

# AT THE KHUNDII GOLD PROJECT AND DISCOVERS HIGH-GRADE GOLD IN PREVIOUSLY UNTESTED AREA

#### **Press Release**

Halifax, Nova Scotia 2019.05.13

**Erdene Resource Development Corp.** (TSX:ERD; MSE:ERDN) ("Erdene" or the "Company") is pleased to announce the results of the Q2 2019 drill program at its 100%-owned Khundii Gold Project ("Khundii Project"). This 1,800 metre program was conducted in April 2019 to increase confidence in the resource, confirm ultra-high gold grades and expand Bayan Khundii mineralization in support of the recently launched Pre-Feasibility Study ("PFS") led by Tetra Tech, Inc., a global engineering firm.

"Results from this drill program, including the intersection of 112 metres grading 5.9 g/t gold at Midfield, are amongst the strongest we've encountered and confirm the continuity of high-grade mineralization from near surface in the heart of the Bayan Khundii deposit," said Peter Akerley, Erdene's President and CEO. "Additionally, the discovery of high-grade gold in a previously untested area of the deposit is very encouraging for future exploration."

"These results confirm the exceptional high grades associated with this near-surface deposit and demonstrate the potential for pit and resource expansion," continued Mr. Akerley. "These results will be incorporated into the mineral reserve estimation workstream of the PFS and will also assist in planning the next phase of our 2019 exploration drilling program in the vicinity of the deposit and in prospective areas within the Khundii District."

### Highlights (see attached figures for reference)

- Confirmed strong continuity in the high-grade Midfield zone, starting near surface
  - o Intersected 112 metres of 5.9 g/t gold, with 8 metres of 45 g/t gold, including samples of 81, 95 and 129 g/t gold (BKD-261)
  - O Discovered a very high-grade zone beginning 7 metres from surface in Midfield with 14 metres of 14 g/t gold, including 1 metre of 147 g/t gold (BKD-262)
- Established continuity of the high-grade zone into the upper portion of Midfield North
  - o Drilled 23 metres of 4.4 g/t gold beginning at 85 metres vertical depth (BKD-260)
  - o Intersected 2 metres of 39 g/t gold below the proposed pit limits (BKD-259)
- Extended mineralization towards surface and at depth in Striker West
  - O Detected mineralization 210 metres west of the proposed pit boundary, with 3 metres of 40 g/t gold at 136 metres vertical depth (BKD-265)
  - o Intersected a 16-metre zone of 1.1 g/t gold, including 5 metres of 2.7 g/t gold, beginning 28 metres from surface, 160 metres west of the current pit boundary (BKD-265)
- Expanded mineralization beyond current resource perimeter in southern Bayan Khundii
  - o Returned 1 metre of 51.9 g/t at depth (BKD-266)



Table 1 summarizes results for the eight holes drilled at Bayan Khundii in April 2019. For reference see the attached plan maps and cross-sections.

Table 1. Bayan Khundii Drilling Highlights

Drill Hole	From (m)	To (m)	Interval (m)	Gold (g/t)
Midfield Zone*				
BKD-261	13.0	125.0	112.0	5.9
Incl	63.0	69.0	6.0	18.6
Incl	80.0	81.0	1.0	26.8
Incl	116.8	125.0	8.2	45.2
Incl	116.8	120.0	3.2	82.6
Incl	124.0	125.0	1.0	81.1
BKD-262	9.0	23.0	14.0	14.1
Incl	9.0	10.0	1.0	146.9
Incl	17.0	18.0	1.0	18.8
And	51.0	157.4	106.4	1.4
Incl	61.0	66.0	5.0	12.4
Incl	61.0	62.0	1.0	10.2
Incl	64.0	66.0	2.0	24.2
North Midfield*				
BKD-259	110.7	129.1	18.4	1.6
Incl	114.0	118.0	4.0	3.8
And	145.0	152.0	7.0	1.1
And	202.0	204.0	2.0	39.0
BKD-260	97.6	120.9	23.3	4.4
Incl	108.0	109.0	1.0	57.2
And	128.7	135.0	6.3	7.7
Incl	130.0	131.0	1.0	40.4
And	154.0	156.0	2.0	5.9
BKD-263	122.7	133.8	11.1	5.2
Incl	128.0	129.0	1.0	27.1
And	154.0	158.0	4.0	1.1
And	192.0	194.0	2.0	1.8
Striker West**				
BKD-264	115.0	154.0	39.0	1.1
BKD-265	28.0	44.0	16.0	1.1
Incl	37.0	42.0	5.0	2.7
And	141.0	151.0	10.0	12.8
Incl	142.0	145.0	3.0	40.0
And	165.0	166.0	1.0	34.6
Extension Hole				
BKD-266	264.0	265.0	1.0	51.9

<sup>\*</sup> Reported intervals for BKD-259 and BKD-263 are within +/- 0.5% of true width assuming a global mineralization anisotrophy dipping 50 degrees to the south-southwest. BKD-260, BKD-261 and BKD-262 were drilled on a north-northeasterly azimuth, oblique to mineralization. True thickness are 70% (BKD-260), 87-90% (BKD261) and 93% (BKD-262) of apparent interval (m) width.

<sup>\*\*</sup> Reported intervals within the Striker West zone are apparent widths. Currently there is insufficient data to accurately define mineralization orientation and subsequent true thicknesses. Striker West holes were drilled using a -85 deg dip with a northeasterly azimuth.



#### Midfield Zone – Near Surface High Grade Discovery and Strong Continuity of Ultra-High Grade Zone at Depth

The Midfield Zone is a buried gold zone in the central portion of Bayan Khundii. The zone is characterized by very high-grade mineralization below 100 metres, with lower grades near surface. Prior drilling indicated a core zone extending to within metres of surface with indications of increasing grade, although limited continuity. Structural interpretation identifying a favorable mineralization host as the intersection of northeast-trending extensional faults with the northwest trending basement structure and the identification of a secondary north to south orientated gold bearing vein set supported testing this feature with a new orientation, drilled to the northeast. BKD-261 and BKD-262 are scissor holes crossing the interpreted trend of the mineralization and intersecting the main vein set at an approximate 50 to 60 degree angle of incidence, with an interpreted true width of approximately 88% and 93% of reported apparent width, respectively.

BKD-261 was drilled at a 45 degree dip angle through the central portion of Midfield with mineralization intersected 13 metres from surface and continuing to a depth of 125 metres for 112 metres of 5.9 g/t gold. Excluding a 7-metre wide dyke, immediately above the ultra high-grade zone, the grade averages 6.2 g/t gold over 105 metres. Above the dyke, the gold mineralization averages 3.0 g/t gold over 97 metres, and below, averages 45.2 g/t gold over 8 metres. The gold mineralization is hosted within a strongly silica- and illite-altered tuff cut by quartz-adularia-hematite veins and breccias of variable width, where wider veins typically host the highest gold grades. Details of the exceptionally high grades at depth are displayed in Table 2:

<b>Table 2.</b> BKD-261	Highlights -	High-Grade at 1	Depth

From (m)	To (m)	Interval (m)	Gold (g/t)	Silver (g/t)
116.8	118.0	1.2	95.1	21.0
118.0	119.0	1.0	128.7	50.0
119.0	120.0	1.0	22.0	10.0
120.0	121.0	1.0	3.7	5.0
121.0	122.0	1.0	9.8	5.0
122.0	123.0	1.0	8.9	4.0
123.0	124.0	1.0	4.7	4.0
124.0	125.0	1.0	81.1	21.0
Average Grade		45.2	15.0	

BKD-262 was drilled adjacent to the collar of BKD-261 at a 60 degree dip angle and returned the highest near surface results at Midfield. Beginning 9 metres down hole, or 7 metres from surface, the first 14 metres of mineralization averaged 14 g/t gold, beginning with a 1-metre interval of 147 g/t gold in a strongly altered (illitesilica) volcanic host with intense iron oxidation. The hole also returned 106 metres of 1.4 g/t gold, including 5 metres of 12 g/t gold in a similar host to BKD-261.

## North Midfield

The North Midfield Zone is the deepest of the three main zones (Striker, Midfield, Midfield North) in the Khundii Project Preliminary Economic Assessment ("PEA"), with gold mineralization beginning at approximately 125 metres depth in the central portion of the zone. The Company drilled three holes in this area (BKD-259, -260 and -263) to test for nearer surface mineralization, and extension and continuity of the high-grade veins intersected just below the proposed PEA pit boundaries. These holes intersected gold mineralization ranging from 85 to 117 metres vertical depth with BKD-260 returning 23 metres of 4.4 g/t gold, beginning at 85 metres vertical depth. In addition, BKD-259 intersected 2 metres of 39 g/t gold in a vein in the vicinity of other high-grade intervals outside the current pit perimeter.



#### Striker West

The Striker West area is located approximately 100 metres west of the pit planned in the PEA. This target has been drilled at a lower density than the other main targets and the objective was to establish greater continuity of the locally high-grade intervals and to test for nearer surface mineralization. Both objectives were met with BKD-265 returning the widest high-grade interval to date for Striker West, 3 metres of 40 g/t gold, a second interval of 34.6 g/t gold and a near surface zone of 16 metres of 1.1 g/t gold.

#### Bayan Khundii Extension

A single hole was drilled south of the defined resource, BKD-266, to test for down dip extensions of mineralization to the south of the deposit. The hole intersected a broad zone of moderate to strong silica-illite and magnetite altered volcanics with increased quartz vein density at a depth of 238 metres. A wide (4 metre) quartz vein was intersected in the zone with associated chlorite-magnetite alteration and visible gold at the upper contact. Gold values up to 51.9 g/t over 1 metre were returned from this zone. The zone remains untested and open to the south. Further east, the down dip extension of higher-grade veins is supported by hole, BKD-19 that returned 36 g/t gold at 182 metres depth, and to the east of the deposit, BKD-118 returned 102.5 g/t at 113 metres. Further testing is required outside of the current resource and the planned open pit perimeter.

#### **Future Exploration Plans**

The Q2 drilling program demonstrates the potential upside of the Bayan Khundii deposit both through discovery of new trends to the high-grade zones as well as continuation of ultra-high-grade zones and nearer surface mineralization through higher density drilling. The program also provides insights into the design of follow-up programs on the other targets on the Bayan Khundii license. The drilling in Striker West and the extension hole imply that gold mineralization continues over an apparent vertical distance of a minimum of 250 metres. To date, drilling elsewhere on the license has been focused within 75 metres of surface. Exploration plans are being finalized for a mid-2019 program which will include exploration drilling at the CSZ, Khundii North and Altan Arrow prospects as well as definition of targets where dilation, steepening or intersection with other major structures provides the ideal setting for large scale gold deposits.

### **Review of Khundii Gold Project Development**

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 "Project").

The Company delivered the Project's maiden mineral resource estimate in Q3 2018 with a Measured and Indicated ("M&I") resource of 751,000 ounces ("oz") gold at an average grade of 2.3 g/t gold and an Inferred resource of 291,000 oz gold at an average grade of 1.8 g/t gold (cut-off grade of 0.7 g/t gold). This was followed by a National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") Preliminary Economic Assessment in December 2018 which returned an after-tax Net Present Value at a 5% discount rate ("NPV5%") and a US\$1,200/oz gold price of US\$99 million and Internal Rate of Return ("IRR") of 56%. The initial development has a life of mine head grade of 3.42 g/t gold with an average annual gold production of 51,200 oz over an eight-year mine life. Based on the potential for additional discovery and expansion on the current license areas the planned development is considered as a foundation for growth.



The PEA is by nature, a preliminary economic study, based in part on Inferred Resources. Inferred Resources are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves which is required for a prefeasibility or feasibility study. Mineral resources that are not mineral reserves do not have demonstrated economic viability and there is no certainty that the PEA will be realized.

Erdene initiated a NI 43-101 Pre-Feasibility Study ("PFS") for the Khundii Gold Project in March 2019. Led by Tetra-Tech, Inc., with support from Sustainability East Asia LLC for Environmental and Social Impact studies, and Blue Coast Laboratories, for Metallurgical analysis, the PFS is scheduled to be announced in Q3-2019.

# **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 m intervals (depending on the lithology and style of mineralization) over the entire length of the drill hole, excluding minor post-mineral lithologies and un-mineralized granitoids. Sample intervals were based on meterage, not geological controls or mineralization. All drill core was cut in half with a diamond saw, with half of the core placed in sample bags and the remaining half securely retained in core boxes at Erdene's Bayan Khundii exploration camp. All samples were organized into batches of 30 including a commercially prepared standard, blank and either a field duplicate, consisting of two quarter-core intervals, or a laboratory duplicate. Sample batches were periodically shipped directly to SGS in Ulaanbaatar via Erdene's logistical contractor, Monrud Co. Ltd.

#### **About Erdene**

Erdene Resource Development Corp. is a Canada-based resource company focused on the acquisition, exploration, and development of precious and base metals in underexplored and highly prospective Mongolia. The Company has interests in four exploration licenses and a mining license 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 Mongolia stock exchanges. Further information is available at www.erdene.com. Important information may be disseminated exclusively via the website; investors should consult the site to access this information.

## **Forward-Looking Statements**

Certain information regarding Erdene contained herein may constitute forward-looking statements within the meaning of applicable securities laws. Forward-looking statements may include estimates, plans, expectations, opinions, forecasts, projections, guidance or other statements that are not statements of fact. Although Erdene believes that the expectations reflected in such forward-looking statements are reasonable, it can give no assurance that such expectations will prove to have been correct. Erdene cautions that actual performance will be affected by a number of factors, most of which are beyond its control, and that future events and results may vary substantially from what Erdene currently foresees. Factors that could cause actual results to differ materially from those in forward-looking statements include 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.

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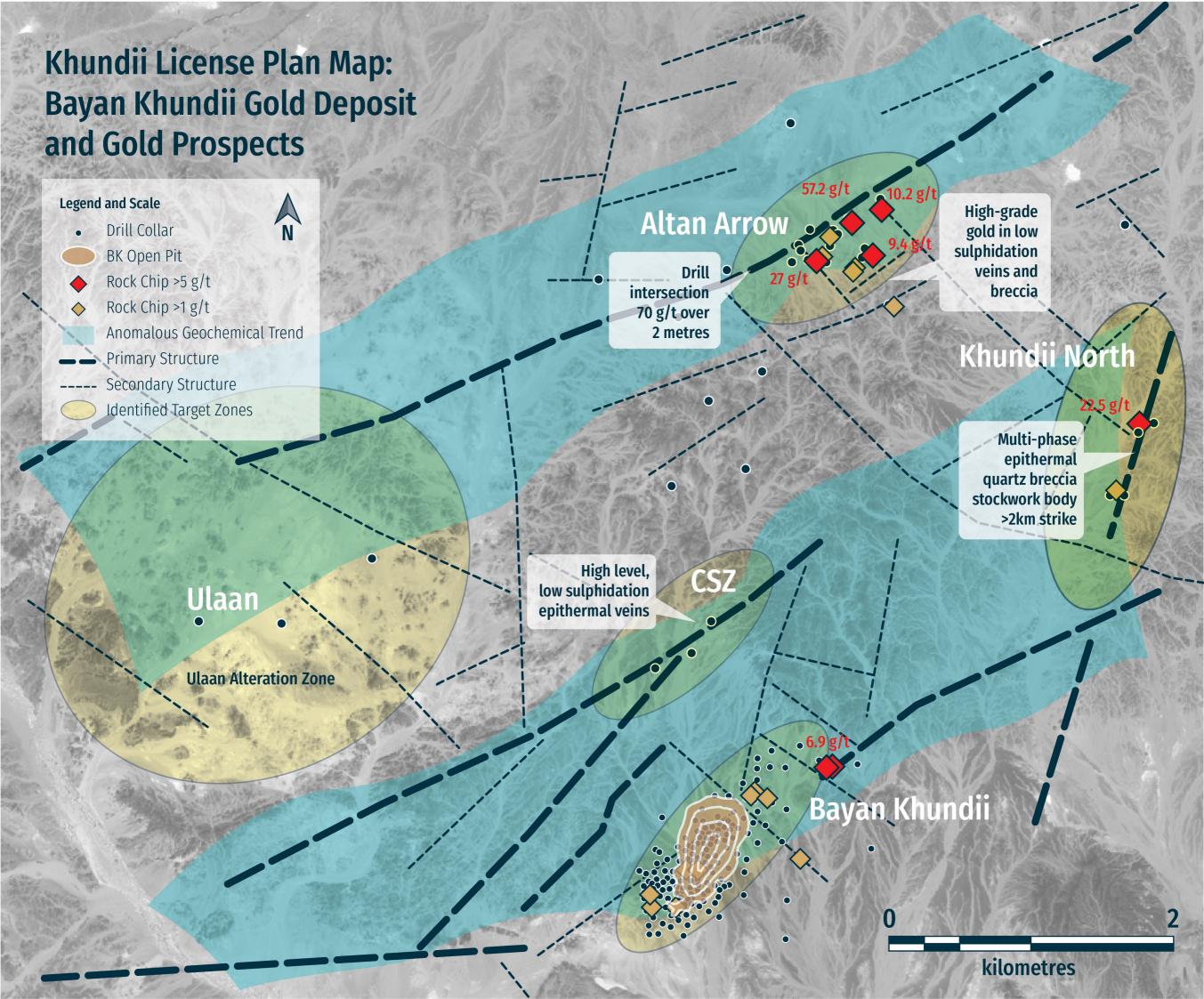
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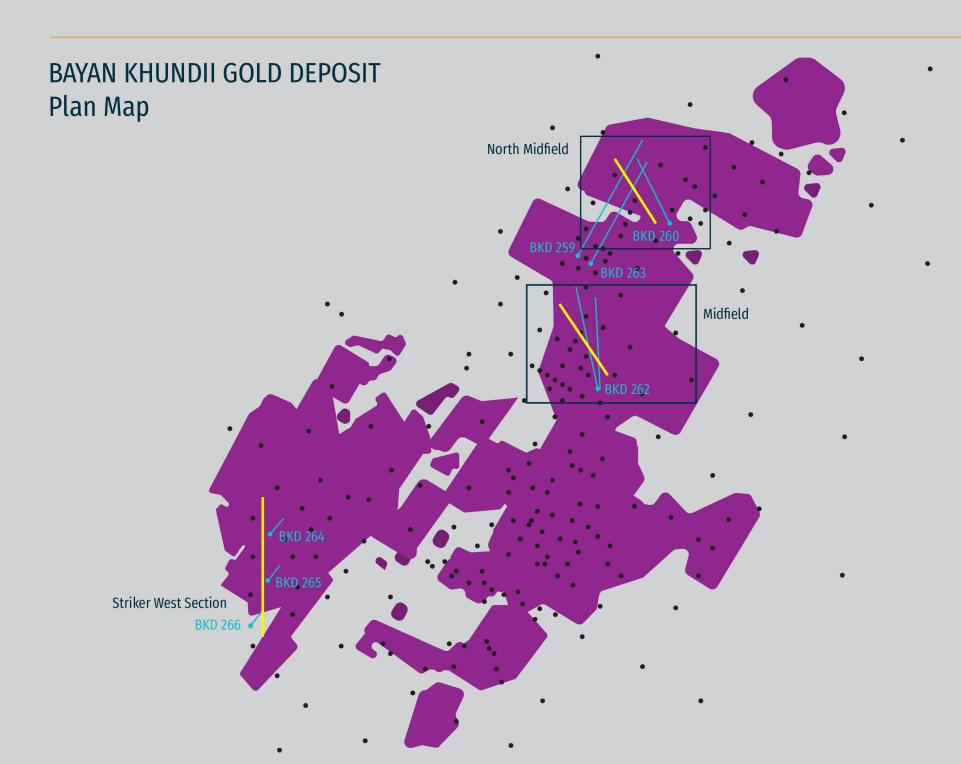
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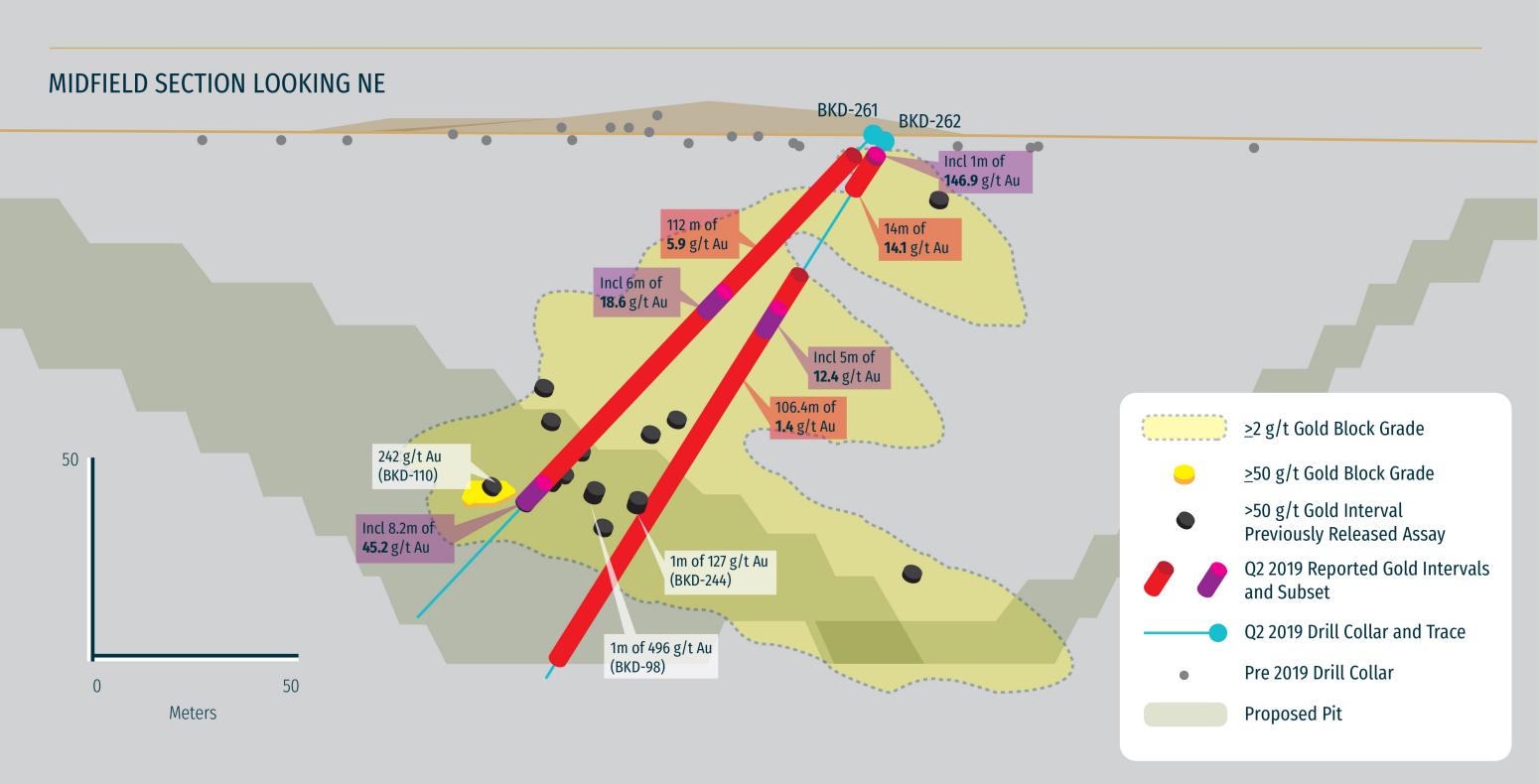




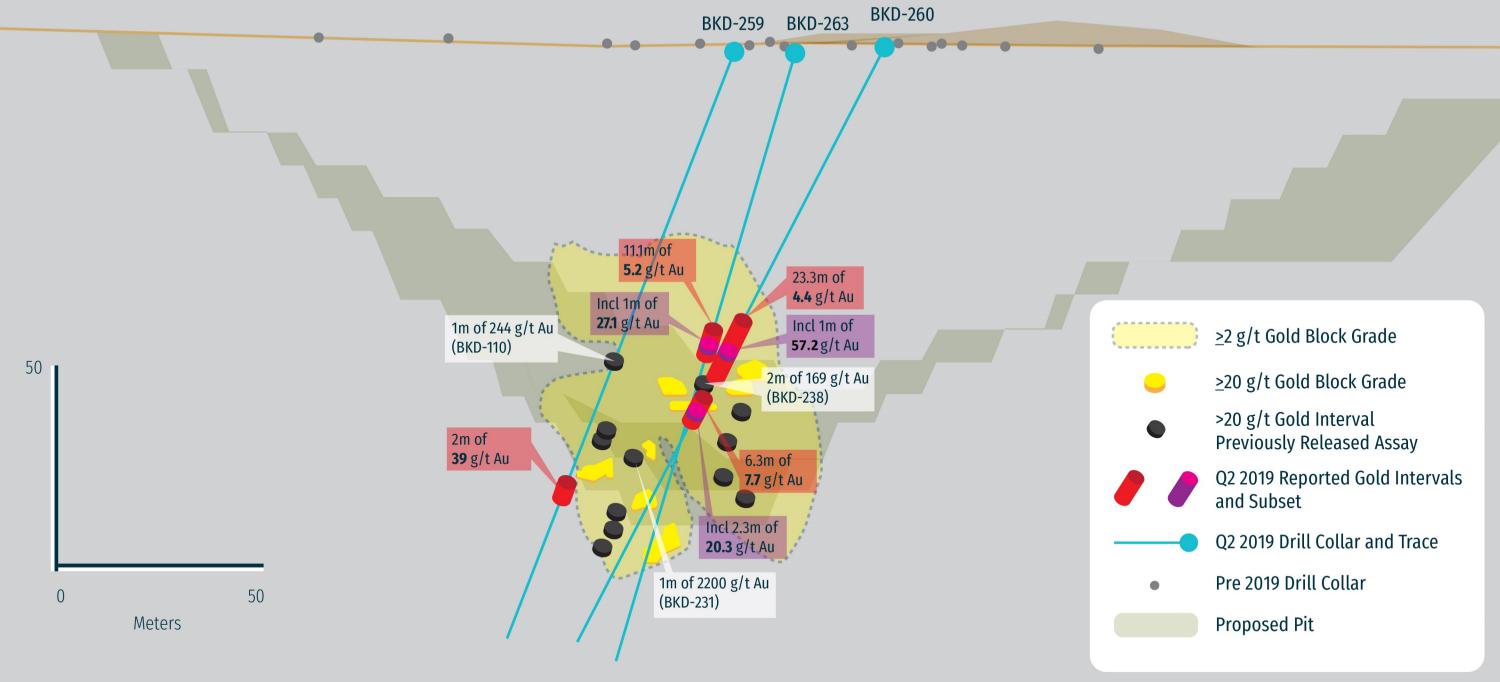




250 500 Meters



# NORTH MIDFIELD SECTION LOOKING NE



# STRIKER WEST SECTION LOOKING EAST

