	187
Indicated	3.3	2.04	219	1.22	131
M&I	7.4	2.58	613	1.34	319
Inferred	0.2	1.08	6	1.32	8

#### Notes:

- 1. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- 2. Summation errors may occur due to rounding.
- 3. The effective date of the Mineral Resources is April 20, 2023.
- 4. Open pit mineral resources are reported within an optimized constraining shell.
- 5. Open pit cut-off grade is 0.3 g/t Au based on the following parameters:
  - Gold Price of US\$2,000/oz Au
  - Gold recovery of 95%
  - Mining Costs of US\$3.00/t
  - Milling Costs and G&A of \$22.00/t
  - Capping of gold grades was 200 g/t Au and 50 g/t Ag on 1m composite values.
  - The density varies between 2.58 g/cm³ and 2.66 g/cm³ depending on lithology.

### **Dark Horse Mane Mineral Resource Estimate**

The Company is pleased to provide a summary of the maiden mineral resource estimate for the Dark Horse Mane Gold Deposit ("Dark Horse Mineral Resource") discovered in 2021 and located just two kilometres north of the BK Gold Deposit. The Dark Horse Mineral Resource was prepared in accordance with NI 43-101 and CIM standards by RPM Global ("RPM") with an effective date of November 1, 2022. The Dark Horse Mineral Resource was prepared by Mr. Oyunbat Bat-Ochir who is a full-time employee of RPM and a Member of the Australian Institute of Geoscientists, and a QP as defined by NI 43-101.



The Dark Horse Mineral Resource is reported above a gold cut-off grade of 0.35 g/t gold for oxide and transition mineralization and 1.02 g/t gold for fresh mineralization. The Mineral Resource has been constrained to a conceptual pit shell. The assumptions and parameters utilized to establish the cut-off grade and pit shell are reported below in notes to Table 4.

Table 4. Dark Horse Gold Deposit – Mineral Resource Estimate Summary, November 2022

Туре	Indica Tonnes (Kt)	ted Mineral Gold Grade g/t Au	Resource Ounces Gold (K oz)	Inferre Tonnes (Kt)	d Mineral Ro Gold Grade g/t Au	esource Ounces Gold (K oz)
Oxide	578	3.0	56.2	75	1.1	2.7
Transitional	99	1.5	4.8	109	1.2	4.1
Fresh	5	4.9	0.7	-	-	-
Total	682	2.8	61.7	184	1.2	6.8

#### Notes:

- The Statement of Estimates of Mineral Resources has been compiled under the supervision of Mr. Oyunbat Bat-Ochir who is a full-time employee of RPM and a Member of the Australian Institute of Geoscientists. Mr. Bat-Ochir has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity that he has undertaken to qualify as a Qualified Person as defined in the CIM Standards of Disclosure.
- 2. All Mineral Resources figures reported in the table above represent estimates at November 1, 2022. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.
- 3. Mineral Resources are reported on a dry in-situ basis.
- 4. The Mineral Resource is reported using a 0.35 g/t Au cut-off grade in oxide and transition mineralisation and 1.02 g/t Au cut-off in fresh mineralisation and is constrained above conceptual optimised pit shell. Cut-off parameters were selected based on an RPM internal cut-off calculator, assuming an open cut mining method with 5% ore loss and 10% dilution, a gold price of US\$1,723 per ounce, a mining cost of US\$3 per tonne and a processing cost of US\$16 per tonne milled and processing recovery of 90% for oxide, 87% for transitional and 30% for fresh Au mineralisation. The conceptual optimised pit shell was constructed using a gold price of US\$2,000 per ounce, which is 1.4 times the long-term consensus forecast price.
- 5. Mineral Resources referred to above, have not been subject to detailed economic analysis and therefore, have not been demonstrated to have actual economic viability.

#### **BK and DH Reserve Estimate**

The Bayan Khundii and Dark Horse FS Mineral Reserves have been estimated by QP, Mr. Julien Lawrence, Director, O2 Mining Limited, using the 2014 CIM Definition Standards for Mineral Resources and Mineral Reserves to conform to the Canadian National Instrument 43-101 Standards of Disclosure for Mineral Projects. The total Mineral Reserve for the Bayan Khundii deposit is shown in Table 5 and the total Mineral Reserve for the Dark Horse Mane deposit is shown in Table 6. Mineral Reserves are based on the BK Mineral Resource and Dark Horse Mineral Resource, reported herein. Mineral Reserves estimated for the BK and DH deposits are based on Measured and Indicated Resources and have an effective date of August 1, 2023. Reserves were calculated by O2 Mining using FS level engineering designs for the pit and associated process plant operating parameters.

The cut-off grade for mineral reserve calculations is 0.63 g/t gold for the BK Gold Deposit and 0.68 g/t gold for Dark Horse Gold Deposit, based on a gold price of \$1,816/oz. The reserves, as defined by the regularized block model, contain modelled mineral losses of 2.5% and average internal dilution of 10%, within the ultimate pit.



A summary of the Mineral Reserves estimated for the BK and Dark Horse deposit with an effective date of August 1, 2023 can be found in Tables 5 and 6.

Table 5. BK Gold Deposit – Mineral Reserve Estimate Summary, August 1, 2023

Classification	Tonnage (Mt)	Grade (g/t Au)	Contained Gold (Koz)	Grade (g/t Ag)	Contained Silver (Koz)
Proven	2.7	4.1	360.2	1.7	159.4
Probable	1.1	3.0	104.7	1.7	61.1
Total	3.8	3.8	464.9	1.7	220.5

Table 6. Dark Horse Gold Deposit – Mineral Reserve Estimate Summary, August 1, 2023

Classification	Tonnage (Mt)	Grade (g/t Au)	Contained Gold (Koz)
Proven	-	-	-
Probable	0.2	7.0	48.8
Total	0.2	7.0	48.8

#### Notes:

- 1. The effective date of the Mineral Reserve estimate is August 1, 2023. The QP for the estimate is Mr. Julien Lawrence of O2 Mining Limited;
- 2. The Mineral Reserve estimates were prepared with reference to the 2014 Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Definition Standards (2014 CIM Definition Standards) and the 2003 CIM Best Practice Guidelines;
- 3. Reserves estimated assuming open-pit mining method;
- 4. Waste to ore cut-offs were determined using a NSR for each block in the model. NSR is calculated using prices and process recoveries for each metal accounting for all off-site losses, transportation, smelting and refining charges;
- 5. Reserves are based on a gold price of \$1.816/oz; and
- 6. Mineral Reserves were calculated from a diluted "mining" block model which included average dilution of 10% and losses of 2.5%.

#### Mining

The BK FS is based on an open-pit mining operation targeting 650,000 tonnes per year of feed material for the processing plant. The total mineable mineralized plant feed is 4.0 million tonnes at an average diluted head grade of 4.0 g/t gold and average strip ratio of 10.9:1 (waste tonne: plant feed tonne). Mineralization starts at surface, with the majority of the deposit contained within the top 100 metres. The deposit structure, grades and depth suggest selective open cut mining will be utilized. Mining will use hydraulic excavators in backhoe configuration. Drilled and blasted material will be loaded into haul trucks, with waste rock deposited in an engineered Integrated Waste Facility ("IWF") adjacent to the pit, and ore hauled to a crusher or run-of-mine ("ROM") pad adjacent to the processing plant.

The BK FS has assumed owner mining based on methodology and costing prepared from first principles using vendor quotations for major cost elements and O2 Mining experience in Mongolia in similar open-pit mining environments. In this scenario, the owner leases the major fleet and provides for all minor fleet and personnel to operate the project. The mine plan proposes a total of 4 x excavators (2 x ore, 2 x waste), 20 x 55t payload trucks, 3 x blasthole drills and a fleet of ancillary and support equipment to deliver the required material movement. The mining workforce peaks at approximately 260 personnel (employees and contractor personnel) to deliver the required schedule of production.



#### **Processing**

The FS assumes processing of ROM material via a conventional crush and grind circuit and a carbon in pulp plant. Plant design by 360-Global has been based on testing at Blue Coast Research which has established optimal processing parameters, including; grind size of 80% passing 60 microns; design inputs for comminution circuit, optimal cyanide concentration in leach circuit; 36 hour retention time; carbon adsorption parameters and detoxification reagent dosages. The process circuit has been designed to maximize water recovery with the most efficient dewatering process (pressure filters) to achieve targeted 15% moisture in tailings, minimize chemical and reagent usage and reduce environmental impact.

The ore-processing plant will be located adjacent to the Bayan Khundii open pit and throughput will target 650,000 ore-tonnes per year, nominally 1,935 tonnes per day. Total mineralized material from BK, processed in the plant over the course of the mine life, is 4.0 million tonnes at an average diluted head grade of 4.0 g/t gold. Using an estimated mill recovery of 92.6%, total recovered gold over the life of the Bayan Khundii Project is 476,000 ounces.

### **Operating Costs**

Operating costs are based on the mining and processing scenarios outlined above and assume owner mining. Power for operations will be generated through an on-site hybrid diesel and solar generation solution, provided under a power purchase agreement for the duration of the Project. All other activities are assumed to be owner-operated. The AISC for Bayan Khundii is estimated at \$869/oz.

**Table 7. Operating Costs** 

	LOM (\$ millions)	US\$/oz	US\$/tonne
Mine Operating Cost	165	347	41
Processing Cost	166	349	41
G&A	20	43	5
Total Site Operating Costs	352	739	88
Royalty and Charges	51	108	13
Sustaining Capital & Closure Costs	10	22	3
All-In Sustaining Cost	414	869	103

Note: Rounding may cause computational discrepancies

#### **Capital Costs**

Construction costs, primarily comprising the process plant and supporting infrastructure, accommodation village, and associated engineering and indirect costs are estimated at US\$88 million. Pre-production costs, including first fills and mobile site equipment total \$2 million. Additionally, a 12% contingency, or US\$10 million, has been provided in arriving at the total estimated capital cost. Sustaining capital of US\$4 million has been included in the mine plan and net mine closure costs are estimated at US\$7 million, accounting for salvage values. Total life of mine capital expenditures for the Bayan Khundii Gold Project are estimated at US\$109 million. Approximately \$5 million of costs have been incurred to date, representing deposits on long-lead mechanical equipment, temporary construction facilities and civil works.



**Table 8. Capital Costs** 

ltem	\$ millions
Process Plant	47
Non-Process Infrastructure	14
Construction Indirects	27
Construction Costs	88
Pre-Production Costs	2
Contingency	10
Subtotal Plant and Infrastructure	100
Sustaining Capital	4
Reclamation and Mine Closure	7
Salvage	(2)
Total	109

Note: Rounding may cause computational discrepancies

### **Environmental and Permitting**

Erdene completed an independent Environmental and Social Impact Assessment ("ESIA") for the Project in accordance with the Performance Requirements of the European Bank for Reconstruction and Development ("EBRD") in 2020. Subsequently, the Mongolian statutory Detailed Environmental Impact Assessment ("DEIA") for the Project was approved by the Mongolian Government in 2021. Additional studies were carried out in 2021 and 2022 as part of the expected Project Lender's due diligence.

Erdene has obtained approvals for the 12 project facilities that the company will own and operate. Construction permits have been issued for nine of these facilities, including the CIP Process Plant, and earthworks for several facilities is currently underway.

### **Project Finance and Next Steps**

The Company engaged HCF to act as Project Finance advisor, with primary responsibility for securing debt in 2020. HCF is a leading independent corporate finance advisory boutique based in London, focused on the global natural resources and infrastructure sectors. HCF possess significant Mongolian experience, having acted as an advisor on the financing of Oyu Tolgoi, Mongolia's largest mining project, and has strong relationships with the EBRD, a strategic investor in Erdene and one of Mongolia's largest foreign investors.

Two international financial institutions have conducted due diligence on BK and are expected to provide debt financing for the project. These institutions are active in Mongolia, as major funders to the Oyu Tolgoi Copper-Gold project. It is anticipated that senior debt financing could comprise as much as 65% of the total financing package.

The equity capital for the project has been secured from the Mongolian Mining Corporation through the Strategic Alliance Agreement announced January 10, 2023 (see press release here). Highlights of the SAA include:

- MMC is Mongolia's largest internationally traded mining company, listed on the main board of the Hong Kong Stock Exchange (HKEx: 975).
- MMC to invest US\$40 million for a 50% equity interest in Erdene's Mongolian subsidiary, Erdene Mongol LLC ("EM"), holding the Khundii and Altan Nar mining licenses and the Ulaan exploration license through a three-stage transaction, based on achievement of milestones.



- Erdene retains a 50% equity interest in EM and a 5.0% Net Smelter Return ("NSR") royalty on all production from the Khundii, Altan Nar and Ulaan licenses, as well as any properties acquired within 5 kilometres of these licenses, beyond the first 400,000 ounces gold recovered.
- The first two stages of the transaction were completed in January 2023 and May 2023, with MMC investing US\$10 million to finance technical studies, including this FS, early construction works and exploration for the Bayan Khundii Gold Project.
- The third stage of the transaction, expected to close in late Q3 2023, will see MMC invest a further US\$30 million once EM has reached a construction decision, providing equity capital for the Bayan Khundii Gold Project.
- Erdene will appoint EM's Chief Executive and Chief Technical Officers, and MMC will appoint EM's Chief Operating and Chief Financial Officers.
- Erdene maintains a 100% interest in its large Zuun Mod Molybdenum-Copper deposit and Khuvyn Khar Copper project, located approximately 30 kilometres east of Bayan Khundii, and adjacent to a planned railway development.

In addition to project financing, over the coming months, development work will be focused on:

- Continuing with construction early works;
- Executing the Engineering, Procurement and Construction contract for the Project;
- Concluding the Project's Power Purchase Agreement;
- Optimizing the project execution schedule and completing value engineering;
- Securing approval of Erdene and MMC's Boards of Directors to begin construction; and
- Exploring in the Khundii Minerals District to expand mineralization and convert resources to reserves.

# **Study Consultants**

The updated FS and associated Detailed Engineering and Design ("DED") work has been completed by a consortium of International and Mongolian firms with significant experience:

- O2 Mining Ltd. ("O2") led the overall delivery of the FS update, completing the key works of mine design and planning (including closure), process design, cost estimation, and financial evaluation. O2 is a Hong Kong-based engineering firm with principals who have over 15 years of Mongolian mining experience and a team with significant experience in mine development in Australasia, including the design, construction, commissioning and operation of gold, coal, base metals and industrial mineral mines and processing facilities.
- Roma Group Ltd. ("Roma"), a leading company in the region in engineering, business and asset valuations, corporate and M&A advisory services, will lead the development of the final NI 43-101 FS Technical Report. Roma is listed on the Hong Kong Stock Exchange and has extensive experience working with major regional mining and financial firms leading technical studies and valuations for mining projects in Asia, including Mongolia.
- Multiple Mongolian companies provided in-country services and support for the FS update.
   Erdene works closely with local specialists to apply international standards and ensure compliance with Mongolian regulations.
- 360-Global Inc. ("360-Global") carried out process plant design and engineering for the FS and DED work. 360-Global is a consulting firm based in the Philippines, specialized in full cycle design services and experienced with gold processing infrastructure globally, including in Mongolia, China, Canada, Australia and Africa.
- ATC Williams Pty Ltd, ("ATCW") undertook mineral waste and tailings facility design and management planning, including for closure. ATCW is Australia-based and has extensive experience in mineral waste and tailings transport, storage, closure and water management, including at the Oyu Tolgoi project in Mongolia.



- Blue Coast Research Ltd ("BCR") provided metallurgical testing and interpretation for the Bayan Khundii Gold Project. BCR have extensive experience with gold deposits and have carried out all of the Bayan Khundii, Dark Horse, and Altan Nar metallurgical test work to date.
- Ramboll Australia Pty performed technical review and assessment of the mine water supply and pit hydrology. Ramboll is a global architecture, engineering, and consultancy company involved in buildings, transport, energy, environment & health, water, management consulting, architecture and landscape.
- Fugro Ltd. provided the geotechnical assessment of the Bayan Khundii and Dark Horse open pits. Fugro is a leading geo-data specialist.
- AGP Mining Consultants Inc. completed the mineral resource estimate for the Bayan Khundii Gold deposit. AGP is a full service, independent mine engineering company.
- RPM Global Inc. completed the mineral resource estimate for the Dark Horse Gold Deposit.
   RPM Global is an international provider of advisory and consulting, software, and training services focused on the mining industry.
- Sustainability East Asia LLC, Ramboll, and Eco Trade LLC delivered the Environmental and Social Impact Assessment for the Project, announced on June 4, 2020 (see full press release <u>here</u>).

## **Qualified Person and Sample Protocol**

The information in this press release that relates to the financial models for the Bayan Khundii Feasibility Study is based on information compiled and reviewed by Mark Reynolds, engaged through O2 Mining Limited. The information in this press release that relates to the capital and operating cost estimation for the Bayan Khundii Feasibility Study is based on information compiled and reviewed by Julien Lawrence, who is a FAusIMM and the Director of O2 Mining Ltd. The information in this press release that relates to the process design and recovery methods for the Bayan Khundii Feasibility Study is based on information compiled and reviewed by Jeffrey Jardine. who is a FAusIMM and is engaged through O2 Mining Ltd. The information in this press release that relates to the BK Resource Estimate is based on information compiled and reviewed by Paul Daigle, who is a P.Geo, and is an employee of AGP Mining Consultants Inc. The information in this press release that relates to the Dark Horse Resource Estimate is based on information compiled and reviewed by Oyunbat Bat-Ochir who is a full-time employee of RPM Global and a Member of the Australian Institute of Geoscientists. The information in this press release that relates to the Bayan Khundii reserve estimate is based on information compiled and reviewed by Julien Lawrence, Each of Mr. Reynolds, Mr. Lawrence, Mr. Jardine, Mr. Daigle and Mr. Bat-Ochir has sufficient experience, which is relevant to the style of mineralization and type of deposit under consideration and to the activity which they have undertaken to qualify as a Qualified Person, as that term is defined by National Instrument 43-101. Each of Mr. Reynolds, Mr. Lawrence, Mr. Jardine, Mr. Daigle and Mr. Bat-Ochir is not aware of any potential for a conflict of interest in relation to this work with Erdene.

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.

#### **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 three mining licenses and an exploration license in Southwest Mongolia, where exploration success has led to the discovery and definition of the Khundii Minerals District. Erdene Resource Development Corp. is listed on the Toronto and the Mongolian stock exchanges. Further information is available at <a href="https://www.erdene.com">www.erdene.com</a>. 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

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