

ERDENE EXTENDS DARK HORSE DISCOVERY TO THE SOUTH WITH NEAR SURFACE INTERSECTION OF 35M OF 2.7 G/T GOLD INCLUDING 12M OF 5.1 G/T GOLD

Press Release Halifax, Nova Scotia 2021.04.22

Erdene Resource Development Corporation (TSX:ERD | MSE:ERDN) ("Erdene" or the "Company") is pleased to report initial assay results from the current exploration drill program confirming the southern extension of the Dark Horse Mane gold prospect.

Highlights¹(See the attached maps and images for reference):

- Exploration drilling continues to expand zones of mineralization within the 30 square-kilometre Ulaan-Khundii prospect area
- Recent drilling extended the near-surface, high-grade gold zone at the southern end of Dark Horse Mane prospect, located 3 kilometres north of the Bayan Khundii gold deposit
 - AAD-81 returned 35 metres of 2.67 g/t gold beginning 4 metres from surface
 - Includes 12 metres of 5.1 g/t gold, including 1-metre intervals of 14 and 19.1 g/t gold
 - Mineralization remains open to the south, with assay results pending for holes located approximately 100 meters to the south (AAD-84)
 - AAD-79 intersected 4 metres of 3.2 g/t gold and 22 g/t silver
 - All 10 holes returned significant zones of anomalous gold and/or indicator mineral elements, helping to refine the geological model and future targeting
- The current 37-hole drilling program, totalling 3,757 metres, was concluded on April 20
 - Results are pending for 27 holes (over 2,610 metres) from the Dark Horse Mane and surrounding prospects
 - Next phase of exploration is expected to commence in late Q2 2021

Quotes from the Company:

"The intersection of 35 metres of 2.67 g/t gold in AAD-81, starting almost at surface, complimenting the significant gold mineralization in drilling to date, demonstrates the prospectivity of the large Ulaan-Khundii alteration system," said Peter Akerley, Erdene's President and CEO. "The intersection in AAD-81 also confirms the southern extension of the Dark Horse Mane prospect, illustrating the potential scale of this newly discovered

¹ Reported intervals in this release are downhole apparent widths. Continued exploration is required to confirm anisotropy of mineralization and true thicknesses.



system. We are looking forward to receiving the remaining results from this program later in the quarter."

"Results from this drilling, as well as recently completed geophysical, surface mapping, spectral analysis and other technical programs continue to improve our geologic understanding of the larger Ulaan-Khundii alteration system," continued Mr. Akerley. "We plan to commence additional drilling in late Q2 to further define the controls on the gold mineralization in this large system."

Q2 Dark Horse Drill Program Summary

The Q2 drill program at the Dark Horse prospect was completed on April 20. In all, 37 holes were drilled, totalling 3,757 metres. The program was designed to achieve several objectives. The first was to test the near-surface expression of the gold mineralization previously intersected along the 1.4-kilometre long NS structural feature (now referred to as the Dark Horse Mane prospect). Drill holes were spaced 50 to 100 metres apart between and in the vicinity of AAD-57, AAD-58 and AAD-61. The second objective was to test other structural features within the larger Ulaan-Khundii prospect area with associated anomalous gold, and other indicator elements, identified by soil and rock geochemical surveys.

Assay results have been received for 10 holes, totalling 1,072 metres, drilled over a 300 metre swath within the southern portion of the north-south Dark Horse Mane prospect area. Results for the remaining 27 holes are expected to be received during the second half of Q2 2021. Highlights from the recently received assays are included in Table 1 below with complete 2021 Dark Horse Mane results included as Table 2 below.

Hole	From	То	Interval ⁽¹⁾	g/t Au ⁽²⁾
AAD-79	31	39	8	1.81
Incl	32	36	4	3.23
AAD-81	4	39	35	2.65
Incl	5	17	12	5.10
Incl	5	6	1	19.11
Incl	12	13	1	14.04

Table 1 - Dark Horse Mane (South) Phase I Drilling Highlights

¹ Reported intervals are apparent thicknesses (i.e., downhole widths). Insufficient drilling has been completed at Dark Horse to determine orientation of the mineralized zones and therefore true widths cannot be determined at this time. Exploration drill holes are typically oriented normal to (at a right angle to) the trend of potential mineralized targets and holes dips range from 45 to 75 degrees.

² Reported grades for intervals are weighted averages based on length of sampling intervals, typically 1 to 2 metres. No top cut has been applied; however, intervals greater than 10 g/t gold are reported separately for clarity.

Hole AAD-81 returned the highest grade mineralization from the recently received assays. This hole was drilled toward the west with a 45-degree dip to test the strike extension of the interpreted north-south striking, near-vertical dipping, epithermal breccia zone intersected in AAD-58. This hole collared in intensely oxidized porphyritic rock cut by a dense stockwork of open space to sugary quartz-hematite veins/veinlets. White mica



alteration, locally abundant pyrite and intense silicification become more apparent downhole continuing to approximately 40 metres depth in the 75-metre hole.

Additionally, hole AAD-79 returned the highest gold values north of AAD-58 in this set of results, including 8 meters of 1.8 g/t gold, including a 4 metre interval of 3.2 g/t gold and 22 g/t silver. Notably, this interval intersected the highest antimony values (0.02%) to date in the Dark Horse prospect. These silver and antimony results from this hole may indicate a shallower level in the epithermal system. Higher silver numbers continue to be observed moving north along the structure.

Based on current exploration data, the Dark Horse Mane prospect, and surrounding larger Ulaan-Khundii area, host alteration mineral assemblages resulting from hydrothermal fluids ranging in temperature from low (epithermal) to high (porphyry). The current drill results have returned the highest copper, molybdenum and zinc values in some of the deeper and more southerly targets. Although the Dark Horse Mane target displays characteristics related to a low sulphidation epithermal system, evidence for higher temperature alteration (sericite) overprinting and base metal anomalism may indicate the potential for intermediate sulphidation to porphyry type systems within the Khundii prospect area. As displayed in the accompanying figures, the current conceptual interpretation is of repeated pulses of low-temperature gold-bearing hydrothermal fluids migrating along structures resulting in alteration (destruction) of magnetic minerals and causing magnetic-low anomalies. This concept will be used to test for deeper, potentially higher-grade, boiling zones along structures during the phase II program. That program is expected to commence later in Q2 following receipt of all phase I results, compilation and interpretation.

Pending Results

Assay results for 27 holes (2,610 metres) are currently pending. These drill holes tested shallow targets with only one hole exceeding 150 metres depth. Two holes are located within the southern portion of the Dark Horse Mane prospect magnetic low corridor, sixteen holes are located within the northern portion of the Dark Horse Mane corridor and nine holes (scout holes) are located the east, west and south of the Dark Horse Mane prospect, targeting prospective structural, geophysical and geochemical anomalies in the larger area.

The Company is strongly encouraged by the preliminary results from these drill holes. Logging descriptions include broad (greater than 10-metre) intervals of intense clay alteration, multiple instances of high-frequency quartz and quartz-hematite stockwork veining and breccia zones, epithermal quartz vein textures, and silicification.

Table 2 below includes Dark Horse Drill result highlights from the 2021 program (see attached map for reference).



Mongolia COVID-19 Update

Since the first community transmission of COVID-19 in November 2020, the Government of Mongolia has implemented a series of restrictions on the movement of people and the delivery of goods and services. While restrictions were temporarily eased in mid-Q1 2021, preventive measures were reintroduced in early Q2 2021 following an increase in the number of reported cases. Additionally, in March 2021, Bayankhongor Province, where Erdene's Projects are located, reported its first confirmed case of community transmission of COVID-19, imposing 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.

Since mid-2020, Erdene has implemented operational changes to ensure the safety and productivity of its people. Daily health and safety briefings, body temperature checks, enhanced hygiene protocols, rapid testing, and additional personal protective equipment have been instituted in all of the Company's operations in Mongolia. The Company maintains a dedicated, registered nurse at the project site to administer COVID-19 testing and implement health and safety procedures. With these measures, our team continues to carry out field work without significant disruption. The Company's corporate and administrative teams continue to work on modified schedules and have adopted enhanced hygiene measures that allow operations to continue without significant disruption.

Though the impact of COVID-19 on the Company's operations has been modest to date, the COVID-19 pandemic continues to evolve. The Company will monitor the impact of COVID-19 on its operations in 2021, particularly potential disruptions to the Bayan Khundii Gold Project schedule or budget, prior to reaching a construction decision, which is expected in mid-2021.

The Company extends its appreciation to all medical, public safety, and essential workers for their efforts to safeguard public health and help prevent the spread of COVID-19 in Mongolia and Canada.

Khundii Gold District

Erdene's deposits are located in the Edren Terrane, within the Central Asian Orogenic Belt, host to some of the world's largest gold and copper-gold deposits. The Company has been the leader in exploration in southwest Mongolia over the past decade and is responsible for the discovery of the Khundii Gold District comprised of multiple high-grade gold and gold/base metal prospects, two of which are being considered for development: the 100%-owned Bayan Khundii and Altan Nar projects. Together, these deposits comprise the Khundii Gold Project.

The Bayan Khundii Gold Resource¹ includes 521,000 ounces of 3.16 g/t gold Measured and Indicated ("M&I")² and 103,000 ounces of Inferred resources at 3.68 g/t gold. Within the M&I resource, a proven and probable open-pit reserve totals 409,000 ounces at 3.7



g/t (see the full press release <u>here</u>), providing significant potential growth of reserves with the development of the remaining M&I and Inferred resources².

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

Erdene Resource Development Corp. is a Canada-based resource company focused on the acquisition, exploration, and development of precious and base metals in underexplored and highly prospective Mongolia. The Company has interests in three mining licenses and two exploration licenses in Southwest Mongolia, where exploration success has led to the discovery and definition of the Khundii Gold District. Erdene Resource Development Corp. is listed on the Toronto and the Mongolian stock exchanges. Further information is available at <u>www.erdene.com</u>. Important information may be disseminated exclusively via the website; investors should consult the site to access this information.

Qualified Person and Sample Protocol

Peter Dalton, P.Geo. (Nova Scotia), Senior Geologist for Erdene, is the Qualified Person as that term is defined in National Instrument 43-101 and has reviewed and approved the technical information contained in this news release. All samples have been assayed at SGS Laboratory in Ulaanbaatar, Mongolia. In addition to internal checks by SGS Laboratory, the Company incorporates a QA/QC sample protocol utilizing prepared standards and blanks. All samples undergo standard fire assay analysis for gold and ICP-OES (Inductively Coupled Plasma Optical Emission Spectroscopy) analysis for 33 additional elements. For samples that initially return a grade greater than 5 g/t gold, additional screen-metallic gold analysis is carried out which provides a weighted average gold grade from fire assay analysis of the entire +75 micron fraction and three 30-gram samples of the -75 micron fraction from a 500 gram sample.

Erdene's drill core sampling protocol consisted of collection of samples over 1 or 2 metre intervals (depending on the lithology and style of mineralization) over the entire length of the drill hole, excluding minor post-mineral lithologies and un-mineralized granitoids. Sample intervals were based on meterage, not geological controls or mineralization. All drill core was cut in half with a diamond saw, with half of the core placed in sample bags and the remaining half securely retained in core boxes at Erdene's Bayan Khundii exploration camp. All samples were organized into batches of 30 including a commercially prepared standard, blank and either a field duplicate, consisting of two quarter-core

¹ For details of the Mineral Resources see Khundii Gold Project NI 43-101 Technical Report, Tetra Tech December 4, 2019 – SEDAR

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



intervals, or a laboratory duplicate. Sample batches were periodically shipped directly to SGS in Ulaanbaatar via Erdene's logistical contractor, Monrud Co. Ltd.

Forward-Looking Statements

Certain information regarding Erdene contained herein may constitute forward-looking statements within the meaning of applicable securities laws. Forward-looking statements may include estimates, plans, expectations, opinions, forecasts, projections, guidance or other statements that are not statements of fact. Although Erdene believes that the expectations reflected in such forward-looking statements are reasonable, it can give no assurance that such expectations will prove to have been correct. Erdene cautions that actual performance will be affected by a number of factors, most of which are beyond its control, and that future events and results may vary substantially from what Erdene currently foresees. Factors that could cause actual results to differ materially from those in forward-looking statements include the ability to obtain required third party approvals, market prices, exploitation and exploration results, continued availability of capital and financing and general economic, market or business conditions. The forward-looking statements are expressly qualified in their entirety by this cautionary statement. The information contained herein is stated as of the current date and is subject to change after that date. The Company does not assume the obligation to revise or update these forward-looking statements, except as may be required under applicable securities laws.

NO REGULATORY AUTHORITY HAS APPROVED OR DISAPPROVED THE CONTENTS OF THIS RELEASE

Erdene Contact Information

Peter C. Akerley, President and CEO, or Robert Jenkins, CFO

Phone:	(902) 423-6419
Email:	info@erdene.com
Twitter:	https://twitter.com/ErdeneRes
Facebook:	https://www.facebook.com/ErdeneResource
LinkedIn:	https://www.linkedin.com/company/erdene-resource-development-corp-/



Table 2 - Dark Horse 2021 Drilling Highlights (intervals averaging greater than 0.3 g/t gold)

Hole	From	То	Interval ⁽¹⁾	g/t Au ⁽²⁾
AAD-57	52	68	16	0.58
And	160	180	20	0.45
And	194	242	48	1.18
Incl	202	232	30	1.74
AAD-58	10	55	45	5.97
Incl	32	54	22	11.98
Incl	36	37	1	21.18
Incl ⁽³⁾	41	49	8	27.07
Incl	43	44	1	82.53
AAD-61	10	140	130	0.53
Incl	14	40	26	1.06
Incl	92	96	4	1.25
Incl	120	129	9	1.07
AAD-65	113	120	7	1.15
And	128	142	14	0.51
And	196	205	9	0.69
AAD-66	53	67	14	1.31
And	112	132	20	1.74
And	137	139	2	0.96
AAD-67	110	116	6	0.32
AAD-68	192	194	2	1.41
And	250	252	2	0.47
AAD-70	52	53	1	0.66
And	64	66	2	4.24
And	110	116	6	0.33
AAD-74 ⁽⁴⁾	36	37	1	0.38
AAD-75 ⁽⁴⁾	37	38	1	0.33
And	45	48	3	0.32
And	120	121	1	0.38
AAD-76 ⁽⁴⁾	56	58	2	0.35
AAD-77 ⁽⁴⁾	62	72	10	0.37
And	135	138	3	0.30
AAD-79 ⁽⁴⁾	31	39	8	1.81
Incl	32	36	4	3.23
AAD-80 ⁽⁴⁾	11	12	1	0.97
AAD-81 ⁽⁴⁾	4	39	35	2.65
Incl	5	17	12	5.10
Incl	5	6	1	19.11
Incl	12	13	1	14.04
AAD-82 ⁽⁴⁾	39	48	9	0.30
And	75	76	1	0.31
AAD-83 ⁽⁴⁾	239	241	2	0.73



¹ Reported intervals are apparent thicknesses (i.e., downhole widths). Insufficient drilling has been completed at Dark Horse to determine orientation of the mineralized zones and therefore true widths cannot be determined at this time. Exploration drill holes are typically oriented normal to (at a right angle to) the trend of potential mineralized targets and holes dips range from 45 to 75 degrees.

² Reported grades for intervals are weighted averages based on length of sampling intervals, typically 1 to 2 metres. No top cut has been applied; however, intervals greater than 10 g/t gold are reported separately for clarity.

³ Seven of the eight 1-metre samples in this interval returned assays greater than 10 g/t gold, the eighth sample returned an assay of 9.5 g/t gold. The highest grade interval (43-44 metres) is reported separately.

⁴ Newly reported hole

Note: All exploration holes not listed intersected anomalous gold and/or zones anomalous in pathfinder elements (arsenic, molybdenum and antimony) but no significant intervals greater than 0.3 g/t gold.

PROSPECT MAP KHUNDII GOLD

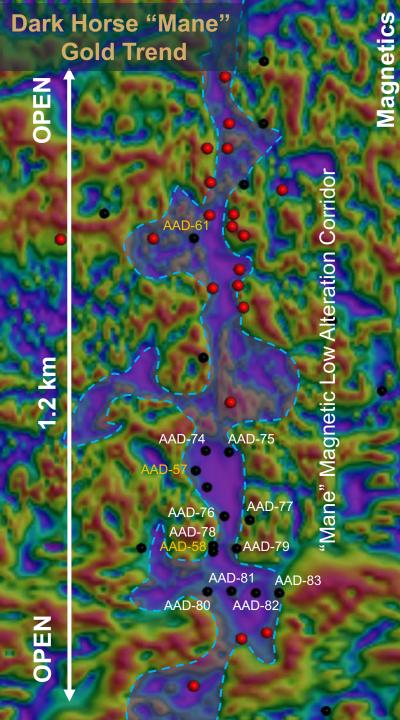
Dark Horse Gold Discovery

Ulaan Prospect Pervasive and Intense QSP Alteration Zone Bayan Khundii-Dark Horse N-S Magnetic Low Corrido

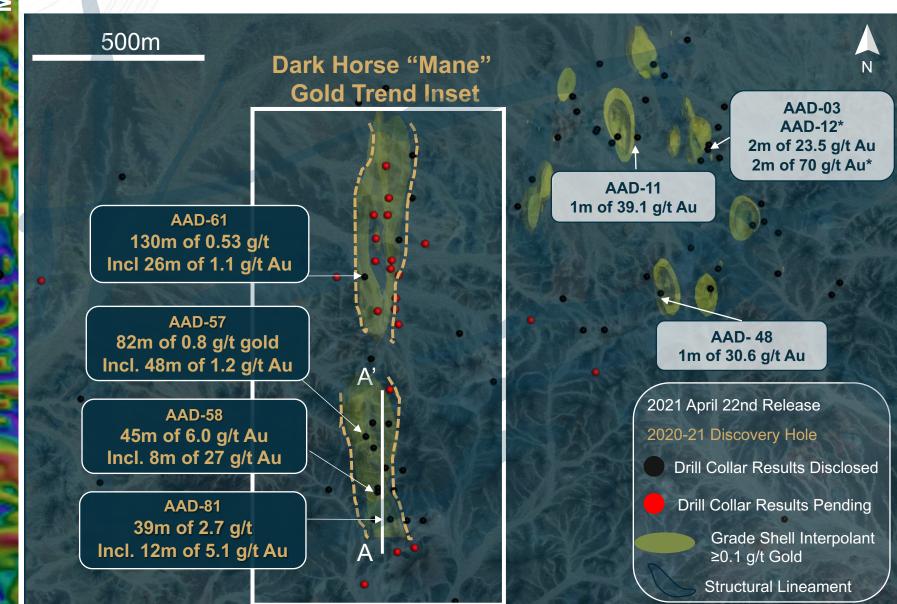
Bayan Khundii Gold Deposit Resources

521 Koz M&I @ 3.16g/t Gold 103 Koz Inf. @ 3.68g/t Gold

2km



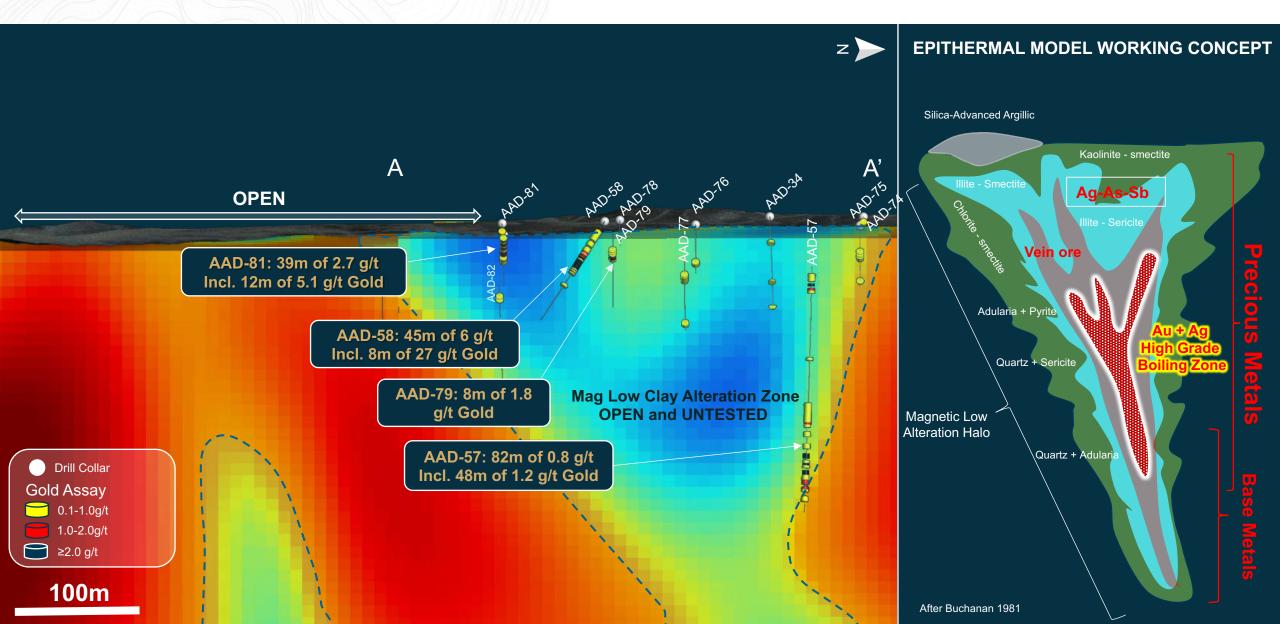
DARK HORSE DISCOVERY 2021 Q1 - Q2 Planned and Completed Drilling



DARK HORSE GOLD PROSPECT SOUTH MANE - LONG SECTION

3D Magnetics with Highlighted Gold Intervals and Conceptual Epithermal Model





DARK HORSE DISCOVERY 2021 Q2 Assay Results Pending for 2,610 metres





