



## **CONDENSED CONSOLIDATED INTERIM FINANCIAL STATEMENTS**

For the three and six months ended June 30, 2021, and 2020

*(Canadian dollars)*  
*(Unaudited)*

Prepared by management – See Notice to Reader

## NOTICE TO READER

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Under National Instrument 51-102, Part 4, subsection 4.3 (3) (a), if an auditor has not performed a review of the condensed consolidated interim financial statements, they must be accompanied by a notice to this effect. These unaudited condensed consolidated interim financial statements have been prepared by management of the Corporation. Management have compiled the unaudited condensed consolidated interim statements of financial position of Erdene Resource Development Corporation as at June 30, 2021, and December 31, 2020, and the unaudited condensed consolidated interim statements of comprehensive loss, changes in equity and cash flows for the three and six months ended June 30, 2021, and 2020. The Corporation's independent auditors have not audited, reviewed or otherwise attempted to verify the accuracy or completeness of the June 30, 2021, and 2020 condensed consolidated interim financial statements. Readers are cautioned that these statements may not be appropriate for their intended purposes.

# ERDENE RESOURCE DEVELOPMENT CORPORATION

## Condensed Consolidated Interim Statements of Financial Position

(Canadian dollars)

	Notes	June 30, 2021	December 31, 2020
<b>Assets</b>			
Cash and cash equivalents		\$ 7,499,476	\$ 12,800,728
Receivables		61,567	89,344
Prepays		860,089	212,479
Current assets		8,421,132	13,102,551
Exploration and evaluation assets	4	33,647,062	29,364,155
Right-of-use asset	5	93,008	107,693
Property, plant and equipment		249,972	239,431
Non-current assets		33,990,042	29,711,279
<b>Total Assets</b>		<b>\$ 42,411,174</b>	<b>\$ 42,813,830</b>
<b>Liabilities and Equity</b>			
Trade and other payables		\$ 1,017,608	\$ 582,356
Lease liability	5	28,910	27,853
Current liabilities		1,046,518	610,209
Lease liability	5	70,980	85,699
Non-current liabilities		70,980	85,699
<b>Total Liabilities</b>		<b>1,117,498</b>	<b>695,908</b>
<b>Shareholders' Equity</b>			
Share capital	8	\$ 137,666,716	\$ 136,618,086
Contributed surplus		26,415,850	25,937,667
Accumulated other comprehensive loss		(3,420,119)	(2,964,666)
Deficit		(119,368,771)	(117,473,165)
<b>Total Shareholders' Equity</b>		<b>41,293,676</b>	<b>42,117,922</b>
<b>Total Liabilities and Equity</b>		<b>\$ 42,411,174</b>	<b>\$ 42,813,830</b>

Commitments (Note 6)

Share Capital and Subsequent Event (Note 8)

The accompanying notes are an integral part of these condensed consolidated interim financial statements.

Approved on behalf of the Board:

Signed "John P. Byrne"

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Director

Signed "T. Layton Croft"

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Director

# ERDENE RESOURCE DEVELOPMENT CORPORATION

## Condensed Consolidated Interim Statements of Comprehensive Loss

(Canadian dollars)

	Notes	For the three months ended		For the six months ended	
		June 30,		June 30,	
		2021	2020	2021	2020
<b>Operating Expenses</b>					
Exploration and evaluation	9	\$ 648,662	\$ 134,046	\$ 882,905	\$ 311,241
Corporate and administration	10	634,527	351,984	1,029,131	726,058
Loss from operating activities		1,283,189	486,030	1,912,036	1,037,299
Finance income		(15,535)	(343)	(36,608)	(17,339)
Interest expense		1,732	502,991	3,598	1,114,261
Change in fair value of financial instrument	7	-	5,740,401	-	5,564,698
Foreign exchange loss (gain)		9,136	(51,094)	16,580	21,056
<b>Net Loss</b>		<b>\$ 1,278,522</b>	<b>\$ 6,677,985</b>	<b>\$ 1,895,606</b>	<b>\$ 7,719,975</b>
Other comprehensive loss (income):					
Foreign currency translation difference					
arising on translation of foreign subsidiaries		229,442	886,683	455,453	(126,493)
<b>Other comprehensive loss (income)</b>		<b>229,442</b>	<b>886,683</b>	<b>455,453</b>	<b>(126,493)</b>
<b>Total comprehensive loss</b>		<b>\$ 1,507,964</b>	<b>\$ 7,564,668</b>	<b>\$ 2,351,059</b>	<b>\$ 7,593,482</b>
Basic and diluted loss per share		\$ 0.01	\$ 0.03	\$ 0.01	\$ 0.04
Basic weighted average number					
of shares outstanding		269,014,664	192,167,922	268,760,626	191,890,375

The accompanying notes are an integral part of these condensed consolidated interim financial statements.

# ERDENE RESOURCE DEVELOPMENT CORPORATION

## Condensed Consolidated Interim Statements of Changes in Equity (Canadian dollars)

	Notes	Number of shares	Share capital	Contributed surplus	Accumulated other comprehensive loss	Deficit	Total equity
<b>Balance at January 1, 2020</b>		191,068,490	\$ 109,466,565	\$ 16,829,920	\$ (1,958,616)	\$ (104,356,807)	\$ 19,981,062
<b>Total comprehensive loss for the period:</b>							
Net loss		-	-	-	-	(7,719,975)	(7,719,975)
Other comprehensive income		-	-	-	126,493	-	126,493
Options exercised		1,150,000	262,625	(90,125)			172,500
Issue of shares from DSU plan		719,212	132,964	(132,964)			-
Share-based compensation		-	-	197,687			197,687
<b>Total transactions with owners</b>		<b>1,869,212</b>	<b>395,589</b>	<b>(25,402)</b>	<b>-</b>	<b>-</b>	<b>370,187</b>
<b>Balance at June 30, 2020</b>		<b>192,937,702</b>	<b>\$ 109,862,154</b>	<b>\$ 16,804,518</b>	<b>\$ (1,832,123)</b>	<b>\$ (112,076,782)</b>	<b>\$ 12,757,767</b>
<b>Balance at January 1, 2021</b>		<b>268,450,433</b>	<b>\$ 136,618,086</b>	<b>\$ 25,937,667</b>	<b>\$ (2,964,666)</b>	<b>\$ (117,473,165)</b>	<b>\$ 42,117,922</b>
<b>Total comprehensive loss for the period:</b>							
Net loss		-	-	-	-	(1,895,606)	(1,895,606)
Other comprehensive loss		-	-	-	(455,453)	-	(455,453)
Options exercised	8	900,000	492,275	(173,875)			318,400
Warrants exercised	8	1,727,500	556,355	(38,105)			518,250
Share-based compensation	8	-	-	690,163			690,163
<b>Total transactions with owners</b>		<b>2,627,500</b>	<b>1,048,630</b>	<b>478,183</b>	<b>-</b>	<b>-</b>	<b>1,526,813</b>
<b>Balance at June 30, 2021</b>		<b>271,077,933</b>	<b>\$ 137,666,716</b>	<b>\$ 26,415,850</b>	<b>\$ (3,420,119)</b>	<b>\$ (119,368,771)</b>	<b>\$ 41,293,676</b>

The accompanying notes are an integral part of these condensed consolidated interim financial statements.

# ERDENE RESOURCE DEVELOPMENT CORPORATION

## Condensed Consolidated Interim Statements of Cash Flows

(Canadian dollars)

	Notes	For the three months ended		For the six months ended	
		June 30,		June 30,	
		2021	2020	2021	2020
<b>Cash flows from operating activities:</b>					
Net loss		\$ (1,278,522)	\$ (6,677,985)	(1,895,606)	\$ (7,719,975)
Items not involving cash:					
Depreciation and amortization		17,060	12,945	33,714	25,969
Share-based compensation		612,008	133,167	690,163	197,687
Finance income		(15,535)	(343)	(36,608)	(17,339)
Interest expense capitalized	7	-	500,730	-	1,109,606
Foreign exchange not related to cash		9,136	(123,977)	16,580	(51,827)
Fair value change on convertible loan	7	-	5,813,284	-	5,637,581
Change in non-cash working capital		(258,656)	438,243	(190,043)	465,871
Cash flows from operating activities		(914,509)	96,064	(1,381,800)	(352,427)
<b>Cash flows from financing activities:</b>					
Proceeds on exercise of stock options		318,400	172,500	318,400	172,500
Proceeds on exercise of warrants		488,250	-	518,250	-
Repayment of lease liability		(6,897)	(6,353)	(13,662)	(12,574)
Cash flows from financing activities		799,753	166,147	822,988	159,926
<b>Cash flows from investing activities:</b>					
Expenditures on exploration and evaluation assets	4	(2,446,243)	(1,902,456)	(4,735,968)	(3,237,191)
Expenditures on property, plant and equipment		(8,273)	(1,401)	(35,641)	(4,119)
Interest received		15,535	343	36,608	17,339
Cash flows from investing activities		(2,438,981)	(1,903,514)	(4,735,001)	(3,223,971)
Effect of exchange rate changes on cash balances		(3,832)	(120,593)	(7,439)	224,962
Decrease in cash and cash equivalents		(2,557,569)	(1,761,896)	(5,301,252)	(3,191,510)
Cash and cash equivalents, beginning of period		10,057,045	3,677,249	12,800,728	5,106,863
Cash and cash equivalents, end of period		\$ 7,499,476	\$ 1,915,353	7,499,476	\$ 1,915,353

The accompanying notes are an integral part of these condensed consolidated interim financial statements.

# ERDENE RESOURCE DEVELOPMENT CORPORATION

## Notes to Condensed Consolidated Interim Financial Statements

(Canadian dollars)

(Unaudited)

For the three and six months ended June 30, 2021, and 2020

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### 1. Nature of operations:

Erdene Resource Development Corporation (“Erdene” or the “Corporation”) is a Canadian based resource company focused on the exploration and development of precious and base metal deposits in Mongolia. The Corporation’s common shares are listed on the Toronto Stock Exchange under the symbol “ERD” and the Mongolian Stock Exchange under the symbol “ERDN”. The address of the Corporation’s registered office is 1300-1969 Upper Water Street, Halifax, Nova Scotia, B3J 2V1.

Erdene is a late exploration stage business focusing on the acquisition, exploration and development of gold and other precious and base metal properties in southwest Mongolia. Currently, the Corporation’s principal development is the Bayan Khundii Gold Project, located in Bayankhongor province in Mongolia.

In August 2020, Erdene completed a Feasibility Study for its Bayan Khundii Gold Project, titled “Bayan Khundii Gold Project Feasibility Study, NI 43-101 Technical Report”. The continued operations of the Corporation and the recoverability of the amounts capitalized for mineral properties is dependent upon the existence of economically recoverable reserves, the ability of the Corporation to obtain the necessary financing to complete the exploration and development of such properties and upon future profitable production or proceeds from the disposition of one or more of the properties.

#### COVID-19

On March 11, 2020, the COVID-19 outbreak was declared a pandemic by the World Health Organization. The outbreak and efforts to contain it have had a significant effect on commodity prices and global capital markets. The Corporation adopted certain operating procedures in response to COVID-19, and associated restrictions implemented by the Government of Mongolia, including remote working, travel restrictions, and increased sanitation. As a result, the Corporation has been able to continue operating safely during the pandemic. Notwithstanding the proactive and considered actions taken to maintain a safe workplace, it is possible that in the future there will be negative impacts on operations that could have a material adverse effect on the Corporation’s results of operations and financial position. The Corporation had \$7,374,614 in working capital at June 30, 2021, providing sufficient liquidity to manage through this period of uncertainty.

### 2. Basis of presentation

These unaudited condensed consolidated interim financial statements for the three and six months ended June 30, 2021 (the “Interim Financial Statements”) have been prepared in accordance with IAS 34 – Interim Financial Reporting. The Interim Financial Statements should be read in conjunction with the annual audited consolidated financial statements for the year ended December 31, 2020 (“Annual Financial Statements”), which have been prepared in accordance with International Financial Reporting Standards (“IFRS”) issued by the International Accounting Standards Board (“IASB”).

These unaudited condensed consolidated interim financial statements were authorized for issue on behalf of the Board of Directors on August 12, 2021.

### 3. Seasonality

The corporation’s business experiences a seasonal pattern in which exploration expenditures and investments in exploration and evaluation assets are concentrated in the second and third quarters of the year due to weather conditions in Mongolia.

# ERDENE RESOURCE DEVELOPMENT CORPORATION

## Notes to Condensed Consolidated Interim Financial Statements

(Canadian dollars)

(Unaudited)

For the three and six months ended June 30, 2021, and 2020

### 4. Exploration and evaluation assets

	Bayan Khundii	Altan Nar	Zuun Mod	Ulaan & Other	Total
Balance, January 1, 2020	\$ 16,164,725	\$ 3,561,166	\$ 828,799	\$ 928,827	\$ 21,483,517
Additions	7,436,420	391,875	64,512	980,554	8,873,361
Effect of movements in exchange rates	(750,939)	(125,774)	(55,030)	(60,980)	(992,723)
Balance, December 31, 2020	\$ 22,850,206	\$ 3,827,267	\$ 838,281	\$ 1,848,401	\$ 29,364,155
Balance, January 1, 2021	\$ 22,850,206	\$ 3,827,267	\$ 838,281	\$ 1,848,401	\$ 29,364,155
Additions	4,362,777	315,781	55,694	1,716	4,735,968
Effect of movements in exchange rates	(354,946)	(54,039)	(19,826)	(24,250)	(453,061)
Balance, June 30, 2021	\$ 26,858,037	\$ 4,089,009	\$ 874,149	\$ 1,825,867	\$ 33,647,062

The Corporation's mineral exploration and mining licenses in Mongolia are held by its subsidiaries, Erdene Mongol LLC, Anian Resources LLC and Leader Exploration LLC. Mineral exploration licenses are valid for a period of three years and, through renewals, can be extended to a maximum of twelve years, subject to minimum work requirements. Mining licenses are issued for an initial term of 30 years with two 20-year extensions possible. These rights are held in good standing through the payment of an annual license fee.

#### Bayan Khundii Gold Project

The Bayan Khundii Gold Project is located in Bayankhongor province in Mongolia and is comprised of the 2,309 hectare Khundii mining license, issued in August 2019, from the Mineral Resource and Petroleum Authority of Mongolia, through the conversion of a portion of its legacy Khundii exploration license. The Khundii mining license includes the Bayan Khundii Resources and Reserves reported in "Bayan Khundii Gold Project Feasibility Study NI 43-101 Technical Report", dated August 31, 2020, and prepared by Roma Oil and Mining Associates Limited. The Corporation is currently completing construction readiness activities on the project in advance of a decision to proceed to construction, anticipated in late 2021.

Additionally, the mining license includes Erdene's highly prospective Altan Arrow, Dark Horse, Khundii North and Khundii West targets. On July 1, 2016, the Corporation began capitalizing exploration costs on the property in accordance with its capitalization policy.

#### Altan Nar Gold Project

The Altan Nar Gold Project is located in Bayankhongor province in Mongolia, approximately 16km north of Erdene's Bayan Khundii Gold Project. Erdene received the 4,669 hectare Altan Nar mining license including the Altan Nar gold, silver, lead and zinc resource, on March 5, 2020, from the Mineral Resource and Petroleum Authority of Mongolia, through the conversion of its legacy Tsenker Nomin exploration license. On January 1, 2015, having received the initial resource estimate for the Altan Nar prospect, the Corporation began capitalizing exploration costs on the property in accordance with its capitalization policy. Prior to 2015, the Corporation only capitalized licensing costs associated with Altan Nar.

#### Zuun Mod Copper & Molybdenum Resource

The Zuun Mod property is located in Bayankhongor province in Mongolia and is comprised of a 6,041 hectare molybdenum-copper Mining License. The mining license was issued in 2011. The Zuun Mod molybdenum-copper deposit has significant potential for development provided the molybdenum price improves. The Corporation will continue to evaluate its options in light of technological and market factors.

#### Ulaan & Other

The Ulaan exploration license covers an area of approximately 1,780 hectares, situated immediately adjacent to the Khundii mining license. 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



# ERDENE RESOURCE DEVELOPMENT CORPORATION

## Notes to Condensed Consolidated Interim Financial Statements

(Canadian dollars)

(Unaudited)

For the three and six months ended June 30, 2021, and 2020

#### 4. Exploration and evaluation assets (continued)

prescribed under the Minerals Law of Mongolia. On August 30, 2017, Erdene acquired 51% of the outstanding shares of Leader Exploration LLC, a private Mongolian company that holds the license. Erdene evaluated the acquisition considering IFRS 3, Business Combinations, and concluded that the transaction constituted the acquisition of a collection of assets, not a business. On December 10, 2020, Erdene acquired a 100% interest in the Ulaan exploration license with the purchase of the remaining 49% interest in Leader Exploration LLC for US\$750,000.

The Corporation maintains an exploration license for 2,205 hectares of the legacy Khundii exploration license that were not converted to a mining license in 2019. This exploration license is in its twelfth 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.

#### 5. Leases

The Company entered a five-year lease for its head office, with an effective date of September 1, 2019. The lease is reflected on the balance sheet as a right-of-use asset, with an associated lease liability. The discount rate applied to the lease is 7%.

Additional information on the right-of-use asset is as follows:

Balance, January 1, 2020	\$	137,064
Additions		-
Depreciation		(29,371)
Balance, December 31, 2020	\$	107,693
Balance, January 1, 2021	\$	107,693
Additions		-
Depreciation		(14,685)
Balance, June 30, 2021	\$	93,008

The maturity analysis of the office lease liability at June 30, 2021, is as follows:

	Within 1 year	1 - 2 years	2 - 3 years	3 - 4 years	Total
Lease payments	\$ 34,522	\$ 34,951	\$ 35,037	\$ 5,839	\$ 110,349
Finance charges	(5,612)	(3,489)	(1,343)	(15)	(10,459)
<b>Total liability</b>	<b>\$ 28,910</b>	<b>\$ 31,462</b>	<b>\$ 33,694</b>	<b>\$ 5,824</b>	<b>\$ 99,890</b>

The Corporation also has leases for office space and staff accommodation in Mongolia that expire within the next 12 months. The Corporation has elected not to apply the requirements of IFRS 16 to these payments and the Corporation expenses lease payments for these facilities as incurred.

#### 6. Commitments

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.

The Corporation has a 1.5% NSR Royalty on the Zuun Mod License, subject to a buy-down provision. There are no minimum exploration work commitments for the Zuun Mod mining license.

# ERDENE RESOURCE DEVELOPMENT CORPORATION

## Notes to Condensed Consolidated Interim Financial Statements

(Canadian dollars)

(Unaudited)

For the three and six months ended June 30, 2021, and 2020

### 7. Convertible Loan

On October 11, 2019, Erdene executed a US\$5 million (C\$6.6 million) Convertible Loan (“Loan”) with the European Bank for Reconstruction and Development (“EBRD”). The Loan was funded by way of an initial advance of US\$2.5 million on November 4, 2019, and a second advance of US\$2.5 million on November 25, 2019.

On October 9, 2020, the EBRD exercised its conversion option in respect of the entire principal amount of the Convertible Loan, receiving 30,043,290 common shares of the Corporation. Additionally, the Corporation paid cash interest of US\$457,639 to the EBRD, accrued to the date of extinguishment of the Loan. The carrying amount of the host liability of \$5,429,703 and the fair value of the conversion option of \$10,339,232, at the conversion date, were recorded as additions to share capital with the extinguishment of the liabilities.

Key terms of the Loan included:

- Principal amount of US\$5.0 million
- Coupon rate of 10% payable in cash, or capitalized, at the Corporation’s option, annually
- The Loan was convertible, in whole or in part, at the election of the EBRD, into common shares of the Corporation at a conversion price (in respect of the principal amount drawn down under the Loan) of C\$0.20 per share, subject to a conversion premium of 10%, 20% or 30%, respectively, if EBRD exercised its conversion option prior to or on the first, second, or third anniversary, respectively, of the date of the Loan Agreement
- Any capitalized interest on the date of the conversion was payable, at EBRD’s option, in cash or shares of the Corporation at the prevailing market price of the common shares of the Corporation (5-day Volume Weighted Average Price)

For accounting purposes, the Loan represented a hybrid financial instrument, consisting of a host loan obligation, and embedded derivative instruments comprised of the conversion and prepayment features of the Loan. The Corporation accounted for the host loan obligation at amortized cost, accreted to maturity over the term of the Loan. The embedded conversion and prepayment options were accounted for as financial liabilities measured at fair value through profit or loss.

At the dates of issue, the Loan and its components were measured at fair value as follows:

Host liability	\$	4,505,902
Conversion and prepayment options		2,106,123
Financing costs		(254,262)
Net proceeds from issue	\$	6,357,763

The following table summarizes the continuity of the host liability component of the loan for the six months ended June 30, 2021, and 2020:

	2021		2020	
Balance, January 1	\$	-	\$	4,333,370
Interest expense, capitalized		-		525,658
Accretion of discount		-		583,948
Effect of movement in exchange rates		-		177,742
Balance, June 30	\$	-	\$	5,620,718

# ERDENE RESOURCE DEVELOPMENT CORPORATION

## Notes to Condensed Consolidated Interim Financial Statements

(Canadian dollars)

(Unaudited)

For the three and six months ended June 30, 2021, and 2020

### 7. Convertible Loan (continued)

The following table summarizes the continuity of the conversion option component of the loan for the six months ended June 30, 2021, and 2020:

	2021		2020	
Balance, January 1	\$	-	\$	1,927,151
Fair value adjustment		-		5,637,581
Balance, June 30	\$	-	\$	7,564,732

The fair value of the conversion option was determined using a binomial option valuation model, using the following key assumptions:

	Six Months Ended June 30, 2021	Six Months Ended June 30, 2020
Expected volatility	n/a	82%
Risk-free interest rate	n/a	0.5%
Conversion option term	n/a	2.3 years
Credit spread	n/a	27.4%
Underlying share price	n/a	\$ 0.390
Exchange rate (C\$:US\$)	n/a	0.737

### 8. Share Capital and Contributed Surplus

#### Authorized

An unlimited number of common shares with no par value.

#### Deferred Share Units

In 2013, the Corporation adopted a deferred share unit (“DSU”) plan to align the long-term incentive compensation of certain officers, directors and employees with the drivers of long-term shareholder value. Under the Erdene DSU plan, the Corporation may grant DSUs to eligible plan members in such number and at such times as is determined by the Board of Directors as a bonus or in respect of services rendered by the plan member or otherwise as compensation. On the grant date, DSUs vest immediately and plan members are credited with the DSUs granted to them. Upon termination or death of the plan member, the Corporation pays the then market value of the plan member’s shares either in cash or in shares, at the sole discretion of the Corporation. Since the type of payout is at the discretion of the Corporation, and the Corporation does not intend to cash settle awards under the plan, the plan is accounted for as an equity settled plan.

During the six months ended June 30, 2021, the Corporation granted 328,077 DSUs with an average fair value of \$0.37 per DSU (2020 – 549,127 DSUs with fair value of \$0.24 per DSU). The fair value of \$121,388 (2020 – \$129,438) was charged to share based compensation included in exploration expenses and corporate and administration expenses.

	Six Months Ended June 30, 2021	Six Months Ended June 30 2020
Five day volume weighted average price at grant date	\$ 0.37	\$ 0.24

# ERDENE RESOURCE DEVELOPMENT CORPORATION

## Notes to Condensed Consolidated Interim Financial Statements

(Canadian dollars)

(Unaudited)

For the three and six months ended June 30, 2021, and 2020

### 8. Share Capital and Contributed Surplus (continued)

The following table summarizes the continuity of DSUs for the six months ended June 30, 2021, and 2020:

	2021	2020
	Number of DSUs	Number of DSUs
Outstanding at January 1	5,032,836	4,636,850
Granted	328,077	549,127
Issued	-	(719,212)
Outstanding at June 30	5,360,913	4,466,765

#### Warrants

The following table summarizes the continuity of warrants for the six months ended June 30, 2021, and 2020:

	2021		2020	
	Number of warrants	Weighted average exercise price	Number of warrants	Weighted average exercise price
Outstanding at January 1	75,097,796	\$ 0.55	30,252,774	\$ 0.49
Exercised	(1,727,500)	0.30	-	-
Expired	(22,599,194)	0.55	-	-
Outstanding at June 30	50,771,102	\$ 0.56	30,252,774	\$ 0.49
Exercisable at June 30	50,771,102	\$ 0.56	30,252,774	\$ 0.49

The remaining contractual lives of warrants outstanding at June 30, 2021, are as follows:

Exercise price	Number of warrants outstanding	Weighted average remaining contractual life (years)
\$0.30	5,926,050	0.16
\$0.60	44,845,052	1.12
	50,771,102	1.00

Subsequent to period end, 3,326,250 warrants were exercised for proceeds \$997,875.

#### Stock options

The Corporation has a rolling 10% incentive stock option plan (the "Plan") under which options to purchase common shares of the Corporation may be granted to directors, officers, employees and consultants of the Corporation. Under the Plan, the terms and conditions of each grant of options are determined by the Board of Directors. If there are no terms specified upon grant, options vest immediately on the grant date. The number of common shares subject to options granted under the Plan is limited to 10% of the issued and outstanding common shares of the Corporation and no one person may receive in excess of 5% of the outstanding common shares of the Corporation at the time of grant (on a non-diluted basis).

# ERDENE RESOURCE DEVELOPMENT CORPORATION

## Notes to Condensed Consolidated Interim Financial Statements

(Canadian dollars)

(Unaudited)

For the three and six months ended June 30, 2021, and 2020

### 8. Share Capital and Contributed Surplus (continued)

During the six months ended June 30, 2021, 3,375,000 options were granted at a weighted average exercise price of \$0.37.

The changes in stock options during the three and six months ended June 30, 2021, and 2020 were as follows:

	2021		2020	
	Number of options	Weighted average exercise price	Number of options	Weighted average exercise price
Outstanding at January 1	13,790,000	\$ 0.46	12,305,000	\$ 0.41
Granted	3,375,000	0.37	550,000	0.22
Expired/Surrendered	(960,000)	0.36	(250,000)	0.20
Exercised	(900,000)	0.35	(1,150,000)	0.15
Outstanding at June 30	15,305,000	\$ 0.45	11,455,000	\$ 0.43
Exercisable at June 30	15,305,000	\$ 0.45	11,455,000	\$ 0.43

The remaining contractual lives of options outstanding at June 30, 2021, are as follows:

Range of prices	Number of options exercisable	Weighted average remaining contractual life (years)	Weighted average exercise price of exercisable options
\$0.18 - \$0.24	2,845,000	3.16	\$ 0.20
\$0.25 - \$0.49	9,815,000	3.76	0.42
\$0.50 - \$0.89	2,645,000	0.78	0.86
	15,305,000	3.14	\$ 0.45

### Share-Based Compensation

For the six months ended June 30, 2021, the Corporation charged a total of \$690,163 of stock-based compensation expense to the statement of comprehensive loss (2020 – \$197,687) of which \$289,770 is attributable to exploration expenses (2020 – \$20,898).

# ERDENE RESOURCE DEVELOPMENT CORPORATION

## Notes to Condensed Consolidated Interim Financial Statements

(Canadian dollars)

(Unaudited)

For the three and six months ended June 30, 2021, and 2020

### 9. Exploration and evaluation expenses

The following table summarizes exploration and evaluation expenses for the three and six months ended June 30, 2021, and 2020:

	For the three months ended June 30,		For the six months ended June 30,	
	2021	2020	2021	2020
Depreciation & amortization	\$ 7,759	\$ 3,719	\$ 15,169	\$ 7,381
Direct costs	288,625	63,214	444,635	154,630
Employee compensation costs	70,081	50,722	133,331	128,332
Share-based compensation	282,197	16,391	289,770	20,898
	\$ 648,662	\$ 134,046	\$ 882,905	\$ 311,241

### 10. Corporate and administration expenses

The following table summarizes corporate and administration expenses for the three and six months ended June 30, 2021, and 2020.

	For the three months ended June 30,		For the six months ended June 30,	
	2021	2020	2021	2020
Administrative services	\$ 103,858	\$ 84,542	\$ 203,829	\$ 180,894
Depreciation and amortization	9,305	9,261	18,536	18,577
Directors fees and expenses	31,513	-	50,924	44,583
Investor relations and marketing	64,577	25,440	114,474	86,399
Office and sundry	24,584	19,366	47,648	40,405
Professional fees	57,033	69,401	127,319	107,857
Regulatory compliance	12,729	27,199	64,696	64,387
Share-based compensation	329,811	116,775	400,393	176,789
Travel and accommodations	1,117	-	1,312	6,167
	\$ 634,527	\$ 351,984	\$ 1,029,131	\$ 726,058

### 11. Financial instruments

#### Credit Risk:

The carrying amount of financial assets represents the maximum credit exposure. The maximum exposure to credit risk at the reporting date was:

	Carrying Amount	
	June 30, 2021	December 31, 2020
Cash and cash equivalents	\$ 7,499,476	\$ 12,800,728
Receivables	61,567	89,344
	\$ 7,561,043	\$ 12,890,072

The Corporation manages credit risk by holding the majority of its cash and cash equivalents with high quality financial institutions in Canada, where management believes the risk of loss to be low. At June 30, 2021,

# ERDENE RESOURCE DEVELOPMENT CORPORATION

## Notes to Condensed Consolidated Interim Financial Statements

(Canadian dollars)

(Unaudited)

For the three and six months ended June 30, 2021, and 2020

### 11. Financial instruments (continued)

\$162,372 or 2% of the balance of cash was held in banks outside Canada (December 31, 2020 - \$133,130 or 1%).

#### 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 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.

##### a) Interest rate risk

As of June 30, 2021, the Corporation has no interest-bearing debt and is therefore not exposed to significant interest rate risk.

##### b) 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 and has received financing 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 Mongolian tugrik denominated cash, accounts payable and accrued liabilities. The Corporation maintains Canadian and US dollar bank accounts in Canada.

The Corporation's exposure to US dollar currency risk was as follows:

	June 30, 2021	December 31, 2020
Cash and cash equivalents	\$ 557,765	\$ 292,895
Trade and other payables	(171,758)	(223,503)
	\$ 386,007	\$ 69,392

A 10% change in the US dollar exchange rate would affect net and comprehensive loss and deficit by approximately \$38,600 (December 31, 2020 - \$6,900).

The Corporation's exposure to Mongolian Tugrik currency risk was as follows:

	June 30, 2021	December 31, 2020
Cash and cash equivalents	\$ 2,590	\$ 889
Trade and other receivables	8,675	5,460
Trade and other payables	(581,564)	(87,043)
	\$ (570,299)	\$ (80,694)

A 10% change in the Mongolian Tugrik exchange rate would affect net and comprehensive loss and deficit by approximately \$57,000 (December 31, 2020 - \$8,100).

# ERDENE RESOURCE DEVELOPMENT CORPORATION

## Notes to Condensed Consolidated Interim Financial Statements

(Canadian dollars)

(Unaudited)

For the three and six months ended June 30, 2021, and 2020

### 11. Financial instruments (continued)

#### c) 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.

#### Fair Value:

Assets and liabilities measured at fair value in the consolidated statements of financial position, or disclosed in the notes to the financial statements, are categorized using a fair value hierarchy that reflects the significance of the inputs used in determining the fair values:

- a) Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities;
- b) Level 2: inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
- c) Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

The fair value hierarchy of assets and liabilities measured at fair value on the consolidated statements of financial position or disclosed in the notes to the financial statements is as follows:

	June 30, 2021			December 31, 2020		
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Assets and liabilities measured at fair value:						
Cash and cash equivalents	\$ 7,499,476	\$ -	\$ -	\$ 12,800,728	\$ -	\$ -

### 12. Related Parties

The Corporation has defined key management personnel as senior executive officers, as well as the Board of Directors. The total remuneration of key management personnel and the Board of Directors was as follows:

	Six months ended June 30,	
	2021	2020
Directors' fees	\$ 62,917	\$ 29,500
Share-based compensation to directors	212,900	152,000
Executive compensation and benefits	456,121	424,530
Share-based compensation to key management	227,965	38,289
	\$ 959,903	\$ 644,319





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

For the three and six months ended June 30, 2021, and 2020

**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
*Three and six months ended June 30, 2021*

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*This Management Discussion and Analysis (“MD&A”), dated August 12, 2021, 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, 2021 and 2020, audited consolidated financial statements for the years ended December 31, 2020 and 2019, 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.*

## Company Overview

Erdene Resource Development Corporation is a Canadian based resource company focused on the acquisition, exploration, and development of high-grade, near surface, precious and base metals deposits in underexplored and highly prospective Mongolia. The Company has interests in three mining licenses and two exploration licenses in southwest Mongolia, where exploration success has led to the discovery of the Khundii Gold District. 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 Khundii Gold District. Erdene is listed on the Toronto Stock Exchange (TSX: ERD) and Mongolian Stock Exchange (MSE: ERDN).

Erdene’s deposits are located in the Edren Terrane within the Central Asian Orogenic Belt, host to some of the world’s largest gold and copper-gold deposits. 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 Oyu Tolgoi copper-gold deposit has been developed in Southeast Mongolia, and Erdene has discovered the Khundii Gold District in the country’s southwest. Within the Khundii Gold District (“KGD”), the Company has discovered multiple high-grade gold and base metal 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.

Erdene is advancing BK towards construction and gold production. On July 20, 2020, the Company announced results of an independent Bankable Feasibility Study (“BFS”), incorporating detailed mine design and scheduling, front-end engineering design for the processing plant and site infrastructure, a hydrogeological assessment, mineral waste facility design, comprehensive capital and operating cost estimation. An Environmental and Social Impact Assessment (“ESIA”), led by Sustainability East Asia LLC, has also been completed for the Project. In July 2021 the Company entered a Local Cooperation Agreement (“LCA”) with the Bayankhongor Provincial Government, the host community for the BK Gold Project. Key terms of the LCA include milestone-based investments in the local community tied to permitting, project development and first production, as well as training, employment and local procurement commitments.

In October 2020, 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, subject to satisfactory diligence which is well progressed. Erdene is undertaking construction readiness activities and has recently placed an order for the comminution circuit, in advance of a construction decision in late 2021; however, the Company will consider the potential impacts of COVID-19 on the movement of people and equipment prior to commencing construction.

While focused on development of the Bayan Khundii Gold Project, Erdene continues to explore the broader Khundii Gold District. 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. In late 2020, Erdene intersected high-grade gold in multiple holes at its Dark Horse prospect, located 3.5 km north of Bayan Khundii. Since that time, the Company has defined a 1.4 km mineralized trend at Dark Horse, referred to as the Dark Horse “Mane”, that remains open along strike and at depth, confirming Dark Horse as the most significant zone of gold mineralization in the KGD since the discovery of the Bayan Khundii gold deposit. Additionally, maiden drilling at the southeast corner of the Company’s Ulaan license in Q2 2021 confirmed a new discovery in this previously unexplored portion of the KGD. Based on recent on-license exploration results, Erdene is targeting total resources of over 2 million gold equivalent ounces by the end of 2022. Furthermore, management sees the potential to add resources beyond this target through further discoveries in Erdene’s unexplored portion of the prolific gold and copper producing Central Asian Orogenic Belt.

### 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. With the first community transmission of COVID-19 in November 2020, the Government of Mongolia further restricted the movement of people and the delivery of goods and services.

While restrictions were eased in mid-Q1 2021, measures were subsequently reintroduced in late Q1 2021 following an increase in the number of reported cases in Mongolia. Additionally, in March 2021, Bayankhongor Province, where Erdene’s Projects are located, reported its first confirmed case of community transmission of COVID-19, leading to the imposition of restrictions on the movement of people within and to/from the province. In response, Erdene provided emergency funding and supplied personal

protective equipment to the Bayankhongor Emergency Commission to support its efforts to contain the spread of COVID-19 within the Company's host province.

During the second quarter of 2021, Mongolia reported a significant further increase in the number of cases of COVID-19 throughout the country. In response, additional restrictions were placed on the movement of goods and people. Furthermore, in late June 2021, Bayankhongor province and the sub-province of Shinejinst, the communities in which Erdene operates, imposed states of emergency due to worsening community spread of COVID in the area. The Company temporarily halted field exploration activity on June 28 in response. Restrictions have since been lifted, and Company staff and contractors returned to site in early August 2021 to commence follow-up exploration work.

Although the impact of COVID-19 on the Company's operations has been modest to date, the pandemic continues to evolve. The Company is monitoring the situation and assessing the impact on the Bayan Khundii Gold Project construction schedule and budget. Concurrently, the Company continues construction readiness work, including detailed engineering and design, procurement, and project finance due diligence with EDC. Additionally, the Company's Mongolian exploration team continues field exploration without significant disruption, while adopting enhanced health and safety protocols. Erdene's Corporate and Administrative teams in Canada and Mongolia have worked remotely throughout the pandemic. It is expected that a relaxation of government restrictions and widespread vaccine distribution will allow the Mongolian economy to gradually reopen in the second half of 2021 and permit the Company's Canadian staff and consultants to travel to Mongolia.

With re-opening, activity in Erdene's local communities can resume, including employee safety and job training programs. Despite the impacts of COVID-19, in late June the Company held consultative stakeholder meetings required as part of the Company's Detailed Environmental Impact Assessment ("DEIA") submission. As part of this exercise, community leaders collected a formal survey with the majority of residents supporting the Project's development. Approval of the DEIA is a key milestone in the permitting process, is required to commence construction, and is expected in late Q3 2021.

Assuming approval of the DEIA in late Q3 2021, the Company expects to commence early works, including civils and foundations as early as late 2021. Given Mongolian winter conditions, significant concrete and steel works are not expected until 2022, resulting in a first pour of gold in H1 2023. During this period, exploration results from both the Dark Horse and Ulaan prospects will be evaluated to determine possible adjustments to the development plans.

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:
  - Detailed design and engineering for process and non-process infrastructure ("NPI") 80% complete
  - Regulatory review of detailed drawings well advanced, with five NPI facilities fully approved, including those planned during the site establishment
  - Project execution plan and construction schedule optimized for late 2021 early works and full construction commencement in 2022
  - Training needs assessment for construction phase roles developed
- Advanced regulatory approvals required for mine development:
  - Completed statutory consultations for the project's DEIA, holding community meeting in late June
  - Filed DEIA with Ministry of Environment and Tourism – approval expected in late Q3 2021
- Progressed local community initiatives:
  - Executed a Cooperation Agreement with the local Provincial Government in late July 2021
  - Launched an Employment Orientation program at the Bayan Khundii Project for local residents
  - Initiated heavy equipment operation and mine construction training program for 11 local residents who successfully completed the Employment Orientation Program

- Prepared updated Bayan Khundii Resource Estimate, incorporating 2020 drilling at Striker West, Striker, Midfield and Midfield North, and reflecting current gold prices:
  - 2021 BK Mineral Resource Estimate contains 61,700 more ounces gold (36%) in the Measured category and 2,700 more ounces of gold (1%) in the Indicated category
  - Measured mineral resources within the minable pit, as defined by the 2020 Feasibility Study increased by 47,500 ounces (28%)
  - Confirmed the high-grade nature of the BK deposit with an average grade of 6.59 g/t gold for combined Measured and Indicated Resources, at a cut-off grade of 1.0 g/t gold
  - Additional near surface gold mineralization was identified at Midfield and at Midfield North, results from 2020 drilling allowed for the localized extension of the modeled mineralized domains
  - Drilling at Striker West identified additional gold mineralization at depth, permitting more detailed structural interpretations of this region

## Exploration

- Drilled 60 holes totaling 5,827 metres at the Dark Horse prospect between March and June 2021, successfully defining gold mineralization along the 1.4 kilometre Dark Horse Mane:
  - Intersected a near-surface, strongly mineralized gold zone at the southern end of Dark Horse Mane, extending over a strike length of approximately 350 metres, including a high-grade zone (greater than 1 g/t gold) over a strike length of 180 metres
  - Confirmed continuity of near-surface, lower grade, oxide gold mineralization in the northern portion of the Dark Horse Mane
  - Highlights of Dark Horse drilling announced since Q1 2021 include:
    - AAD-79 – 4 metres of 3.23 g/t gold, beginning 32 metres downhole
    - AAD-81 – 35 metres of 2.67 g/t gold, beginning 4 metres from surface, including 12 metres of 5.1 g/t gold, including metre intervals of 14 and 19 g/t gold
    - AAD-123 – 30 metres of 2.86 g/t gold, beginning 58 metres downhole, including 7.03 g/t gold over 11 metres, starting 61 metres downhole
    - AAD-124 – 27 metres of 5.86 g/t gold, beginning 24 metres downhole, including 3 metres of 17.41 g/t gold, starting 28 metres downhole
    - AAD-126 – 30 metres of 5.63 g/t gold, beginning 10 metres downhole, including 6 metres of 24.12 g/t gold, starting 26 metres downhole
    - In total, 56 of 60 holes drilled at Dark Horse in Q2 2021 intersected anomalous gold
  - Launched evaluation and interpretation program including geophysics, clay mineral analysis, petrography, mineralogy, fluid inclusion work and 3-D modelling:
    - Geophysical surveys, currently underway, to assist with 3D modelling and the identification of deeper drill targets at Dark Horse
  - Future drilling will focus on expansion and confirmation of mineralization, including depth potential, with the eventual goal of establishing a resource estimate for Dark Horse
    - Approximately 4,300 metres of drilling planned at Dark Horse area to commence in Q3 2021, following completion of the geophysical program currently underway
- Discovered gold in the southern portion of the Ulaan license, located adjacent Bayan Khundii:
  - Significant gold discovery 300 metres west of the Bayan Khundii Gold Deposit, with multiple holes intersecting mineralization including:
    - UDH-10 – 258 metres of 0.98 g/t gold beginning at 92 metres downhole, including 3.77 g/t gold over 40 metres, starting at 99 metres downhole
    - UDH-07 – 100 metres of 0.63 g/t gold, beginning 85 metres from surface, including 4 metres of 1.39 g/t gold, located 50 metres south of UDH-10
  - Follow-up drilling totaling approximately 4,500 metres commenced August 12

## Corporate

- Progressed due diligence for the Bayan Khundii Project Finance with EDC
  - EDC mandate letter contemplates a senior secured debt facility of up to US\$55 million, subject to the satisfactory completion of due diligence and documentation
  - Site visits completed in Q1 2021, and draft technical, and environmental and social diligence reports received
  - Legal term sheet drafted that will form the basis of the EDC loan document
- Initiated a strategic and technical review of the Zuun Mod/Khuvyn Khar molybdenum-copper project
  - Engaged RPMGlobal to complete an updated technical analysis
  - Review will consider multiple avenues to optimize the Project's value, including a sale, joint venture partnership, or spinout
- Recorded a net loss of \$1,278,522 for the three months ended June 30, 2021, compared to a net loss of \$6,677,985 for the three months ended June 30, 2020
  - Exploration and evaluation expenditures, including capitalized expenditures, totaled \$3,094,905 for the three months ended June 30, 2021, compared to \$2,036,502 for the three months ended June 30, 2020, primarily due to increased exploration. Erdene drilled 6,172 metres in the current quarter, compared to 925 metres in the same prior year quarter. Additionally, non-cash expenditures on share-based compensation were greater in the current year quarter.
  - Corporate and administrative expenses totaled \$634,527 for the three months ended June 30, 2021, compared to \$351,984 for the three months ended June 30, 2020, due to higher investor relations costs, directors' fees and share-based compensation costs.

## Strategy and Outlook

Erdene is focused on two strategic priorities – advancing the Bayan Khundii Gold Project to production and expanding precious and base metal resources in the Khundii Gold District through exploration and acquisition.

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 ESIA in accordance with the Performance Requirements of the 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. Concurrently, the Mongolian statutory DEIA for the Project has been prepared by Eco Trade LLC in accordance with the 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. The Company expects to receive approval for its statutory DEIA from the Ministry of Environment and Tourism of Mongolia in late Q3 2021.

Erdene has obtained many of the key permits required to construct the Bayan Khundii Gold Project over the past eighteen months. 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, the Dark Horse Prospect and the highly prospective Altan Arrow, Khundii North and Khundii South targets. The mining license is valid for an initial term of 30 years with the ability to extend to 70 years. Erdene maintains an exploration license for the remaining 2,205 hectares of the legacy Bayan Khundii exploration license that were not converted to a mining license as part of its application. 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.

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.

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 80% 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.

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. The balance of the technical drawings are expected to be submitted in the coming months, allowing a rapid construction ramp up. Upon approval of the drawings as well as the Project's statutory DEIA, the Company may apply for permission to commence construction. Concurrently, constructability, value engineering, and HAZOPS review are underway, and tender and contracting for critical facilities and services has begun.

The Company engaged HCF International to act as Project Finance advisor, with primary responsibility for securing debt. Erdene executed a project finance mandate letter with EDC on November 4, 2020, for senior secured debt financing of up to US\$55 million. EDC's financing is conditional upon the satisfactory completion of due diligence, which is largely complete, but has been impacted by COVID-19. Diligence is expected to conclude in the coming months. During the first quarter of 2021, EDC's technical, and environmental and social consultants completed their site visits. Diligence is expected to conclude in the coming months. Furthermore, the EDC disclosed its formal consideration of financing for the Project in early August 2021. Erdene closed a \$20 million equity financing, led by a \$15 million investment by Eric Sprott in August 2020, providing the funds to initiate early construction works at Bayan Khundii and continue exploration in the Khundii Gold District.

During the first half of 2021, Erdene drilled 69 holes totaling 7,736 metres at Dark Horse, confirming the prospect as the most significant zone of gold mineralization in Erdene's Khundii District, since the discovery of Bayan Khundii. Erdene has traced mineralization along the 1.4 km N-S trending Dark Horse Mane structure, that remains open along strike and at depth. Highlights of Dark Horse drilling, announced since Q1 2021, include:

- AAD-79 – 4 metres of 3.23 g/t gold, beginning 32 metres downhole
- AAD-81 – 35 metres of 2.67 g/t gold, beginning 4 metres from surface, including 12 metres of 5.1 g/t gold, including metre intervals of 14 and 19 g/t gold
- AAD-123 – 30 metres of 2.86 g/t gold, beginning 58 metres downhole, including 11 of 7.03 g/t gold over 11 metres, starting 61 metres downhole
- AAD-124 – 27 metres of 5.86 g/t gold, beginning 24 metres downhole, including 3 metres of 17.41 g/t gold, starting 28 metres downhole
- AAD-126 – 30 metres of 5.63 g/t gold, beginning 10 metres downhole, including 6 metres of 24.12 g/t gold, starting 26 metres downhole

In late June, the Company completed its maiden drill program at the Ulaan Gold prospect, due west of the Bayan Khundii deposit, establishing a significant new discovery just 300 metres from the BK deposit. Highlight intersections from this drill program include 258 metres of 0.98 g/t gold beginning at 92 metres downhole, including 3.77 g/t gold over 40 metres, starting at 99 metres at hole UDH-10, and 50 metres south of UDH-10, UDH-07 intersected 100 metres averaging 0.63 g/t gold, beginning 85 metres down hole.

Additional geophysical surveys are currently being conducted at both the Dark Horse prospect and at high priority targets on the Ulaan license. The current Q3-Q4 2021 drill program totals 8,800 metres with 4,500 metres dedicated to follow-up drilling at Ulaan, currently underway (as of August 12), and approximately 4,300 metres at Dark Horse, to commence following completion of the geophysical surveys.

Results from recent drill programs, coupled with exploration activities to date, demonstrate that the Khundii Gold District hosts multiple zones of epithermal gold mineralization over a wide area. Host volcanic lithologies, generally andesitic in composition and ranging from sub-volcanic to tuffaceous units, have been hydrothermally altered by an earlier high-temperature event which has been overprinted by low temperature epithermal alteration associated with significant gold mineralization. As is typical with this type of environment, structures play an important role in focusing mineralizing fluid and deposition of gold mineralization. Geophysical surveys have and continue to be carried out to assist in the identification of

both structures and areas of hydrothermal alteration, making these excellent tools to identify high-priority drill targets. With each round of drilling, Erdene is able to refine the Company's geological model and focus exploration programs further. The Company believes the Khundii Gold District is likely to host a multi-million ounce gold deposit

Erdene continues to evaluate acquisition opportunities throughout the Khundii District and beyond. 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 the PFS prepared by Tetra Tech. 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 this MD&A, the Company is announcing an updated mineral resource estimate for the Bayan Khundii deposit with an effective date of June 17, 2021. 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. In addition, the Khundii mining license hosts Erdene's highly prospective Dark Horse, Altan Arrow and Khundii North targets.

### *Bayan Khundii*

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 completed 55,691 metres of diamond drilling at Bayan Khundii over a series of 350 diamond drill holes and advanced the project through independent studies to the bankable feasibility stage.

In June 2020, the Company completed a 925-metre drill program in near-surface areas of the Midfield SE and Striker SW zones of the Bayan Khundii deposit. This program was designed to test for mineralization in zones otherwise classified as waste or low-grade stockpile material with the potential to add significant value at the earliest stages of mining. Results from this program were very positive. Highlights of the program include the intersection of 5.5 metres of 125.9 g/t gold, including 1 metre of 581.6 g/t gold, in BKD-288, beginning 11.5 metres down hole, 15 metres of 25.6 g/t gold including 1 metre of 338 g/t gold beginning at 14.9 metres in BKD-274, and BKD-292 intersected 15 metres of 29 g/t gold beginning 0.9 metres from drill collar, including one metre of 353 g/t gold.

In August 2020, the Company launched a follow up Bayan Khundii program utilizing two rigs. In total, the follow up program comprised 9,346 metres over 54 holes (including four extension holes), in areas peripheral to the Bayan Khundii economic pit. Drilling at the North Midfield and Striker West zones included several high-grade intersections outside the current BK economic pit that have the potential to meaningfully add to Project resources. Highlighted intersections from 2020 drilling include:

- 3.9 g/t gold over 22.4 metres, including 2 metres of 27.5 g/t gold beginning 127 metres down hole (vertical 115m) in BKD-302 (North Midfield);
- 3.9 g/t gold over 12 metres, including 1 metre of 38.9 g/t gold beginning 206 metres down hole (vertical 144m) in BKD-304 (North Midfield);
- 4.0 g/t gold over 10 metres, including 1 metre of 24.5 g/t gold beginning 14 metres down hole in BKD-310 (Striker SW);
- 44 metres of 1.0 g/t gold, including 1 metre of 16.2 g/t starting 64 metres down hole in BKD-312 (Striker SW);
- 28 metres of 2.5 g/t gold, including 1 metre of 36.9 g/t gold within 14 metres of 4.5 g/t gold starting 122 metres downhole in hole BKD-334 (Striker West);
- 38 metres of 1.8 g/t gold, including 1 metre of 23.3 g/t gold within 9 metres of 5.5 g/t gold starting 108 metres downhole in hole BKD-338 (Striker West); and
- 54 metres of 1.2 g/t gold, including 1 metre of 13.1 g/t gold starting 129 metres downhole in hole BKD-339 (Striker West).

With the conclusion of this program, no further drilling is planned in the immediate vicinity of the Bayan Khundii gold deposit at this time. Results to date have been incorporated into a mineral resource update, prepared by TetraTech, Inc., the details of which are provided herein.

### *Bayan Khundii Mineral Resource Update*

The Bayan Khundii updated Mineral Resource Estimate (“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 updated Mineral Resource did not change materially from the previously reported mineral resource and as provided under National Instrument 43-101 (NI 43-101) a new Technical Report is not required. The details of the parameters used in preparing the updated Mineral Resource, including data verification, and sample preparation, analysis and security, are appended to this MD&A.

The updated Mineral Resource for the Bayan Khundii deposit incorporates 95 additional drill holes totaling 12,889 metres and an updated structural interpretation study completed by Erdene at Bayan Khundii since the previous mineral resource estimate, with an effective date October 1, 2019, was announced. The total number of drill holes included in the updated Bayan Khundii Mineral Resource is 350, totaling 55,791 metres of drilling, along with 1,075 metres of trenching from 23 trenches. The focus of the 2020 drilling program was to:

- Investigate the extent of the mineralization at Striker West;
- Test and further define high grade domains identified and modeled during the 2019 resource work;
- Improve the understanding of the mineralization at Striker, Midfield, and Midfield North Zones;
- Build upon the previous geological interpretation; and
- Improve drill spacing to show continuity of mineralization and increase overall confidence in the deposit.

The resource estimate QP, Cam Norton P. Geo, visited the property from May 6 to May 12, 2019, and a subsequent site visit for the purposes of this Mineral Resource update was not deemed necessary.

Ordinary Kriging (OK) restricted to a mineralized domain was used to interpolate gold grades (g/t) into a block model. Measured, Indicated and Inferred mineral resources are reported at various cut-off grades in the summary tables below. The mineral estimate takes into consideration that the Striker, Midfield, and Midfield North zones will be mined by open pit mining methods.

The resource reported as of June 17, 2021, has been tabulated in terms of a gold cut-off grade and has been rounded to the nearest thousand tonnes due to the nature of the precision of the block model.

The Mineral Resource has been constrained to a preliminary pit shell developed using the Lerchs Grossman algorithm in Whittle™ using parameters outlined below to constrain blocks which are considered reasonable prospects for eventual economic extraction. The following table presents the Mineral Resource at various cut-off grades for the purposed of comparison. Tetra Tech recommends a reporting cut-off grade is 0.4 g/t gold.

No environmental, permitting, legal, title, taxation, socio-economic, marketing or other relevant issues are known to Tetra Tech that may affect the estimate of the mineral resources. Mineral reserves can only be estimated on the basis of economic evaluation that is used in a preliminary feasibility study or a feasibility study of a mineral project. As per NI 43-101, mineral resources, which are not mineral reserves, do not have to demonstrate economic viability.

## Mineral Resource Estimate for Bayan Khundii, Effective June 17, 2021

Cut-off Grade <sup>(1)</sup>	Resource Classification	Quantity (tonnes)	Grade Au g/t	Gold oz
0.4 Recommended	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
0.55	Measured	2,221,000	3.08	220,200
	Indicated	3,885,000	2.65	331,100
	<b>Measured &amp; Indicated</b>	<b>6,105,000</b>	<b>2.81</b>	<b>551,400</b>
	Inferred	375,000	2.80	33,800
1.0	Measured	727,000	7.96	186,100
	Indicated	1,454,000	5.91	276,100
	<b>Measured &amp; Indicated</b>	<b>2,181,000</b>	<b>6.59</b>	<b>462,200</b>
	Inferred	133,000	6.68	28,500
1.4	Measured	628,000	9.04	182,600
	Indicated	1,282,000	6.55	269,900
	<b>Measured &amp; Indicated</b>	<b>1,910,000</b>	<b>7.37</b>	<b>452,500</b>
	Inferred	121,000	7.22	28,100

### 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.

### Dark Horse

In early Q4 2019 Erdene discovered the Dark Horse prospect area, 3.5 km north of the BK deposit, on a previously underexplored portion of the Khundii Mining License. Surface exploration in late 2019, including detailed geologic mapping and geochemical sampling (rock chip and soil) identified multiple samples grading over 5 g/t gold, including an 87.8 g/t gold rock chip sample hosted within comb quartz-adularia veins. In June 2020, the Company trenched new gold zones at Dark Horse, with assays returning 6 metres grading 8.8 g/t gold, including 1 metre of 50.8 g/t gold, and 4 metres of 14 g/t gold, including 1 metre of 45.3 g/t gold.

Initial drilling at the Dark Horse prospect, consisting of 25 holes totaling 4,660 metres, was completed in the second half of 2020. Results from the exploration program defined a N-S trending, 1.4 km long mineralized structure, referred to as the Dark Horse Mane, establishing Dark Horse as the most significant area of gold mineralization in Erdene's Khundii Gold District since the discovery of the Bayan Khundii gold deposit. Highlight intersections from the drill campaign along this trend include:

- 16 metres of 0.6 g/t gold beginning 52 metres downhole, and 48 metres of 1.2 g/t gold beginning 194 metres downhole, including 30 metres of 1.7 g/t gold in hole AAD-57;
- 45 metres of 5.97 g/t gold, beginning 10 metres downhole, including 1 metre of 82.5 g/t gold within 8 metres of 27.1 g/t gold in hole AAD-58; and
- 130 metres of 0.53 g/t gold beginning 10 metres downhole in hole AAD-61.

During the first half of 2021, Erdene drilled 69 holes totaling 7,736 metres at Dark Horse, confirming the prospect as the most significant zone of gold mineralization in Erdene's Khundii District, since the discovery of Bayan Khundii. The Dark Horse Mane remains open along strike and at depth with the intersection of high-grade mineralization in multiple holes in the southern portion of the Dark Horse Mane prospect. Highlights of Dark Horse drilling, announced since Q1 2021, include:

- AAD-79 – 4 metres of 3.23 g/t gold, beginning 32 metres downhole
- AAD-81 – 35 metres of 2.67 g/t gold, beginning 4 metres from surface, including 12 metres of 5.1 g/t gold, including metre intervals of 14 and 19 g/t gold
- AAD-123 – 30 metres of 2.86 g/t gold, beginning 58 metres downhole, including 11 of 7.03 g/t gold over 11 metres, starting 61 metres downhole
- AAD-124 – 27 metres of 5.86 g/t gold, beginning 24 metres downhole, including three metres of 17.41 g/t gold, starting 28 metres downhole
- AAD-126 – 30 metres of 5.63 g/t gold, beginning 10 metres downhole, including six metres of 24.12 g/t gold, starting 26 metres downhole

In total, 56 of 60 holes drilled at Dark Horse in Q2 2021 intersected anomalous gold. Geophysical surveys are currently being conducted at the Dark Horse prospect and approximately 4,300 metres of drilling is planned at Dark Horse over the balance of 2021.

#### *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

Erdene herein provides an updated resource estimate for the Khundii Gold District. The total Khundii Gold District resource was 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<sup>(3)</sup></b>	<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).

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
<b>Mineral Reserve</b>	<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 Classification	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 Bayan Khundii 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.

Project highlights are presented in the table 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:

#### Technical Report Sensitivities – After-Tax Gold Price Sensitivity Analysis – BK BFS

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 \$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 Q2 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 Scale Exploration**

Erdene continues to evaluate opportunities throughout the Edren 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 five licenses, drilling of selected targets and evaluation of acquisition targets on private and government held ground.

Exploration within the licenses has identified significant gold mineralization. Approximately 70% of regional drill holes have intersected anomalous gold mineralization (defined as >0.1 g/t gold), with three holes intersecting greater than 20 g/t gold over 1 to 2 metre intervals. Regional drilling has been restricted to shallow targets with average drill depths of about 100 metres. 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.

### ***Altan Arrow Gold Target***

The Altan Arrow target is located 4 kilometres north of the Bayan Khundii gold deposit, along a gold bearing structure in the central portion of the Khundii mining license. Drilling has concentrated in an area along and south of the main structure, where several high-grade zones have been intersected, including 39 g/t gold over 1 metre and 24 g/t gold and 70 g/t gold over 2 metres. Overall, 77% of the 21 holes (2,605 metres) drilled at Altan Arrow have intersected anomalous gold.

Drill testing of the main mineralized structure indicates a broad corridor of anomalous gold over a 1.2 kilometre trend (open along strike) and up to 400 metres south of the main structure in what is interpreted as secondary structural splays. In addition, drill testing of these structural splays, south of the main zone, returned multiple intersects at deeper levels than typically tested (approximately 100 metres vertical depth) with gold grades ranging from 0.2 to 2.6 g/t with anomalous silver, molybdenum, lead, zinc and antimony (AAD-25). Exploration results suggest gold mineralization within the district is controlled by a structure associated with zones of major dilatancy and structural intersections. Such zones commonly have associated alteration events that are magnetite destructive, resulting in zones of low magnetic response. In advance of future drilling the Corporation will complete a comprehensive geophysical interpretation of the Altan Arrow prospect, including high resolution magnetics, IP dipole-dipole and gravity datasets.

### ***Khundii North Gold Target***

The Khundii North target is located 4 kilometres northeast of the Bayan Khundii gold deposit, on the Khundii mining license, and was initially drill tested in 2018. The area was identified through surface exploration in late 2017, when sampling of quartz vein material returned high grade gold mineralization of up to 22 g/t gold from a structurally controlled quartz vein stockwork and breccia zone traced over a 1,500 metre strike length. Six holes, totaling 970 metres and averaging 93 metres vertical depth have now tested the stockwork-breccia body, comprised of three collars in the south and two in the north, separated by approximately 500 metres. Although the northern holes returned only minor levels of anomalous gold, the southern holes intersected wide zones of intense multi-phase epithermal quartz stockwork and breccia at depth within an altered monzonite. These stockwork zones are continuous, with up to 35-metre widths (AAD-29) and have associated anomalous gold, locally up to 2.1 g/t over one metre intervals (AAD-30) and locally anomalous copper (>500ppm). In Q3 2019, a single 253 metre drill hole (AAD-38) was completed to test the Khundii North quartz breccia body at depth. Assay results from the drill hole returned modest but anomalous gold values of up to 0.25 g/t gold over 2 metres. Gold anomalism appears to be associated within intervals of quartz stockwork veins intersected throughout the drill hole.

### ***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 sixth 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.

Ulaan is 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 on the Ulaan license.

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. Highlight intersections from the maiden Ulaan gold drilling program include 3.77 g/t gold over 40 metres, within 258 metres of 0.98 g/t gold beginning 92 metres downhole in UDH-10, and 50 metres south of UDH-10, UDH-07 intersected 100 metres averaging 0.63 g/t gold, beginning 85 metres down hole.

The maiden Ulaan gold drilling program was designed to test the southern portion of the Ulaan license for the presence of similar styles of mineralization to the Bayan Khundii gold deposit. The program consisted of seven drill holes totaling 1,543 metres. Holes were spaced between 50 to 450 metres apart and tested targets over an area of approximately two square kilometres to a maximum depth of 350 metres. Holes were drilled at an azimuth of 030 and at an 85 degree dip and oriented core measurements were obtained throughout. A follow-up drill program was launched in mid-August 2021.

### ***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 improves. Market demand for molybdenum has recently improved, with the price of molybdenum oxide currently trading at approximately US\$18.00 per pound, compared to approximately US\$7.25 per pound in 2017, and US\$12.00 per pound at March 31, 2021. In light of the recent rise in Molybdenum and Copper prices, Erdene has engaged RPMGlobal to undertake an updated technical analysis of the project, and the broader Khuvyn Khar license. The results of this study are expected to be announced in Q4 2021.

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, 2021, and 2020

The tables below detail exploration and evaluation expenditures for the three months ended June 30, 2021, and 2020. The Bayan Khundii Gold Project was the focus of the Corporation's efforts during these periods.

Quarter ended June 30, 2021	Zuun Mod,				Total
	Bayan Khundii	Altan Nar	Ulaan & Other	General & Admin	
<b>E&amp;E expenditures</b>					
Exploration and field support	\$ 1,106,958	\$ 115,656	\$ 273,587	\$ 50,215	\$ 1,546,416
Mining studies and permitting	1,079,649	28,082	24,470	(6,953)	1,125,248
Mongolian office costs	-	-	-	85,845	85,845
Share-based compensation	-	-	-	282,197	282,197
Stakeholder relations	53,979	6,478	22	3,409	63,888
Travel and other	(253)	-	-	(8,436)	(8,689)
Total exploration expenditures	2,240,333	150,216	298,079	406,277	3,094,905
Capitalized expenditures	(2,240,333)	(150,216)	(55,694)	-	(2,446,243)
<b>Expensed exploration costs 2021</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 242,385</b>	<b>\$ 406,277</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>\$ 827,562</b>	<b>\$ 1,837,091</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)	(9,107)	(11,224)	(228,415)
<b>E&amp;E assets, June 30, 2021</b>	<b>\$ 26,858,037</b>	<b>\$ 4,089,009</b>	<b>\$ 874,149</b>	<b>\$ 1,825,867</b>	<b>\$ 33,647,062</b>

Quarter ended June 30, 2020	Zuun Mod,				Total
	Bayan Khundii	Altan Nar	Ulaan & Other	General & Admin	
<b>E&amp;E expenditures</b>					
Exploration and field support	\$ 558,423	\$ 80,931	\$ 85,628	\$ 25,383	\$ 750,365
Mining studies and permitting	1,200,848	3,222	7,808	(1,373)	1,210,505
Mongolian office costs	-	-	-	72,884	72,884
Share-based compensation	-	-	-	16,390	16,390
Stakeholder relations	6,067	1,516	-	(14,536)	(6,953)
Travel and other	-	-	-	(6,689)	(6,689)
Total exploration expenditures	1,765,338	85,669	93,436	92,059	2,036,502
Capitalized expenditures	(1,765,338)	(85,669)	(64,512)	13,063	(1,902,456)
<b>Expensed exploration costs 2020</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 28,924</b>	<b>\$ 105,122</b>	<b>\$ 134,046</b>

<b>E&amp;E assets, April 1, 2020</b>	<b>\$ 18,085,390</b>	<b>\$ 3,878,709</b>	<b>\$ 890,774</b>	<b>\$ 968,403</b>	<b>\$ 23,823,276</b>
Additions	1,765,338	85,669	64,512	(13,063)	1,902,456
Effect of movements in exchange rates	(649,353)	(140,405)	(53,526)	(33,923)	(877,207)
<b>E&amp;E assets, June 30, 2020</b>	<b>\$ 19,201,375</b>	<b>\$ 3,823,973</b>	<b>\$ 901,760</b>	<b>\$ 921,417</b>	<b>\$ 24,848,525</b>

Exploration and evaluation expenditures, including capitalized expenditures, totaled \$3,094,905 for the three months ended June 30, 2021, compared to \$2,036,502 for the three months ended June 30, 2020.

Exploration and field support expenses of \$1,546,416 in Q2 2021 were well ahead of prior year expenses of \$750,365 as the Company drilled 6,172 metres in the current year quarter, compared to 925 metres in Q2 2020.

Mining studies and permitting costs for the three months ended June 30, 2021, totaled \$1,125,248, \$85,257 less than for the three months ended June 30, 2020, as expenditures on the Bayan Khundii Gold Project Construction Readiness and Detailed Engineering & Design activities in the current year quarter were less than the costs associated with the Bayan Khundii Gold Project Feasibility Study work during the second quarter of 2020.

Mongolian office costs for the three months ended June 30, 2021, were \$12,961 higher than the comparative prior year quarter primarily due to an increase in legal fees associated with long-lead procurement in the current period and incremental administrative staffing, as the Company builds its team in advance of construction.

Stakeholder relations costs of \$63,888 for the three months ended June 30, 2021, were \$70,841 greater than for the three months ended June 30, 2020, primarily due to the expenditures associated with the employment readiness training programs undertaken in the Q2 2021. Additionally, prior year quarter results included a reversal of prior period accruals as a result of COVID-19.

Non-cash share-based compensation costs were \$265,807 greater in the current year quarter than the prior year quarter due to the timing of stock option grants which were awarded in June 2021 and August 2020, respectively.

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, 2021, and 2020, Erdene has capitalized all exploration costs associated with these projects. Exploration costs relating to the Company's Ulaan license were not capitalized during the period, consistent with Erdene's accounting policy.

The following table summarizes corporate and administration expenses for the three months ended June 30, 2021, and 2020.

	<b>For the three months ended June 30,</b>		
	<b>2021</b>	<b>2020</b>	<b>Change</b>
Administrative services	\$ 103,858	\$ 84,542	\$ 19,316
Depreciation and amortization	9,305	9,261	44
Directors fees and expenses	31,513	-	31,513
Investor relations and marketing	64,577	25,440	39,137
Office and sundry	24,584	19,366	5,218
Professional fees	57,033	69,401	(12,368)
Regulatory compliance	12,729	27,199	(14,470)
Share-based compensation	329,811	116,775	213,036
Travel and accommodations	1,117	-	1,117
	<b>\$ 634,527</b>	<b>\$ 351,984</b>	<b>\$ 282,543</b>

Corporate and administrative expenses totaled \$634,527 for the three months ended June 30, 2021, compared to \$351,984 for the three months ended June 30, 2020.

Administrative services expenses of \$103,858 for the three months ended June 30, 2021, were \$19,316 greater than the prior year due to expenditures associated with the establishment of an employee share sale plan, as well as inflationary salary increases and greater employee benefit costs.

Director's fees and expenses for the three months ended June 30, 2021, were \$31,513 higher than the prior year comparative period, as compensation was paid in Deferred Share Units during Q2 2020, which are reported as share-based compensation.

Investor relations and marketing expenses for the three months ended June 30, 2021, were \$39,137 higher than the three months ended June 30, 2020, due to the engagement of additional IR consultants in the current year as the Company increased investor outreach activities.

Professional fees of \$57,023 for the three months ended June 30, 2021, were \$12,368 greater than the prior year as financial advisory services expenses have been capitalized during the current year period.

Regulatory compliance expenses for the current year quarter were \$14,470 less than for the three months ended June 30, 2020, largely due to reduced costs associated with the Corporation's annual general meeting. The comparative prior year quarter also included regulatory fees related to the renewal of the Corporation's DSU plan that were not incurred during the current period.

Non-cash share-based compensation for the second quarter of 2021 was \$213,036 higher than the previous year due to the timing of stock option grants, which were awarded in June 2021 and August 2020, respectively, partially offset by a reduction in DSU expenses, as a portion of directors fees were paid in cash during the current period as noted above.

Depreciation and amortization, Office and sundry, and Travel and accommodations expenditures for the period ended June 30, 2021, were not material or significantly different from those incurred in the prior year comparative period.

### **Six months ended June 30, 2021, and 2020**

The tables below detail exploration and evaluation expenditures for the six months ended June 30, 2021, and 2020. The Bayan Khundii Gold Project was the focus of the Corporation's efforts during these periods.

<b>Period ended June 30, 2021</b>	<b>Bayan Khundii</b>	<b>Altan Nar</b>	<b>Zuun Mod, Ulaan &amp; Other</b>	<b>General &amp; Admin</b>	<b>Total</b>
<b>E&amp;E expenditures</b>					
Exploration and field support	\$ 2,115,848	\$ 189,420	\$ 305,638	\$ 127,124	\$ 2,738,030
Mining studies and permitting	2,121,858	92,883	28,000	1,573	2,244,314
Mongolian office costs	-	-	-	191,210	191,210
Share-based compensation	-	-	-	289,770	289,770
Stakeholder relations	125,324	33,478	27	3,409	162,238
Travel and other	(253)	-	-	(6,436)	(6,689)
Total exploration expenditures	4,362,777	315,781	333,665	606,650	5,618,873
Capitalized expenditures	(4,362,777)	(315,781)	(55,694)	(1,716)	(4,735,968)
<b>Expensed exploration costs 2021</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 277,971</b>	<b>\$ 604,934</b>	<b>\$ 882,905</b>

<b>E&amp;E assets, January 1, 2021</b>	<b>\$ 22,850,206</b>	<b>\$ 3,827,267</b>	<b>\$ 838,281</b>	<b>\$ 1,848,401</b>	<b>\$ 29,364,155</b>
Additions	4,362,777	315,781	55,694	1,716	4,735,968
Effect of movements in exchange rates	(354,946)	(54,039)	(19,826)	(24,250)	(453,061)
<b>E&amp;E assets, June 30, 2021</b>	<b>\$ 26,858,037</b>	<b>\$ 4,089,009</b>	<b>\$ 874,149</b>	<b>\$ 1,825,867</b>	<b>\$ 33,647,062</b>

<b>Period ended June 30, 2020</b>	<b>Bayan Khundii</b>	<b>Altan Nar</b>	<b>Zuun Mod, Ulaan &amp; Other</b>	<b>General &amp; Admin</b>	<b>Total</b>
<b>E&amp;E expenditures</b>					
Exploration and field support	\$ 849,135	\$ 186,941	\$ 111,740	\$ 45,932	\$ 1,193,748
Mining studies and permitting	2,040,881	48,456	8,600	-	2,097,937
Mongolian office costs	-	-	-	167,434	167,434
Share-based compensation	-	-	-	20,898	20,898
Stakeholder relations	24,731	4,356	92	13,701	42,880
Travel and other	25,990	3,995	1,117	(5,568)	25,534
Total exploration expenditures	2,940,737	243,748	121,549	242,397	3,548,431
Capitalized expenditures	(2,940,737)	(243,748)	(64,512)	11,807	(3,237,190)
<b>Expensed exploration costs 2020</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 57,037</b>	<b>\$ 254,204</b>	<b>\$ 311,241</b>

<b>E&amp;E assets, January 1, 2020</b>	<b>\$ 16,164,725</b>	<b>\$ 3,561,166</b>	<b>\$ 828,799</b>	<b>\$ 928,827</b>	<b>\$ 21,483,517</b>
Additions	2,940,737	243,748	64,512	(11,807)	3,237,190
Effect of movements in exchange rates	95,913	19,059	8,449	4,397	127,818
<b>E&amp;E assets, June 30, 2020</b>	<b>\$ 19,201,375</b>	<b>\$ 3,823,973</b>	<b>\$ 901,760</b>	<b>\$ 921,417</b>	<b>\$ 24,848,525</b>

	For the six months ended June 30,		
	2021	2020	Change
Administrative services	\$ 203,829	\$ 180,894	\$ 22,935
Depreciation and amortization	18,536	18,577	(41)
Directors fees and expenses	50,924	44,583	6,341
Investor relations and marketing	114,474	86,399	28,075
Office and sundry	47,648	40,405	7,243
Professional fees	127,319	107,857	19,462
Regulatory compliance	64,696	64,387	309
Share-based compensation	400,393	176,789	223,604
Travel and accommodations	1,312	6,167	(4,855)
	<b>\$ 1,029,131</b>	<b>\$ 726,058</b>	<b>\$ 303,073</b>

## Summary of Quarterly Results

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

	Fiscal 2021			Fiscal 2020			Fiscal 2019	
	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3
	Jun	Mar	Dec	Sep	Jun	Mar	Dec	Sep
Net loss	\$1,279	\$617	\$1,525	\$3,871	\$6,678	\$1,042	\$773	\$638
Basic loss per share	\$0.01	\$0.00	\$0.00	\$0.02	\$0.03	\$0.01	\$0.01	\$0.00
Total assets	\$42,411	\$42,454	\$42,814	\$44,918	\$27,155	\$27,826	\$26,973	\$20,942

For the three months ended June 30, 2021, the Corporation recognized a net loss of \$1,278,522 compared to a net loss of \$6,677,985 for the comparative period in 2020. The decrease in the net loss in the current period compared to Q2-2020 is primarily attributable to reduced interest expenses and fair value adjustments on the convertible loan, which was extinguished in late 2020, partially offset by higher exploration expenses in the current year period, as exploration expenditures related to the Company's Ulaan license in Q2-2021 are not capitalized.

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 \$6.1 million in working capital.

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 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 12, 2021	December 31, 2020
Common shares issued and outstanding	274,404,183	268,450,433
Options outstanding	15,305,000	13,790,000
Warrants outstanding	47,336,052	75,097,796
DSU's outstanding	5,755,651	5,032,836
Total instruments outstanding at end of period	342,800,886	362,371,065

## Contractual Obligations

The following table summarizes the Corporation's contractual obligations at June 30, 2021:

	Total	Less than one year	1 - 3 years	4 - 5 years	More than 5 years
Office leases	\$ 110,349	\$ 34,522	\$ 69,988	\$ 5,839	\$ -
Accounts payable and accrued liabilities	1,017,608	1,017,608	-	-	-
	<b>\$ 1,127,957</b>	<b>\$ 1,052,130</b>	<b>\$ 69,988</b>	<b>\$ 5,839</b>	<b>\$ -</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, which includes a buy-down provision. There are no minimum exploration work commitments for the Zuun Mod mining license.

## Off-Balance Sheet Arrangements

As at June 30, 2021, 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, 2020. 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 \$690,163 of non-cash share-based compensation to the statement of comprehensive loss for the six months ended June 30, 2021 (2020 - \$197,687).

## Financial Instruments and Other Risks

### Financial Instruments

The fair values of the Corporation's financial instruments are considered to approximate the carrying amounts. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value hierarchy establishes levels to classify the inputs to valuation techniques used to measure fair value.

Level 1: Inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2: Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).

Level 3: Inputs are unobservable (supported by little or no market activity).

### Fair Value

During the six months ended June 30, 2021, and during the year ended December 31, 2020, there were no transfers between level 1, level 2 and level 3 classified assets and liabilities. The following table provides the disclosures of the fair value of financial assets and liabilities which are recorded at fair value through profit and loss, and the level in the hierarchy.

	June 30, 2021			December 31, 2020		
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Assets and liabilities measured at fair value:						
Cash and cash equivalents	\$ 7,499,476	\$ -	\$ -	\$ 12,800,728	\$ -	\$ -

### 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, 2021, \$162,372 or 2% of the balance of cash was held in banks outside Canada (December 31, 2020 – \$133,130 or 1%).

## 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, 2021, 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 and has received financing 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 Mongolian tugrik denominated cash, accounts payable and accrued liabilities. The Corporation maintains Canadian and US dollar bank accounts in Canada.

The Corporation's exposure to US dollar currency risk was \$386,007 as at June 30, 2021 (December 31, 2020 - \$69,392). A 10% change in the US dollar exchange rate would affect net loss and comprehensive loss and deficit by approximately \$38,600 (December 31, 2020 - \$6,900).

The Corporation's exposure to Mongolian Tugrik currency risk was (\$570,299) as at June 30, 2021 (December 31, 2020 - (\$80,694)). A 10% change in the Mongolian Tugrik would affect net loss and comprehensive loss and deficit by approximately \$57,000 (December 31, 2020 - \$8,100).

### *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 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, 2021 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, 2021. 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, 2021, 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

Cameron Norton, P.Ge. is a qualified person under NI 43-101 and is responsible for the updated Bayan Khundii Mineral Resource Estimate. Mr. Norton is independent of the Corporation and is an employee of Tetra Tech Inc. Mr. Norton has reviewed the approved the discloser related to the Bayan Khundii Mineral Resource Estimate in this MD&A, including the appendix hereto, which provides additional detailed information on the parameters using in preparing the updated Mineral Resource, including data verification, and sample preparation, analysis and security.

Peter Dalton, P.Ge. (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, with the exception of the updated Mineral Resource for Bayan Khundii, has been reviewed and approved by Peter Dalton, P. Geo, 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 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).

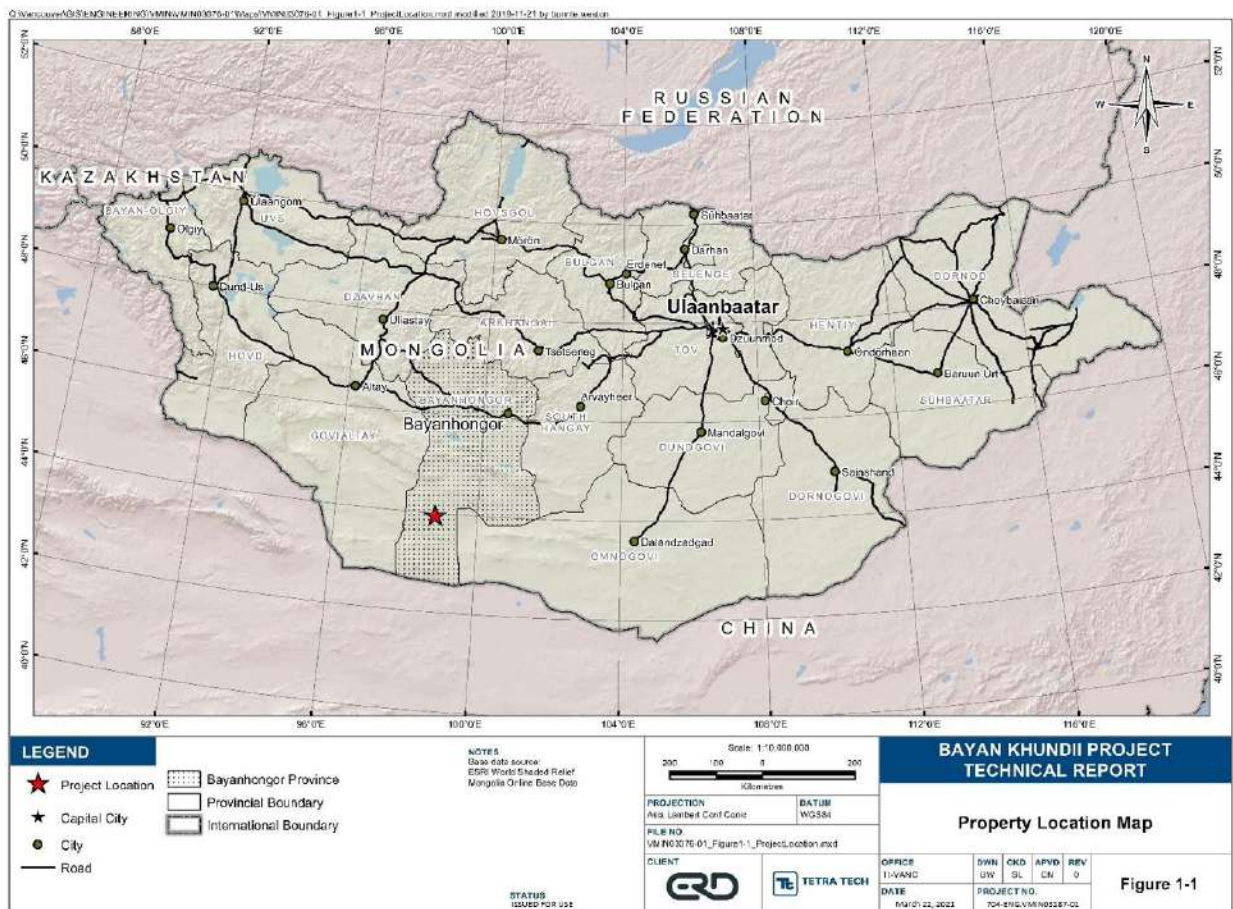
## **Appendix – Updated Mineral Resource Estimate on the Bayan Khundii Project**

# 1.0 INTRODUCTION

The Bayan Khundii Gold Project is located in south-western Mongolia in the Bayankhongor province and is situated approximately 980 kilometres southwest of the Mongolian capital Ulaanbaatar, and approximately 150 km north of the Chinese border. The Bayan Khundii deposit is located on the Khundii Mining License which is 100% held by Erdene Mongol LLC, a wholly owned subsidiary of Erdene. Bayan Khundii is one of several deposits and prospect within the Khundii Gold District discovered and under development or exploration by Erdene. The Company’s land holding in the Khundii Gold District currently includes the Khundii Mining License (MV-021444, 2,308.6 ha) and the Altan Nar Mining License (MV-021547; 4,668.6 ha), the Khundii Exploration License (XV-015569; 2,205.7 ha), and the Ulaan Exploration License (XV-016057; 1780.2 ha). All licenses are 100% held subsidiaries of Erdene.

Vehicle access to the property is via paved roads from Ulaanbaatar to Bayankhongor (630 km), followed by regional gravel roads from Bayankhongor to Shinejinst (310 km), then another 2 hours on to site via dirt road (Figure 1-1). A small airstrip is also located on site which is capable of accommodating light aircraft. A private airline service is available from Ulaanbaatar and a one-way trip takes approximately 3 hours.

Figure 1-1: Property Location



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## 1.1 Geology

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The Bayan Khundii deposit is hosted within the Trans Altai Terrane (“TAT”). The TAT forms part of the western end of the large, composite, arcuate-shaped Carboniferous-Permian New Kazak-Mongol Arc terrain (“NKMA”) and consists mostly of Middle Paleozoic volcanic, sedimentary and meta-sedimentary rocks that were intruded by Middle Paleozoic calc-alkaline plutons.

Locally, the bedrock geology of the Bayan Khundii license area is dominated by a sequence of Devonian and/or Carboniferous volcanic (andesite, andesite porphyry) and pyroclastic rocks (ash, lapilli, and block and ash tuffs). These were intruded by Carboniferous intrusions, with these rocks unconformably overlain by Jurassic volcanic and sedimentary units. All rocks in the region are overlain by unconsolidated sediments of Quaternary or Recent age.

The overall structural model for Bayan Khundii consists of a series of tilted, extensional, domino-style fault blocks with northeast-trending, southeast-verging extensional faults. The main north-northeast trending mineralized zone, comprised of the Striker-Midfield-North Midfield zones, is interpreted as a ‘relay ramp’ whereby stress is transferred from the ends (‘tip points’) of adjacent northeast-trending, southeast-verging extensional faults via a series of north-east trending parallel structures.

Bayan Khundii is categorized as a low sulphidation epithermal gold deposit. Mineralization consists of gold ± silver veins within northwest-southeast trending, moderately-dipping (~45°) zones that range in width from 4 to 149 m. These zones are likely hosted within the hypothesized relay ramps. Visible gold is abundant at Bayan Khundii, being observed in approximately 30% of all holes drilled.

Prior to Erdene’s initial work programs in 2010, no previous exploration work has been conducted on the Property.

Since 2015, six phases of drilling programs have been conducted at Bayan Khundii, which encompasses 350 drill holes totaling 55,255m. The primary focus of this drilling has been the Striker, Striker West, Midfield, and Midfield North gold zones.

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## 1.2 Mineral Resource Statement

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The Mineral Resources presented herein are reported in accordance with the Canadian Securities Administrators National Instrument 43-101 and have been estimated in conformity with generally accepted Canadian Institute of Mining and Petroleum (CIM) “Estimation of Mineral Resource and Mineral Reserves Best Practices Guidelines”. Mineral resources are not mineral reserves and have not demonstrated economic viability. There is no guarantee that all or any part of the mineral resource will be converted into mineral reserves.

Cameron Norton, P.Geol. is a qualified person as defined under NI 43-101 and is responsible for the updated Bayan Khundii Mineral Resource Estimate. Mr. Norton is independent of the Corporation and is an employee of Tetra Tech Inc.

The updated Mineral Resource Estimate for the Bayan Khundii Deposit incorporates 95 additional drill holes totalling 12,889 metres and an updated structural interpretation study completed by Erdene at Bayan Khundii since the previous Mineral Resource Estimate, with an effective date October 1, 2019, was announced. The total number of drill holes included in the updated Bayan Khundii Mineral Resource Estimate is 350, totaling 55,791 metres of drilling, along with 1,075 metres of trenching from 23 trenches. The focus of the 2020 drilling program was to:

- Investigate the extent of the mineralization at Striker West;
- Test and further define high grade domains identified and modeled during the 2019 resource work;
- Improve the understanding of the mineralization at Striker, Midfield, and Midfield North Zones;

- Build upon the previous geological interpretation; and
- Improve drill spacing to show continuity of mineralization and increase overall confidence in the deposit.

The mineral resources for Bayan Khundii were estimated independently by Mr. Cameron Norton (“Mineral Resource QP”) of Tetra Tech based on data collected as of January 1, 2021 and has an effective date of June 17, 2021. Mr. Norton visited the property from May 6 to May 12, 2019, and a subsequent site visit for the purposes of this mineral resource estimate update was not deemed necessary.

The results of the Mineral Resource Estimate for the Bayan Khundii deposit have been constrained to a conceptual pit shell and are presented in Table 1-1 and are reported at a 0.40 g/t Au cut-off. The mineral resource estimate is based on the combination of geological modeling, geostatistics, and conventional block modeling using the Ordinary Kriging method of grade interpolation. The mineral resources were estimated using a block model with a parent blocks of 5 m x 5 m x 5 m with 5 sub-cells allowed in each direction. Estimation of the blocks was completed on the parent blocks and the grades assigned to the sub-cell blocks. The QA/QC protocols and corresponding sample preparation and shipment procedures have been reviewed by Tetra Tech.

The following sections provide the details of the sample preparation, analysis and security; data verification work completed by Tetra Tech; and the parameters used to calculate and review the updated Bayan Khundii mineral resource estimate.

## 2.0 SAMPLE PREPARATION, ANALYSIS AND SECURITY

The details of the sample preparation, analytical methodology and sample security protocols executed by Erdene for soil, rock, trench and drill-core sampling from the exploration programs carried out to date on the Khundii Mining License are included in this section.

### 2.1 Sample Selection

#### 2.1.1 Soil Samples

Soil samples were taken at regular intervals on a grid varying between 400 m intervals on 400 m spaced lines to down 12.5 m intervals along 50 m spaced lines. Sample locations were determined by hand-held GPS devices with a precision of approximately 3 m in lateral directions. All samples were taken using a consistent sampling methodology which included digging shallow holes (avg. 25 cm) and dry sieving to -2 mm.

#### 2.1.2 Rock Chip Samples

Rock chip and rock grab samples were taken from outcrop / sub-crop, respectively, by Erdene’s geologists with locations determined by hand-held GPS devices ( $\pm 3$  m lateral precision). Samples were taken from mineralized and un-mineralized surface rocks that are, as much as possible, representative of the lithological unit identified while in the field. No grid-based rock chip sampling was carried out over the prospect areas.

#### 2.1.3 Trench Samples

All trenches were excavated to bedrock, although zones of intense alteration and deep weathering were encountered and therefore the term ‘bedrock’ is used loosely. Trench samples were collected at 1 m or 2 m intervals, as determined by the senior project geologist, based on the lithology and mineralization. Samples were

chipped from the bottom of the trenches and care was taken to ensure each sample was representative of the entire interval being sampled. Representative hand samples for each interval were also collected for reference.

#### **2.1.4 Drill Core**

Drill core was delivered directly from the drill site to the Company's exploration camp at the end of every shift. All logging and sampling were completed in camp by Erdene geologists. Drill core was logged for geology and RQD, and sample intervals were marked. Core was then photographed before being sawn in half with a core saw after which half-core samples for assay were bagged. Magnetic susceptibility readings were taken for each sample interval. The remaining half-core is securely stored at the Company's Bayan Khundii exploration camp.

Erdene's sampling protocol for drill core consisted of routine collection of samples at 1 m or 2 m intervals (depending on the lithology and style of mineralization) over the entire length of the drill hole, with the exception of more recent drilling where late-stage dykes were not sampled. Sample intervals were generally based on metreage, not geological controls or mineralization. However, in the case of early stage or scout drilling programs, samples were sometimes selected based on geological controls to get a better understanding of the distribution of mineralization.

Following the logging and selection of drill core for sampling, a geotechnician took the selected core into the cutting room and cut the marked core in half using a diamond rock saw, such that one half of the core was left in the box as a record. To mitigate the risk of sample bias, the same side of the cut drill core was always placed back in the box. The cutter would then place the other half of the cut core in a polypropylene bag. After the entire sample has been cut, the cutter would then obtain the corresponding sample slip, and place it in the mouth of each bag and subsequently seal the sample bag. The diamond core saw was connected to a hose line which supplied fresh water to the saw, and then discharged the cutting laden water directly into a sump. No water was recirculated during cutting.

## **2.2 Sample Security**

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For Bayan Khundii, all rock, trench and 2015-2016 drill core samples were organized into batches of 20, while all soil sample and 2017-2020 drill core samples were organized into batches of 30. All sample batches included two commercially prepared certified reference material standards (standards), including a gold standard (generally alternating between a high-level gold-bearing standard and low-level gold bearing standard) and a 'blank' consisting of either 'basalt blank chip' (2015) with very low gold concentration (<1 ppb Au) or coarse silica sand (OREAS 24p, 2016-17). Both of these samples were used as an analytical blank for gold. Batches with 30 samples (all soil and 2107 drill core) included duplicate samples. For soil samples, this included duplicate samples taken from the same location. For drill core batches in 2017, duplicate samples alternated between a field duplicate, consisting of two ¼ core samples from the same interval, or a laboratory duplicate, consisting of duplicate pulps created from the same coarse grind material. Each batch was stored in the field camp in sealed bags. Sample batches were periodically shipped directly to SGS in Ulaanbaatar via Erdene's logistical contractor, Monrud Co. Ltd.

At SGS, all client-submitted material is retained under cover in the secure Ulaanbaatar facility where 24-hour security is maintained. Sample integrity is maintained during the analysis process by laboratory LIMS generated sample labeling throughout the analytical process. Due to a lack of space at the SGS facility, coarse reject material has been recently moved (late 2020) to a secure storage facility rented for that purpose by Erdene.



## 2.3 Sample Preparation

All first assay samples have been prepared and assayed at the Ulaanbaatar laboratory of SGS Mongolia LLC (“SGS”). The laboratory is one of largest commercial laboratories in Mongolia and operated to ISO17025 specifications. Table 2-2 provides a summary of the analytical methods used by SGS to analyze all of the samples. At SGS, all rock samples (drill core, chip and grab) are handled as follows:

- Samples as received are initially sorted and verified against the client Sample Submission Form.
- Samples are air dried at 90°C.
- All samples are crushed to 3.35 mm using a jaw crusher and Boyd crusher in a two-stage process.
- Samples were then split by rotary sample divider to 600-700 g, with reject retained.
- The sample splits are pulverized to 90% passing <75 µm mesh.
- The pulverized samples are mixed and divided manually, with approximately 200 g retained for the client and 300 g retained for laboratory analysis.

At SGS, all soil samples are handled as follows:

- Samples as received are initially sorted and verified against the client Sample Submission Form.
- Samples are air dried at 90°C.
- Whole samples are pulverized to 90% <75 µm.

## 2.4 Analytical Methodology

### 2.4.1.1 Drill Core, Rock, and Chip Samples

Gold was first analyzed by fire assay with an instrument finish using 30 gram aliquots, whereas all other metals analyzed by ICP40B, 4 acid digestion with ICP OES finish (see Table 2-1 for details). Any samples that had an original assay of >5 g/t Au the results of screen metallics were used preferentially in the database over original fire assay values. All drill core sample rejects are saved and stored at a secure facility and are available to carry out check analyses as necessary.

**Table 2-1: Bayan Khundii SGS Analytical Methods and Detection Limits**

SGS Code	Description	Element	Lower Detection Limit	Upper Detection Limit
FAE303	Fire Assay, Solvent Extraction, AAS <sup>1</sup> finish, 30g sample	Au	1 ppb	10,000 ppb
FAA303	Fire Assay, AAS <sup>1</sup> finish, 30g sample	Au	0.01 ppm	1,000 ppm
FAG303	Fire Assay, gravimetric, 30g sample	Au	0.03 ppm	100,000 ppm

ICP40B	4 acid digestion <sup>2</sup> with ICP OES <sup>3</sup> finish	Ag: 2 ppm – 50 ppm; Al: 0.03% - 15%; As: 5 ppm - 1%; Ba: 5 ppm - 1%; Be: 0.5 ppm - 0.25%; Bi: 5ppm - 1%; Ca: 0.01% - 15%; Cd: 1 ppm - 1%; Co: 1 ppm - 1%; Cr: 10 ppm - 1%; Cu: 2 ppm - 1%; Fe: 0.1% - 15%; K: 0.01% - 15%; La: 1 ppm - 1%; Li: 1 ppm - 1%; Mg: 0.02% - 15%; Mn: 5 ppm - 1%; Mo: 2 ppm - 1%; Na: 0.01% - 15%; Ni: 2 ppm - 1%; P: 0.01% - 15%; Pb: 2 ppm - 1%; S: 0.01% - 5%; Sb: 5 ppm - 1%; Sc: 0.5 ppm - 1%; Sn: 10 ppm - 1%; Sr: 5 ppm - 1%; Ti: 0.01% - 15%; V: 2 ppm - 1%; W: 10 ppm - 1%; Y: 1 ppm - 1%; Yb: 0.5 ppm to 1000 ppm; Zn: 5 ppm - 1%; Zr: 3 ppm - 1%
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1. AAS: Atomic Absorption Spectrophotometer
2. Acid Digest: Perchloric (HClO<sub>4</sub>), Hydrochloric (HCl) and Nitric (HNO<sub>3</sub>)
3. Acid Digest: Same as 3-acid plus Hydrofluoric (HF)
4. ICP OES: Inductively Coupled Plasma Optical Emission Spectrometry
5. LDL: Lower Detection Limit
6. UDL: Upper Detection Limit

Source: Bayan Khundii 43-101Report, Bayan (Khundii Exploration License), Bayankhongor Aimag, Southwest Mongolia, National Instrument 43-101 Technical Report, Erdene Resource Development Company, M. A. (MacDonald), MSc, P.Geol., March 1, 2018

### 2.4.1.2 Soil Samples

For soil samples, gold was analyzed by fire assay with an instrument finish using 30 gram aliquots, whereas all other metals analyzed by ICP40B, 4 acid digestion with ICP OES finish (see Table 2-1 for details).

## 2.5 Data Quality Control

A QA/QC program was completed at the Bayan Khundii zone which included the insertion of standards and blanks into the sample stream, as well as the collection of quarter core duplicates. Reject duplicates were also analysed, as well as umpire testing at a third-party laboratory.

All samples were submitted to SGS IMME Mongolia LLC for analysis using the FAE303 method for gold and the ICP40B method for multi-elements. Select higher grade samples were also submitted for screen metallic assay.

A random selection of assay values provided from the Erdene database were compared to digital pdf laboratory certificates from SGS and results were found to be consistent.

Table 2-2 shows the QA/QC sample summary for the project, including QA/QC sample insertion rates. Overall standard and blank insertion rates are acceptable, but the frequency of duplicate samples should be increased as the project advances towards a mining phase. One thing of note, the number of samples processed at the lab per batch is quite small, often incorporating only one standard and one blank within each batch. A suitable insertion rate should be selected in the future to adapt to the small batch sizes, or else perhaps request the lab increase the number of samples in each batch.

**Table 2-2: Bayan Khundii QA/QC Sample Insertion Summary**

	# of Samples	Insertion Rate
Half Core Samples	31,252	

Quarter Core Duplicates	534	1.7%
Reject Duplicates	144	0.5%
Standards	1,390	4.4%
Pulp Blanks	340	1.1%
Coarse Silica Blanks	918	2.9%
<b>Total</b>	<b>34,578</b>	
Umpire Lab Samples	500	1.6%

### 2.5.1.1 Standards

Standard analyses were monitored by Erdene and if SGS analysis varied from the determined assay value by more than 15% for one or more elements then Erdene’s protocol is to request that the entire batch be re-analyzed. The average difference between gold assay values and gold certificate values for the Bayan Khundii drilling program was -2.9 %. No re-analysis has been required to date.

Nine different gold-certified reference standards were used in the Bayan Khundii zone program (Table 2-3) which contained standardized gold values ranging from 0.52 g/t Au to 23.0 g/t Au. A detailed discussion of the performance of each standard is presented in the following sub-sections.

**Table 2-3: Standard Summary**

Standard ID	# of Samples	Au value (ppm)
OREAS 45d	21	23.00
OREAS 60c	319	2.47
OREAS 60d	117	2.47
OREAS 62c	90	8.79
OREAS 62e	518	9.13
OREAS 62f	92	9.71
OREAS 65a	36	0.52
OREAS 66a	94	1.24
OREAS 67a	103	2.24
<b>Total</b>	<b>1,390</b>	

#### Standard OREAS 45d

A total of 23 OREAS 45d standards were inserted into the 2020 drilling program as a high-grade gold standard, with an expected value of 23 g/t Au. Of the standards submitted no issues were identified, with all 23 samples passing within two standard deviations. A consistent high bias for this grade is observed, with the lab returning an average value of 24.81 g/t Au.

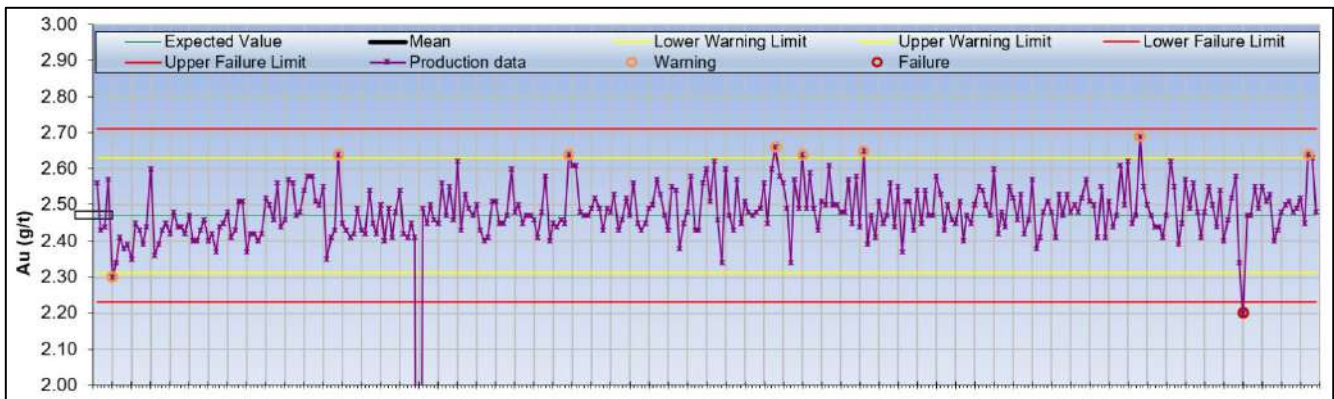
**Figure 2-1: Standard OREAS 45D Au Performance**



**Standard OREAS 60c**

A total of 319 OREAS 60c standards have been inserted during drill programs at Bayan Khundii. Standard performance overall is acceptable, with only 7 of the sample or 2% falling beyond the two-standard deviation “warning” threshold. Two samples have failed outside of three-standard deviations. The first failure returned a below detection limit value for gold and is suspected to be a mis-labelled blank, and the second failure fell just beyond the three-standard deviation failure threshold.

**Figure 2-2: Standard OREAS 60C Au Performance**



**Standard OREAS 60d**

A total of 117 OREAS 6d standards were submitted during the 2020 drilling program, with the standards having an expected value of 2.47 g/t Au. The laboratory appears to have struggled with this standard, with all samples returning higher grades than the expected 2.47 g/t Au. Of the 117 samples submitted, 79, or 68% of the samples fell within the upper limit “warning” threshold and a further 11 samples, or 9% fell above the three-standard deviation failure threshold.

Given that no issues were identified for standard 60C, which has a similar expected gold value as standard 60D, it’s the QP’s opinion that there is an issue with the standard itself and not the analytical laboratory. It’s recommended that Erdene no longer use this batch of standards and replace them with a fresh batch with a similar gold grade.

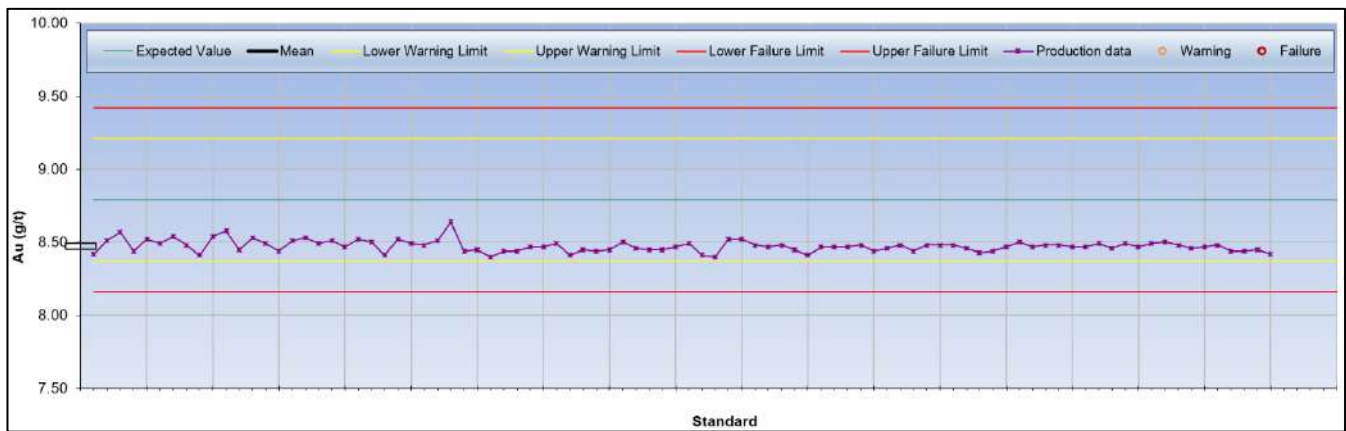
**Figure 2-3: Standard OREAS60d Au Performance**



**Standard OREAS 62c**

A total of 60 OREAS 62c standards have been used during Bayan Khundii drilling programs. Standard performance overall is acceptable, with results showing excellent precision, however a consistently low bias for this grade is observed. Considering this trend is not observed in other standards, this low bias is assumed to result from an issue with the standard rather than the laboratory.

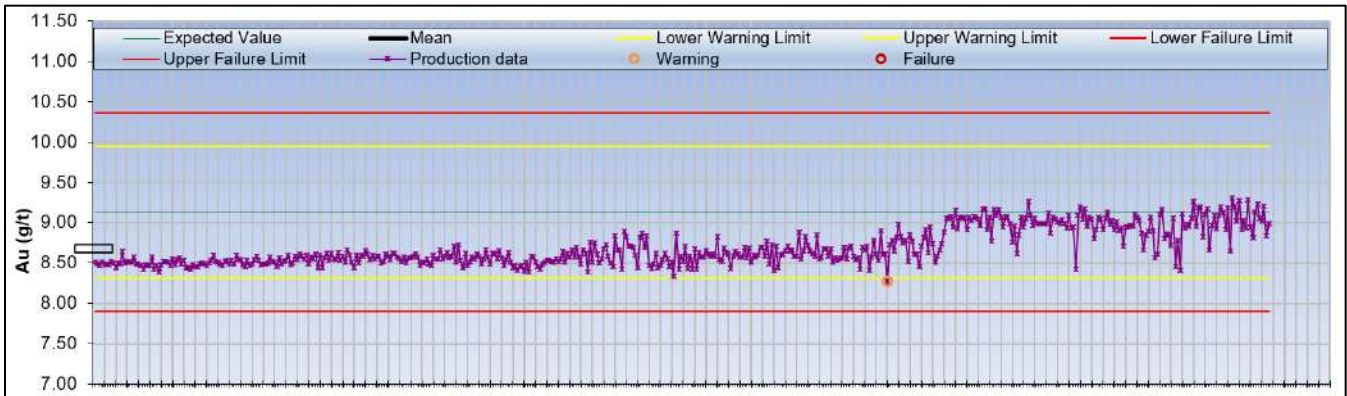
**Figure 2-4: Standard OREAS 62c Au Performance**



**Standard OREAS 62e**

A total of 518 OREAS 62e standards have been submitted during drilling programs at Bayan Khundii. Standard performance overall is acceptable, however plotting of results over time identifies two trends. The first two thirds of the standards contain excellent precision but poor accuracy when compared to the reported standard mean grade, whereby the reported grades show a consistent low-grade bias. This bias appears to abruptly disappear for the last third of these standards, where the assayed mean values for the standard are quite close in value to the expected standard mean value. Considering this jump in values is not observed in the performance of other standards in the program, these later standards are likely sourced from a different batch of standard material and is likely not a reflection of an issue with the laboratory.

**Figure 2-5: Standard OREAS 62e Au Performance**

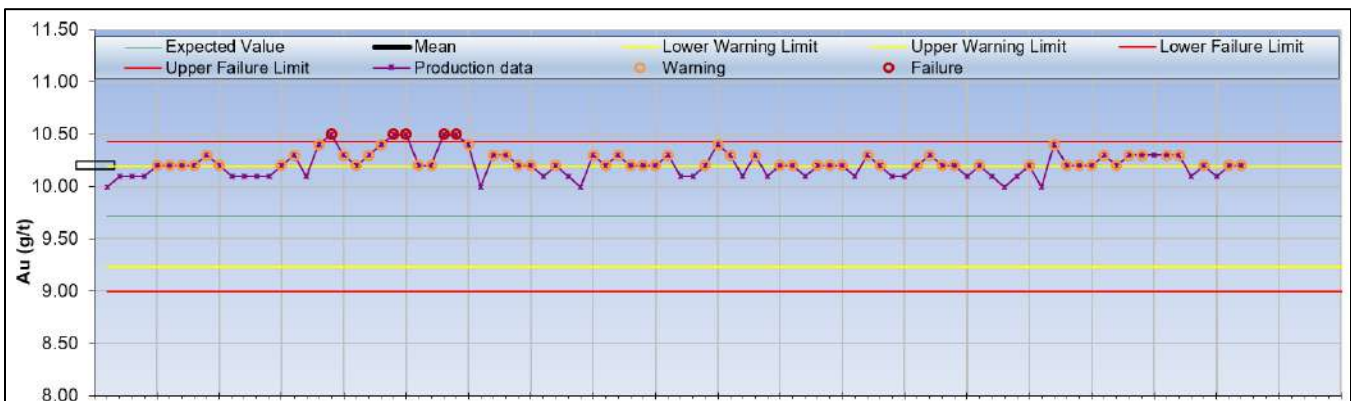


**Standard OREAS 62f**

A total of 92 OREAS 62f standards were submitted during the 2020 drilling program at Bayan Khundii. Plotting of the results shows the lab has a high precision with this standard, but poor precision with the lab assaying an average grade of 10.21 g/t au when compared to the expected 9.71 g/t Au value. The majority of the samples occur within the “warning” range, falling above two standard deviations, but less than three-standard deviations of the expected value. Moreover, Five of the 92 samples fell just beyond the three-standard deviation failure limit.

It’s recommended that the performance of this standard be monitored closely, and if possible, be replaced with a different standard of a similar grade.

**Figure 2-6: Standard OREAS 62f Au Performance**



**Standard OREAS 65a**

A total of 36 OREAS 65a standards have been submitted to the lab during Bayan Khundii drilling programs. Standard performance for this range is excellent, with only one standard returning a “warning”. No standards fell outside the accepted three-standard deviation limit.

**Figure 2-7: Standard OREAS 65a Au Performance**



**Standard OREAS 66a**

A total of 94 OREAS 66a have been submitted. Standard performance overall is excellent, showing both high precision and high accuracy in the results.

**Figure 2-8: Standard OREAS 66a Au Performance**



**Standard OREAS 67a**

A total of 103 OREAS 67a standards were included in the drill program. Standard performance overall is acceptable, with only 2 of the samples falling beyond the two-standard deviation threshold. One sample returned a value for gold of 8.48 ppm which is likely a mis-labelled OREAS 62c standard.

**Figure 2-9: Standard OREAS 67a Au Performance**



**2.5.1.2 Blank Analyses**

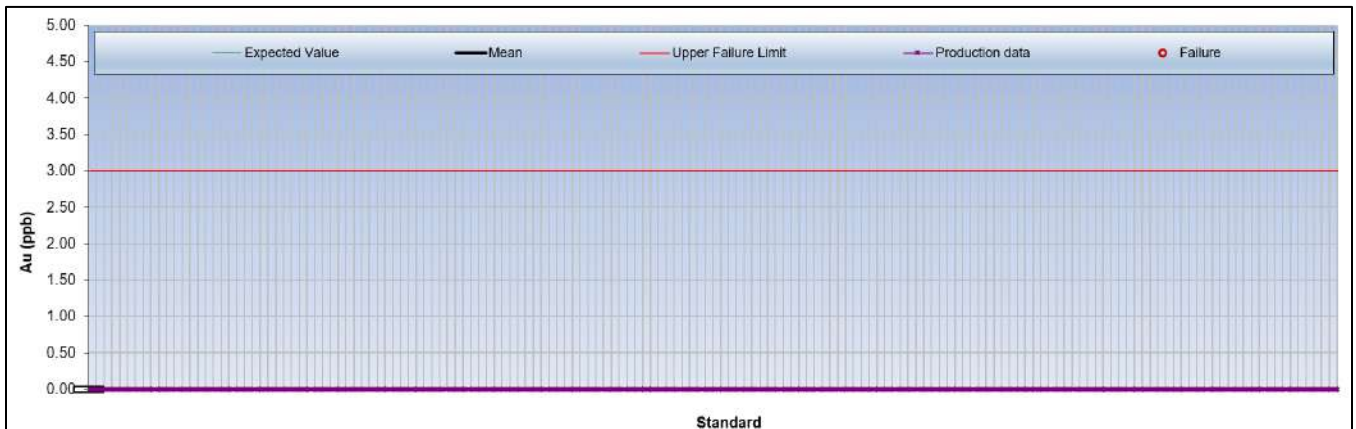
**2.5.1.3 Certified Pulp Blanks – OREAS24P and OREAS26a**

Certified pulp blanks are used to test the calibration of the analytical procedure and for sample contamination resulting during the sample preparation phase. Of the 350 submitted pulp blanks no results returned above detection limit values.

**2.5.1.4 Certified Coarse Silica Blanks – ASL 1/2” Mesh Silica Blank**

Coarse silica blanks are used to monitor potential contamination at the lab due to insufficient cleaning during the sample preparation process. Coarse silica blanks were used in the program for holes BKD-43 to BKD-350 (918 samples). All results returned below detection limit values, as shown below in Figure 2-10, indicating no suspected issues with contamination during sample preparation.

**Figure 2-10: Coarse Silica Blanks (Au ppb)**





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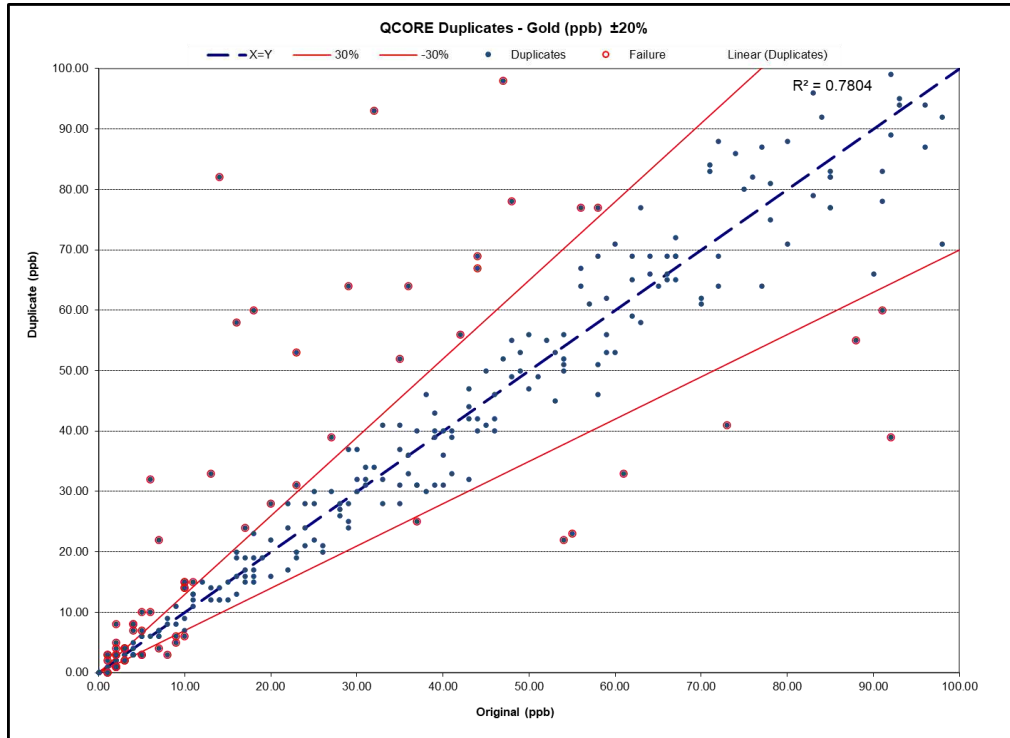
## 2.5.2 Field Duplicates

A total of 534 quarter core duplicate samples were collected, representing an insertion rate of 1.7%.

While submitting quartered duplicate core samples to lab is considered good industry practice, the spatial distribution of gold across a sample is often not uniform which can make interpreting the duplicate lab results difficult. In theory, the best way to obtain a representative gold sample is to submit the entire diameter of drill core to the lab. In practice, this is not practical. Half of the drill core sample should always be retained by the exploration company for their own records and core library. If the gold mineralization is nuggety, or not homogeneously distributed, then the resulting two halves of drill core can have significantly different grades. Later, should the sample remaining portion of the sample require a further analytical test, such as for field duplication or third-party testing, the remaining  $\frac{1}{2}$  of the originally sampled drill core, is again cut in half. This results in  $\frac{1}{4}$  of the original core sample being sent to the lab, and only  $\frac{1}{4}$  of the original core sample remaining in the core box. At these sample sizes, the absence or presence of even a pinpoint fleck of gold can have a significant implication on the reported sample grades.

The results of Erdene's field duplication study are presented graphically in Figure 2-8. While the majority of the duplicate samples fell within the accepted  $\pm 30\%$  threshold, 147 of the 534 samples fell outside of this accepted relative difference suggesting the presence of a small potential nugget effect.

**Figure 2-11: Quarter Core Duplicate Samples (Au g/t)**

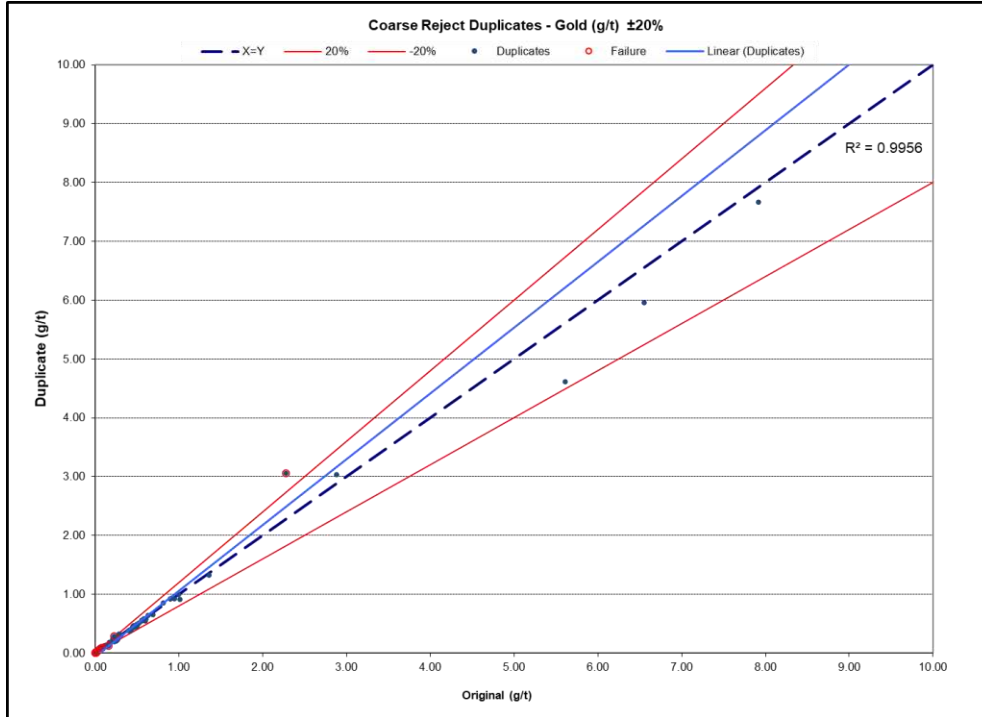


### 2.5.3 Reject Duplicates

A total of 144 samples were collected from lab reject material (0.5% insertion rate) and analysed using the same technique as the original assays. A threshold of +/- 20% is considered an acceptable pass/fail rate for reject samples. While 15 samples, or 13%, fall outside these thresholds, only 1 failed above a gold grade of 0.5 g/t Au. Samples which failed below 0.5 g/t are considered non-material failures given that analytical equipment for these lower grades is less accurate.

Moving forward, it's recommended that Erdene request that SGS run duplicates on a broader range of sample grades in order to better test higher grade mineralization.

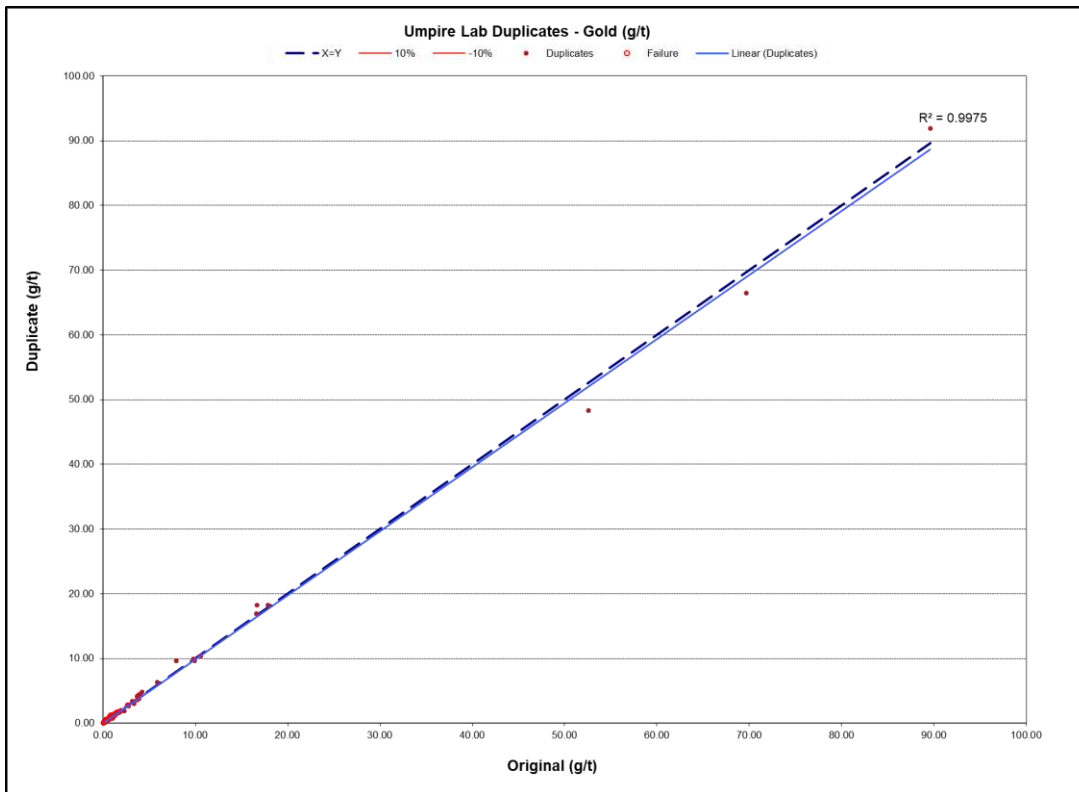
**Figure 2-12: Coarse Reject Duplicate Samples (Au g/t)**



### 2.5.4 External Laboratory Assay Verification

A total of 500 pulps were selected to be sent to ALS Chemex for umpire sampling, representing 1.6% of the samples collected. No sample bias is observed between ALS and SGS.

**Figure 2-13: Umpire Duplicate Samples (Au g/t)**



## 2.6 QP Opinion on Sample Collection, Preparation, and Analyses

Overall, the Resource Estimate QP holds the opinion that the data from drilling on the Bayan Khundii deposit has been obtained in accordance with contemporary industry standards, and that the data is adequate for the calculation of Measured, Indicated, and Inferred mineral resource categories, in compliance with National Instrument 43-101.

Based upon the performance of standards 60d and 62f, it's recommended that Erdene replace these standards with ones of similar grade or order a new batch of standards as there may be an issue with those particular standard batches.

## 3.0 DATA VERIFICATION

### 3.1 Database Audit

The Resource Estimate QP carried out an internal audit of the drill hole database provided to Tetra Tech from Erdene in order to verify that the information fairly represented the original drill logs and assay certificates for the Bayan Khundii database.

#### 3.1.1 Drillhole Collar, Survey and Lithology Database

The verification was completed on 28 holes, examining collar coordinates, end-of-hole depths, down-the-hole survey measurements, and “from” and “to” intervals in 2019. A detailed database audit was not conducted for the 2021 resource update. Scans of the original recorded survey information was not available and so survey information was compared between the values recorded in the drill logs, and the database. No errors were found in survey database. Table 3-1 summarizes the results of the data base audit completed for the Bayan Khundii database.

Tetra Tech imported the drill hole data into Datamine Studio RM software version 1.2.47.0 which has a function that checks for duplicate intervals, overlapping intervals, and intervals beyond end-of hole. Any errors identified in the routine were checked against the original logs and corrected.

**Table 3-1: Erdene Database Verification Statistics**

Analysis	Total Data Set	Verified	Verification Rate	Number of Errors	Error Rate (%)	Comments Regarding Error
Collar	350	28	8%	0	0	Database contains surveyed collar positions. Drill logs often contain handheld GPS survey locations. Recommend updating logs to contain final survey coordinates. Differences not counted as errors.
Lithology	12,941	1,810	14%	0	0	
Assay	31,252	2,619	8%	0	0	

#### 3.1.2 Assay Database

Assay data was provided to Tetra Tech as a compiled excel database which contained the following information:

- Hole ID
- Sample From
- Sample To
- Gold assay values (g/t)
- Silver assay values (g/t)

- Iron assay values (%)
- Gold screen metallic assays (g/t)

A total of 2,619 samples or approximately 8% of the assays in the database were compared against assay certificates. These random spot checks verified the assays in the excel sheets, as no issues were identified during the assay verification.

### 3.2 Independent QP Site Visit

The Resource Estimate QP visited the Property from May 9<sup>th</sup>-11<sup>th</sup>, 2019, and was accompanied by Erdene personnel. Mr. Norton examined several core holes, drill logs, and assay certificates, along with inspecting the core logging facilities, sampling procedures, and core security. Assays were examined against drill core mineralized zones. Mr. Norton also examined the collar and trenching locations, along with surface mineralization during a tour of the property. Given that no active drilling was underway at the time of the site visit, the QP was not able to observe the real-time procedures relating to the collection of drill core, logging, sampling, and cutting of core.

### 3.3 Drill Collar Verification

During the site visit, Mr. Norton visually observed the diamond drill setups on surface. Manual GPS verification was completed using a Garmin GPSMAP® 62CS handheld device. This handheld device has a lower accuracy than professional survey device which was used to survey Erdene’s holes, and as such, minor collar differences are expected for each hole location surveyed (Table 3-2). Coordinates were collected using WGS84 coordinate system.

No issues were identified during the drill collar verification.

**Table 3-2: Drill Collar Verification Results**

Hole ID	Erdene Co-Ordinates (WGS 84)			Tetra Tech Co-Ordinates (WGS 84)			Difference (m)		
	Easting	Northing	Elevation	Easting	Northing	Elevation	Easting	Northing	Elevation
BKD-61	483259	4861055	1240	483260	4861054	1236	1	1	4
BKD-76	483296	4861081	1237	483299	4861081	1233	3	0	4
BKD-227	483266	4861008	1246	483268	4861008	1245	2	0	1
BKD-234	483293	4861012	1245	483290	4861014	1241	3	2	4

### 3.4 Tetra Tech Verification Samples

Verification samples were identified in order to test a range of gold grades and provide insight into grade variability in samples which returned initial assay results of less than 1 g/t Au up to the 100 g/t Au range.

All of the Resource Estimate QP’s independent samples collected from the Bayan Khundii site were security tagged and photographed by the independent Resource Estimate QP and delivered via courier to the ALS Chemex preparation facility in Ulaanbaatar, Mongolia. To be consistent with current Erdene analytical procedures, the same procedures were requested for the verification samples. The standard analytical procedures are as follows:

- All samples were received, registered, and dried.
- All samples were crushed to 80% less than 3.35 mm, then split with a riffle splitter.
- A 750g split from all samples were then pulverized to 90% less than 75µm.
- All pulverized splits were submitted for 50g gold fire assay with AA finish (Au-AA23).
- Samples returning grades above the upper detection limit of Au-AA23 (10 ppm) were submitted for 50g ore grade fire assay with AA finish (Au-AA26) and screen metallica (Au-SCR22AA).

#### 3.4.1 Independent Check Assay Results

The Resource Estimate QP conducted a field duplicate program using 5 samples collected from drill core at Bayan Khundii to evaluate variability in analytical test results. Results are shown in Table 3-3.

The results of the independent coarse reject verification sampling confirm the presence of mineralization. As would be expected in a low sulphidation epithermal system, the grades display high variability even at a short range of a distribution of quartered core (Table 3-3). The observed grade variability is primarily attributed to the verification sample size of ¼ NQ core, which is being compared against a more representative original sample size of ½ of the NQ core.

**Table 3-3: Independent Check Assay Quarter Core Duplicate Results**

Hole ID	From (m)	To (m)	Original Sample Number	Au Results (g/t)			
				Au (orig)	Au (dup)	Au (met)	R.P.D. %
BKD-230	97.0	98.0	121228	42.58	48.6	45.2	13%
BKD-230	98.0	99.0	121230	0.96	0.685		-33%
BKD-242	114.0	115.0	122735	22.08	51.6	51.1	80%
BKD-242	115.0	116.0	122736	4.03	2.430		-50%
BKD-242	121.0	122.0	122743	98.57	84.4	83.6	-15%

Note: “orig” is the original ½ core sample, “dup” is a duplicate of the original using ¼ core sample (combined AA23 and AA26 values), and “met” is screen metallica performed on the duplicate core sample. RPD is relative percent difference between original and duplicate sample.

Screen metallic duplicates were completed on 3 core duplicate samples for gold, as shown in Table 3-4.

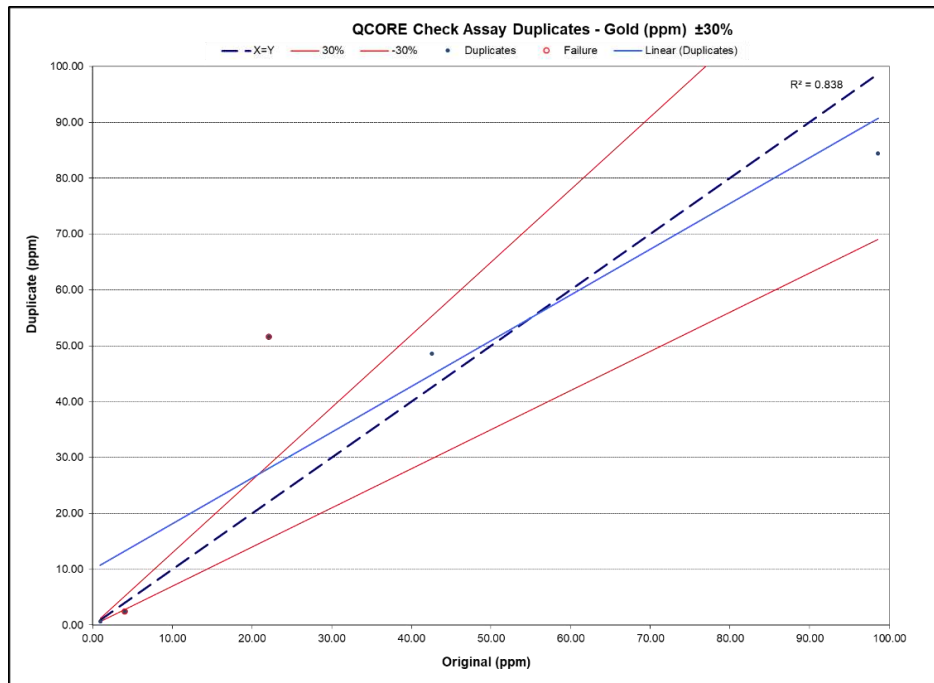
**Table 3-4: Independent Check Assay Screen Metallic Duplicate Results**

Hole ID	Sample Number	Au (gpt) Original	Screen Metallic Au (gpt)	R.P.D.%	% Au > 75 µm
BA18-123	445240	42.58	45.2	6%	17%
BA18-123	445241	22.08	51.1	79%	7%
BA18-123	445242	98.57	83.6	-16%	6%
Overall Average		54.4	60.0	23%	10%

The screen metallic results indicate that approximately 10% of total gold grade by mass is contained in the coarse +75 µm fraction. These results confirm the presence of coarse-grained gold in the system. Overall comparison of gold grades between the screen metallics fire assay and the 50 g fire assay with an AA finish indicates an average RPD value of -3%. This result indicates that variability exists in the relative percent difference for grades reported by each method, however, no significant positive nor negative bias was observed overall between the two analytical methods.

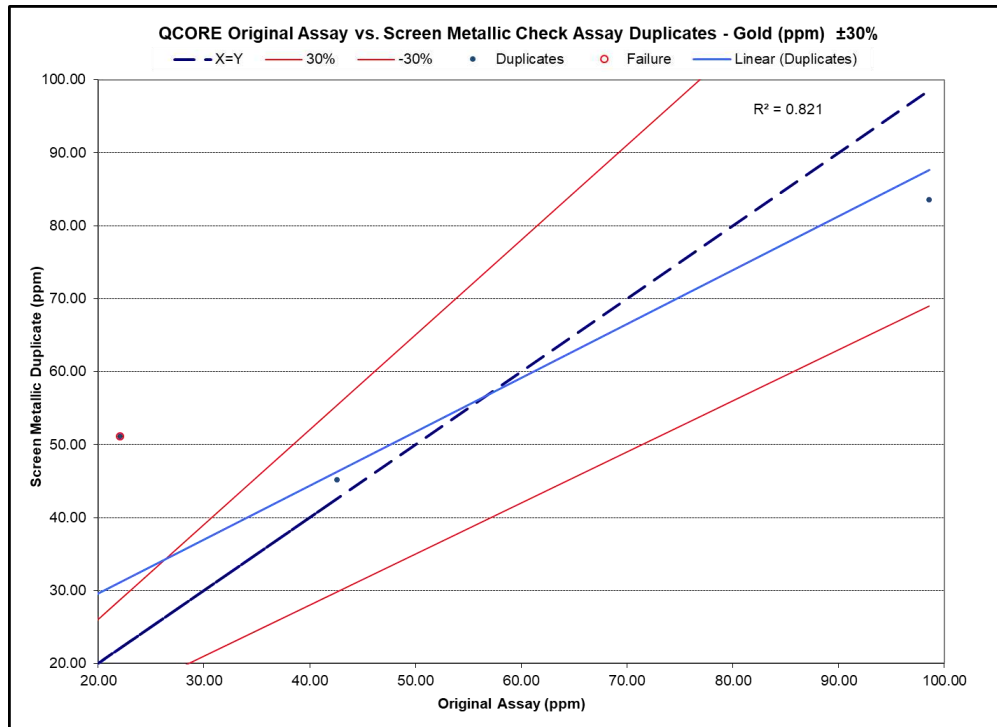
Core check assay duplicate results for AA23/AA26 methods are shown for gold in Figure 3-1. Core check assay duplicate results for screen metallics (compared to original) are shown in Figure 3-2, and for duplicate AA26 vs screen metallics are shown in Figure 3-3.

**Figure 3-1: Quarter Core Check Assay Duplicate Results**

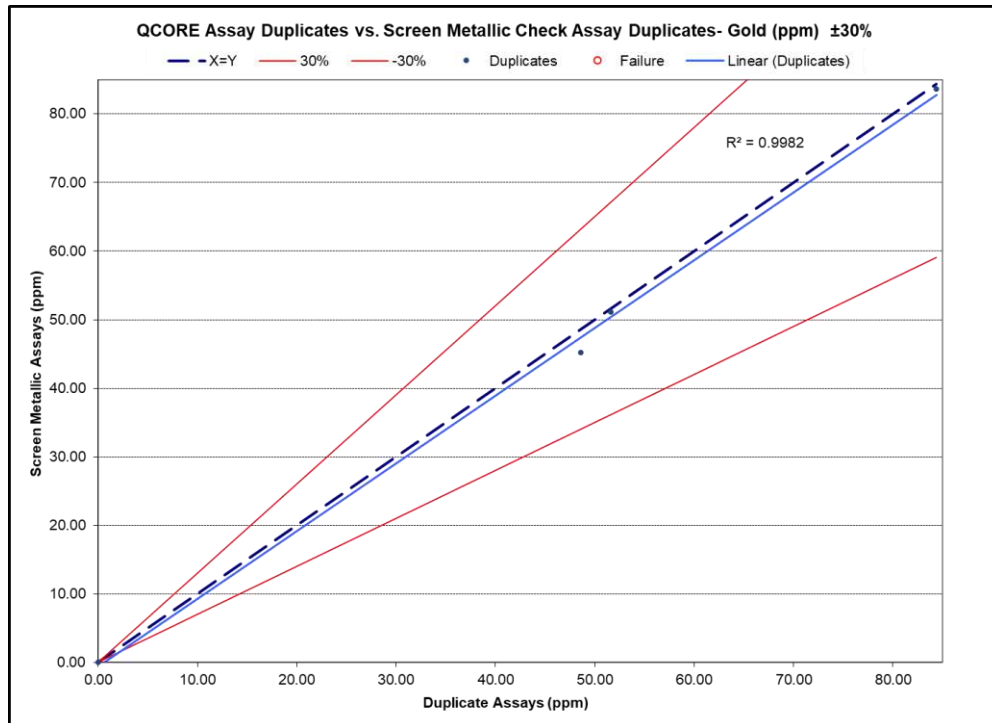




**Figure 3-2: Original vs Screen Metallic Check Assay Duplicate Results**



**Figure 3-3: AA26 Duplicate vs Screen Metallic Check Assay Results**



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### **3.5 QP Opinion on Data Verification**

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The Resource Estimate QP has conducted a review of the project database, has compared analytical certificates with reported assay results for drill core and trench samples, has visited the Property, and collected mineralized drill core samples from the Property. It is the Resource Estimate QP's opinion that the data reported for the Project can be verified and is acceptable for mineral resource estimation.

## 4.0 MINERAL RESOURCE ESTIMATES

### 4.1 Summary

The Bayan Khundii Gold Project includes Mineral Resource Estimates for the Bayan Khundii deposit as outlined in the following sections.

### 4.2 Basis of Current Mineral Resource Estimate

This updated Mineral Resource Estimate for the Bayan Khundii Deposit, incorporates 95 additional drill holes (totalling 12,889.48 m) and an updated structural interpretation study completed by Erdene on the Property since the historically announced Mineral Resource Estimate with effective date October 1<sup>st</sup>, 2019 (Tetra Tech, December 2019). The total number of drill holes included in the Bayan Khundii Mineral Resource Estimate is 350, totaling 55,791.05 metres of drilling, along with 1,074.6 metres of trenching from 23 trenches. The focus of the 2020 drilling program was to:

- Investigate the extent of the mineralization at Striker West;
- Test and further define high grade domains identified and modeled during the 2019 resource work;
- Improve the understanding of the mineralization at Striker, Midfield, and Midfield North Zones;
- Build upon the previous geological interpretation; and
- Improve drill spacing to show continuity of mineralization and increase overall confidence in the deposit.

Completion of the updated Bayan Khundii Mineral Resource Estimate involved a database validation looking for errors, missing data, overlapping intervals, and subsequent generation of an updated geological model, updated structural control model, and an updated three-dimensional (3D) grade model. The Resource Estimate QP previously visited the property from May 6 to May 12 2019, and a subsequent site visit for the purposes of this mineral resource estimate update was deemed not necessary. The effective date of the Bayan Khundii Mineral Resource Estimate is June 17<sup>th</sup>, 2021.

Ordinary Kriging (OK) restricted to a mineralized domain was used to interpolate gold grades (g/t) into a block model. Measured, Indicated and Inferred Mineral resources are reported in summary tables in Section 4.7 The mineral estimate takes into consideration that the Striker, Midfield, and Midfield North zones will be mined by open pit mining methods.

### 4.3 Database

To complete the current Mineral Resource Estimate for Bayan Khundii, a database comprising a series of excel spreadsheets containing drill hole and trenching information was provided by Erdene to the Resource Estimate QP. The database includes hole and trench location information (UTM WGS 84, Zone 47N), survey data, assay data, lithology data, bulk density data, and structural data. The data was verified (Section 12) and then imported into Seequent Leapfrog Geo3D version 5.1.1 software ("Leapfrog") for geological modeling and the development of the grade wireframes. Numerical modeling was completed using Datamine Studio RM version 1.2.47.0. Overall, information for 350 drill holes and 23 trenches was provided to Tetra Tech. The particulars of the information provided to Tetra Tech are presented below in Table 4-1.

**Table 4-1: Bayan Khundii for Mineral Resource Estimate**

Type	Borehole and Trenching Records	Survey Records	Lithology Records	Assay Records	Bulk Density	Structural Records
Drill Hole	350	1,792	12,941	30,528	1,043	97,057
Trenches	23	29	0	724	0	0
Total	372	1,821	12,941	31,252	1,043	97,057

## 4.4 Specific Gravity

A specific gravity of 2.66 was used for the mineralization constrained wireframes based upon measurements collected by Erdene using the water displacement method. This method utilizes Archimedes’ principal, whereby selected drill core is first weighted in air, then immersed in water where its submerged weight is recorded. To accomplish these measurements, Erdene geologists or technicians would isolate intervals of drill core and weigh the dry core on the scale. Next, the core was suspended in water while attached to the underside of an electronic scale, and its weight in water was recorded. The resulting specific gravity of the sample is the ratio of its weight in air to the difference between its weight in air and its weight submersed in water in accordance with the following formula:

$$\text{Specific Gravity} = \text{Weight in Air} / [(\text{Weight in Air}) + (\text{Weight in Water})]$$

In addition to the mineralized tuff, specific gravity measurements were also collected for the surrounding waste rock and are summarized in Table 4-2.

**Table 4-2: Bayan Khundii Density Summary**

Rock Type	Number Samples	Minimum	Maximum	Range	Mean Bulk Density
Mineralized Tuff	763	1.8	5.47	3.67	2.66
Jurassic Sediment	54	2.32	2.79	0.47	2.58
Porphyry	142	1.78	3.74	1.96	2.59
Dacite Dyke	100	2.43	2.87	0.44	2.66

## 4.5 Geological and Resource Interpretation

### 4.5.1 Geological Interpretation

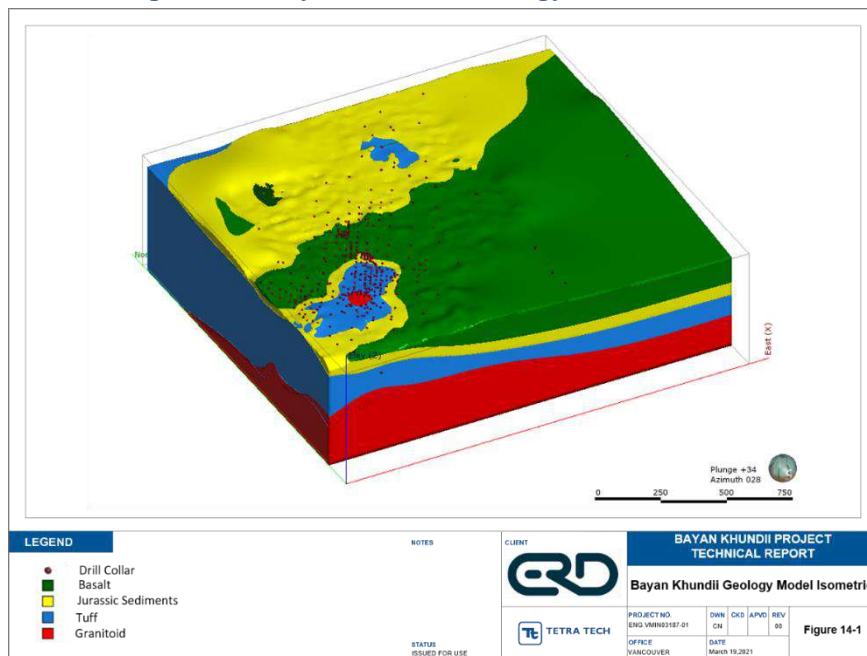
To model and geologically constrain the mineralization, a 3D geological model was constructed in Leapfrog Geo 3D prior to any resource interpretation.

Geologically, the low sulphidation gold mineralization observed at Bayan Khundii is hosted within a brittle faulted, quartz-illite altered Carboniferous tuffaceous units. This mineralization is constrained stratigraphically by a package

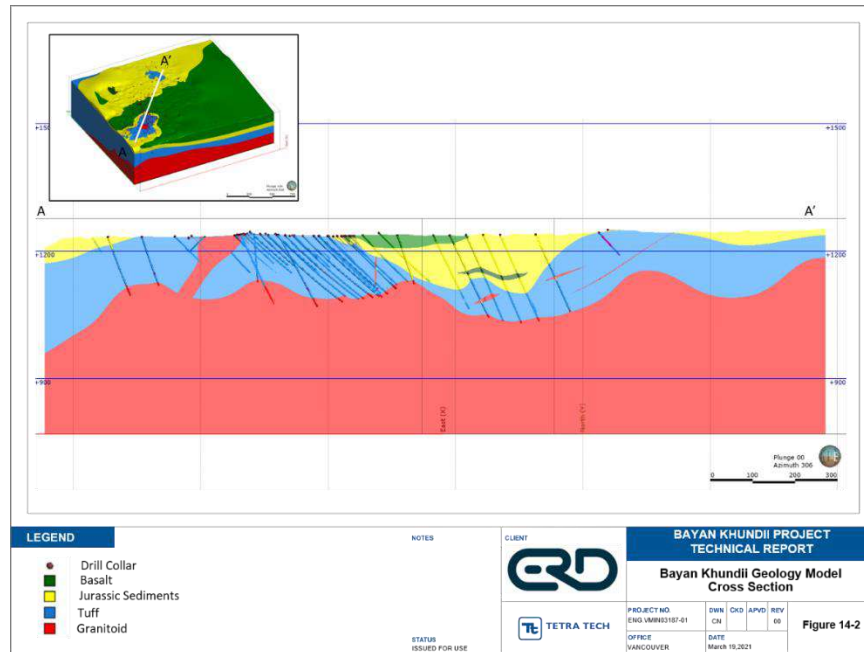
of Jurassic sediments (primarily conglomerates and sandstones) which unconformably overlay the mineralized tuff and contain localized intercalated basalt flows. At depth, mineralization is further constrained by a granitoid body which may represent a granitic laccolith. Finally, syenite and dacite dykes which range from centimetre to metre scale (modeled as “granitic dykes”) are observed cross-cutting the mineralized tuff.

An isometric view and cross section of the geology model is provided below in Figures 4-1 and 4-2 respectively.

**Figure 4-1: Bayan Khundii Geology Model Isometric**



**Figure 4-2: Bayan Khundii Geology Model Cross Section**



## 4.5.2 Structural Interpretation

As previously noted, Bayan Khundii gold mineralization is hosted within brittle tension fractures which formed approximately perpendicular to two north-east trending dip-slip style “zipper” faults. These mineralization-filled structures can be categorized into four distinct geospatial structural domains, with each domain representing a differentiated zone (Figure 4-3).

The Striker West Zone is the flattest dipping of the four zones, with long tabular lenses dipping approximately 30 degrees to the west south-west.

Located approximately 200 m to the east of Striker West, the Striker Zone is rotated slightly compared to Striker West, with the primary high-grade lode bearing structure dipping approximately 55 degrees to the south south-west. A second structure appears to splay obliquely off the main Striker lode which dips approximately 60 degrees to the south.

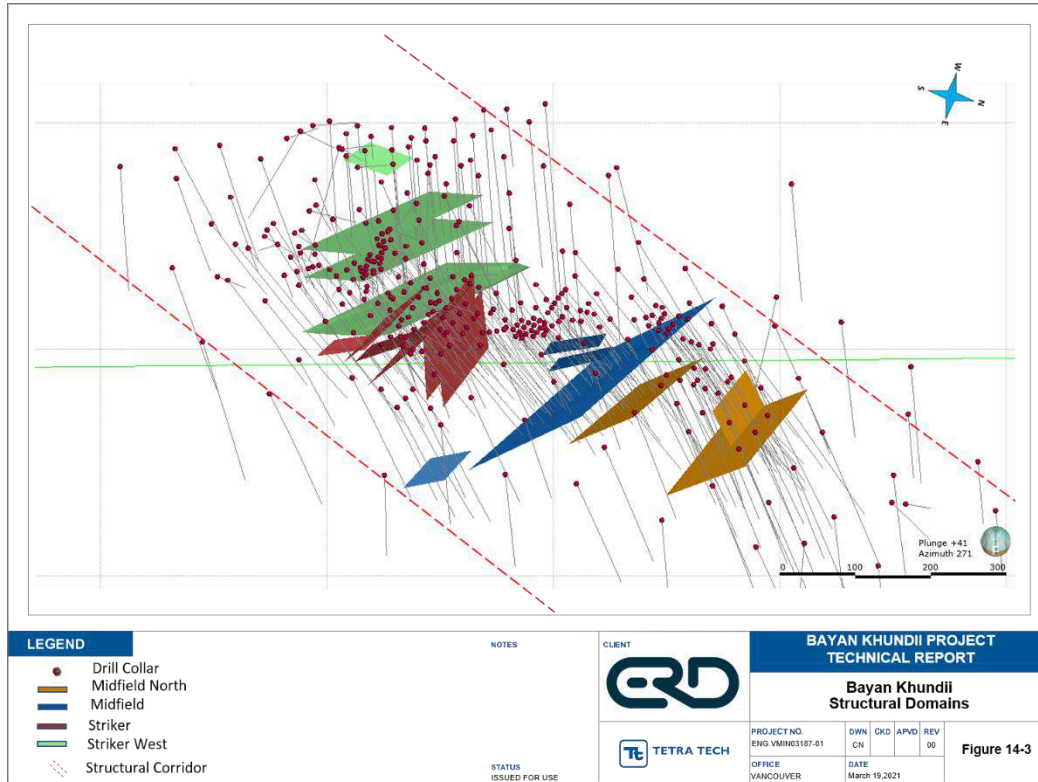
Approximately 200 m to the north-east of Striker, the Midfield primary high-grade lode is hosted within a structure with a primary dip of approximately 50 degrees to the south south-west. In the region separating the main Midfield and Striker structures, exists a likely mineralization filled conjugate fracture regime with host structures dipping approximately 55 degrees to the west south-west.

Finally, approximately 200 m from the Midfield structure is the Midfield North high-grade structure which dips approximately 45 degrees to the south south-west, with minor splays or bifurcations which dip approximately 50 degrees to the south-east. Structurally, it appears that Midfield North may be offset from Midfield by a north-east dipping graben, however, this hypothesis has not been fully tested given that most of the drill holes present in this region have been drilled sub-parallel to the potential fault plane.

Given the strong structural influence on mineralization, a structural model was developed in Leapfrog Geo3D to guide the interpretation of the mineralization solids. Structurally, 42 domains were interpreted within this mineralized corridor to result from varying stress fields generated from the deformational regime. These structural orientations

represent localized structural rotations, cross structures, and bifurcations across the four main zones and are presented below using planar surfaces for simple visualization in Figure 4-3 along with the two bounds of the structural corridor which hosts the Bayan Khundii mineralization.

**Figure 4-3: Bayan Khundii Structural Domains**



### 4.5.3 Mineral Resource Interpretation

Following the completion of the structural interpretation, mineralization domains were generated in Leapfrog Geo3D, using the geological model to constrain the mineralization to the appropriate lithology, and the structural model to inform the mineralization trends.

Three-dimensional gold mineralization interpretations were generated for a low-grade and high-grade domain using Leapfrogs RBF interpolant function. The low-grade domain was defined by gold mineralization occurring over a minimum of 1 m width with grades equal to or greater than 0.4 g/t Au. High grade domains were defined by hosting gold mineralization greater than 2 g/t over a minimum of 1 m. Figures 4-4 and 4-5 below presents an isometric and cross-sectional image of the mineralization model respectively for Bayan Khundii.

The zones of mineralization for each domain are generally contiguous however, due to the nature of the mineralization there are portions of the wireframes that have grades less than the assigned cut-off grade yet are still within the mineralizing trend.

All mineralized wireframes were trimmed to topography, the unconformity between the Carboniferous Tuff and Jurassic sediments, and the Granitoid intrusion in order to avoid over estimates of material (Figure 4-6).

Figure 4-4: Plan View Isometric of Mineralization Domains

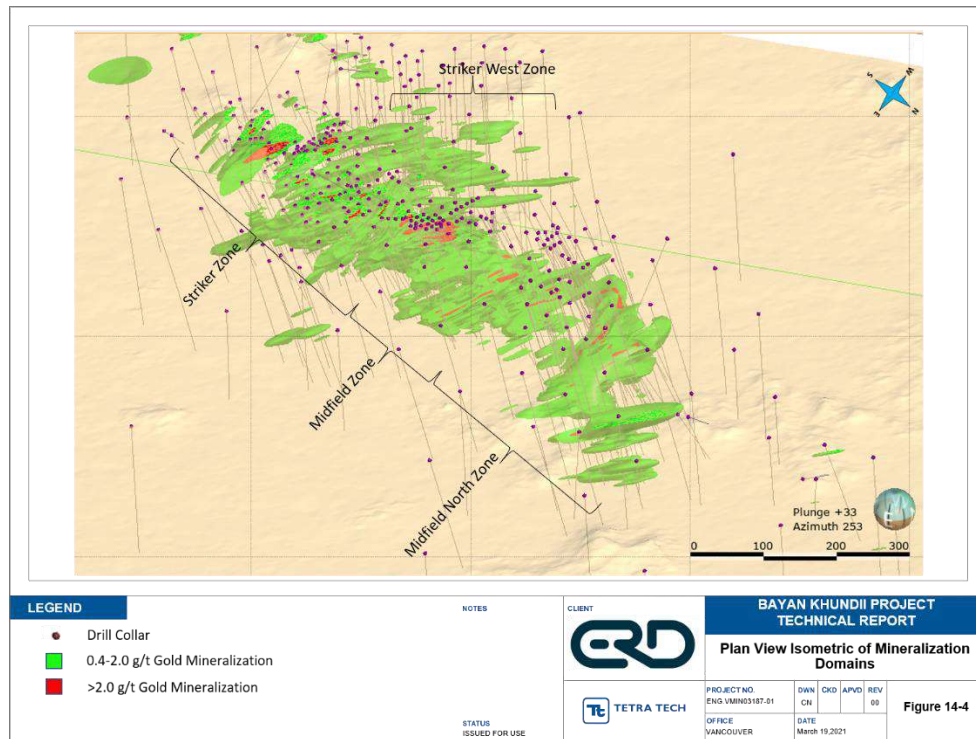
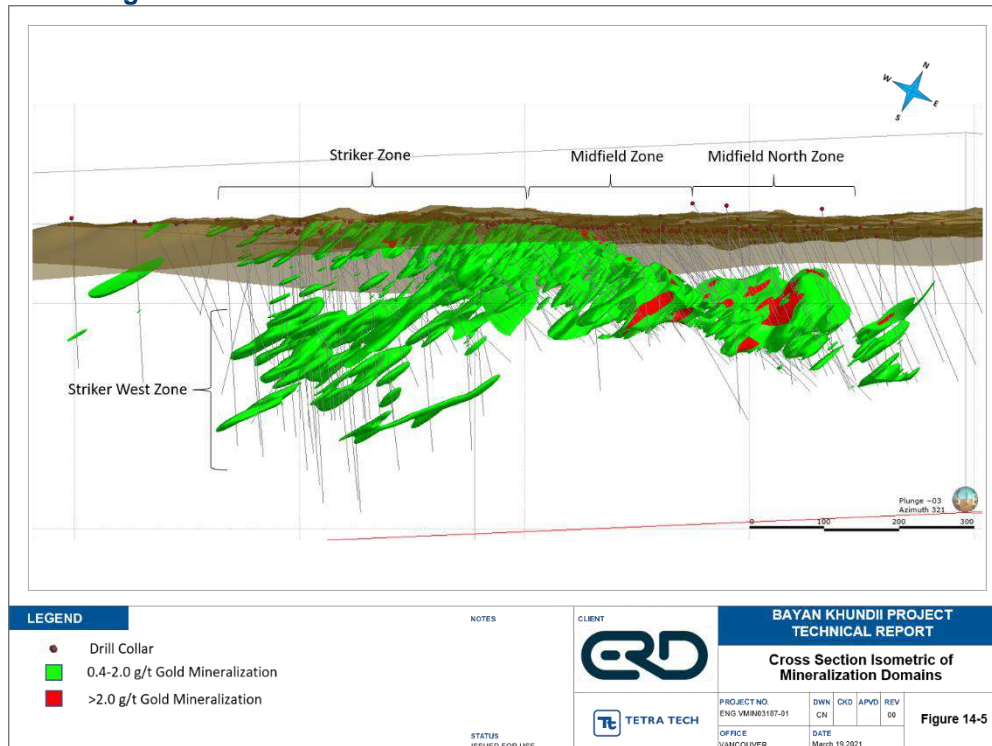
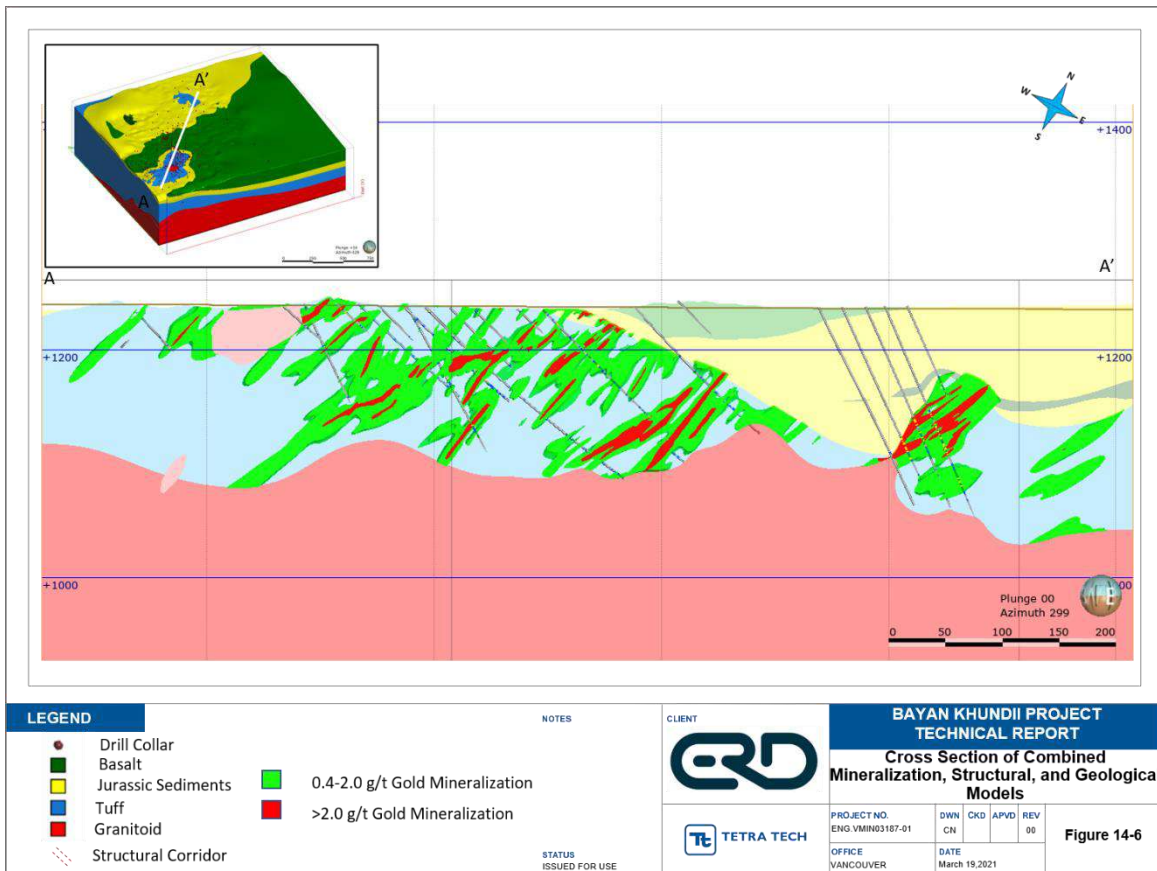


Figure 4-5: Cross Sectional Isometric of Mineralization Domains





**Figure 4-6: Cross Section of Combined Mineralization, Structural and Geological Models.**



## 4.6 Exploratory Data Analysis

Upon completion of the geological model, grade solids were imported into Datamine Studio RM version 1.2.47.0 where numerical modeling was undertaken. The sections below summarize details associated with the various aspects of the numerical modeling process.

### 4.6.1 Assays

The portion of the deposit included in the mineral resource estimate was sampled by a total of 8,255 gold assays. The assay intervals within each domain were captured using a Datamine macro into individual borehole files. These borehole files were reviewed to ensure all the proper assay intervals were captured. Table 4-3 summarizes the basic statistics for the assays in the various domain wireframes.

The non-assayed intervals were given zero a zero (0) value.

**Table 4-3: Bayan Khundii Mineral Domain Statistics**

Zone	Type	Num Samples	Min	Max	Mean	Coefficient of Variation	Standard Deviation	Skewness
Global Low Grade Domain	Au g/t	6,485	0.00	5.96	0.61	0.86	0.52	2.19
	length	6,485	0.01	5.75	1.03	0.33	0.34	1.45
Midfield North High Grade	Au g/t	354	0.06	2,200	15.69	7.54	118.39	17.78
	length	354	0.03	2.00	0.94	0.26	0.25	-0.65
Midfield High Grade	Au g/t	628	0.00	496.67	10.85	2.95	32.03	8.85
	length	628	0.00	2.00	0.93	0.28	0.26	-1.18
Striker High Grade	Au g/t	590	0.01	581.62	10.95	3.26	35.75	9.82
	length	590	0.02	1.98	0.98	0.32	0.31	0.54
Striker West High Grade	Au g/t	198	0.05	105.90	5.72	1.97	11.29	4.85
	Length	198	0.01	2.00	0.95	0.29	0.28	-0.40

#### 4.6.2 Compositing

Compositing of all assay data within the wireframes was completed at 1.0 m and 2.0 m intervals. The downhole intervals honoured the interpretation of the geological solids. The backstitching process was used in the compositing to ensure all captured sample material was included. The backstitching routine adjusts the composite lengths for each individual borehole in order to compensate for the last sample interval.

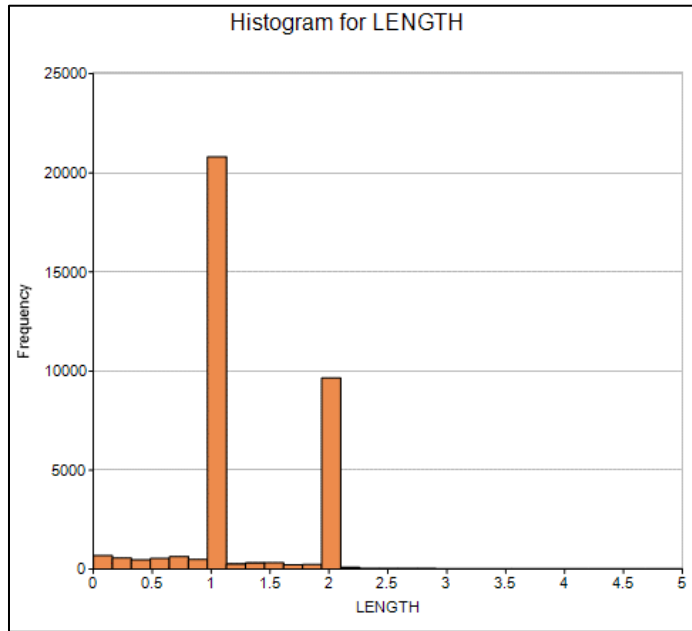
The 1.0 m composites were selected as the composite length to use in the estimate based on the drilling and in order to maintain the complex nature of the high-grade domains.

Table 4-4 summarizes the statistics for the boreholes after compositing. Figure 4-7 presents a histogram of the samples before compositing.

**Table 4-4: Bayan Khundii Composite Statistics**

Zone	Type	Num Samples	Min	Max	Mean	Coefficient of Variation	Standard Deviation	Skewness
Low Grade Domain	Au g/t	6,728	0.00	6.63	0.61	0.84	0.53	2.58
Midfield North HG	Au g/t	338	0.00	2,200	11.80	7.97	120.91	17.49
Midfield HG	Au g/t	584	0.05	372.97	9.69	2.94	28.53	8.24
Striker HG	Au g/t	576	0.01	581.63	10.21	3.36	34.32	10.90
Striker West HG	Au g/t	189	0.03	105.90	5.52	1.99	11.00	5.37
High Grade Combined	Au g/t	1,686	0.01	2,200	10.51	5.74	60.30	29.44

**Figure 4-7: Bayan Khundii Sample Length Histogram**



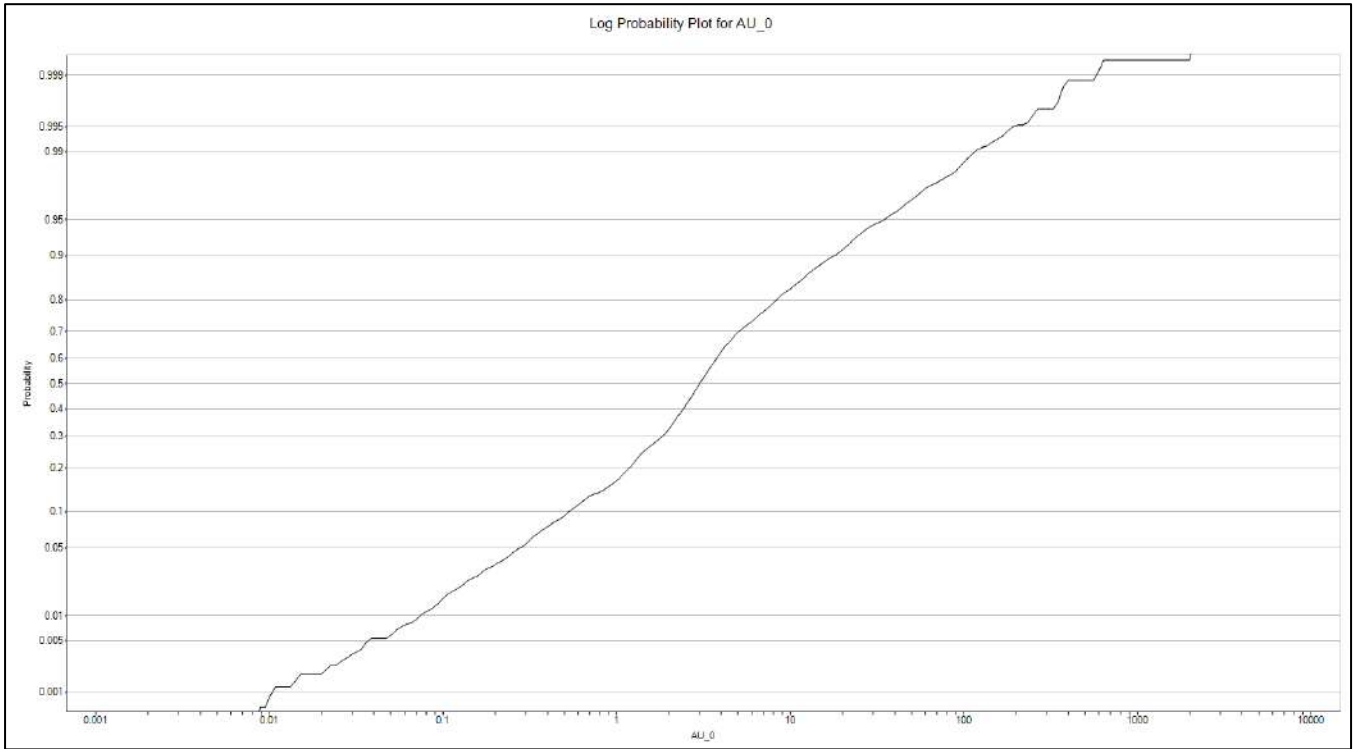
### 4.6.3 Capping Analysis

At Bayan Khundii all gold mineralization is interpreted to occur as a singular mineralizing event, with post mineralization faulting resulting in the separation of the zones. Therefore, the high-grade domains were analyzed as a singular domain when determining the amount of metal at risk from high-grade assays. The Datamine geostatistics module was used on the composited high-grade data to determine if grade capping was required. Capping was based on examination of the log probability plots and histograms for each metal and caps were applied where graphs showed significant outlier influence or deviation from the general trend-line. As observed in Figure 4-8, an inflection in the log probability plot is observed at 200 g/t Au. When further analyzed using a log histogram plot (Figure 4-9), a corresponding outliers also appear for gold assays above 200 g/t. As a result, a 200 g/t top cut was selected for the high-grade domains at bayan Khundii.

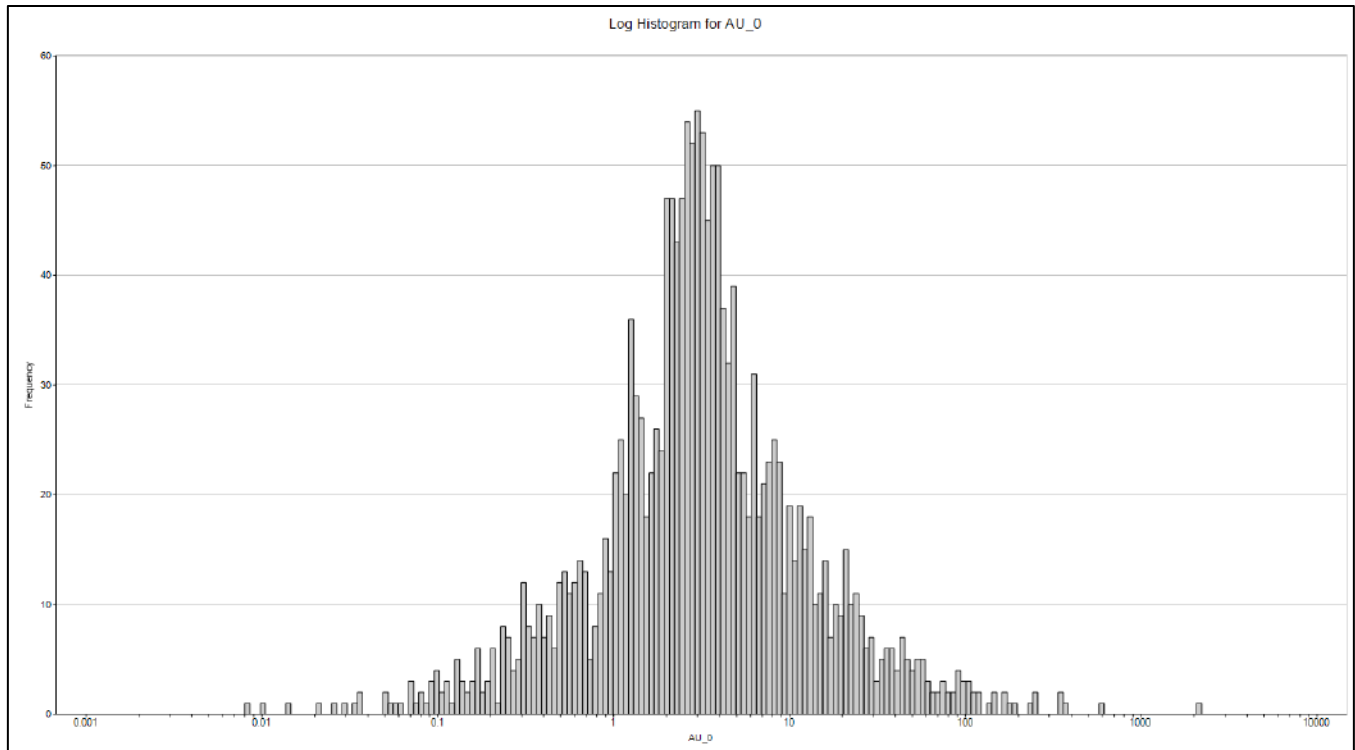
**Table 4-5: Bayan Khundii Capped Statistics**

Zone	Type	Num Samples	Min	Max	Mean	Coefficient of Variation	Standard Deviation	Skewness
Low Grade Domain	Au g/t	6,728	0.00	6.63	0.61	0.86	0.53	2.58
Midfield North HG	Au g/t	338	0.00	200	9.12	2.46	22.48	6.19
Midfield HG	Au g/t	584	0.05	200	9.09	2.45	22.28	5.74
Striker HG	Au g/t	576	0.01	200	9.23	2.45	22.63	5.71
Striker West HG	Au g/t	189	0.03	105.90	5.52	1.99	11.00	5.37
High Grade Combined	Au g/t	1,686	0.01	200	8.75	2.45	21.52	6.01

**Figure 4-8: Log Probability Plot For High Grade Mineralization**



**Figure 4-9: Log Histogram High Grade Domain**



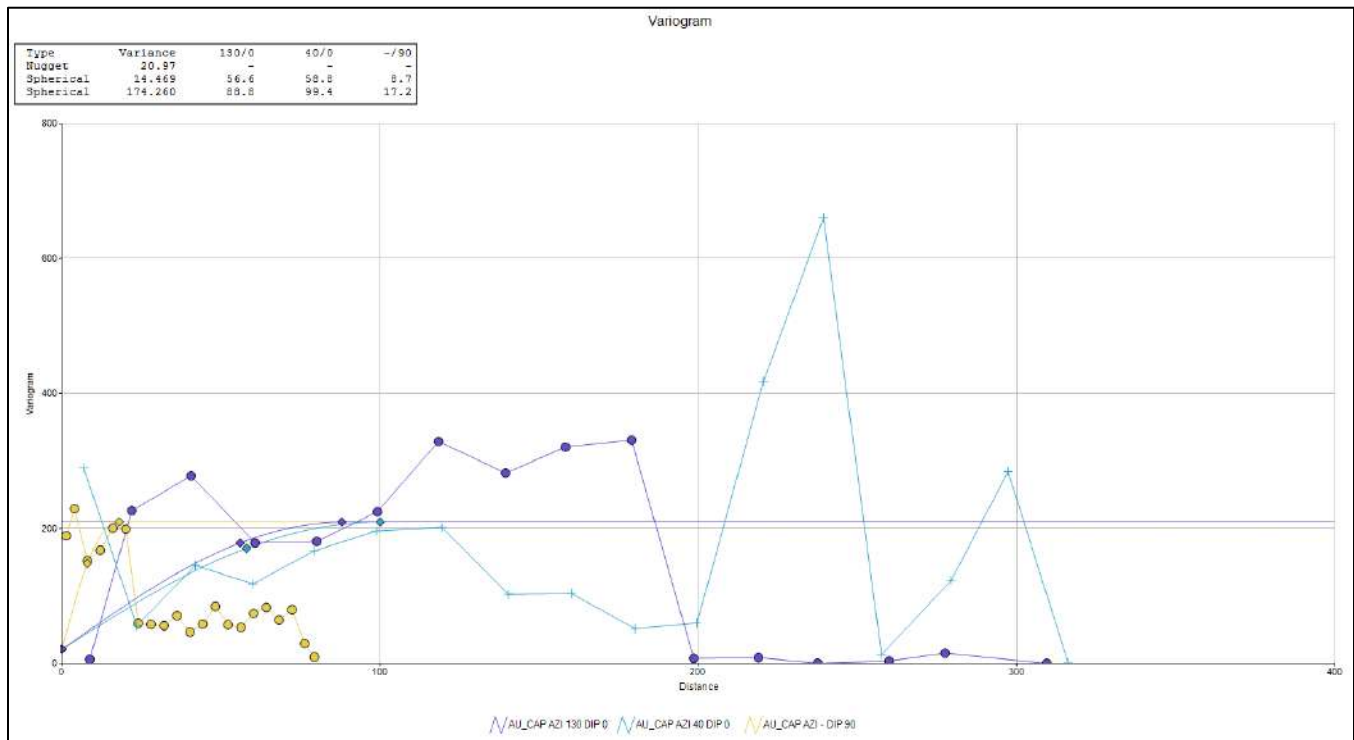
### 4.6.4 Variogram Assessment

Variography using Datamine software was completed for the combined high and low grade domains at Striker and applied to the Midfield, Midfield North, and Striker West zones. Downhole variograms were used to determine the nugget effect, then the variograms were modeled with two structures to determine spatial continuity in the zones. The results of the variography analysis are summarized below in Table 4-6, while Figure 4-10 presents the variograms for each the major, semi-major, and minor axes.

**Table 4-6: Bayan Khundii Variogram Summary**

VDESC	VANGLE1	VANGLE2	VANGLE3	VAXIS1	VAXIS2	VAXIS3	NUGGET
BK_Var	252	24	33	3	2	1	20.97
ST1PAR1	ST1PAR2	ST1PAR3	ST1PAR4	ST2PAR1	ST2PAR2	ST2PAR3	ST2PAR4
56.6	58.8	8.7	14.43	88.8	99.4	17.2	174.298

**Figure 4-10: Bayan Khundii Variogram Summary**



### 4.6.5 Resource Block Model

Individual block models were established in Datamine for the mineral wireframes using one parent model as the origin. The model was not rotated.

Drillhole spacing is typically quite tight, with drilling spaced along 10-75 m sections and at 10-100 m centers on section. Typically, within the center regions of the zones, drill hole spacing occurs at 10 m to 15 m centers.

A block size of 5 m by 5 m by 5 m was selected in order to accommodate the narrow nature of the high-grade mineralization, the tight drill spacing across the majority of the deposit, composite lengths, and the proposed mining method. Within the parent cells, 5 sub-cells were allowed in each direction to more accurately fill the volume of the wireframes and thereby more accurately estimate contacts and tonnage of each wireframe. Estimation of the blocks was completed on the parent blocks and the grades assigned to the sub-cell blocks.

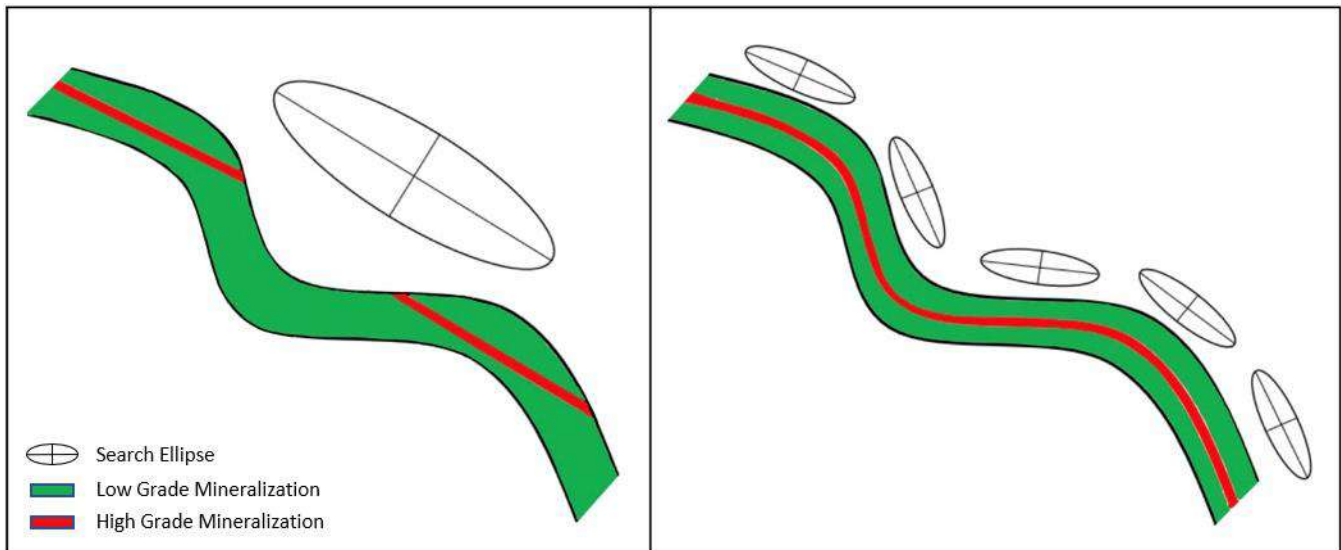
Upon completion of the block modelling, all zones were combined to form the composite Bayan Khundii block model.

### 4.6.6 Dynamic Anisotropy

Due to the local changes in zone orientations and local anastomosing nature of the wireframes a single search ellipse would not truly reflect the distribution of mineralization within the zones. To accommodate the changing orientation of the domains, dynamic anisotropy was utilized to better represent continuous mineralization within the mineralized structures.

Dynamic anisotropy is a function in Datamine RM that permits the search ellipse orientation to be continuously adjusted to match the tangent of the average orientation of the mineralized zone to mimic curvature or folding structures (Figure 4-11). This allows the search volume to be oriented to follow the trend of mineralization. The azimuth of the major and semi-major axes and the search dimensions remained unchanged within the search ellipse.

**Figure 4-11: Schematic of Dynamic Anisotropy (Red-High Grade Mineralization, Green-Low Grade Mineralization)**



#### 4.6.7 Estimation and Search Parameters

The interpolation plan of the Bayan Khundii resource estimation was completed using the following estimation methods: Nearest Neighbour (NN), Inverse Distance Squared (ID<sup>2</sup>) and Ordinary Krigging (OK). The estimations were designed as a three-pass system which were run independently within each individual wireframe using composite data constrained within the wireframe. In each pass, a minimum and maximum number of samples were required as well as a maximum number of samples from a borehole in order to satisfy the estimate criteria.

Table 4-7 below summarizes the interpolation criteria for the various mineral domains.

**Table 4-7: Bayan Khundii Estimation and Search Parameter Summary**

Pass Number	Resource Category	Domain	Search Distance			Rotation			Number of Composites		
			X	Y	Z	Z	X	Z	Min	Max	Max per Drillhole
Pass 1	Measured	HG	33	30	5	263	41	0	9	12	3
		LG	33	30	5	263	41	0	12	16	4
Pass 2	Indicated	HG	66	60	10	263	41	0	6	15	3
		LG	66	60	10	263	41	0	8	16	4
Pass 3	Inferred	HG	99	90	15	263	41	0	4	18	3
		LG	99	90	15	263	41	0	8	20	4

#### 4.7 Mineral Resource Statement

The general requirement that all mineral resources have “reasonable prospects for eventual economic extraction” implies that the quantity and grade estimates meet certain economic thresholds and that the mineral resources are reported at an appropriate cut-off grade, while accounting for possible extraction scenarios and processing recoveries. To meet this requirement, Tetra Tech considers the Bayan Khundii mineralization as a reasonable prospect for open pit extraction.

As a reasonable test for potential economic extraction, the block model was analyzed by, and constrained to, a conceptual pit shell generated in Datamine Studio OPT<sup>TM</sup> using the Lersch-Grossman algorithm for definition of the Mineral Resource Estimate.

In addition to the mineralization being constrained within a pit, the geological continuity of the zones, and the near surface nature of the mineralization has been assessed. A review of the metallurgical testing results also suggests reasonable processing recoveries can be achieved. Based on these considerations, the pit constrained mineralization presented in Table 4-8 is deemed to have reasonable prospects for eventual economic extraction.

The reader is cautioned that the results from the pit optimization are used solely for testing the “reasonable prospects for eventual economic extraction” by open pit and do not represent an attempt to estimate mineral reserves. The results are used as a guide to assist in the preparation of a mineral resource statement and to select

an appropriate resource reporting cut-off grade. A Mineral Reserve analysis and statement for the Bayan Khundii deposit is presented in section 15 of this report.

#### **4.7.1 Mineral Resource Classification Parameters**

The updated mineral resource estimate presented in this Technical Report were prepared and disclosed in compliance with all disclosure requirements for mineral resources set out in the NI 43-101 Standards of Disclosure for Mineral Projects (2011). The classification of the mineral resource is consistent with CIM Definition Standards - For Mineral Resources and Mineral Reserves (2014), including the critical requirement that all mineral resources “have reasonable prospects for eventual economic extraction”.

A Mineral Resource is a concentration or occurrence of solid material of economic interest in or on the Earth’s crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction.

The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling.

Several factors are considered in the definition of a resource classification:

- NI 43-101 requirements;
- Canadian Institute for Mining, Metallurgy and Petroleum (CIM) Guidelines;
- Authors’ experience with low sulphidation epithermal gold deposits;
- Spatial continuity based on variography of the assays within the drillholes;
- Borehole spacing and estimate runs required to estimate the grades in a block;
- Observed mineralization on surface;
- The confidence with the dataset based on the results of the validation; and
- The number of samples and boreholes used in each of the block estimations.

The confidence classification of the resource (Measured, Indicated, and Inferred) is based on an understanding of geological controls of the mineralization and the drill hole pierce point spacing in the resource area. Blocks were classified as Measured, Indicated, or Inferred if they were populated with grade during pass 1, pass 2, or pass 3 respectively during the interpolation process (Table 4-7).

#### **Description of Classifications**

##### ***Measured Mineral Resource***

A ‘Measured Mineral Resource’ is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit.

The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.



Mineralization or other natural material of economic interest may be classified as a Measured Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such that the tonnage and grade of the mineralization can be estimated to within close limits and that variation from the estimate would not significantly affect potential economic viability.

This category requires a high level of confidence in, and understanding of, the geology and controls of the mineral deposit.

### ***Indicated Mineral Resource***

An 'Indicated Mineral Resource' is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation.

An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Mineral Reserve.

Mineralization may be classified as an Indicated Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such as to allow confident interpretation of the geological framework and to reasonably assume the continuity of mineralization. The Qualified Person must recognize the importance of the Indicated Mineral Resource category to the advancement of the feasibility of the project. An Indicated Mineral Resource estimate is of sufficient quality to support a Preliminary Feasibility Study which can serve as the basis for major development decisions.

### ***Inferred Mineral Resource***

An 'Inferred Mineral Resource' is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity.

An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

An Inferred Mineral Resource is based on limited information and sampling gathered through appropriate sampling techniques from locations such as outcrops, trenches, pits, workings and drill holes. Inferred Mineral Resources must not be included in the economic analysis, production schedules, or estimated mine life in publicly disclosed Pre-Feasibility or Feasibility Studies, or in the Life of Mine plans and cash flow models of developed mines. Inferred Mineral Resources can only be used in economic studies as provided under NI 43-101.

There may be circumstances, where appropriate sampling, testing, and other measurements are sufficient to demonstrate data integrity, geological and grade/quality continuity of a Measured or Indicated Mineral Resource, however, quality assurance and quality control, or other information may not meet all industry norms for the disclosure of an Indicated or Measured Mineral Resource. Under these circumstances, it may be reasonable for the Qualified Person to report an Inferred Mineral Resource if the Qualified Person has taken steps to verify the information meets the requirements of an Inferred Mineral Resource.

## 4.7.2 Mineral Resource Tabulation

The resource reported as of June 17, 2021, has been tabulated in terms of a gold cut-off grade and has been rounded to the nearest thousand tonnes due to the nature of the precision of the block model.

The Bayan Khundii Mineral Resource Estimate has been constrained to a preliminary pit shell developed using the Lerchs Grossman algorithm in Whittle™ using parameters outlined below to constrain blocks which are considered reasonable prospects for eventual economic extraction. Table 4-8 presents the Mineral Resource Estimate and Figure 4-12 shows the blocks forming the Mineral Resource Estimate within the constraining conceptual pit.

No environmental, permitting, legal, title, taxation, socio-economic, marketing or other relevant issues are known to Tetra Tech that may affect the estimate of the mineral resources. Mineral reserves can only be estimated on the basis of economic evaluation that is used in a preliminary feasibility study or a feasibility study of a mineral project. As per NI 43-101, mineral resources, which are not mineral reserves, do not have to demonstrate economic viability.

**Table 4-8: Mineral Resource Estimate for Bayan Khundii, Effective June 17,2021**

Cut-off Grade ( <sup>1</sup> )	Resource Classification	Quantity (tonnes)	Grade	Gold
			Au g/t	oz
0.4	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
0.55	Measured	2,221,000	3.08	220,200
	Indicated	3,885,000	2.65	331,100
	<b>Measured &amp; Indicated</b>	<b>6,105,00</b>	<b>2.81</b>	<b>551,400</b>
	Inferred	375,000	2.80	33,800
1	Measured	727,000	7.96	186,100
	Indicated	1,454,000	5.91	276,100
	<b>Measured &amp; Indicated</b>	<b>2,181,000</b>	<b>6.59</b>	<b>462,200</b>
	Inferred	133,000	6.68	28,500
1.4	Measured	628,000	9.04	182,600
	Indicated	1,282,000	6.55	269,900
	<b>Measured &amp; Indicated</b>	<b>1,911,000</b>	<b>7.37</b>	<b>452,500</b>
	Inferred	121,000	7.22	28,100

Notes:

- 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%.
- Bulk density of 2.66 for mineralized domains.
- Numbers may not add exactly due to rounding.
- Conforms to NI 43-101, Companion Policy 43-101CP, and the CIM Definition Standards for Mineral Resources and Mineral Reserves.

- 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.

### **4.7.3 Selection of Reportable Cut-off Grade**

The tabulated resource is reported at a 0.40 g/t Au cut-off grade and is based upon the following assumptions:

- Price of gold: \$1,600 / ounce
- Mining costs: \$3.0 / tonne
- Milling and G&A costs: \$16 / tonne
- Gold Recovery: 95%

Additionally, the mineralization was constrained within a pit shell in order to further facilitate identifying mineralization which contains reasonable prospects for eventual economic extraction at the reported cut-off grade.

The reader is cautioned that the results from the pit optimization are used solely for testing the “reasonable prospects for eventual economic extraction” by open pit and do not represent an attempt to estimate mineral reserves. The results are used as a guide to assist in the preparation of a mineral resource statement and to select an appropriate resource reporting cut-off grade.

### **4.7.4 Model Validation**

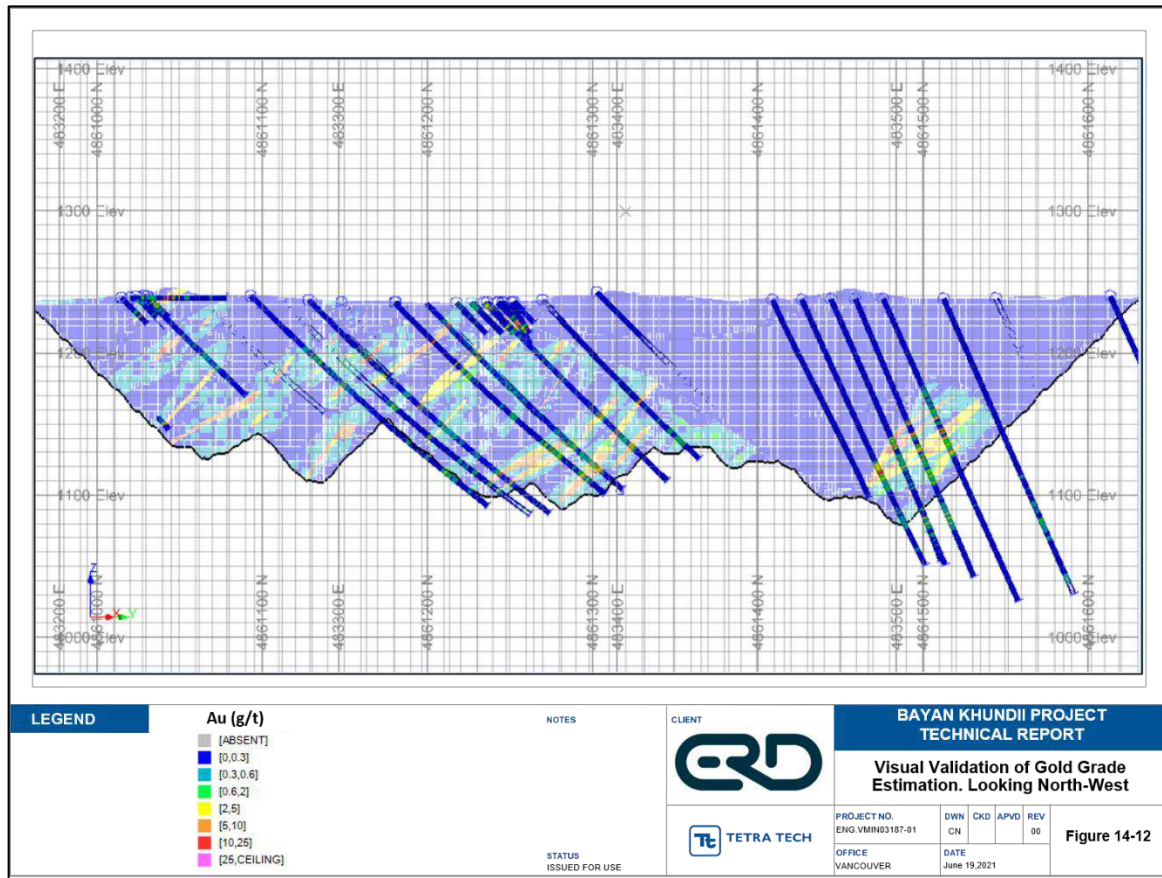
The Bayan Khundii model was validated by the following three methods:

- Visual comparison of colour-coded block model grades with composite grades on section and plan;
- Comparison of the global mean block grades for NN, ID2, OK, and composites; and
- Swath plots in both plan and sectional views.

#### **4.7.4.1 Visual Validation**

The visual comparison of block model grades against composite sample grade shows a strong correlation between the values. No significant discrepancies were apparent between the sections and the plans reviewed, yet some grade smoothing is apparent (Figure 4-12).

Figure 4-12: Bayan Khundii Visual Validation



#### 4.7.4.2 Global Comparison

The global block model statistics for the OK model were compared to the global NN and ID<sup>2</sup> values as well as the composite capped data. Table 4-9 shows this comparison of the global estimates for the three estimation calculations. In general, there is agreement between the NN, ID<sup>2</sup>, and Ok models. Larger discrepancies are reflected as a result of sample clustering or lower drill density in some portions of the model. There is a degree of smoothing apparent with comparison between statistics of block model grades to the assay composite grades. Comparisons were made using all blocks at a 0 g/t Au cut-off.

Table 4-9: Global Estimate Comparisons

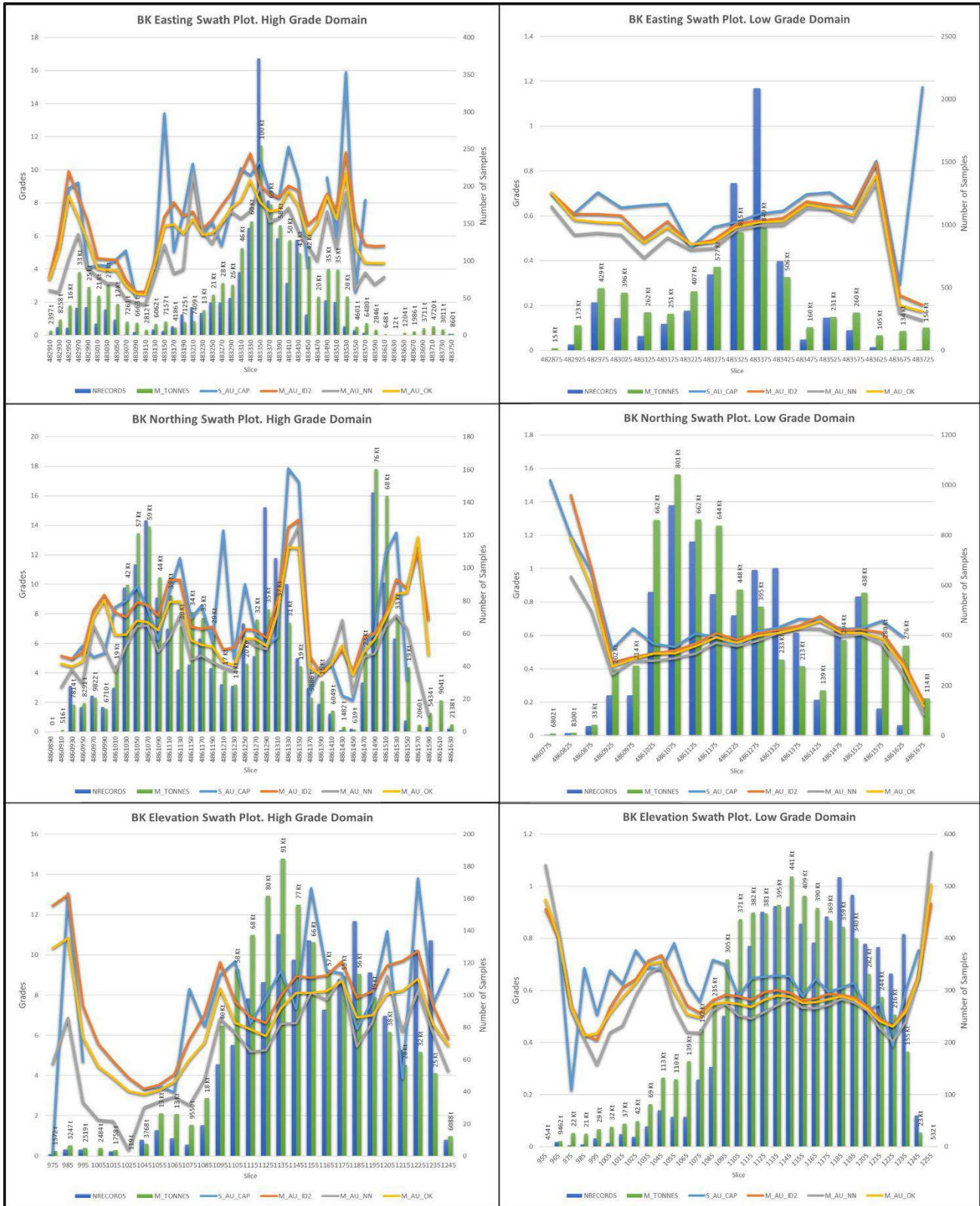
Grade Shell Domain	DDH Au Capped Values (g/t)	Au NN (g/t)	Au ID <sup>2</sup> (g/t)	Au OK (g/t)
Low Grade	0.61	0.46	0.51	0.49
High Grade	8.75	6.06	7.71	6.84

#### **4.7.4.3 Swath Plots Comparison**

Swath plots provide a qualitative method to observe preservation of the input composite grade trends on a spatial basis in the block model results. The data is plotted with average values along discrete intervals along the Cartesian X, Y and Z axis (i.e., easting, northing, and elevation). Input sample data used for these swath plots is composited and capped, resulting in a slightly smoother trend than raw data. However, the sample data can be clustered and may misrepresent areas of high-grade mineralization that have been oversampled. The block data is based on the composited and capped data and can also appear clustered due to the creation of sub-blocks. Both datasets have been constrained to the geological and grade shell models.

Swath plots for the low-grade domain show excellent correlation between the NN, ID2, OK estimated models, with all three methods showing only minor smoothing in comparison to the average capped and composited drill hole grades shown for each section. The greatest deviations between the estimation grade and drill hole grade correlation can be attributed to a decrease in the number of sample records for a region. The high-grade domains also show good correlation between NN, ID2, and OK estimation methods, however, to a lesser extent when compared to the low-grade estimation. A greater smoothing of grades is also observed when the estimation methods are compared to the average capped and composited drill hole grades for each section. This difference in performance is attributed to the higher-grade domain containing a smaller number of records (or assays) when compared to the lower grade domain. Further, the higher-grade domain contains a greater degree of grade variability between samples, and therefore, increased smoothing of the drill data will be observed depending on the estimation process. Swath plots for the Bayan Khundii resource estimate are presented below in Figure 4-13.

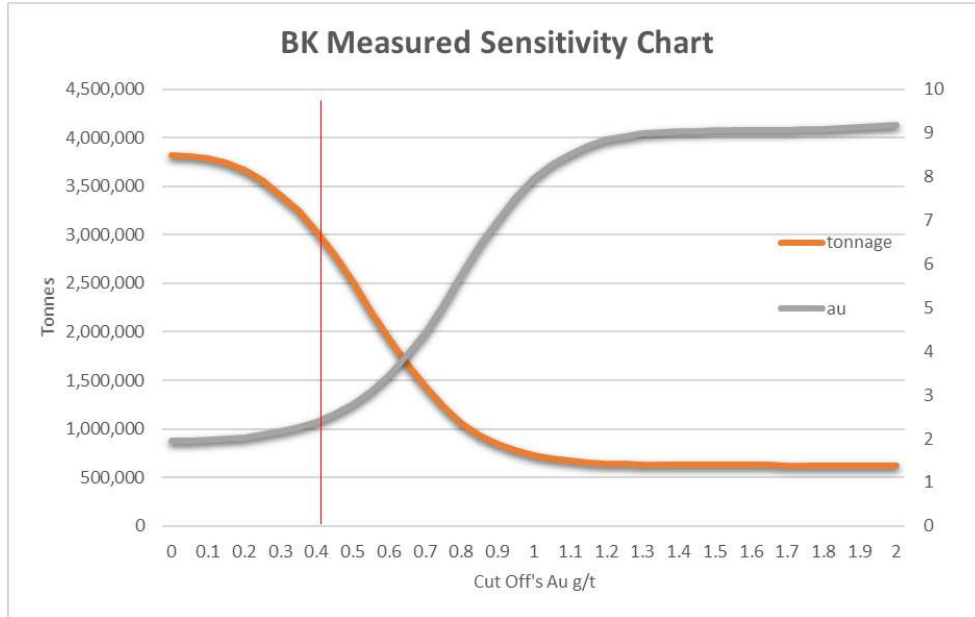
Figure 4-13: Bayan Khundii Swath Plots



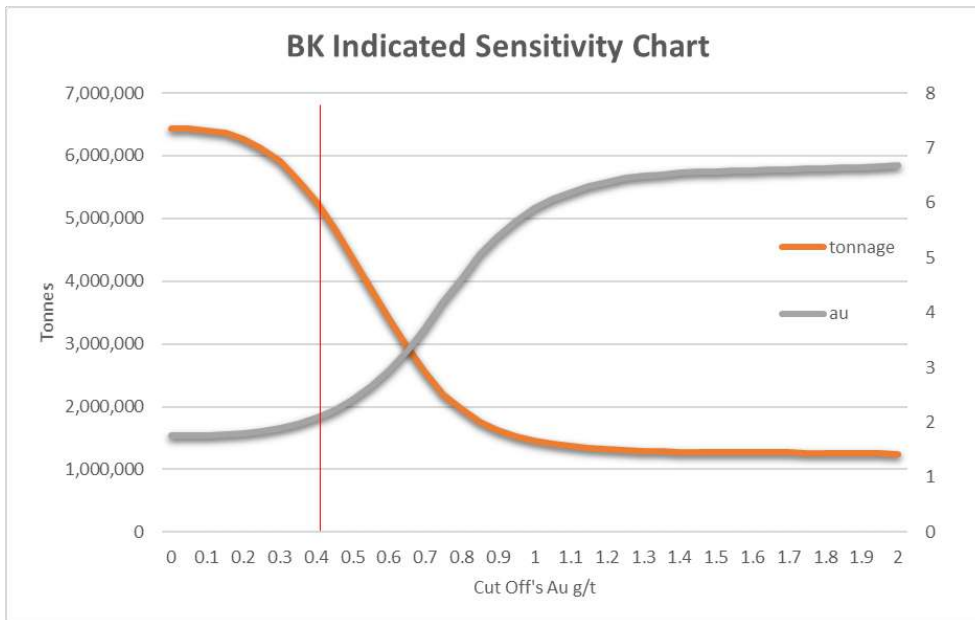
### 4.7.5 Grade Tonnage Curves

Figures 4-14 through 4-16 shows the grade-tonnage curves for the Bayan Khundii block model. The current mineral resources are reported at a 0.40 g/t Au cut-off which is represented by the red line in the figures below.

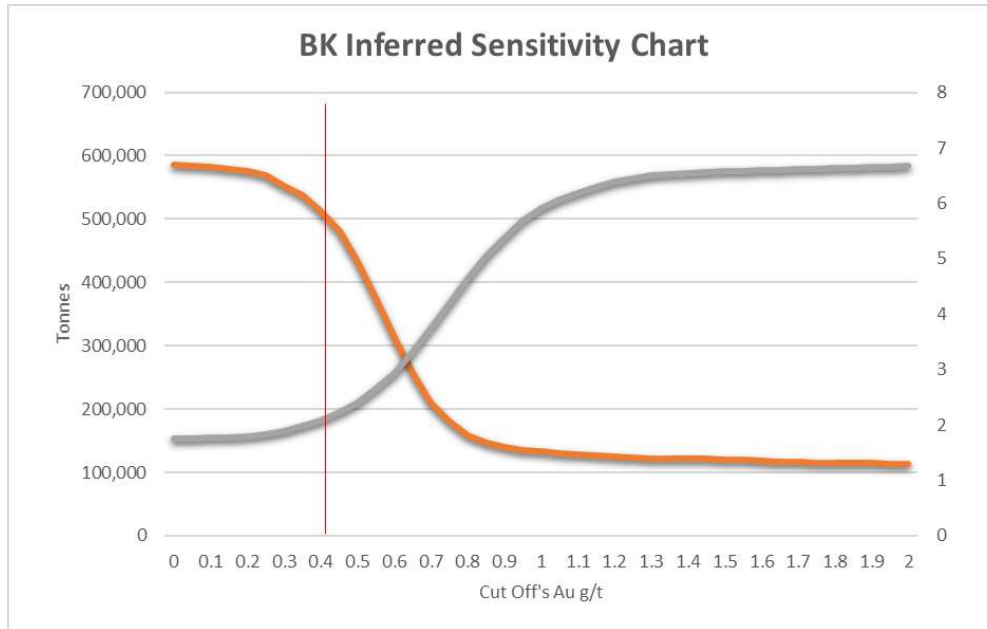
**Figure 4-14: Bayan Khundii Measured Grade-Tonnage Sensitivity Curve**



**Figure 4-15: Bayan Khundii Indicated Grade-Tonnage Sensitivity Curve**



**Figure 4-16: Bayan Khundii Indicated Grade-Tonnage Sensitivity Curve**



## 4.7.6 Comparison to Previous Mineral Resource Estimate

### 4.7.6.1 Comparison to Previous Mineral Resource Estimate Constrained to Reasonable Prospects Pit

A comparison of the current Bayan Khundii Deposit updated Mineral Resource Estimate (2021MRE) and the 2019 Mineral Resource Estimate (2019MRE) constrained to the reasonable prospects pit (RPP) has been undertaken to evaluate the overall impact of the additional drilling and other modifying factors which were amended between the 2019 MRE and 2021 updated MRE. A summary of comparison for MRE parameters and assumptions is presented in Table 4-10.

**Table 4-10: Mineral Resource Estimation Parameters, 2019 and 2021**

MRE Parameter	2019	2021
Cut-off Grade (g/t Au)	0.55	0.40
Price of Gold (\$/oz)	\$1,350	\$1,600
Mining Cost (\$/ tonne)	\$3.0	\$3.0
Capping (g/t)	250 <sup>(1)</sup>	200
Milling and G&A Costs	\$16	\$16
Gold Recovery	95%	95%
Number of drill holes and trenches	278	372
Number of Assays	6,933	8,255
Bulk Density	2.66	2.66
Effective Date	October 1 <sup>st</sup> , 2019	June 17,2021



1. *Midfield Zone capped at 250 g/t Au.*

A comparison of the current Bayan Khundii Deposit updated Mineral Resource Estimate and the 2019 Mineral Resource Estimate is presented in Table 4-11. The 2019 mineral resource estimate for Bayan Khundii has been superseded by the 2021 mineral resource estimate.

The increase in gold ounces along with the higher level of confidence in the mineral resource estimate is the result of additional diamond drilling with an additional focus on expanding the mineralization at Striker West, and identifying additional near surface gold mineralization at Striker, Midfield and Midfield North. The drilling at Striker West was successful in identifying additional gold mineralization at depth and allowing for more detailed structural interpretations to be generated within this region. At Midfield, additional near surface gold mineralization was identified, and at Midfield North, the additional drilling allowed for the localized extension of the modeled mineralized domains. Additionally, the reported increase in gold ounces can, in part, be attributed to an increase in gold prices from 2019 to 2021. The 2021 MRE contains 61,700 more ounces gold (36%) in the Measured category, 2,700 more ounces of gold (1%) in the Indicated category and 66,900 fewer ounces of gold (65%) in the Inferred category which does not represent an overall material change to the project.

**Table 4-11: Comparison of the 2021 and 2019 Bayan Khundii Deposit Mineral Resource Estimates, Constrained to Reasonable Prospect Open Pit**

Class	Constrained by	Au Cut-off	Tonnes	Au g/t	Au
<b>2021 Measured</b>	<b>Reasonable Prospect Pit</b>	<b>0.40 g/t</b>	<b>3,031,000</b>	<b>2.39</b>	<b>232,700</b>
2019 Measured	Reasonable Prospect Pit	0.55 g/t	1,410,000	3.77	171,000
<b>2021 Indicated</b>	<b>Reasonable Prospect Pit</b>	<b>0.40 g/t</b>	<b>5,269,000</b>	<b>2.08</b>	<b>352,400</b>
2019 Indicated	Reasonable Prospect Pit	0.55 g/t	3,710,000	2.93	349,700
<b>2021 Inferred</b>	<b>Reasonable Prospect Pit</b>	<b>0.40 g/t</b>	<b>512,000</b>	<b>2.18</b>	<b>35,900</b>
2019 Inferred	Reasonable Prospect Pit	0.55 g/t	868,000	3.68	102,800

1. The 2021 and 2019 mineral resource estimate have utilized different input parameters and have been reported at different cut-off grades based upon changes in market prices. The 2019 mineral resource estimate for Bayan Khundii has been superseded by the 2021 mineral resource estimate, and as such, should no longer be relied upon.

**4.7.6.2 Comparison to Previous Mineral Resource Estimate Constrained to Feasibility Pit**

A FS level engineering design for the open pit was completed in July 2020. This pit was applied to the 2019 MRE and reported on in the Bayan Khundii Feasibility Study Technical Report. A summary of FS Ultimate Open Pit Design parameters is included in Table 4.12.

**Table 4-12: Bayan Khundii Deposit FS Ultimate Open Pit Design Values, (July 2020)**

Description	Unit	FS Ultimate Open Pit Design Value
Avg. Mining Cost	US\$/t mined	3.17
Variable Base Mining Cost	US\$/t mined	2.2
Fixed Base Mining Cost	US\$/t mined	0.78
Total Base Mining Cost	US\$/t mined	2.98
Incremental Mining Cost per	US\$/t mined per 5 m	0.021
Avg. Mining Cost	US\$/t mined	3.17
Ave. Processing Cost	US\$/t plant feed	19.49
Recovery _ Au 0 - 0.36	%	230.61*Au
Recovery _ Au 0.36 - 1.19	%	13.32* Au + 76.052
Recovery _ Au 1.19 -21.9	%	0.324* Au + 91.856
Recovery _ Au>21.9	%	99
Throughput Year 1	Plant feed t/year	450,000
Throughput Year 2 onwards	Plant feed t/year	600,000
Gold Price	US\$/oz	1,307
Discount rate (optimization)	%	10
Smelting recovery	%	99.85
Smelting cost	US\$/oz	4.71
Processing Overhead	US\$/oz	115.88
Site General and	US\$/oz	40.47
Royalties	US\$/oz	78.15

A comparison of the Bayan Khundii Deposit updated Mineral Resource Estimate and the 2019 Mineral Resource Estimate for resources constrained to the feasibility pit is presented in Table 4-13. The resources reported in in Table 4-13 are not mineral reserves, and as such, have not been tested for economic viability.

When constrained to the 2020 Feasibility Study Open Pit, the 2021 MRE contains 47,500 more ounces gold (28%) in the Measured category, 42,100 fewer ounces of gold (16%) in the Indicated category and 23,100 fewer ounces of gold (65%) in the Inferred category.

**Table 4-13: Comparison of the 2021 and 2019 Bayan Khundii Deposit Mineral Resource Estimates Constrained to Feasibility Pit**

<b>Class</b>	<b>Constrained by</b>	<b>Au Cut-off</b>	<b>Tonnes</b>	<b>Au g/t</b>	<b>Au Ounces</b>
<b>2021 Measured</b>	<b>2020 FS Pit</b>	<b>0.40 g/t</b>	<b>2,644,000</b>	<b>2.55</b>	<b>216,600</b>
2019 Measured	2020 FS Pit	0.55 g/t	1,354,000	3.89	169,100
<b>2021 Indicated</b>	<b>2020 FS Pit</b>	<b>0.40 g/t</b>	<b>2,621,000</b>	<b>2.59</b>	<b>218,400</b>
2019 Indicated	2020 FS Pit	0.55 g/t	2,596,000	3.12	260,500
<b>2021 Inferred</b>	<b>2020 FS Pit</b>	<b>0.40 g/t</b>	<b>157,000</b>	<b>2.48</b>	<b>12,500</b>
2019 Inferred	2020 FS Pit	0.55 g/t	335,000	3.30	35,600

1. The 2021 and 2019 mineral resource estimate have utilized different input parameters and have been reported at different cut-off grades based upon changes in market prices. The 2019 mineral resource estimate for Bayan Khundii has been superseded by the 2021 mineral resource estimate, and as such, should no longer be relied upon.