



## **MANAGEMENT'S DISCUSSION AND ANALYSIS**

For the three and six months ended June 30, 2022, and 2021

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*Three and six months ended June 30, 2022*

## Contents

	Page No.
Company Overview	3
Highlights and Significant Subsequent Events	4
Strategy and Outlook	6
Development and Exploration Projects	7
NI 43-101 Technical Reports – Resources and Reserves	7
Khundii Gold District	8
District Scale Exploration	15
Acquisitions	17
Discussion of Operations	18
Summary of Quarterly Results	21
Liquidity and Capital Resources	21
Outstanding Share Data	22
Contractual Obligations	22
Other Financing Arrangements and Commitments	22
Off-Balance Sheet Arrangements	22
Critical Accounting Estimates	22
Adoption of New Accounting Standards and Future Changes in Accounting Policies	23
Financial Instruments and Other Risks	24
Disclosure Controls and Internal Controls Over Financial Reporting	25
Qualified Person	25
Other Information	26

*This Management Discussion and Analysis (“MD&A”), dated August 3, 2022, relates to the operating results and financial condition of Erdene Resource Development Corporation (“Erdene” or the “Company” or the “Corporation”) and should be read in conjunction with the Corporation’s unaudited condensed consolidated interim financial statements for the three and six months ended June 30, 2022 and 2021, audited consolidated financial statements for the years ended December 31, 2021 and 2020, and the notes thereto. The consolidated financial statements of the Corporation have been prepared in Canadian dollars in accordance with International Financial Reporting Standards (“IFRS”).*

*This discussion includes certain statements that may be deemed “forward-looking statements”. All statements in this discussion, other than statements of historical fact, that address reserve potential, exploration drilling, exploitation activities, budgeted financial results and events or developments that the Corporation expects, are forward-looking statements. Although the Corporation believes the expectations expressed in such forward-looking statements are based on reasonable assumptions (including, but not limited to, assumptions in connection with the continuance of the Corporation and its subsidiaries as a going concern, general economic and market conditions, mineral prices, and the accuracy of mineral resource estimate), such statements are not guarantees of future performance and actual results or developments may differ materially from those in the forward-looking statements. Factors that could cause actual results to differ materially from those in forward-looking statements include market prices, exploration and evaluation results, continued availability of capital and financing and general economic, market or business conditions.*

*The risk factors identified above are not intended to represent a complete list of the factors which could affect the Corporation. Additional factors are noted under “Risk Factors” in the Corporation’s latest Annual Information Form, a copy of which is available on the Corporation’s SEDAR document page at [www.sedar.com](http://www.sedar.com).*

*Any financial outlook or future-oriented financial information in this MD&A, as defined by applicable securities legislation, has been approved by management of the Corporation as of the date of this MD&A. Such financial outlook or future oriented financial information is provided for the purpose of providing information about management’s current expectations and plans relating to the future. Readers are cautioned that such outlook or information should not be used for purposes other than for which it is disclosed in this MD&A.*

*In preparing this MD&A, the Corporation makes reference to “Exploration and evaluation expenditures”, a non-GAAP financial performance measure. Management believes Exploration and evaluation expenditures, comprised of capitalized and operating expenditures attributable to exploration and evaluation activities, is a valuable indicator of the total investment in the Corporation’s properties for the period of the financial statements. For a detailed reconciliation of this non-GAAP financial performance measure to the most directly comparable measures under IFRS, please see page 18 of this MD&A. The non-GAAP financial performance measure set out in this MD&A is intended to provide additional information to investors and does not have any standardized meaning under IFRS, and therefore may not be comparable to other issuers, and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with IFRS.*

## Company Overview

Erdene Resource Development Corporation is a Canadian based resource company focused on the acquisition, exploration, and development of large, high-grade, near surface, precious and base metals deposits in underexplored and highly prospective Mongolia. The Company holds three mining licenses and an exploration license in southwest Mongolia, where exploration success has led to the discovery of the Khundii Gold District (“KGD”). The Company is focused on advancing its high-grade, open-pit Bayan Khundii gold project (“Bayan Khundii” or “BK”) to production, while expanding resources in the KGD. Erdene is listed on the Toronto Stock Exchange (TSX: ERD) and Mongolian Stock Exchange (MSE: ERDN).

Erdene’s deposits are located in the Trans Altai Terrane within the Central Asian Orogenic Belt, host to some of the world’s largest gold and copper-gold deposits. Although epithermal gold and porphyry copper-gold deposits are well documented in China and along the Belt’s western trend, exploration in Mongolia was limited until the mid-1990’s, when the country opened to foreign investment. Since that time, the world-class Oyu Tolgoi copper-gold deposit has been developed by Rio Tinto in Southeast Mongolia, and Erdene has discovered the KGD in the country’s southwest. Within the KGD, the Company has discovered multiple high-grade gold and base metal deposits and prospects, two of which are being developed: Bayan Khundii and Altan Nar (“AN”). In addition, the Company holds a large molybdenum-copper resource at its 100% owned Zuun Mod project, 33 kilometres east of Bayan Khundii.

During 2021, the Corporation made new discoveries at the Dark Horse and Ulaan Southeast (SE) prospects, located within 3 kilometres of Bayan Khundii. At the Dark Horse prospect, 2.4 km north of Bayan Khundii, multiple holes intersected high-grade, near-surface gold, along a 1.5 km mineralized trend (Dark Horse Mane), that remains open along strike and at depth. Drilling at Ulaan SE, immediately west of the Bayan Khundii Project, intersected the thickest intervals of gold mineralization intercepted in the KGD to date, including exceptionally high-grade zones. These discoveries support Erdene’s thesis that the Khundii-Ulaan alteration trend could host a multimillion-ounce gold deposit, which would significantly increase production from the Bayan Khundii Gold Project. Additionally, the presence of very high-grade oxide material that appears amenable to heap leach processing, provides optionality for future developments. Conceptual engineering work is underway to assess the changes required to fast track and scale up operations to accommodate these discoveries.

The Company announced results of an independent Bankable Feasibility Study (“BFS”) for BK in 2020, and since this time has completed permitting, procurement, and construction readiness activities in advance of a construction decision. In late February 2022, the local government provided construction permits for eight key facilities. The Company has ordered the comminution and elution circuits, critical long lead time items, and has received updated proposals for the majority of construction packages. Consistent with macro-economic trends, the Company is seeing significant cost escalation compared to the estimates in the BFS. Erdene will provide a fulsome update on the opportunity for increased production, schedule and budget upon receipt of final proposals and further engineering work. The Company commenced preparatory site works in early 2022 and intends to continue site establishment in the period preceding construction.

The Company executed a mandate letter with Export Development Canada (“EDC”) for an up to US\$55 million senior secured debt facility to develop BK in late 2020. Due diligence for the loan is largely complete, with EDC’s technical consultants delivering their report in January 2022. Counsel for Erdene and EDC are finalizing loan documentation in advance of financial close, expected in late-2022. In July 2022, Erdene completed a C\$7.2M million non-brokered private placement to fund early works and exploration. Discussions continue with local and international financiers to secure the balance of capital for development.

In April 2022, Erdene launched the first phase of its 2022 exploration program, focused on following up on 2021’s success. Results from drilling at the Ulaan SE discovery in Q2 2022 intersected an interpreted high-grade, gold bearing feeder structure on the license. Additionally, the Company completed a 278-hole reverse circulation (“RC”) program, for which results are pending.

Erdene is targeting total resources of over two million gold equivalent ounces by the end of 2022. Furthermore, management sees the potential to add resources beyond this target through further discoveries in this under-explored portion of the prolific gold and copper producing Central Asian Orogenic Belt. The KGD hosts the full spectrum of arc-related base and precious metal systems, including copper-molybdenum porphyries, intermediate sulphidation/carbonate base metal gold deposits, and low sulphidation epithermal gold and gold-silver systems providing significant exploration opportunity.

## COVID-19

In late January 2020, the Government of Mongolia instituted limitations on public gatherings, suspended in-person classroom learning, and implemented international border controls in response to COVID-19. The Canadian Government adopted similar measures in March 2020, as did most governments globally during 2020. While restrictions in Mongolia were eased in early 2021, precautionary measures were subsequently reintroduced in late Q1 2021 following an increase in the number of reported cases in Mongolia. Company staff and contractors returned to site in early August 2021, and work has continued without significant interruption due to COVID since this date. Additionally, Canadian and International staff and consultants resumed travel to Mongolia in Q3 2021. On February 14, 2022, the Government of Mongolia fully reopened its borders to vaccinated international travelers, allowing the Company's staff and key contractors to travel to the Country with minimal disruption. Despite a recent increase in reported cases in Mongolia and Canada, related to the Omicron BA.5 variant, the Company has not seen a reintroduction of travel or operating restrictions within the countries in which it operates.

Although operations within Mongolia have largely returned to normal, the country continues to see disruptions at its land borders with China, given the latter's zero COVID policies. These disruptions have impacted the availability and price of industrial and consumer goods required for the construction of the Bayan Khundii Gold Project and has the potential to further delay and/or increase the costs of the development. The Company is monitoring the situation and assessing the impact on the Bayan Khundii Gold Project construction schedule and budget. Erdene does not intend to ramp up to full construction until there is certainty that supplies can readily be imported to Mongolia at reasonable cost. The Company will provide further details on the impact of COVID-19 on its operations and the Bayan Khundii Gold Project as they become available.

## Highlights and Significant Subsequent Events

### Bayan Khundii Gold Project – 100% Erdene

- Progressed construction readiness activities for the Bayan Khundii Gold Project
  - Preliminary Site Establishment works completed, including camp expansion, communications infrastructure installation and project controls software implementation
  - Re-pricing and tendering for major equipment supply and construction works substantially complete
  - Preferred and shortlist vendors selected for all major project works
- Obtained key permits and advanced regulatory approvals required for mine development:
  - Regulatory review of detailed drawings well advanced, with nine facilities fully approved, including those planned during the site establishment and initial construction – received construction permits for eight of these facilities in February 2022
  - Process plant regulatory review ongoing with approvals anticipated in Q3 2022
- Continued local community programs in advance of full construction
  - Undertook several community-led programs to support public health and education in the sub-province, within the framework of the Local Cooperation Agreement
  - Established over 10,000 endemic plants and trees at a 2 hectare nursery at the project site for future reclamation and environmental protection
  - Employed over 30 local residents at site

### Exploration

- Completed first phase of the 2022 KGD exploration program, including 3,906 metres of diamond drilling and 2,145 metres of shallow, reverse circulation (“RC”) work
  - Drilled 2,464 metres at Ulaan SE, expanding this high-grade discovery west and at depth, intersecting an interpreted feeder zone
  - Completed 1,442 metres of shallow “scout” drilling across the broader Ulaan license – results are pending and expected to be announced in mid-August 2022
  - Executed a systematically spaced RC drill program focusing on zones of cover primarily within the Khundii license – results are pending and expected to be announced in mid-August 2022

- Traced mineralization at Ulaan SE over a 200 metre strike to a depth of 450 metres, that remains open to the west and at depth
  - UDH-35 included the highest average grade intersection to date at Ulaan SE
    - Intersected 23 metres of 13.7 g/t gold within 41 metres of 8.1 g/t gold, beginning 187 metres downhole
  - UDH-21, including the hole extension, returned one of the thickest gold zones in the KGD
    - Intersected 335 metres of 1.1 g/t gold, beginning 115 metres downhole, ending in mineralization
    - Includes 27 metres of 8.7 g/t gold, within 77 metres of 3.2 g/t gold
  - UDH-36 intersected 179 metres of 1.2 g/t gold, beginning 72 metres downhole
    - Includes several one-metre, high-grade intervals, ranging from 10-33 g/t gold, and ending in mineralization
  - UDH-53 returned high-grade mineralization within a projected feeder zone
    - Includes 2 metres of 24.9 g/t gold within 27 metres of 3.5 g/t gold
  - UDH-52, 60 metres SSE of UDH-53, intersected a wide zone of mineralization
    - Returned 189 metres averaging 0.8 g/t gold

### **Corporate**

- Completed a \$7.2 million financing led by \$2.0 million investment from Eric Sprott on July 21
  - Proceeds will be used to fund exploration, including follow up drilling at the recent Ulaan and Dark Horse discoveries, site establishment work for the Company's Bayan Khundii Gold Project development, and for general working capital purposes
- Progressed due diligence for the Bayan Khundii Project Finance with EDC and other financiers
  - EDC term sheet agreed and detailed drafting underway in advance of anticipated late-2022 financial close
  - Discussions are proceeding in parallel with Mongolian and International financiers on subordinated debt and other non-equity instruments
- Recorded a net loss of \$2,928,904 for the six months ended June 30, 2022, compared to a net loss of \$1,895,606 for the six months ended June 30, 2021
  - Exploration and evaluation expenditures totaled \$5,936,987, including capitalized expenditures of \$3,943,279, for the six months ended June 30, 2022, compared to \$5,618,873, including capitalized expenditures of \$4,735,968, for the comparative prior year period, as increased salaries, camp and stakeholder relations costs due to a ramp-up in activity prior to construction more than offset lower drilling and analysis costs due to less exploration in the period and lower share-based compensation expenditures due to the timing of employee performance grants
  - Corporate and administration expenses totaled \$921,045 for the six months ended June 30, 2022, compared to \$1,029,131 for the six months ended June 30, 2021, as lower share-based compensation expenditures due to the timing of employee performance grants more than offset higher administrative salaries in support of pre-development and financing work for the Bayan Khundii Gold Project and increased regulatory fees driven by growth in the Company's market capitalization

## Strategy and Outlook

Erdene is focused on the development of multi-million ounce gold deposits in the Khundii Gold District. The Company sees the BK mine as the foundation for building a leading, multi-asset precious metals producer. The two strategic priorities are advancing the BK Project to production and expanding precious and base metal resources in the Khundii Gold District through exploration and acquisition, with a near-term target of defining more than two million ounces of near-surface gold equivalent resources by the end of 2022.

In July 2020, Erdene announced positive results of an independent BFS for the Bayan Khundii Gold Project. The Study envisions a high-grade, open-pit mine, beginning at surface in the southern portion of the Bayan Khundii deposit (Striker and Gold Hill), and expanding northward into adjacent zones at Midfield and Midfield NE. The development incorporates conventional crushing and grinding, leach and a Carbon in Pulp (“CIP”) plant with processing capacity of 1,800 tonnes per day. The Bayan Khundii Gold Project Feasibility Study NI 43-101 Technical Report, dated August 31, 2020, was filed on SEDAR on September 1, 2020.

In June 2020, the Company completed an independent Environmental and Social Impact Assessment (“ESIA”) in accordance with the Performance Requirements of the European Bank for Reconstruction and Development (“EBRD”). The study was led by Sustainability East Asia LLC, in consortium with Eco Trade LLC and Ramboll Australia Pty Ltd. The EBRD disclosed the ESIA for public comment on June 12, 2020, and on August 12, 2020, the disclosure period concluded. EDC disclosed the Project’s ESIA in June 2021, as part of its public consultation process.

The Mongolian statutory Detailed Environmental Impact Assessment (“DEIA”) for the Project was prepared by Eco Trade LLC in accordance with applicable national standards. Local stakeholder consultations on the DEIA were completed in late June 2021, and the Company executed a Local Cooperation Agreement with the Bayankhongor Provincial Government in late July 2021. On October 5, 2021, the Ministry of Environment and Tourism of Mongolia completed its technical review of the Project’s DEIA and in late November 2021, the Ministry formally approved the Company’s submission.

Erdene has obtained the majority of the permits required to construct the Bayan Khundii Gold Project. Erdene received Mining License MV-021444 for its Bayan Khundii resource on August 5, 2019, from the Mineral Resource and Petroleum Authority of Mongolia (“MRPAM”). The Khundii mining license covers 2,309 hectares, including the Bayan Khundii Reserve and the Dark Horse Prospect. The mining license is valid for an initial term of 30 years with the ability to extend to 70 years. On November 1, 2019, MRPAM council approved Erdene’s Altan Nar resource registration application and the Company received the Altan Nar mining license on March 5, 2020. Mongolian mining licenses are valid for an initial term of 30 years with the ability to extend to 70 years.

The Company’s Statutory Technical and Economic Assessment (“Mongolian Feasibility Study”) was approved by the Mineral Resource and Petroleum Authority in early 2020. The Mongolian Ministry of Environment and Tourism approved a water reserve and flow rate to be utilized for the planned processing plant and infrastructure of the Bayan Khundii Gold Project. Additionally, the Project’s Land Arrangement Plan and associated land use permissions have been approved by the local government, granting access to the 100-hectare area required to construct the BK open-pit and associated surface infrastructure. During Q1 2022, the Company completed an expansion of its camp and erected two cellular towers at site to facilitate communications, in anticipation of full construction.

Detailed design and engineering for the Carbon-in-Pulp (“CIP”) Leach processing plant was completed in Q1 2021 and design work for the mine support infrastructure is progressing on schedule, with approximately 90% of the detailed design completed to date. In March 2021, the Company contracted with CITIC for the comminution circuit for the Project’s processing plant and Erdene contracted with COMO to provide the processing plant’s elution circuit in Q4 2021.

The general arrangement for the site has gone through regulatory review, alongside which the detailed drawings for key mine support facilities, including offices, mine dry, security guard house, workshop, warehouse, and permanent camp, have been submitted for approval, which was received in late February 2022. The technical drawings for the processing plant and mineral waste facility are undergoing regulatory review, with expected completion in Q3 2022. Additionally, constructability, value engineering, and HAZOPS review are underway, following the completion of tender and re-pricing for most critical facilities and services. Preferred vendors have been identified for most major facilities, with contracting expected to commence alongside a project construction decision. The Company is reviewing final proposals for the process plant construction, contract mining, and other major contracts, and expects to select vendors in the coming months.

The Company commenced preliminary site establishment works in 2022. To date, these have involved the installation of communications infrastructure and expanded infrastructure for the temporary camp. Additionally, the company established the project controls systems and personnel for the future construction.

Environmental management work has been expanded in 2022. During the first quarter of the year, the Company established a two-hectare nursery at the project site to cultivate endemic plants and trees, sowing 10,000 seedlings to date. Moving forward, the Company will harvest seed and transplant vegetation for landscape improvement at site as well as future rehabilitation. In April 2022, Erdene committed to plant one million trees by 2030, as part of Mongolia's "Billion Trees" campaign.

Contributions to stakeholder engagement and community development continued during the period. The Company provided funding for public health and community programs through its Local Cooperation Agreement with the government of Bayankhongor, the province within which the Company's projects are located. These funds were used for community development initiatives in support of education, public health, environmental protection, and livelihoods improvement.

The Company continues to work with HCF International, its Project Finance advisor, to close out the package for its BK Gold Project. The Company is working with EDC to finalize due diligence and documentation and expects to finalize in late 2022. Concurrently, the Company is working with Mongolian and international financiers to secure the remaining capital required for development. Erdene expects to announce commitments for the entire project finance package in the coming months.

Exploration results to date suggest the greater Khundii-Ulaan alteration zone, including the BK Deposit, Dark Horse prospect and Ulaan, are part of the same, large, gold-bearing hydrothermal system, that shows the potential to host a multimillion-ounce gold deposit. Exploration in 2022 will focus on expanding high-grade gold mineralization discovered in 2021 at the Ulaan and Dark Horse discoveries at the BK Gold Project, confirming continuity at the Altan Nar Gold Project, and testing near-surface, high-grade oxide gold targets across the District. During Q2 2022, the Company completed approximately 4,000 metres of diamond drilling and 2,000 metres of shallow RC drilling at Ulaan SE and Dark Horse. Results from exploration at Ulaan SE further expanded mineralization at depth and along strike and results from regional work are pending. Planning for the next phase of the 2022 exploration program, incorporating recent results, is underway.

Erdene continues to evaluate acquisition opportunities throughout the Khundii Gold District. Over the past decade Erdene has developed the largest proprietary geologic database of Southwest Mongolia's mineralization that has led to the identification of more than 20 high-priority targets for acquisition.

## **Development and Exploration Projects**

### **NI 43-101 Technical Reports – Resources and Reserves**

On September 15, 2018, the Company announced a resource estimate for the Bayan Khundii and Altan Nar deposits. On October 21, 2019, Erdene announced an updated Bayan Khundii Resource as well as a Bayan Khundii Mineral Reserve, as part of a Prefeasibility Study ("PFS") prepared by Tetra Tech, Inc. The reserve announced October 21, 2019, has been superseded by a Mineral Reserve estimate, dated July 1, 2020, prepared by Auralia Mining Consulting. In conjunction with the Company's MD&A for the three and six months ended June 30, 2021, and 2020, the Company announced an updated mineral resource estimate for the Bayan Khundii deposit with an effective date of June 17, 2021, prepared by Tetra Tech.

Apart from Zuun Mod, the Company's other targets are early stage and do not contain any mineral resource estimates, as defined by National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101"). Except for those deposits already delineated, potential quantities and grades disclosed in this MD&A are conceptual in nature, and there has been insufficient exploration to define a mineral resource estimate for other targets disclosed herein. It is uncertain if further exploration will result in these targets being delineated as a mineral resource. Additional information about our projects is also summarized in our AIF and the respective NI 43-101 Technical Reports and can be viewed under the Company's issuer profile on SEDAR at [www.sedar.com](http://www.sedar.com).

## Khundii Gold District



The Khundii Gold District includes the Company's high-grade, near-surface Bayan Khundii and Altan Nar deposits. The Bayan Khundii gold project is located on Erdene's 100%-owned, 2,309 hectare Khundii mining license. The Khundii mining license includes the Bayan Khundii mineral resources reported in "Khundii Gold Project NI 43-101 Technical Report", dated December 4, 2019, and prepared by Tetra Tech, Inc., and an updated Mineral Reserve estimate, dated July 1, 2020, prepared by Auralia Mining Consulting and reported in "Bayan Khundii Gold Project Feasibility Study NI 43-101 Technical Report", dated August 31, 2020.

### *Bayan Khundii Gold Deposit*

The Bayan Khundii deposit was discovered in Q2 2015, with initial drill results reported in Q4 2015; the first hole returned 7 metres of 27.5 g/t gold at 14 metres depth. Definition drill programs completed in 2016 through 2018 identified three main areas over an 800-metre strike length and within 150 metres of surface. These areas of very high-grade gold mineralization over significant widths include: Striker Zone, where mineralization starts from surface, and Midfield and North Midfield Zones that extend to the northeast under younger, post-mineralization cover. The Midfield and North Midfield Zones have returned some of the highest grades and widest mineralized intervals at Bayan Khundii. BKD-98 returned 80 metres of 6.0 g/t gold from 42 metres depth and BKD-261 returned 112 metres of 5.9 g/t gold, both in the Midfield Zone, and BKD-231 in North Midfield, returned 14 metres of 158 g/t gold, including one metre of 2,200 g/t gold.

Bayan Khundii is the highest priority project for the Corporation based on its grade, proximity to surface, and favorable metallurgy. The Corporation has advanced the project through independent studies to the bankable feasibility stage.

During Q1 2021, Erdene engaged Tetra Tech, Inc. ("Tetra Tech") to prepare an updated Mineral Resource Estimate ("Mineral Resource"), incorporating 2020 drilling at Striker West, Striker, Midfield and Midfield North, and reflecting prevailing gold prices.

The updated Bayan Khundii Mineral Resource incorporates 95 additional drill holes totaling 12,889 metres and an updated structural interpretation study completed by Erdene at Bayan Khundii since the previous October 1, 2019, mineral resource estimate was announced. In total, the updated Bayan Khundii Mineral Resource incorporates 350 diamond drill holes totaling 55,791 metres, along with 1,075 metres of trenching from 23 trenches.

The Bayan Khundii updated Mineral Resource conforms to NI 43-101, Companion Policy 43-101CP, and the CIM Definition Standards for Mineral Resources and Mineral Reserves. The Mineral Resource was prepared by Tetra Tech and has an effective date of June 17, 2021. The reported Mineral Resource is based on information provided to Tetra Tech by Erdene and verified where possible by Tetra Tech. Data verification and statistical analyses were carried out by Tetra Tech in support of the Mineral Resource. The details of the parameters used in preparing the updated Mineral Resource, including data verification,

sample preparation, analysis and security, are included in the Company's Q2 2021 MD&A, available on the Company's website or SEDAR.

The June 2021 Mineral Resource for Bayan Khundii is provided below under the *Mineral Resources and Reserves* section of this MD&A.

### *Dark Horse*

The greater Dark Horse prospect area (38 square kilometres) is located in the northern portion of the Khundii Mining License and is characterized by elevated gold in soil anomalism with multiple surface rock-chip, trench and drill core samples assaying greater than 1 g/t gold. Trace element anomalism, geophysical anomalies related to alteration and mineralization, structures interpreted to represent conduits for mineralizing fluids, and alteration signatures supporting an epithermal mineralization model characterize the greater Dark Horse prospect area. To date the Company has completed 21,673 metres of drilling in 190 holes ranging in vertical depths from 21 to 318 metres within the greater Dark Horse prospect portion of the Khundii mining license, including 126 holes totaling 11,608 metres in 2021.

Most of the drilling to date has been focused on the Dark Horse Mane discovered in early 2021. Erdene discovered the Dark Horse Mane, 2.4 kilometres north of the Bayan Khundii deposit, when initial drilling returned 6.0 g/t gold over 45 metres, beginning 10 metres downhole, including 8 metres of 27.1 g/t gold (AAD-58). Drilling over the past year has defined a 1.5-kilometre trend of alteration and gold mineralization within the Dark Horse Mane that remains open along strike to the north and south, and at depth. Highlight interceptions at Dark Horse Mane since the initial discovery include:

- AAD-126: 30 metres of 5.6 g/t gold, beginning 10 metres downhole, including 24.1 g/t over six metres, starting 26 metres downhole
- AAD-137: 24.5 metres of 9.4 g/t gold beginning 1.5 metres downhole, including 13.5 metres of 16.1 g/t gold
- AAD-138: 25 metres of 6.1 g/t gold beginning 18 metres downhole, including 8 metres of 17.1 g/t gold
- AAD-177: 23 metres of 11.4 g/t gold beginning 1 metre downhole, including 4 metres of 59.8 g/t gold within 8 metres of 32.2 g/t gold
- AAD-178: 15 metres of 42.8 g/t gold beginning 11 metres downhole, including 3 metres of 160.4 g/t gold within 5 metres of 123.5 g/t gold

The Dark Horse Mane is associated with a north-south trending, linear structural corridor which intersects deep seated northeast trending transform faults, believed to be a conduit for primary mineralizing fluids. The N-S structure has been traced over five kilometres, from the southern portion of the Bayan Khundii deposit to the northern extension of Dark Horse Mane. Gold mineralization is hosted within strongly altered tuffaceous and volcanoclastic rocks, crosscut by quartz and quartz-hematite veins and stockwork zones. The Dark Horse Mane shallow oxide zone begins at surface, hosting supergene enriched gold zones with values up to 195 g/t over 1 metre and ranging in thickness from 20 to 60 metres vertical depth with locally deeper oxidation along fractures. The high-grade oxide body exhibits strong continuity along a north-south strike. Mineralization remains open along strike and at depth.

The near surface oxide gold zones discovered at Dark Horse Mane are the result of oxidation of sulfide bearing epithermal veins and hydrothermal breccias within white mica altered host lithologies. Limited deeper drilling has gold bearing epithermal veins and associated white mica and sulfide alteration zones to a depth of up to 230 metres vertically, that remains open at depth. The gold mineralization near surface at Dark Horse Mane is related to broader areas of structurally controlled alteration and mineralization believed to be connected to feeder structures, distributing gold bearing fluids over a wide area as these fluids approached the paleo surface. Evidence for these feeder structures includes a series of exposed residual quartz lithocaps, associated locally with increasing copper anomalism at depth interpreted to predate the gold mineralization. These lithocaps are distributed along dominant NE trending structures believed to represent transform faults and potentially feeder conduits from a magmatic porphyry source at depth. The highest-grade gold bearing oxide zones at the southern end of the Dark Horse Mane are located proximal to the residual quartz lithocaps and hosted within tuffaceous to porphyritic volcanoclastic units.

### *Ulaan Southeast*

In June 2021, the Company completed the maiden gold exploration program in the southern portion of the Ulaan license, reporting a significant new gold discovery just 300 metres west of the Bayan Khundii Deposit. Results to date, including follow-up drilling in Q2 2022, have confirmed a significant gold discovery at Ulaan SE. Multiple drill holes have returned hundreds of metres (up to 354 metres) of gold mineralization, often ending in mineralization, over an area 200 metres by 250 metres. Gold mineralization begins approximately

80 metres from surface with anomalous gold intersected as shallow as 4 metres depth (UDH-18) and remains open along strike to the west/northwest and at depth. Gold grades up to 156 g/t are related to intense quartz ± hematite veins and stockwork zones enveloped by the same gold bearing silicified, white mica altered lapilli tuff sequence which hosts Erdene's Bayan Khundii epithermal gold deposit, located just east on the Khundii mining license. Structural controls are also similar with northwest striking, southwest dipping veins hosting the gold and intensifying adjacent to bounding structures and/or feeder conduits typically oriented northeast or north. Gold mineralization, particularly the low-grade envelope, also appears to be partially controlled by lithology with low permeability silicified ash tuffs focusing fluid flow and coarser lapilli tuffs acting as a preferred host to mineralization, stratigraphically dipping to the northwest.

Highlight interceptions at Ulaan SE since the initial discovery include:

- UDH-14: 217 metres of 1.1 g/t gold beginning 188 metres downhole, including 3.5 g/t gold over 53 metres
- UDH-21: 335 metres of 1.1 g/t gold beginning 115 metres downhole, including 8.7 g/t gold over 27 metres within 77 metres of 3.2 g/t gold
- UDH-22: 152 metres of 1.7 g/t gold beginning 85 metres downhole, including 3.1 g/t gold over 65 metres
- UDH-35: 23 metres of 13.7 g/t gold within 41 metres of 8.1 g/t gold, beginning 187 metres downhole
- UDH-36: 179 metres of 1.2 g/t gold, beginning 72 metres downhole, including several one-metre intervals, ranging from 10 to 33 g/t gold, and ending in mineralization at 350 metres
- UDH-53: 2 metres of 24.9 g/t gold within 27 metres of 3.5 g/t gold, beginning 248 metres downhole

Together with the Bayan Khundii deposit and Dark Horse prospect, results from drilling at Ulaan Southeast demonstrate the potential scale of mineralization within the nearly 4,000 hectare Khundii-Ulaan Hydrothermal system, which extends from Ulaan over 10 kilometres to the northeast onto the Khundii license.

#### *Altan Nar*

The 100%-owned Altan Nar deposits are located on the Corporation's 4,669 hectare Altan Nar mining license, 16 kilometres northwest of Bayan Khundii. The AN mining license was received on March 5, 2020 and is valid for an initial 30-year term with provision to renew the license for two additional 20-year terms. The license hosts 18 mineralized (gold, silver, lead, zinc) target areas within a 5.6 by 1.5 kilometre mineralized corridor. Two of the early discoveries, Discovery Zone ("DZ") and Union North ("UN"), host wide zones of high-grade, near-surface mineralization, and are the focus of a Resource Estimate released in Q2 2018.

Altan Nar is an intermediate sulphidation, carbonate-base metal gold ("CBMG") deposit, with similarities to prolific gold deposits such as Barrick Gold's Porgera mine (Papua New Guinea), Rio Tinto's formerly producing Kelian mine (Indonesia), Lundin Gold's Fruta Del Norte deposit (Ecuador), 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.

Altan Nar received limited exploration over the past two years as the Company's resources were focused on the Bayan Khundii discovery. In late Q4 2019, the Company drilled five holes totaling 667 metres in DZ. 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. Results from the 2019 program, including the intersection of 45.7 g/t gold, 93.4 g/t silver, 1.54% lead and 3.40% zinc over 7 metres beginning at approximately 70 metres vertical depth, within 23 metres grading 17 g/t gold, are amongst the strongest to date. Many of the 2019 high-grade intersections are locally outside or in areas of previously low-grade resource blocks and therefore expand the DZ high-grade core indicating consistency in high-grade mineralization within the identified ore horizon. These results are expected to positively impact the resource at Altan Nar and open 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.

To date, Indicated Mineral Resources have been established for the Discovery Zone and Union North prospects. The remaining 16 targets at Altan Nar appear very prospective and the Company intends to complete further drilling on the license to increase its understanding of the system.

## Mineral Resources and Reserves

### Khundii Gold District

The total Khundii Gold District resource is calculated by adding the resource from both the Bayan Khundii and Altan Nar deposits and calculating the weighted average grades. The Bayan Khundii Mineral Resource Estimate, prepared by Tetra Tech, has an effective date of June 17, 2021. The Altan Nar Mineral Resource Estimate, prepared by RPMGlobal, has an effective date of May 7, 2018.

A summarized sensitivity analysis of the grade and tonnage relationships at various cut-off grades for the Khundii Gold District is shown in the table below<sup>1</sup>:

Cut-Off Grade <sup>(1,2)</sup>	Resource Classification	Quantity (Mt)	Grade (Au g/t)	Gold (Koz)
<b>Recommended</b> <sup>(3)</sup>	<b>Measured &amp; Indicated</b>	<b>13.3</b>	<b>2.12</b>	<b>903</b>
	<b>Inferred</b>	<b>3.9</b>	<b>1.76</b>	<b>222</b>
1.0	Measured & Indicated	6.3	3.77	768
	Inferred	3.3	1.99	211
1.4	Measured & Indicated	5.2	4.42	738
	Inferred	3.0	2.12	204

Notes:

(1) Combined resources from Bayan Khundii and Altan Nar.

(2) Cut-off grades for Altan Nar are AuEq2 and for Bayan Khundii are gold only. For the AN resource estimate, Gold Equivalent ("AuEq2") calculations assume metal prices of US \$1,310 per ounce gold, US \$18 per ounce silver, and US \$2,400 per tonne lead and US \$3,100 per tonne zinc.

(3) Tetra Tech recommended cut-off grade for Bayan Khundii is 0.40 g/t gold and RPM recommended cut-off grade for Altan Nar is 0.7 g/t AuEq2 above a pit and 1.4 g/t AuEq2 below the same pit shell.

### Bayan Khundii Gold Deposit

#### Resource

The 2021 Bayan Khundii Mineral Resource Estimate, prepared by Tetra Tech, is based on the combination of geological modeling, geostatistics, and conventional block modeling using the Ordinary Kriging method of grade interpolation in Datamine Studio RM™ software. The QAQC sampling protocols and corresponding sample preparation and shipment procedures have been reviewed by Tetra Tech.

The Mineral Resource Estimate has been constrained to a conceptual pit shell and is reported at a recommended 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 in notes following the table below and support reasonable prospects for eventual economic extraction. Mineral Resources are inclusive of Mineral Reserves (reported below). For further details on the updated Bayan Khundii mineral resource estimate, please see the Company's Q2 MD&A dated August 12, 2021.

Cut-off Grade (1)	Resource Classification	Quantity (tonnes)	Grade Au g/t	Gold oz
<b>0.4 g/t Au</b>	Measured	3,031,000	2.39	232,700
	Indicated	5,269,000	2.08	352,400
	<b>Measured &amp; Indicated</b>	<b>8,301,000</b>	<b>2.19</b>	<b>585,100</b>
	Inferred	512,000	2.18	35,900

Notes:

(1) Cut-off grades have been calculated using a gold price of \$1,600 /ounce, milling and G&A costs of \$16.0 / tonne, and mining costs of \$3.0 / tonne, and an assumed gold recovery of 95%.

(2) Bulk density of 2.66 for mineralized domains.

(3) Numbers may not add exactly due to rounding.

(4) Conforms to NI 43-101, Companion Policy 43-101CP, and the CIM Definition Standards for Mineral Resources and Mineral Reserves.

(5) Mineral resources which are not mineral reserves do not have demonstrated economic viability. All figures are rounded to reflect the relative accuracy of the estimate.

#### Reserves

The total Bayan Khundii Mineral Reserve is shown below, as reported in Erdene's press release dated July 20, 2020. The Bayan Khundii July 1, 2020, BFS Mineral Reserve has been estimated by Qualified Person, Mr. Anthony Keers, Director, Auralia Mining Consulting, 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 Mineral Reserve is based on the October 1, 2019, mineral resource estimate. The Mineral Reserve includes both Proven and Probable Mineral Reserves that were converted from Measured and Indicated mineral resources. Tonnes and grades were calculated for the mining blocks, and allowances for dilution and mining recovery were applied to estimate the Mineral Reserve Statement. The effective date of the Mineral Reserve statement is July 1, 2020.

	Tonnage (Mt)	Grade (g/t Au)	Contained Au (Koz)
Proven Mineral Reserves	1.2	4.2	166
Probable Mineral Reserves	2.2	3.5	244
Mineral Reserve	<b>3.4</b>	<b>3.7</b>	<b>409</b>

Notes:

- (1) The effective date of the Mineral Reserve estimate is July 1, 2020. The QP for the estimate is Mr. Anthony Keers of Auralia Mining Consulting
- (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 methods
- (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 \$1400/oz.
- (6) Mineral Reserves were calculated from a diluted "mining" block model which included average dilution of 9% and losses of 1%.
- (7) The Mineral Reserve is based on the October 1, 2019, mineral resource estimate.

### Altan Nar Gold-Polymetallic Deposit

RPMGlobal calculated the mineral resource estimate for Altan Nar in May 2018 at a number of gold cut-offs, however, RPM recommends reporting the Altan Nar mineral resource at cut-off of 0.7 g/t AuEq2 (see definition for AuEq2 in note 8 below) above a pit and 1.4 g/t AuEq2 below the same pit shell. For further details on the Altan Nar mineral resource estimate, please see the Company's Altan Nar Gold-Polymetallic Project NI 43-101 Technical Report dated March 29, 2021.

Cut-off AuEq2 g/t	Resource Classi- fication	Quantity (Mt)	Grade				Contained Metal					
			Au g/t	Ag g/t	Zn g/t	Pb g/t	AuEq2 g/t	Au Koz	Ag Koz	Zn Kt	Pb Kt	AuEq2 Koz
0.7	Indicated	5.0	2.0	14.8	0.6	0.6	2.8	318	2,350	31.6	29.0	453
	Inferred	3.4	1.7	7.9	0.7	0.7	2.5	186	866	23.7	22.3	277

Notes:

- (1) The Mineral Resources have been constrained by topography and a cut-off of 0.7 g/t AuEq2 above a pit and 1.4 g/t AuEq2 below the same pit shell.
- (2) The Mineral Resource Estimate Summary was compiled under the supervision of Mr. Jeremy Clark who is a full-time employee of RPM and a Member of the Australian Institute of Geoscientists. Mr. Clark 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.
- (3) All Mineral Resource figures reported in the table above represent estimates as at May 7, 2018. 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.
- (4) Mineral Resource grades are reported in accordance with the CIM Standards.
- (5) Mineral Resources reported on a dry in-situ basis.
- (6) No dilution or ore loss factors have been applied to the reported Resource Estimate
- (7) No allowances have been made for recovery losses that may occur should mining eventually result.
- (8) For the AN resource estimate Gold Equivalent ("AuEq2") calculations assume metal prices of US \$1,310 per ounce gold, US \$18 per ounce silver, and US \$2,400 per tonne lead and US \$3,100 per tonne zinc.

### Economic Studies

On July 20, 2020, Erdene announced the results of an independent Bankable Feasibility Study for the BK gold deposit. The report, titled "Bayan Khundii Gold Project Feasibility Study, NI 43-101 Technical Report", dated August 31, 2020, was prepared by international and Mongolian firms with significant experience operating in Mongolia. The study incorporates detailed mine design and scheduling, front-end engineering and design for the processing plant and site infrastructure, a hydrogeological assessment, mineral waste facility design, comprehensive capital and operating cost estimation, and an updated economic model.

The BFS envisions a high-grade, open-pit mine beginning at surface in the southern portion of the BK deposit (Striker and Gold Hill), expanding northward into adjacent zones at Midfield and North Midfield. The Project incorporates conventional crushing and grinding, leach and a Carbon in Pulp plant with processing

capacity of 1,800 tonnes per day. The BFS includes 3.4 million mineable tonnes from the BK resource at an average diluted head grade of 3.7 g/t gold, all of which are Proven and Probable Reserves.

Highlights from the June 2020 BFS are presented below (results at US\$1,400/oz gold price, unless noted):

Production Profile		
Average Head Grade Over Life of Mine <sup>1</sup>	g/t gold	3.7
Project Life <sup>2</sup>	years	8
Operating Life	years	6
Target Production Rate Per Day <sup>3</sup>	tpd	1,800
Average Annual Saleable Gold <sup>4</sup>	oz	63,500
Peak Annual Saleable Gold <sup>4</sup>	oz	79,100
Average Gold Recovery Rate Over Life of Mine	%	93%
Strip Ratio	t:t	9.1
Operating Costs		
Life of Mine ("LOM") Average Cash Cost <sup>5</sup>	US\$/oz	731
LOM Cash Cost plus Sustaining Cost (AISC) <sup>5</sup>	US\$/oz	733
Pre-Tax Net Present Value		
5% discount rate	US\$M	145
7.5% discount rate	US\$M	126
10% discount rate	US\$M	109
After-Tax Net Present Value		
5% discount rate	US\$M	100
7.5% discount rate	US\$M	86
10% discount rate	US\$M	73
Internal Rate of Return and Payback		
Pre-Tax Internal Rate of Return	%	55%
After-Tax Internal Rate of Return	%	42%
Payback Period Post-Construction (After-Tax) <sup>5</sup>	years	1.9
Capital Requirements		
Pre-production Capital Cost, including contingency	US\$M	59
LOM Sustaining Capital Cost	US\$M	5

Notes:

(1) Average diluted head grade of mineralized rock fed to process plant.

(2) Project life comprising one year pre-production period, approximately nine years operating life and one year mine closure.

(3) Assumes process plant operates for 8,000 hours per annum to achieve the target production rate of 600 ktpa.

(4) Reported numbers for saleable gold for Bayan Khundii.

(5) Operating costs reported in terms of saleable gold ounces includes Royalty and Charges of US\$77/oz.

The following table shows the change 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:

#### Sensitivities – After-Tax Gold Price Sensitivity Analysis – BK BFS – June 2020

Price Sensitivity Analysis	Units	US\$1,200	US\$1,400	US\$1,600	US\$1,800	US\$2,000
NPV (5% discount rate)	US\$M	43	100	158	216	274
NPV (7.5% discount rate)	US\$M	33	86	138	190	242
NPV (10% discount rate)	US\$M	25	73	120	168	215
IRR	%	22%	42%	60%	77%	93%

The BK BFS is based on an open-pit mining operation targeting 600,000 tonnes per year of feed material for the processing plant. The total mineable mineralized plant feed is 3.4 million tonnes at an average diluted head grade of 3.7 g/t gold and average strip ratio of 9.1:1 (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 BFS has assumed contract mining based on methodology and costing contained in proposals received from contractors with suitable experience in Mongolia in similar open-pit mining environments. In this scenario the contractor provides the full fleet and personnel to operate the project on a schedule of

rates (US\$/tonne material moved) basis. The contractor is proposing a total of 4 x excavators (2 x ore, 2 x waste), 10 x 55t payload trucks, 3 x blasthole drills and a fleet of ancillary and support equipment to deliver the required material movement. The contractor's workforce peaks at approximately 190 personnel to deliver the required schedule of production.

The BK BFS 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, low cyanide concentration in leach circuit (0.5 g/litre sodium cyanide); 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 (ceramic disc filters) to achieve targeted 15% moisture in tailings, minimize chemical and reagent usage and minimize environmental impact.

The ore-processing plant will be located adjacent to the Bayan Khundii open pit and throughput will target 600,000 ore-tonnes per year, nominally 1,800 tonnes per day. Total mineralized material from BK, processed in the plant over the course of the mine life, is 3.4 million tonnes at an average diluted head grade of 3.7 g/t gold. Using an estimated mill recovery of 93.1%, total recovered gold over the life of the Bayan Khundii deposit is 381,700 ounces.

Operating costs are based on the mining and processing scenarios outlined above and assumes contract mining. Power for operations will be generated through a 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 US\$733/oz.

Bayan Khundii BFS			
	LOM (US\$M)	US\$/oz	US\$/tonne
Mine Operating Cost	133	350	39
Processing Cost	96	252	28
G&A	13	33	4
<b>Total Site Operating Costs</b>	<b>242</b>	<b>635</b>	<b>71</b>
Royalty and Charges	32	86	10
Sustaining Capital & Closure Costs	5	12	1
<b>All-In Sustaining Cost</b>	<b>279</b>	<b>733</b>	<b>82</b>

Construction costs (Year 0), primarily comprising the process plant and supporting infrastructure, accommodation village, and associated engineering and indirect costs is estimated at US\$46 million. Pre-production costs, including construction readiness, mobile site equipment and pre-strip total \$8M. The capital cost estimate includes a 10% contingency. Sustaining capital of US\$4 million has been included in the mine plan and net mine closure costs are estimated at US\$1 million, including salvage values. Total life of mine capital expenditures for the Bayan Khundii Gold Project are estimated at US\$64 million.

BK BFS (US\$M)	
Process Plant	24
Non-Process Infrastructure	10
Accommodation Village	2
Construction Indirects	6
Engineering & Support	4
<b>Construction Costs</b>	<b>46</b>
Pre-Production Costs	8
Contingency	5
<b>Subtotal Plant and Infrastructure</b>	<b>59</b>
Sustaining Capital	4
Reclamation and Mine Closure	3
Salvage	(2)
<b>Total</b>	<b>64</b>

The Company sees the following opportunities to enhance value at the Khundii Gold District:

- **Additional Resources at Bayan Khundii:**
  - The updated Bayan Khundii Resource includes Measured and Indicated resources of 585,100 ounces at an average grade of 2.19 g/t gold, and an additional 35,900 ounces at a grade of 2.18 g/t gold of Inferred Resources which could potentially be added to reserves through both additional drilling and rising gold prices.
  - Very high gold grades observed in drilling in the Striker West portion of the deposit have the potential to add high-grade resources should closer spaced drilling improve continuity.
  - The reported resource is constrained based on multiple parameters including a US\$1,600/oz gold price. Multiple high-grade intersections outside the pit provide expansion targets requiring additional drilling in a rising gold price environment.
- **Exploration:** The Bayan Khundii deposit is situated in a highly prospective region that has received minimal historical exploration. On the Bayan Khundii property, multiple high-grade targets have been established through limited shallow drilling and surface sampling within 4 kilometres of the deposit, including the Dark Horse prospect identified in late 2019. In 2021, drilling on the Ulaan license, 300 metres west of Bayan Khundii, identified a new gold discovery that has the potential to be incorporated into the Bayan Khundii mine plan.
- **Recoveries:** Although a 93% gold recovery has been utilized for the BFS, testing of a recent master composite sample, representative of the BK ore, with a head grade of 3.6 g/t gold, returned recoveries averaging 95% indicating an opportunity for increased recoveries in the plant.
- **Higher Grade Upside:** The very high-grade nature of the Bayan Khundii deposit provides upside should continuity of the ultra-high-grade zones (greater than 20 g/t gold) be established during mining.
- **Underground Potential:** Further underground mining potential has been identified in conceptual studies for Midfield North and Striker West which, if proven economical through further studies, could lead to a further increase in the economic reserve of the Bayan Khundii Project.
- **Additional Resources at Altan Nar:** Erdene's Altan Nar deposit, located approximately 16km north of Bayan Khundii, has an established Indicated Resource of 5.0 Mt grading 2.0 g/t gold (318,000 ounces of contained gold) and an Inferred Resource of 3.4 Mt grading 1.7 g/t gold (186,000 ounces of contained gold). Approximately 250,000 ounces of the current Altan Nar resource could potentially be processed by the Bayan Khundii Project processing facility at modest incremental capital cost (see "KGP 2019 Technical Report"). A number of development options for Altan Nar are under consideration.

## **District Area Exploration**

Erdene's deposits are in the Trans Altai 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 base metal prospects, one of which is currently being developed, the 100%-owned Bayan Khundii Gold Project, and another which is being considered for development, the 100%-owned Altan Nar Project. In 2021, the Company discovered two new significant gold prospects, Dark Horse and Ulaan.

The Company is targeting total resources of over two million gold equivalent ounces by the end of 2022, based on current resources, as well as the results from recent drilling that is not yet incorporated into resources. Furthermore, management sees the potential to add resources beyond this target through further discoveries in this underexplored portion of the prolific gold and copper producing Central Asian Orogenic Belt.

### ***Khundii-Ulaan Epithermal Gold Potential***

Results from recent exploration confirm that the Khundii Gold District hosts multiple zones of epithermal gold mineralization over a wide area. The Khundii mining license and adjoining Ulaan exploration license cover nearly 4,000 hectares of the Khundii-Ulaan hydrothermal alteration zone, which extends from Ulaan over 10 kilometres to the northeast. This alteration trend has a central zone of intense secondary silica with a peripheral halo of sericite alteration, and an outer zone of white mica and sericite, which hosts the Bayan Khundii gold deposit. This northeast trending alteration area, which incorporates the Ulaan, Bayan Khundii, Dark Horse and other mineralized targets in the area, is associated with a regional structural dilational jog and associated major volcano-plutonic centre, along a northeast trending transform fault. The various styles of alteration and mineralization within the Khundii-Ulaan target area are consistent with a fertile magmatic island arc, with evidence for possible arc migration, and overlapping or telescoped mineralization along major structures.

Exploration results to date suggest the greater Khundii-Ulaan alteration zone and known gold occurrences are part of the same, large, gold-bearing hydrothermal system which remains largely under-explored. Gold mineralization identified to date is hosted within an expansive, white mica and silica altered tuffaceous sequence exposed around the periphery of the Khundii-Ulaan hydrothermal alteration system. Quartz vein textures and clay alteration compositions indicate a large-scale epithermal type gold mineralizing environment existed within the Khundii-Ulaan system with the tuffaceous lithologies acting as preferred hosts for gold mineralization. Exploration planning is currently underway to test multiple high-priority geological, geochemical and geophysical targets across the Khundii-Ulaan target area.

Regional drilling has been restricted to shallow targets with average drill depths of about 100 metres with approximately 70% of regional drill holes having intersected anomalous gold mineralization (defined as >0.1 g/t gold). Success has been driven by the abundance of untested, near surface geochemical and geophysical targets in a region that has had no previous modern exploration. Recent exploration successes testing shallow targets, and the definition of three deposits, exposed at surface, are testament to the discovery potential of this new district. During Q2 2022, the Company completed a 278 hole RC drill program to test shallow targets across the greater Dark Horse area principally on the Khundii License. Results are pending and expected to be announced in mid-August.

Furthermore, Erdene continues to evaluate opportunities throughout the Trans Altai Terrane, within our licenses and elsewhere in the mineralized belt. This has led to the identification of prospects that are being explored through surface surveys on the Company's four licenses, drilling of selected targets and evaluation of acquisition targets on private and government held ground.

### ***Ulaan Copper-Gold Porphyry Target***

On August 30, 2017, the Corporation acquired a 51% interest in the 1,780-hectare Ulaan exploration license ("Ulaan Property"), immediately west of its high-grade Bayan Khundii deposit. In December 2020, Erdene acquired the remaining 49% interest in the property. The exploration license is in its seventh year of a maximum 12-year term and can be converted to a mining license at any time prior to the end of the twelfth year by meeting the requirements prescribed under the Minerals Law of Mongolia.

In addition to the Ulaan Southeast gold prospect discovery, the Ulaan license hosts a porphyry copper prospect primarily based on the broad (5km by 4km) zone of phyllic (quartz-sericite-pyrite) alteration at surface, with characteristics thought to be related to a porphyry intrusion at depth. Rock chip and stream sediment geochemical sampling identified anomalous concentrations of gold, copper and molybdenum in the surrounding area, and recently completed geophysical surveys have produced a number of follow-up targets.

Three wide spaced holes were drilled in 2018, totaling 1,050 metres over a 1.3 kilometre area in the central portion of the license. These 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 (100 to 300 ppm over 60 metres).

A 700-metre, three-hole drilling program was completed in 2019 to test the alteration system at depth (to 650 metres), by extending a previous drill hole, and to investigate two shallower moderate IP chargeability targets (to 200 metres). The extension hole showed continuity at depth of the phyllic style alteration and ended within elevated copper, averaging 130 ppm over 22 metres. The entire second hole exhibited sericite alteration and pyrite mineralization with localized zones of tourmaline alteration and quartz veining within an andesite host, however no anomalous geochemistry was encountered. The final hole 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: 2 metres of 1.3 g/t gold, 4 metres of 0.29 g/t gold, 2 metres of 0.5 g/t gold and 2 metres of 0.23 g/t gold or 40 metres of 0.15 g/t gold average grade. Anomalous copper, exceeding 400 ppm, 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 of the Ulaan Copper-Gold Porphyry target.

### ***Zuun Mod Molybdenum-Copper Project***

The Zuun Mod Molybdenum-Copper Project is a porphyry molybdenum-copper deposit located in southwest Mongolia on the Company's Khuvyn Khar license. This project is approximately 950 kilometres southwest of Ulaanbaatar and 215 kilometres from railhead on the Mongolia-China border at Ceke. The property consists of a mining license totaling 6,041 hectares. The mining license is registered in the name of Anian Resources LLC, a wholly owned subsidiary of the Corporation, and has an initial term of 30 years.

This project was acquired from Gallant Minerals Limited in 2005 and is subject to a net smelter returns royalty ("NSR Royalty") of 1.5%, subject to a buy-down provision.

In Q2 2011, the Corporation released a NI 43-101 compliant resource estimate for Zuun Mod containing a Measured and Indicated Resource of 218 million tonnes ("Mt") at an average grade of 0.057% molybdenum, and 0.069% copper at a cut-off grade ("COG") of 0.04% molybdenum. This equates to 273.5 million pounds ("M lbs") of contained molybdenum metal and 330.7 M lbs of contained copper metal. In addition, there is a 168 Mt Inferred Resource at an average grade of 0.052% molybdenum and 0.065% copper, equating to a further 191.8 M lbs of contained molybdenum metal and 240.5 M lbs of contained copper metal.

The Zuun Mod molybdenum-copper deposit has significant potential for development provided the molybdenum price remains strong. Market demand for molybdenum has recently improved, with the price of molybdenum oxide currently trading at approximately US\$21.00 per pound, compared to approximately US\$7.25 per pound in 2017. In light of the recent rise in Molybdenum and Copper prices, Erdene engaged RPMGlobal to undertake an updated technical analysis of the project, and the broader Khuvyn Khar license. The results of this study were received in Q4 2021 and suggest strong economics for the project at current metals prices.

Further details on the Zuun Mod resource can be found in the "Technical Report Zuun Mod Porphyry Molybdenum-Copper Project, South-Western Mongolia, National Instrument 43-101 Independent Technical Report" dated June 2011, filed on SEDAR.

### ***Khuvyn Khar Copper-Silver Project***

The Khuvyn Khar copper-silver project is located on Khuvyn Khar license, approximately 2.2 kilometres north of the Zuun Mod molybdenum-copper porphyry deposit. Exploration work at Khuvyn Khar has included geological mapping, vein density mapping, geochemical sampling, geophysical surveys, and wide spaced drilling. Previous drilling intersected 34 metres of 1.3% copper and 9.24 g/t silver from 308 to 342 metres (ZMD-121). The Project has a very large copper mineralized zone trending over 900 metres with multiple zones in three drill holes returning assays in excess of 0.2% copper over significant widths (12 to 42 metres). As noted above, RPMGlobal has been engaged to undertake a technical and economic study of the Zuun Mod Molybdenum-Copper project, including a high-level analysis of the prospectivity of the broader Khuvyn Khar license.

### **Acquisitions**

Mongolia's Ministry of Mining and Heavy Industry periodically issues areas for exploration. Erdene has established the largest proprietary geologic database of Southwest Mongolia with a priority list of acquisition targets. The Company will participate in the tendering process as its priority targets are opened for tender. The Company has also been evaluating privately held licenses for acquisition.

## Discussion of Operations

### Three months ended June 30, 2022, and 2021

The tables below detail exploration and evaluation expenditures for the three months ended June 30, 2022, and 2021. The Bayan Khundii Gold Project was the focus of the Corporation's efforts during these periods, although the Company also completed significant drilling on its Ulaan license in Q2 2022.

Quarter ended June 30, 2022	Bayan Khundii	Altan Nar	Ulaan	Zuun Mod & Other	General & Admin	Total
<b>E&amp;E expenditures</b>						
Exploration and field support	\$ 877,937	\$ 34,642	\$ 855,634	\$ 133,620	\$ -	\$ 1,901,833
Mining studies and permitting	705,005	-	2,825	54,884	-	762,714
Mongolian office costs	-	-	-	-	210,749	210,749
Share-based compensation	-	-	-	-	19,920	19,920
Stakeholder relations	43,578	10,654	322	12,825	-	67,379
Travel and other	57,382	-	6,018	6,420	-	69,820
Total exploration expenditures	1,683,902	45,296	864,799	207,749	230,669	3,032,415
Capitalized expenditures	(1,721,684)	(45,296)	-	(53,351)	-	(1,820,331)
<b>Expensed exploration costs 2022</b>	<b>\$ (37,782)</b>	<b>\$ -</b>	<b>\$ 864,799</b>	<b>\$ 154,398</b>	<b>\$ 230,669</b>	<b>\$ 1,212,084</b>

<b>E&amp;E assets, April 1, 2022</b>	<b>\$ 31,958,297</b>	<b>\$ 4,234,090</b>	<b>\$ 1,746,444</b>	<b>\$ 927,847</b>	<b>\$ -</b>	<b>\$ 38,866,678</b>
Additions	1,721,684	45,296	-	53,351	-	1,820,331
Effect of movements in exchange rates	(431,731)	(49,862)	(19,969)	(18,601)	-	(520,163)
<b>E&amp;E assets, June 30, 2022</b>	<b>\$ 33,248,250</b>	<b>\$ 4,229,524</b>	<b>\$ 1,726,475</b>	<b>\$ 962,597</b>	<b>\$ -</b>	<b>\$ 40,166,846</b>

Quarter ended June 30, 2021	Bayan Khundii	Altan Nar	Ulaan	Zuun Mod & Other	General & Admin	Total
<b>E&amp;E expenditures</b>						
Exploration and field support	\$ 1,159,588	\$ 73,572	\$ 211,430	\$ 7,955	\$ -	\$ 1,452,545
Mining studies and permitting	1,029,442	102,014	27,652	47,758	-	1,206,866
Mongolian office costs	-	-	-	-	85,845	85,845
Share-based compensation	-	-	-	-	282,197	282,197
Stakeholder relations	53,748	6,478	22	3,387	-	63,635
Travel and other	-	-	-	3,817	-	3,817
Total exploration expenditures	2,242,778	182,064	239,104	62,917	368,042	3,094,905
Capitalized expenditures	(2,240,333)	(150,216)	-	(55,694)	-	(2,446,243)
<b>Expensed exploration costs 2021</b>	<b>\$ 2,445</b>	<b>\$ 31,848</b>	<b>\$ 239,104</b>	<b>\$ 7,223</b>	<b>\$ 368,042</b>	<b>\$ 648,662</b>

<b>E&amp;E assets, April 1, 2021</b>	<b>\$ 24,799,748</b>	<b>\$ 3,964,833</b>	<b>\$ 1,788,788</b>	<b>\$ 875,865</b>	<b>\$ -</b>	<b>\$ 31,429,234</b>
Additions	2,240,333	150,216	-	55,694	-	2,446,243
Effect of movements in exchange rates	(182,044)	(26,040)	(11,059)	(9,272)	-	(228,415)
<b>E&amp;E assets, June 30, 2021</b>	<b>\$ 26,858,037</b>	<b>\$ 4,089,009</b>	<b>\$ 1,777,729</b>	<b>\$ 922,287</b>	<b>\$ -</b>	<b>\$ 33,647,062</b>

Exploration and evaluation expenditures, including capitalized expenditures, totaled \$3,032,415 for the three months ended June 30, 2022, compared to \$3,094,905 for the three months ended June 30, 2021.

Exploration and field support expenses of \$1,901,833 in Q2 2022 were \$449,288 greater than prior year quarter due to an increase in land use license fees as well as higher camp and other support costs following the expansion of the camp in advance of construction. Expat and Mongolian salaries are also greater in the current year period due to the onboarding of staff in advance of construction.

Mining studies and permitting costs for the three months ended June 30, 2022, were \$444,152 less than in the same quarter of 2021 largely due to deposit paid on the comminution circuit for the Bayan Khundii Gold Project in June 2021.

Mongolian office costs of \$210,749 for the three months ended June 30, 2022, were \$124,904 higher than the comparative prior year quarter primarily due to the recruitment of staff in advance of construction as well as incremental expenditures on community outreach.

Share-based compensation expenditures for the quarter ended June 30, 2022, were \$262,277 less than those in the prior year quarter due to the timing of the annual stock-based compensation grant to employees.

Travel and other costs for the period ended June 30, 2022, were \$66,003 greater than the prior year quarter as international travel resumed in late 2021 following a relaxation of COVID-19 related restrictions.

Erdene began capitalizing exploration costs for its Altan Nar Project in 2015 and commenced capitalizing costs for its Bayan Khundii Gold Project in 2016. For the three months ended June 30, 2022, and 2021, Erdene capitalized all exploration costs associated with these projects; however, exploration and evaluation expenditures associated with the Ulaan property were expensed in 2022 and 2021, consistent with Company's capitalization policy.

The following table summarizes corporate and administration expenses for the three months ended June 30, 2022, and 2021.

	<b>For the three months ended June 30,</b>		
	<b>2022</b>	<b>2021</b>	<b>Change</b>
Administrative services	\$ 150,991	\$ 103,858	\$ 47,133
Depreciation and amortization	9,527	9,305	222
Directors fees and expenses	43,004	31,513	11,491
Investor relations and marketing	43,896	64,577	(20,681)
Office and sundry	25,680	24,584	1,096
Professional fees	91,959	57,033	34,926
Regulatory compliance	19,254	12,729	6,525
Share-based compensation	61,661	329,811	(268,150)
Travel and accommodations	29,627	1,117	28,510
	<b>\$ 475,599</b>	<b>\$ 634,527</b>	<b>\$ (158,928)</b>

Corporate and administration expenses totaled \$475,599 for the three months ended June 30, 2022, compared to \$634,527 for the three months ended June 30, 2021.

Administrative services expenditures of \$150,991 for the three months ended June 30, 2022, were \$47,133 higher than those in the prior year quarter primarily due to the recruitment of an investor relations professional, as well as cost of living salary increases for administrative staff.

Director's fees and expenses for the three months ended June 30, 2022, were \$11,491 greater than the prior year quarter, due to an inflationary increase in director compensation implemented in mid-2021.

Investor relations and marketing expenditures for the three months ended June 30, 2022, were \$20,681 less than the comparative prior year quarter due to a reduction in fees to external IR consultants following the recruitment of a dedicated investor relations professional.

Professional fees for the three months ended June 30, 2022, were \$34,926 greater than the prior year quarter, due to additional finance related assurance work by the Company's auditor as well as the engagement of a Mongolian financial advisor.

Share-based compensation expenditures for the quarter ended June 30, 2022, were \$268,150 less than those in the prior year quarter due to the timing of the annual stock-based compensation grant to employees.

Travel and accommodations expenditures were \$28,510 higher than those in the prior year quarter as international travel has resumed following the lifting of COVID-19 travel restrictions.

Depreciation and amortization, Office and Sundry and Regulatory compliance expenditures for the three months ended June 30, 2022, were not material or significantly different from those incurred in the prior year comparative quarter.

## Six months ended June 30, 2022, and 2021

The tables below detail exploration and evaluation expenditures for the six months ended June 30, 2022, and 2021. The Bayan Khundii Gold Project was the focus of the Corporation's efforts during these periods.

Period ended June 30, 2022	Bayan Khundii	Altan Nar	Ulaan	Zuun Mod & Other	General & Admin	Total
<b>E&amp;E expenditures</b>						
Exploration and field support	\$ 2,060,787	\$ 79,276	\$ 891,934	\$ 195,915	\$ -	\$ 3,227,912
Mining studies and permitting	1,473,345	69,150	27,994	55,547	-	1,626,036
Mongolian office costs	-	-	-	-	514,395	514,395
Share-based compensation	-	-	-	-	39,473	39,473
Stakeholder relations	413,796	944	322	12,825	-	427,887
Travel and other	70,867	11,341	7,237	11,839	-	101,284
Total exploration expenditures	4,018,795	160,711	927,487	276,126	553,868	5,936,987
Capitalized expenditures	(3,728,052)	(160,150)	(1,726)	(53,351)	-	(3,943,279)
<b>Expensed exploration costs 2022</b>	<b>\$ 290,743</b>	<b>\$ 561</b>	<b>\$ 925,761</b>	<b>\$ 222,775</b>	<b>\$ 553,868</b>	<b>\$ 1,993,708</b>
<b>E&amp;E assets, January 1, 2022</b>						
	\$ 30,910,999	\$ 4,246,301	\$ 1,797,500	\$ 973,653	\$ -	\$ 37,928,453
Additions	3,728,052	160,150	1,726	53,351	-	3,943,279
Effect of movements in exchange rates	(1,390,801)	(176,927)	(72,751)	(64,407)	-	(1,704,886)
<b>E&amp;E assets, June 30, 2022</b>	<b>\$ 33,248,250</b>	<b>\$ 4,229,524</b>	<b>\$ 1,726,475</b>	<b>\$ 962,597</b>	<b>\$ -</b>	<b>\$ 40,166,846</b>

Period ended June 30, 2021	Bayan Khundii	Altan Nar	Ulaan	Zuun Mod & Other	General & Admin	Total
<b>E&amp;E expenditures</b>						
Exploration and field support	\$ 2,187,417	\$ 115,528	\$ 232,019	\$ 47,153	\$ -	\$ 2,582,117
Mining studies and permitting	2,098,597	200,164	31,930	57,283	-	2,387,974
Mongolian office costs	-	-	-	-	191,210	191,210
Share-based compensation	-	-	-	-	289,770	289,770
Stakeholder relations	125,093	33,478	27	3,387	-	161,985
Travel and other	-	-	-	5,817	-	5,817
Total exploration expenditures	4,411,107	349,170	263,976	113,640	480,980	5,618,873
Capitalized expenditures	(4,362,777)	(315,781)	(1,716)	(55,694)	-	(4,735,968)
<b>Expensed exploration costs 2021</b>	<b>\$ 48,330</b>	<b>\$ 33,389</b>	<b>\$ 262,260</b>	<b>\$ 57,946</b>	<b>\$ 480,980</b>	<b>\$ 882,905</b>
<b>E&amp;E assets, January 1, 2021</b>						
	\$ 22,850,206	\$ 3,827,267	\$ 1,799,626	\$ 887,056	\$ -	\$ 29,364,155
Additions	4,362,777	315,781	1,716	55,694	-	4,735,968
Effect of movements in exchange rates	(354,946)	(54,039)	(23,613)	(20,463)	-	(453,061)
<b>E&amp;E assets, June 30, 2021</b>	<b>\$ 26,858,037</b>	<b>\$ 4,089,009</b>	<b>\$ 1,777,729</b>	<b>\$ 922,287</b>	<b>\$ -</b>	<b>\$ 33,647,062</b>

The following table summarizes corporate and administration expenses for the six months ended June 30, 2022, and 2021.

	<b>For the six months ended June 30,</b>		
	<b>2022</b>	<b>2021</b>	<b>Change</b>
Administrative services	\$ 293,881	\$ 203,829	\$ 90,052
Depreciation and amortization	19,047	18,536	511
Directors fees and expenses	69,254	50,924	18,330
Investor relations and marketing	67,309	114,474	(47,165)
Office and sundry	50,482	47,648	2,834
Professional fees	166,114	127,319	38,795
Regulatory compliance	100,557	64,696	35,861
Share-based compensation	118,521	400,393	(281,872)
Travel and accommodations	35,880	1,312	34,568
	<b>\$ 921,045</b>	<b>\$ 1,029,131</b>	<b>\$ (108,086)</b>

## Summary of Quarterly Results

*Expressed in thousands of Canadian dollars except per share amounts*

	Fiscal 2022			Fiscal 2021			Fiscal 2020	
	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3
	Jun	Mar	Dec	Sep	Jun	Mar	Dec	Sep
Net loss	\$1,698	\$1,231	\$1,739	\$1,936	\$1,279	\$617	\$1,525	\$3,871
Basic loss per share	\$0.01	\$0.00	\$0.01	\$0.01	\$0.00	\$0.00	\$0.00	\$0.02
Total assets	\$42,495	\$44,230	\$46,544	\$42,319	\$42,411	\$42,454	\$42,814	\$44,918

For the six months ended June 30, 2022, the Corporation recognized a net loss of \$2,928,904 compared to a net loss of \$1,895,606 for the same period in 2021.

The Corporation's expenditures vary from quarter to quarter, largely due to the timing of its Mongolian exploration and evaluation programs. The Corporation is not aware of any other specific trends which account for fluctuations in financial results from period to period.

## Liquidity and Capital Resources

At the date of this MD&A, the Corporation had approximately \$6.9 million in working capital, calculated as current assets less current liabilities.

Funds raised have been used to advance the Corporation's projects in Mongolia and to meet administrative costs in support of those programs (see Development and Exploration Projects and Discussion of Operations). The ability of the Corporation to continue with its exploration and development programs beyond this point is contingent upon securing additional funds through asset sales, formation of alliances, option and/or joint venture agreements, equity and debt financing and/or expenditure reductions. The timing and availability of additional financing will be determined largely by market conditions and the results of the Corporation's ongoing exploration programs.

The Corporation has minimal sources of income. It is therefore difficult to identify any meaningful trends or develop an analysis from the Corporation's cash flows. The Corporation is dependent primarily on the issuance of share capital and debt to finance its exploration and development programs.

Other than as discussed herein, the Corporation is not aware of any trends, demands, commitments, events or uncertainties that may result in the Corporation's liquidity or capital resources materially increasing or decreasing at present or in the foreseeable future. Material increases or decreases in the Corporation's liquidity and capital resources will be substantially determined by the success of the Corporation's Mongolian exploration and development programs and its ability to obtain sufficient financing.

## Outstanding Share Data

### Authorized

An unlimited number of common shares with no par value.

### Issued and Outstanding Share Capital

	August 3, 2022	December 31, 2021
Common shares issued and outstanding	318,308,532	294,379,845
Options outstanding	13,350,000	15,855,000
Warrants outstanding	57,016,222	44,845,052
DSU's outstanding	6,545,106	6,103,362
Total instruments outstanding	<b>395,219,860</b>	361,183,259

## Contractual Obligations

The following table summarizes the maturity of the Corporation's contractual obligations at June 30, 2022:

	Total	Less than one year	1 - 2 years	2 - 3 years
Office leases	\$ 125,201	\$ 74,503	\$ 44,859	\$ 5,839
Accounts payable and accrued liabilities	1,151,683	1,151,683	-	-
	<b>\$ 1,276,884</b>	<b>\$ 1,226,186</b>	<b>\$ 44,859</b>	<b>\$ 5,839</b>

## Other Financing Arrangements and Commitments

### Sandstorm Gold Ltd. Royalty Agreement

Sandstorm Gold Ltd. ("Sandstorm") holds a 1% net smelter returns royalty ("NSR Royalty") on Erdene's Altan Nar, Khundii and Ulaan licenses. Sandstorm has been given a right of first refusal on future stream or royalty financings related to these licenses.

### Other

The Zuun Mod License is subject to a 1.5% NSR Royalty. Erdene has the option to buy down a portion of the royalty if certain production milestones are achieved.

## Off-Balance Sheet Arrangements

As at June 30, 2022, the Corporation had no off-balance sheet arrangements such as guarantee contracts, contingent interests in assets transferred to an entity, derivative instruments obligations or any obligations that trigger financing, liquidity, market or credit risks to the Corporation.

## Critical Accounting Estimates

The preparation of financial statements in conformity with IFRS requires Erdene to establish accounting policies and to make estimates that affect both the amount and timing of the recording of assets, liabilities, revenues and expenses. Some of these estimates require judgments about matters that are inherently uncertain.

A detailed summary of all of the Corporation's significant accounting policies and the key sources of estimation uncertainty that have a risk of resulting in a material adjustment to the carrying amount of assets and liabilities within the next twelve months are included in Note 2 to the consolidated financial statements for the year ended December 31, 2021. While all of the key sources are important to the Corporation's consolidated financial statements, the following key sources have been identified as being critical:

- Recoverability of exploration and evaluation assets; and
- Share-based compensation.

## Recoverability of exploration and evaluation assets

In accordance with the Corporation's accounting policy, at the end of each reporting period, the Corporation assesses its exploration and evaluation assets to determine whether any indication of impairment exists. Judgment is required in determining whether indicators of impairment exist, including factors such as the period for which the Corporation has the right to explore, expected renewals of exploration rights, whether substantive expenditures on further exploration and evaluation of resource properties are budgeted and results of exploration and evaluation activities on the exploration and evaluation assets.

Where an indicator of impairment exists, a formal estimate of the recoverable amount is made, which is considered to be the greater of the fair value less cost of disposal and value in use. The impairment analysis requires the use of estimates and assumptions, such as long-term commodity prices, discount rates, future capital expenditures, exploration potential and operating costs. Fair value of exploration and evaluation assets is generally determined as the present value of estimated future cash flows arising from the continued use of the asset, which includes estimates such as the cost of future expansion plans and eventual disposal, using assumptions that an independent market participant may take into account. Cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessment of the time value of money and risks to the asset. If the Corporation does not have sufficient information about a particular mineral resource property to meaningfully estimate future cash flows, the fair value is estimated by management through comparison to similar market assets and, where available, industry benchmarks.

## Share-based payments

Equity-settled share-based payments issued to employees and directors are measured at fair value (excluding the effect of non-market based vesting conditions) at the date of grant. Fair value is measured using the Black-Scholes pricing model and requires the exercise of judgment in relation to variables such as expected volatilities and expected lives based on information available at the time the fair value is measured. The Corporation charged a total of \$157,994 of non-cash share-based compensation to the statement of comprehensive loss for the six months ended June 30, 2022 (2021 - \$690,163).

## Adoption of New Accounting Standards and Future Changes in Accounting Policies

### *New and revised accounting standards adopted*

Erdene has adopted the following new and revised standards, along with any consequential amendments, effective January 1, 2022. These changes were made in accordance with applicable transitional provisions.

#### IAS 16 – Property, Plant and Equipment

The Corporation adopted the amendment to IAS 16 Property, Plant and Equipment, issued on May 14, 2020, by the IASB, that prohibit deducting from the cost of an item of property, plant and equipment, any proceeds from selling items produced while bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management. The application of the amendment has been made on a prospective basis and did not have an impact on the Corporation.

#### IAS 37 – Provisions, Contingent Liabilities and Contingent Assets

The Corporation adopted the amendment to IAS 37 Provisions, Contingent Liabilities and Contingent Assets, issued on May 14, 2020, by the IASB, specifying which costs an entity includes in determining the cost of fulfilling a contract for the purpose of assessing whether the contract is onerous. The application of the amendment has been made on a prospective basis and did not have an impact on the Corporation.

#### IFRS 9 – Financial Instruments

The Corporation adopted the amendment to IFRS 9 Financial Instruments, issued on May 14, 2020, by the IASB, clarifying which fees to include in the test in assessing whether to derecognize a financial liability. The application of the amendment has been made on a prospective basis and did not have an impact on the Corporation.

### *New and revised accounting standards not yet adopted*

The IASB issued the following new and revised standards that have not been applied in preparing these condensed consolidated interim financial statements as their effective date falls within annual periods beginning subsequent to the current reporting period.

## IAS 1 – Presentation of Financial Statements

On January 23, 2020, the IASB issued an amendment to IAS 1 Presentation of Financial Statements providing a more general approach to the classification of liabilities. The amendment clarifies that the classification of liabilities as current or noncurrent depends on the rights existing at the end of the reporting period as opposed to the expectations of exercising the right for settlement of the liability. The amendments further clarify that settlement refers to the transfer of cash, equity instruments, other assets, or services to the counterparty. The amendments are effective for annual periods beginning on or after January 1, 2023, and are to be applied retrospectively, with early adoption permitted. The Corporation is currently assessing the financial impact of the amendments and the application of such amendments is not expected to have a material impact.

## **Financial Instruments and Other Risks**

### **Financial Instruments**

The fair values of the Corporation's financial instruments are considered to approximate the carrying amounts. Financial instruments, including cash and cash equivalents, receivables, and trade and other payables are measured at amortized cost on the Corporation's financial statements.

### **Credit Risk**

The Corporation manages credit risk by holding the majority of its cash and cash equivalents with reputable financial institutions in Canada, where management believes the risk of loss to be low. At June 30, 2022, \$92,263 or 23% of the balance of cash was held in banks outside Canada (December 31, 2021 - \$270,113 or 3%).

### **Liquidity Risk**

Liquidity risk is the risk that the Corporation will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The Corporation's approach to managing liquidity is to ensure, to the extent possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions.

### **Market Risk**

Market risk is the risk of loss that may arise from changes in market factors such as interest rates, foreign exchange rates, and commodity and equity prices.

#### *Interest rate risk*

As of June 30, 2022, the Corporation has no interest-bearing debt and is not exposed to any significant interest rate risk.

#### *Foreign Currency Risk*

The functional currency of the Corporation is the Canadian dollar, and the functional currency of the Corporation's subsidiaries is the Mongolian tugrik. Additionally, the Corporation incurs expenses in US dollars. Consequently, fluctuations of the Canadian dollar in relation to other currencies impacts the fair value of financial assets, liabilities and operating results. Financial assets and liabilities subject to currency translation risk primarily include US dollar denominated cash, accounts payable and accrued liabilities, as well as the Corporation's net investments in its Mongolian subsidiaries. The Corporation maintains US dollar bank accounts in Canada.

The Corporation's exposure to US dollar currency risk was \$306,741 as at June 30, 2022 (December 31, 2021 - \$3,038,230). A 10% change in the US dollar exchange rate would affect net loss and comprehensive loss and deficit by approximately \$30,700 (December 31, 2021 - \$303,800).

The Corporation's exposure to Mongolian Tugrik currency risk was \$199,525 as at June 30, 2022 (December 31, 2021 - \$61,212). A 10% change in the Mongolian Tugrik would affect net loss and comprehensive loss and deficit by approximately \$20,000 (December 31, 2021 - \$6,100).

#### *Price Risk*

The Corporation's financial instruments are not exposed to direct price risk other than that associated with commodity price fluctuations impacting the mineral exploration and mining industries as the Corporation has no significant revenues.

## Other Risks

In conducting its business, the principal risks and uncertainties faced by the Corporation relate primarily to exploration results, permitting, financing, availability and price of industrial and consumer goods required for the construction of the Bayan Khundii Gold Project and, to a lesser extent, metal and commodity prices. Exploration for minerals and development of mining operations involve many risks, many of which are outside the Corporation's control. In addition to the normal and usual risks of exploration and mining, the Corporation works in remote locations that lack the benefit of infrastructure and easy access. More information on risks is available in the Corporation's Annual Information Form available on SEDAR at [www.sedar.com](http://www.sedar.com).

## Disclosure Controls and Internal Controls over Financial Reporting

Erdene has established and maintains disclosure controls and procedures over financial reporting, as defined under the rules adopted by the Canadian Securities Regulators in instrument 52-109. The Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO") have evaluated the design and effectiveness of Erdene's disclosure controls and procedures as of June 30, 2022 and have concluded that such procedures are adequate and effective to provide reasonable assurance that material information relating to Erdene and its consolidated subsidiaries would be made known to them by others within those entities to allow for accurate and complete disclosures in annual filings.

The Management of Erdene, with the participation of the CEO and CFO (collectively "Management"), is responsible for establishing and maintaining adequate internal controls over financial reporting. Erdene's internal controls over financial reporting are designed to provide reasonable assurance regarding the reliability of financial reporting and preparation of financial statements in accordance with IFRS.

Management evaluated the design and effectiveness of Erdene's internal controls over financial reporting as of June 30, 2022. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in its report "Internal Control – Integrated Framework (2013)". This evaluation included reviewing controls in key risk areas, assessing the design of these controls, testing these controls to determine their effectiveness, reviewing the results and then developing an overall conclusion.

Based on management's evaluation, the CEO and the CFO have concluded that as of June 30, 2022, Erdene's internal controls over financial reporting were effective in providing reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with IFRS.

However, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation. Also, projections of any evaluation of effectiveness in future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

## Qualified Person

Peter Dalton, P.Geol. (Nova Scotia) is a qualified person under NI 43-101 and supervises all of the Corporation's exploration programs. Samples are assayed at SGS Laboratory in Ulaanbaatar, Mongolia or Tianjin China, Central Geological Laboratory in Ulaanbaatar, Blue Coast Research Ltd in Parksville British Columbia, Canada, or ALS Chemex in Vancouver, Canada. In addition to internal checks by SGS Laboratory, Central Geological Laboratory and ALS Chemex, the Corporation incorporates a QA/QC sample protocol utilizing prepared standards, field and laboratory splits, and blanks.

The disclosure in this MD&A of scientific or technical information about mineral projects on the Corporation's properties has been reviewed and approved by Peter Dalton, P. Geol., who is not independent of the Corporation.

The information in this MD&A that relates to the financial models for the Bayan Khundii Feasibility Study is based on information compiled and reviewed by Kenny Li, CFA, who is an employee of ROMA Group Ltd. The information in this MD&A 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 MD&A 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 MD&A that relates to the Bayan Khundii resource estimate is based on information compiled and reviewed

by Mr. Cam Norton, who is a P. Geo The information in this MD&A that relates to the Bayan Khundii reserve estimate is based on information compiled and reviewed by Mr. Anthony Keers, who is an MAusIMM (CP Mining) and a Director, Auralia Mining Consulting. Each of Mr. Li, Mr. Lawrence, Mr. Jardine, Mr. Norton and Mr. Keers 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. Li, Mr. Lawrence, Mr. Jardine, Mr. Norton and Mr. Keers is not aware of any potential for a conflict of interest in relation to this work with Erdene.

## **Other Information**

Additional information regarding the Corporation, including the Corporation's Annual Information Form, is available on SEDAR at [www.sedar.com](http://www.sedar.com) and on the Corporation's website at [www.erdene.com](http://www.erdene.com).