

## ENDEAVOUR REPORTS POSITIVE PFS RESULTS FOR BOTH FETEKRO AND KALANA, CONFIRMING STRONG ORGANIC GROWTH PIPELINE

### HIGHLIGHTS:

- Positive PFS results for both Fetekro and Kalana Projects confirm Endeavour’s high quality organic growth pipeline
- Fetekro PFS shows potential for +200kozpa production at low AISC over long mine life:
  - › 10-year mine life based on current reserves of 2.1Moz
  - › Average annual production of 209koz at AISC of \$838/oz
  - › Robust economics with after-tax NPV<sub>5%</sub> of \$479m and IRR of 33%, based on a \$1,500/oz gold price
- Kalana PFS shows potential for 150kozpa production at low AISC over long mine life:
  - › 11-year mine life based on current reserves of 1.8Moz
  - › Average annual production of 150koz at AISC of \$901/oz
  - › Robust economics with after-tax NPV<sub>5%</sub> of \$331m with IRR of 49% based on a \$1,500/oz gold price
- DFS on each project will now commence, with further opportunities to optimize and expand the projects through exploration and engineering

**George Town, February 23, 2021** – Endeavour Mining (TSX:EDV) (OTCQX:EDVMF) is pleased to announce that it has recently completed a positive Pre-Feasibility Study (“PFS”) for both its Fetekro and Kalana projects as part of its focus on organic growth opportunities. The robust PFS results confirm that both projects justify moving forward to the Definitive Feasibility Study (“DFS”) stage, which will now commence.

*Sebastien de Montessus, President and CEO said: “The positive studies announced today confirm the compelling nature of our two most advanced projects and reinforce our focus on organic growth. Together with a number of earlier stage projects, Endeavour now has an attractive pipeline of opportunities, each of which will compete for capital with the goal of generating strong returns across operations, projects and exploration.”*

*At Fetekro, our exploration efforts have resulted in the discovery of a project with the potential to become a cornerstone mine with annual production of +200,000 ounces at low all in sustaining costs over at least 10 years while boasting robust economics. Our \$20 million investment in exploration at Fetekro over the past three years has generated significant returns as we now have a project with an NPV<sub>5%</sub> of approximately \$480 million at a gold price of \$1,500/oz.*

*At Kalana, we have outlined a project with annual production of 150,000 ounces over at least 10 years with very attractive economics. Having purchased Kalana for approximately \$120 million in 2017, the project now has an NPV<sub>5%</sub> of approximately \$330 million at a gold price of \$1,500/oz, despite the overhaul of the geological model which incorporates more conservative assumptions.*

*From a broader ESG standpoint, in accordance with our aim to reduce our carbon footprint, both projects have low forecast emissions intensity, in line with our current operations, as well as the opportunity to benefit from renewable energy, either in the form of a solar plant at Fetekro, or from the Malian grid for Kalana, which has a significant portion powered by renewables. We will now progress the Definitive Feasibility Studies for both projects, which we expect to announce in late 2021 for Fetekro and in early 2022 for Kalana.”*

**Table 1: Project Highlights**

	FETEKRO	KALANA	ENDEAVOUR STRATEGIC TARGETS
Reserves, Moz	2.1	1.8	>2.0
Mine life, years	9.5	11.0	>10
Average annual production, kozpa	First 5 years 220	186	>200
	Life of mine 209	150	
AISC, \$/oz	First 5 years 916	679	<900
	Life of mine 838	901	
NPV <sub>5%</sub> , \$m <sup>1</sup>	479	331	n.a.
IRR, % <sup>1</sup>	33	49	>20

<sup>1</sup>Post-tax, based on a gold price of \$1,500/oz

The PFS summary metrics and project economics for the Fetekro and Kalana projects are shown in Tables 2 and 3 below.

Table 2: PFS Summary

	FETEKRO	KALANA
<b>OPERATION TYPE</b>		
Mine Type	Open Pit	Open Pit
Mill Type	3.0Mtpa Gravity / CIP Plant	3.0Mtpa Gravity / CIL Plant
<b>RESERVES &amp; RESOURCES</b>		
P&P Reserves	31.9Mt at 2.0 Au g/t for 2.1Moz	35.6Mt at 1.6 Au g/t for 1.8Moz
M&I Resources (inclusive of reserves)	32.0Mt at 2.4 Au g/t for 2.5Moz	46.0Mt at 1.6 Au g/t for 2.3Moz
Inferred Resources	0.8Mt at 2.5 Au g/t for 0.1Moz	4.6Mt at 1.7 Au g/t for 0.3Moz
<b>LIFE OF MINE PRODUCTION</b>		
Mine life, years	9.5	11.0
Strip ratio, W:O	10.3	6.7
Tonnes processed, Mt	32	36
Grade processed, Au g/t	2.0	1.6
Gold contained processed, Moz	2.1	1.8
Average recovery rate, %	95	90
Gold production, Moz	2.0	1.7
Average annual production, kozpa	209	150
Cash costs, \$/oz	684	785
AISC, \$/oz <sup>1</sup>	838	901
<b>AVERAGE FOR YEARS 1 TO 5</b>		
Production, kozpa	220	186
Cash costs, \$/oz	751	589
AISC, \$/oz <sup>1</sup>	916	679
<b>CAPITAL COST</b>		
Upfront capital cost, \$m	338	297
<b>ENVIRONMENTAL DATA</b>		
GHG Emissions Intensity <sup>2</sup> , t CO <sub>2</sub> e/oz	0.36	0.30
Energy Intensity, GJ/oz	6.99	7.65

<sup>1</sup> Based on a gold price of \$1,500/oz. <sup>2</sup>GHG Emissions Intensity calculated as Scope 1 and 2 emissions.

Table 3: Project Economics

Gold Price	FEKETRO				KALANA			
	\$1,350/oz	\$1,500/oz	\$1,650/oz	\$1,800/oz	\$1,350/oz	\$1,500/oz	\$1,650/oz	\$1,800/oz
<b>PRE-TAX</b>								
NPV <sub>5%</sub> , \$m	439	<b>663</b>	862	1083	310	<b>498</b>	687	875
IRR, %	28	<b>38</b>	46	55	44	<b>59</b>	74	88
Payback years <sup>1</sup>	3.3	<b>2.6</b>	2.2	1.9	1.4	<b>1.1</b>	0.9	0.8
<b>AFTER-TAX</b>								
NPV <sub>5%</sub> , \$m	308	<b>479</b>	630	799	204	<b>331</b>	458	584
IRR, %	24	<b>33</b>	40	49	36	<b>49</b>	62	74
Payback years <sup>1</sup>	3.4	<b>2.7</b>	2.3	2.0	1.5	<b>1.1</b>	0.9	0.8

<sup>1</sup> Payback period calculated starting from start of commercial production

## FETEKRO PROJECT PRE-FEASIBILITY STUDY

Endeavour expects to file a Technical Report pursuant to National Instrument 43-101 – Standards of Disclosure for Mineral Projects (“the NI 43-101”) in respect of the Fetekro PFS within a 45-day period.

### Overview

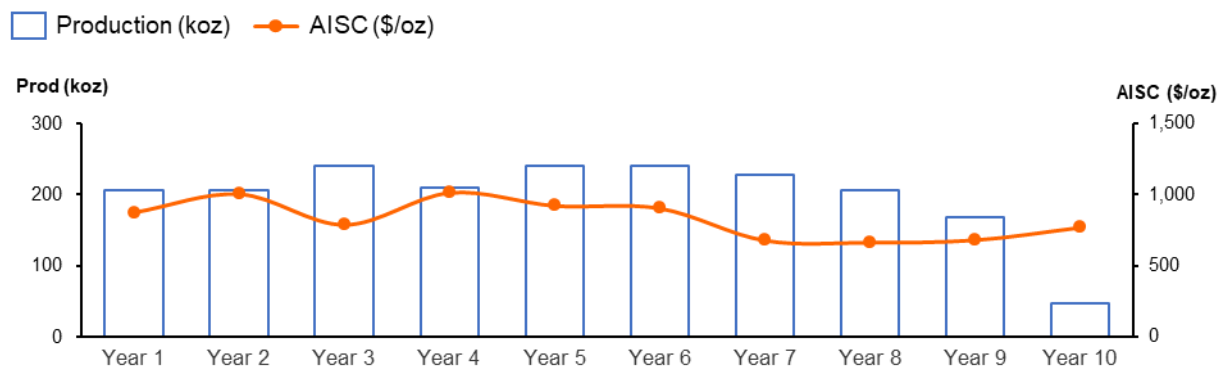
Endeavour began exploration on the Fetekro greenfield project in March 2017, following a strategic assessment of its exploration tenements which identified the project as a top priority target.

A maiden Mineral Resource was published on October 29, 2018 and was subsequently updated on September 3, 2019 and August 18, 2020. A positive Preliminary Economic Assessment (“PEA”), based on the 2019 Indicated Resource, was published on August 18, 2020.

As a result of the positive PEA results, a PFS was expedited to evaluate the economic potential of the updated 2020 Indicated Resource. Lycopodium Minerals Pty Ltd (“Lycopodium”) was responsible for the compilation of the report and delivery of the PFS to Endeavour. For the mining section, Lycopodium was assisted by Snowden Group (“Snowden”) and for the infrastructure, tailing storage facility (“TSF”) and water management sections assisted by Knight Piesold.

As shown in Figure 1 below, the PFS demonstrates Fetekro’s ability to deliver 220kozpa over the first five years and 209kozpa over its 9.5-year mine life, with further significant exploration opportunities.

Figure 1: Fetekro 2021 PFS Production Profile



The following key changes have been incorporated in the 2021 PFS, compared to the 2020 PEA:

- › The study is based on an Indicated Resource of 2.5Moz compared to previous 1.2Moz Indicated Resource
- › Nominal mill capacity increased by 100% from 1.5 to 3.0Mtpa, while upfront capital increased by only 26%
- › PFS includes the addition of a solar hybrid power option to provide sustainable power
- › Average annual production increased by 76% from 119 to 209kozpa and the mine life was extended from 8 to 9.5 years, resulting in an AISC increase of 20% from \$697/oz to \$838/oz mainly due to the higher strip ratio and the lower average grade

Table 4: Fetekro 2020 PEA vs 2021 PFS

	PFS	PEA	VARIANCE
<b>PLANT TYPE, SIZE &amp; CAPEX</b>			
Plant type	Gravity / CIP	Gravity / CIL	
Mill Type	3.0	1.5	+100%
Upfront capital cost, \$m	338	268	+26%
<b>LIFE OF MINE PRODUCTION</b>			
Mine life, years	9.5	8.0	+31%
Strip ratio, W:O	10.3	7.4	+41%
Tonnes processed, Mt	31.9	13.1	+143%
Grade processed, Au g/t	2.05	2.38	-14%
Gold contained processed, Moz	2.1	1.0	+110%
Average recovery rate, %	95	95	0%
Gold production, Moz	2.0	1.0	+109%
Average annual production, kozpa	209	119	+76%
Cash costs, \$/oz	684	592	+27%
AISC, \$/oz <sup>2</sup>	838	697	+20%
<b>ECONOMICS (BASED ON \$1,500/oz)</b>			
<b>Pre-Tax Returns</b>			
NPV <sub>5%</sub> , \$m	663	372	+78%
IRR, %	38	37	+2%
Payback, years <sup>1</sup>	2.6	1.7	+49%
<b>After-Tax Returns</b>			
NPV <sub>5%</sub> , \$m	479	272	+76%
IRR, %	33	32	+2%
Payback, years <sup>1</sup>	2.7	1.8	+48%

<sup>1</sup> Payback period calculated starting from start of commercial production

Notes: For details regarding the 2020 PEA Study, please refer to the press release dated August 18, 2020, available on Endeavour’s website.

## Reserves and Resources

As shown in Table 5 below, a total of 2.1Moz were converted into a maiden Probable Reserve out of an Indicated Resource base of 2.5Moz, representing a conversion ratio of 85%.

The PFS is based on the updated 2020 Mineral Resource Estimate (“MRE”), as published on August 18, 2020, which outlined a 108% increase over the resource base used for the PEA. The Fetekro Reserves and Resources, which comprises only the Lafigué deposit, are shown in the table below. The Inferred material within the pit design was treated as waste.

**Table 5: Lafigué Mineral Reserves and Resource**

On a 100% basis. M&I Resources shown inclusive of Reserves.	2021 PFS			2020 PEA			VARIANCE
	Tonnage (Mt)	Grade (Au g/t)	Content (Au koz)	Tonnage (Mt)	Grade (Au g/t)	Content (Au koz)	Au Content (Au koz)
Proven Reserves	-	-	-	-	-	-	-
Probable Reserves	31.9	2.00	2,100	-	-	-	+2,100
<b>P&amp;P Reserves</b>	<b>31.9</b>	<b>2.00</b>	<b>2,100</b>	-	-	-	<b>+2,100</b>
Measured Resource (incl. reserves)	-	-	-	-	-	-	-
Indicated Resources (incl. reserves)	32.0	2.40	2,471	14.6	2.54	1,190	+1,281
<b>M&amp;I Resources (incl. reserves)</b>	<b>32.0</b>	<b>2.40</b>	<b>2,471</b>	<b>14.6</b>	<b>2.54</b>	<b>1,190</b>	<b>+1,281</b>
Inferred Resources	0.8	2.52	66	0.9	2.17	60	+6

*Mineral Reserve Estimates follow the Canadian Institute of Mining, Metallurgy and Petroleum (“CIM”) Definitions Standards for Mineral Resources and Reserves and have been completed in accordance with the Standards of Disclosure for Mineral Projects as defined by National Instrument 43-101. Reported tonnage and grade figures have been rounded from raw estimates to reflect the relative accuracy of the estimate. Minor variations may occur during the addition of rounded numbers. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. Resources were constrained by MII Pit Shell and based on a cut-off of 0.5 g/t Au and \$1,500/oz gold price. The Qualified Person for the Mineral Resources and Reserves is Kevin Harris CPG, VP Resources.*

## Mining Operations

The Lafigué deposit is near surface and amenable to conventional open-pit mining. The mine planning, resource and cost estimation for the PFS is based on a contract mining operation with a maximum mining movement of 50 million tonnes per (“Mt”) per year with the variation largely due to different productivities by weathering type. The Lafigué pit will be developed in eight stages. Stockpiles are expected to be accumulated to allow high-grade material to be preferentially processed.

## Processing Operations

Ore will be processed via a 3.0 to 3.3 Mtpa processing plant. Ore feed will be above the nominal capacity for the first two years of processing due to the presence of more highly weathered ore. Over the life of mine, the plant will be fed with approximately 92% fresh ore and 8% oxide/transitional ore.

Primary jaw crushing will produce a coarse crushed product, which will feed a secondary conventional cone crusher and high-pressure grinding roll. Ore will be milled to 80% passing 75µm (microns), at which point a gravity circuit will remove coarse free-milling gold. Gravity concentrate will be treated by intensive cyanidation and electrowinning to produce gold doré.

The remaining ore that is not recovered by gravity will be leached in five leach tanks. The leached gold solution will be processed in seven carbon-in-pulp tanks before gold is recovered from loaded carbon in a AARL elution circuit, electrowinning and gold smelting to produce doré.

Extensive metallurgical testwork has indicated that gold is free milling with very high gravity and leach extraction potential, with 95% gold recovery expected over the life of mine.

## Operating Cost Summary

Mining operating cost estimates, prepared by Snowden, are based on a small owner’s team managing mining activities using a contract-mining model. Process operating cost estimates were prepared by Lycopodium and General and Administration (“G&A”) cost estimates were prepared by Lycopodium with input from Endeavour, as summarized in the table below.

**Table 6: Fetekro Life of Mine Operating Unit Costs**

UNIT COSTS	
Open Pit Mining & Rehandling	\$2.83/t mined
Processing	\$9.23/t processed
G&A	\$5.24/t processed

Operating costs have been based on a delivered diesel price of \$0.90 per litre and are in line with current local pricing. Power will be sourced from a combination of the grid supplying 225kv to site and a 7MW solar power plant, with power costs estimated at \$0.09/kWh. The addition of the hybrid power plant decreased the estimated LOM unit power cost from \$0.12/kwh to \$0.09/kwh.

### Capital Cost and Infrastructure Summary

The project capital cost estimate was compiled by Lycopodium with input from Knight Piésold on the TSF, water infrastructure, site access roads and airstrip. Endeavour has provided project specific portions for mine establishment and facilities, owners costs and the high voltage power supply.

A 22-month construction period is projected with the initial capital cost summarized in the table below.

*Table 7: Fetekro Capital Cost Estimate Summary (+20/-10%)*

CAPITAL COSTS (\$M)	
Treatment Plant	74.4
Reagents and Services	14.4
Infrastructure	70.4
Mining	50.3
Construction Distributables	23.5
<b>Subtotal</b>	<b>233.0</b>
Management Costs	24.5
Owners Project Costs	34.2
Working Capital	4.8
<b>Sub-Total</b>	<b>296.5</b>
Contingency	37.7
DFS	3.8
<b>Total</b>	<b>338.0</b>

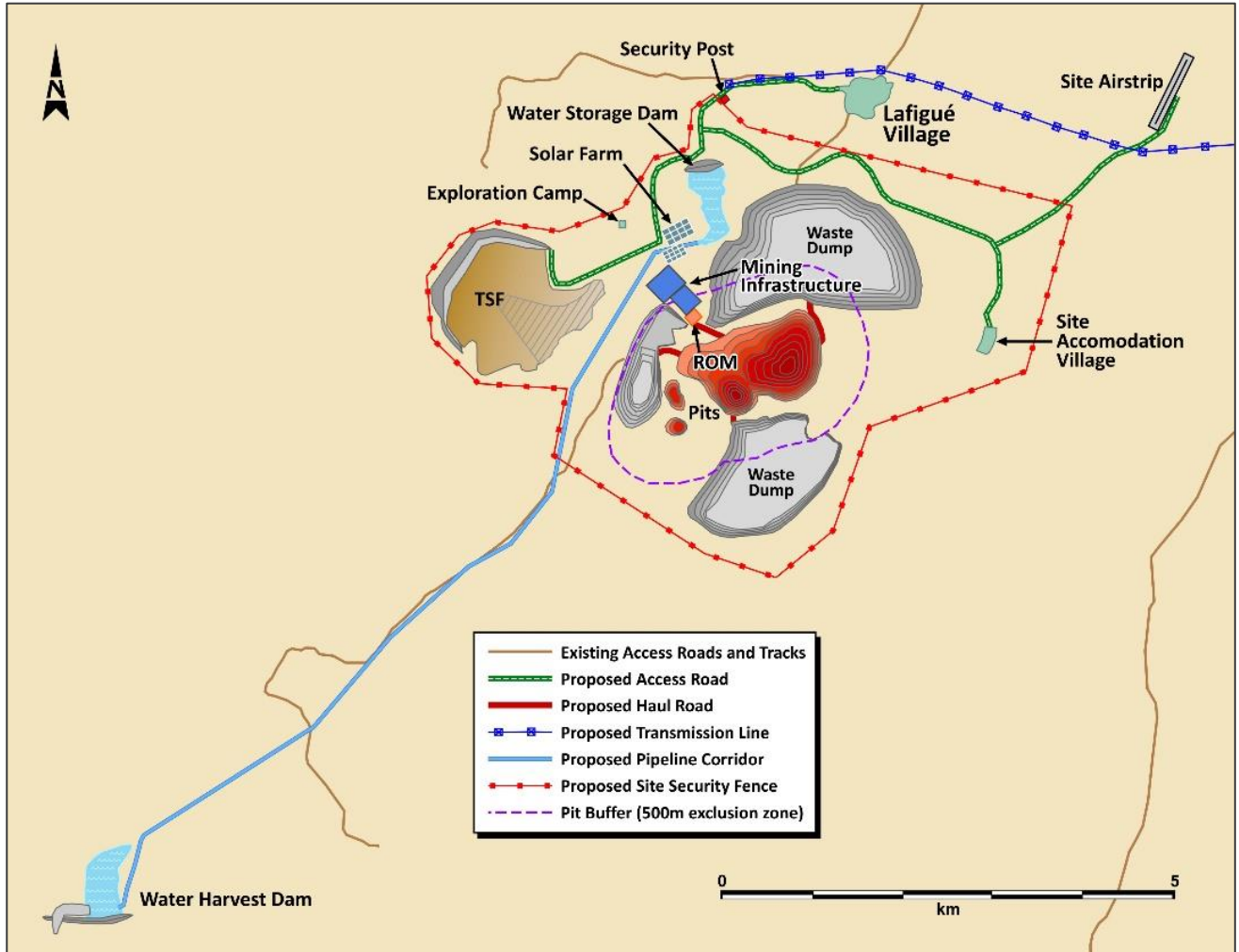
The Fetekro Project benefits from minimal resettlement requirements and good infrastructure, including access to the power grid with a 225kv supply within 28km of the project, which will be supplemented by an on-site 7MW solar power plant with an associated capital cost of approximately \$7 million. A diesel backup power supply, with an associated capital cost of approximately \$24 million plus contingency, may be contemplated within the DFS trade-offs.

Downstream raise construction methods will be utilized for all TSF embankment raises of the perimeter embankments. The TSF will comprise a cross-valley storage facility formed by multi-zoned earth fill embankments, comprising a total footprint area (including the basin area) of approximately 114 ha for the Stage 1 TSF increasing to 200 ha for the final TSF. The TSF is designed to accommodate a total of 32.8 Mt of tailings. The Stage 1 TSF is designed for 18 months storage capacity. Subsequently, the TSF will be constructed in annual raises to suit storage requirements; however, this may be adjusted to biennial raises to suit mine scheduling during the operation.

As shown in Figure 2 below, the process plant and TSF will be located on the northwestern side of the open pit.

Access to the project is by the regional highway B412 and then a sealed road to Yammoussoukro and Bouaké. A 15km stretch of unsealed access road will be upgraded as part of the project and an airstrip will be built 3.5km north of the accommodation village.

Figure 2: Schematic Fetekro Site Layout



The recommendations from the Environmental Social Impact Assessment (“ESIA”) will be used to compile an Environmental and Social Management Plan (“ESMP”) which will guide Endeavour’s local community engagement as well as ensure it fulfils its environment obligations, minimizing the mine’s impacts where possible. The ESMP will be used to ensure compliance with environmental specifications, monitoring and management measures and will be implemented from site preparation through to decommissioning and closure. Monitoring plans will be based on the ESMP. A total of \$35 million has been provisioned into the economic model for the demolition and closure activities after mining and processing activities have ceased.

**Ownership, Permitting, Taxes and Royalties**

Endeavour increased its stake in the Fetekro Project in Q4-2020. Under the terms of the agreement, once the mining permit is granted, Endeavour will be entitled to an 80% stake in the Fetekro Project, compared to 65% previously, while SODEMI (the Ivorian state-owned mining company) and the Government of Côte d’Ivoire will each have a 10% stake. Endeavour will retain full ownership of the Fetekro exploration license until it is converted into a mining license. The environmental permit was received on February 18, 2021 and the exploitation license application was submitted on February 2, 2021.

Endeavour acquired the additional stake from SODEMI for a consideration of \$19 million plus contingent payments of \$3 per ounce for future Proven and Probable Reserves defined outside of the existing Measured and Indicated Resource boundary. The contingent payment is based on a gold price of \$1,450 per ounce and will be adjusted upwards or downwards in a linear relationship with the gold price.

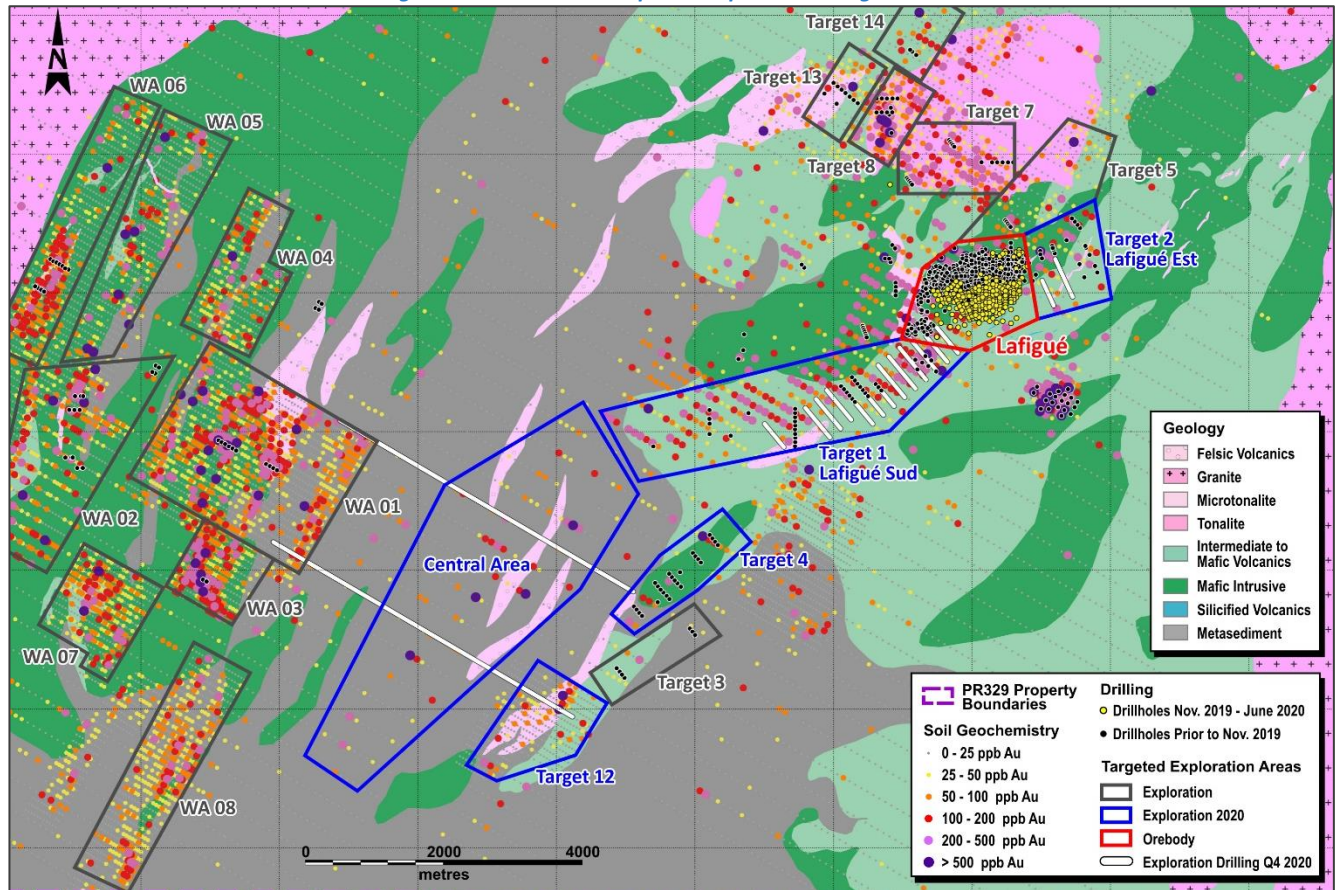
A corporate tax rate of 25% of gross profit has been applied in the PFS. A royalty of 4.0% and stamp duty of 0.5% was applied to all sales. A transport and refining charge of \$4/oz Au was also applied.

## Exploration Upside

The Lafigué resource estimate encompasses a mineralized area extending over 2km long by 1km down dip with the deposit remaining open at depth and along strike. To date, only a small portion of the Fetekro Project has been explored, as the priority has been the Lafigué deposit. Several additional exploration targets have been identified within 10km of Lafigué, which have received limited drilling.

A 15,000m drilling campaign was completed in Q4-2020, as shown in Figure 3 below. In addition, further exploration is planned for 2021 with a budget of \$7 million, with the aim of further extending the Fetekro resource and testing nearby targets, including Lafigué Sud, as shown in Figure 3.

Figure 3: Fetekro Plan Map with Exploration Targets



## Next Steps

- › The Definitive Feasibility Study is expected to commence immediately and is due to be completed in Q4-2021
- › Further exploration is planned during 2021 on near-mine exploration targets and on the Lafigué deposit with an allocated budget of \$7 million

## KALANA PROJECT PRE-FEASIBILITY STUDY

Endeavour expects to file a Technical Report pursuant to National Instrument 43-101 – Standards of Disclosure for Mineral Projects (“the NI 43-101”) in respect of the Kalana PFS within a 45-day period.

### Overview

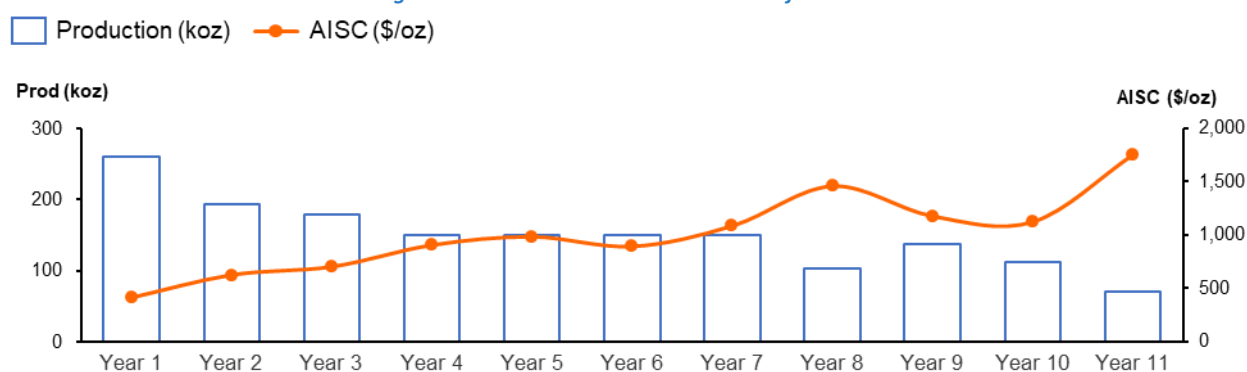
In mid-2017, Endeavour acquired Avnel Gold Mining Limited (TSX:AVK) (“Avnel”), who held an 80% interest in the Kalana Project (“Kalana”) in southwestern Mali for a total consideration of approximately \$122 million<sup>1</sup>. At the time, Kalana was the only project within Endeavour’s development pipeline following the Ity CIL project (constructed between late-2017 and early-2019).

Following the purchase of Kalana, Endeavour focused its efforts on increasing its confidence in the Kalana deposit Mineral Resource, through further drilling and by rebuilding the geological model using a more conservative approach to account for the nuggety gold mineralization. This process resulted in an updated and independently estimated Mineral Resource for Kalana, as prepared by Optiro, and described in the “Reserves and Resources” section below.

Following the completion of the updated resource, Lycopodium Minerals Pty Ltd (“Lycopodium”) independently prepared a Pre-Feasibility Study (the “2021 Study”), with the inputs from Snowden and Knight Piesold, to assess the economic viability of the Kalana Project.

As shown in Figure 4 below, the 2021 Study demonstrates Kalana’s ability to deliver 186kozpa over the first five years and 150kozpa over its 11-year mine life, with significant near mine exploration opportunities. The project boasts strong economics a post-tax NPV<sub>5%</sub> of \$331 million and a post-tax IRR of 49% at a \$1,500/oz gold price.

Figure 4: Kalana 2021 PFS Production Profile



The following key changes have been incorporated in the 2021 Study, compared to the Definitive Feasibility Study (“DFS”) published by Avnel on March 30, 2016 (the “2016 Study”), with the goal of increasing annual production and augmenting the confidence level of the study estimates:

- › Nominal mill capacity increased by 150% from 1.2 to 3.0Mtpa, with upfront capital increased by 51%. The 2016 Study included pre-production revenue from the tailings processed during construction, which were removed within the 2021 Study.
- › Inclusion of the Kalanako satellite deposit and the abovementioned more conservative resource model for the Kalana deposit, which led to the average processed grade decreasing by 43%, tonnage processed increasing by 63%, and the strip ratio decreasing by 34%
- › Average annual production increased by 49% from 101 to 150kozpa, while shortening the mine life from 18 to 11 years
- › AISC increased by 15% to \$901/oz reflecting updated unit costs and the lower grades

<sup>1</sup> As per press release dated June 28, 2017, available on Endeavour’s website.



Table 8: Kalana 2016 vs. 2021 Study Comparison

	2021 STUDY	2016 STUDY	VARIANCE
<b>PLANT SIZE &amp; CAPEX</b>			
Nominal mill capacity, Mtpa	3.0	1.2	+150%
Upfront capital cost, \$m	297	196	+51%
<b>LIFE OF MINE STATS</b>			
Mine life, years	11	18	-39%
Strip ratio, W:O	6.7	10.2	-34%
Tonnes processed, Mt	35.6	21.8	+63%
Grade processed, Au g/t	1.60	2.81	-43%
Gold contained processed, Moz	1.8	2.0	-9%
Average recovery rate, %	90	93	-3%
Total gold production, Moz	1.7	1.8	-8%
Average annual production, kozpa	150	101	+49%
AISC, \$/oz	901	784	+15%

Notes: Details related to the Avnel 2016 Study, published on March 30, 2016, are available on SEDAR under Avnel's profile. Comparative period economics are unavailable as a gold price of US\$1,200/oz was used in the 2016 Study while \$1,500/oz was used in the 2021 Study.

### Reserves and Resources

As shown in Table 9, a total of 1.8Moz were converted into Probable Reserves from an Indicated Resource of 2.3Moz by the 2021 Study for the Kalana Project, representing a conversion ratio of 79%.

The 2021 Study is based on recently updated Mineral Resource Estimates ("MRE"), rather than the previous estimate as prepared on behalf of Avnel in 2016.

The updated MRE includes the Kalana and Kalanako deposits and two TSFs stemming from the historical underground mine which utilized gravity-only recovery methods. The deposit's geological models were updated using a more conservative approach to incorporate tighter geological controls for the high-grade nugget effect, stacked vein sets and dilution after additional drilling in 2017-18, as further described in the section below entitled Kalana Technical Notes.

Table 9: Kalana Project Mineral Resource and Reserve Evolution

On a 100% basis. M&I Resources shown inclusive of Reserves.	2021 PFS BY ENDEAVOUR <sup>1</sup>			2016 FS BY AVNEL <sup>2</sup>			VARIANCE
	Tonnage (Mt)	Grade (Au g/t)	Content (Au koz)	Tonnage (Mt)	Grade (Au g/t)	Content (Au koz)	Content (Au koz)
Proven Reserves	0	0	0	5.1	3	492	-492
Probable Reserves	35.6	1.6	1,831	16.1	2.76	1,472	+359
<b>P&amp;P Reserves</b>	<b>35.6</b>	<b>1.6</b>	<b>1,831</b>	<b>21.7</b>	<b>2.81</b>	<b>1,964</b>	<b>-133</b>
Measured Resource (incl. reserves)	0	0	0	9.5	4.2	1,283	-1283
Indicated Resources (incl. reserves)	46	1.57	2,318	14.2	3.98	1,821	+497
<b>M&amp;I Resources (incl. reserves)</b>	<b>46.0</b>	<b>1.57</b>	<b>2,318</b>	<b>23.7</b>	<b>4.07</b>	<b>3,103</b>	<b>-785</b>
Inferred Resources	4.6	1.67	245	2.1	4.7	314	-69

Mineral Reserve and Resource estimates follow the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") definitions standards for Mineral Resources and Reserves and have been completed in accordance with the Standards of Disclosure for Mineral Projects as defined by National Instrument 43-101. Reported tonnage and grade figures have been rounded from raw estimates to reflect the relative accuracy of the estimate. Minor variations may occur during the addition of rounded numbers. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. <sup>1</sup>The 2020 Updated Kalana Project Mineral Resource has an effective date of June 30, 2020 and is constrained by a \$1,500/oz conceptual open-pit shell. For notes relating to the 2020 Resource Estimate, please consult the section below entitled Kalana Technical Notes. <sup>2</sup>As per Avnel Mineral Resources as of March 30, 2016, based on \$1,400/oz Au; for the notes relating to the 2016 estimate, please consult the Kalana Technical Report dated March 30, 2016 available on the Endeavour website.

The Kalana Project comprises two primary deposits, Kalana and Kalanako, and two TSFs, with resources outlined in the table below.

Table 10: Updated Kalana Project Mineral Resource Estimate

Deposits on a 100% basis, shown inclusive of reserves	INDICATED			INFERRED		
	Tonnage (Mt)	Grade (Au g/t)	Content (Au koz)	Tonnage (Mt)	Grade (Au g/t)	Content (Au koz)
Kalana	43.5	1.54	2,158	4.2	1.64	222
Kalanako	1.6	2.15	112	0.4	1.99	23
Old Tailings	0.8	1.80	48	0.0	0.00	0
<b>Total</b>	<b>46.0</b>	<b>1.57</b>	<b>2,318</b>	<b>4.6</b>	<b>1.67</b>	<b>245</b>

Mineral Resource estimates follow the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") definition standards for Mineral Resources and Reserves and have been completed in accordance with the Standards of Disclosure for Mineral Projects as defined by National Instrument 43-101. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. The Kalana and Kalanako Mineral Resources are constrained by MII \$1,500/oz Pit Shell and based on a cut-off of 0.5 Au g/t. The TSF Mineral Resource does not have a cut-off grade applied. Reported tonnage and grade figures have been rounded from raw estimates to reflect the relative accuracy of the estimate. Minor variations may occur during the addition of rounded numbers. The Qualified Person for the exploration data and geological interpretation is Helen Oliver MSc FGS CGeol, Endeavour Mining Group Resource Geologist. The Qualified Person for the Tailings Mineral Resource Estimate is Ms. Oliver. The Qualified Person for the Kalana and Kalanako

The Probable Mineral Reserves for the Kalana Project, inclusive of dilution and mining loss, derived from an Indicated Resource is summarized in the table below.

**Table 11: Updated Kalana Probable Mineral Reserves**

Deposits on a 100% basis	Tonnage (Mt)	Grade (Au g/t)	Content (Au koz)
Kalana	33.6	1.58	1,707
Kalanako	1.2	2.21	85
Old Tailings	0.82	1.67	44
<b>Total</b>	<b>35.6</b>	<b>1.60</b>	<b>1,836</b>

No Proven reserves have been estimated. Mineral Reserve estimates follow the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") definitions standards for Mineral Resources have been completed in accordance with the Standards of Disclosure for Mineral Projects as defined by National Instrument 43-101. Reported tonnage and grade figures have been rounded from raw estimates to reflect the relative accuracy of the estimate. Minor variations may occur during the addition of rounded numbers. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

### Mining Operations

The mine planning, resource and cost estimation for the 2021 Study is based on a contract-mining operation with a maximum mining movement of 30Mt per year with the variation largely due to different productivities by weathering type. A high proportion of the orebodies are within the saprolite weathering horizon resulting in approximately 30 to 40% of the material moved requiring no or limited blasting. Nearly 97% of the ore tonnes are from Kalana, the remainder is from Kalanako which is higher grade at a higher strip ratio. The Kalana pit will be developed in six stages while Kalanako will be mined in two stages forming two separate pits.

Endeavour elected to use a more conservative approach incorporating fully diluted blocks susceptible for large volume open pit mining rather than small scale selective mining as envisaged in the previous 2017 study.

Stockpiles are expected to be accumulated to allow high grade material to be preferentially processed.

### Processing Operations

The plant design has been based on a nominal capacity of 3.0Mtpa of primary mineralized material, if fed with fresh rock, and a capacity of 3.8Mtpa if fed with oxide material. Over the life of mine, the plant will be fed with approximately 27% oxide, 9% transition, 62% fresh and 2% tailings material, with the majority of the oxide and tailings processed in the first four years of operation.

The 2021 Study envisages a conventional single stage primary crusher, followed by a SABC circuit (SAG and ball mill, with pebble crusher) grinding to 80% passing 90 µm. The grind material will be passed through a gravity concentration circuit to remove coarse gold, which will be subsequently treated by intensive cyanidation and electrowinning to recover gold doré. The remaining feed will be treated by pre-leach thickening and carbon in leach. Loaded carbon will be passed to a split AARL elution circuit, electrowinning and then gold smelting to recover gold from the loaded carbon to produce doré.

Metallurgical testwork demonstrates the Kalana ore has high potential for gravity recoverable gold, particularly the oxide ore, and an average total gold recovery of 90% is projected for the life of mine.

### Operating Cost Summary

Mining operating cost estimates, prepared by Snowden, are based on a small owner's team managing mining activities using a contract-mining model. Process operating cost estimates were prepared by Lycopodium and G&A cost estimates were prepared by Lycopodium with input from Endeavour, as summarized in the table below.

**Table 12: Kalana Life of Mine Operating Unit Costs**

Open Pit Mining & Rehandling	\$2.71/t mined
Processing	\$13.28/t processed
G&A	\$3.97/t processed

Operating costs have been based on a delivered diesel price of \$0.77 per litre and are in line with current local pricing. Power will be derived from the Malian grid with power costs estimated at \$0.14/kWh.

### Capital Cost and Infrastructure Summary

The project capital cost estimate was compiled by Lycopodium with input from Knight Piésold on the TSF, water infrastructure, site access roads and airstrip. Endeavour have provided the project specific portions of mine establishment and facilities, owners costs and the power supply.

A 22-month construction period is expected with the initial capital cost summarized in the Table below.

*Table 13: Capital Cost Estimate Summary (+20/-10%)*

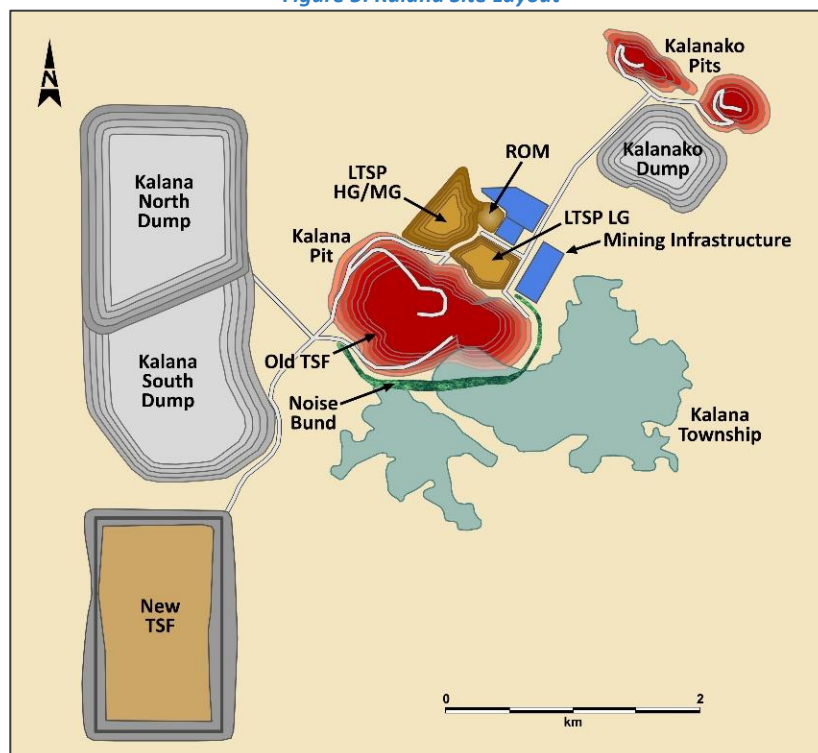
CAPITAL COSTS (\$M)	
Treatment Plant	68.3
Reagents and Services	16.1
Infrastructure	43.1
Mining	16.9
Construction Distributables	18.6
<b>Sub-Total</b>	<b>163.0</b>
Management Costs	21.7
Owners Project Costs	67.5
Working Capital	5.7
<b>Sub-Total</b>	<b>257.9</b>
Contingency	35.8
DFS	3.3
<b>Total</b>	<b>297.0</b>

The Kalana Project will be powered by Malian grid power, which will require the construction of a 51km 66 kV power line from Yanfolila and a new sub-station at the project. Additional emergency power will be supplied by onsite 2,000kVA diesel generators.


Downstream raise construction methods will be utilized for all TSF embankment raises of the perimeter embankments. The TSF will comprise a two-cell paddock storage facility formed by multi-zoned earth fill embankments, comprising a total footprint area (including the basin area) of approximately 77 ha for the Stage 1 TSF, increasing to 239 ha for the final TSF. The TSF is designed to accommodate a total of 35.6Mt of tailings. The stage one TSF is designed for 18 months storage capacity. Subsequently, the TSF will be constructed in annual raises to suit storage requirements, however this may be adjusted to biennial raises to suit mine scheduling during the operation.

As shown in Figure below, the process plant will be located on the north eastern side of the open pit, and the TSF will be located on the south western side of the open pit. The accommodation camp will be located north of the process plant. The airstrip will be located 4km north of the process plant. The 4.9km main access road will approach the site from the south east and connect to the RN8, part of the regional road network between Yanfolila and Bougouni.

*Figure 5: Kalana Site Layout*



The project requires the partial resettlement of Kalana town due to the placement of project infrastructure and the need to ensure a safe buffer zone between mining activities and the community. The development will also result in the compensation of various farmers due to the establishment of mining infrastructure and associated



activities. Resettlement and compensation will be undertaken under the terms of the relevant Malian legislation and industry best practice. A Resettlement Action Plan will be completed in three phases for a total cost of \$62 million, of which \$36 million (plus a 12% contingency) is included into the upfront capital spend for the first resettlement phase. The recommendations from the Environmental Social Impact Assessment (“ESIA”) will be used to compile an Environmental and Social Management Plan (“ESMP”) which will guide Endeavour’s local community engagement as well as ensure it fulfils its environment obligations, minimizing the mine’s impacts where possible. The ESMP will be used to ensure compliance with environmental specifications, monitoring and management measures and will be implemented from site preparation through to decommissioning and closure. Monitoring plans will be based on the ESMP. A total of \$30 million has been provisioned into the economic model for the demolition and closure activities occur after mining and processing activities have ceased.

### *Ownership, Permitting, Taxes and Royalties*

Endeavour has an 80% interest in SOMIKA, the holder of the Permit. The Government of Mali holds the remaining 20% beneficial interest in SOMIKA. The Project comprises one Exploitation Permit (Permis d’Exploitation), registered to SOMIKA that grants the exclusive right of exploitation and exploration. The Permit confers the right to exploit and explore for gold and silver for a period of 30 years. According to Article 43 of the 1999 Mining Code, an exploitation permit is granted by decree for a 30-year period, renewable for a further 10-year period until depletion of the reserves contained within the boundaries of the permit.

Following the three-year period from the commencement of commercial production, an 18% value added tax will be applicable on goods and services, which is fully reimbursable, and customs duty will be applicable on imported goods.

As SOMIKA elected to stay under the old CIT regime in force before Loi de Finance 2012, the tax structure in Mali applicable to its operations consists of a general corporate income tax rate of 35% of profits after deductions for expenses and allowable depreciation. SOMIKA is also subject to a minimum tax rate of 1.0% of net revenue, even in years with a deficit.

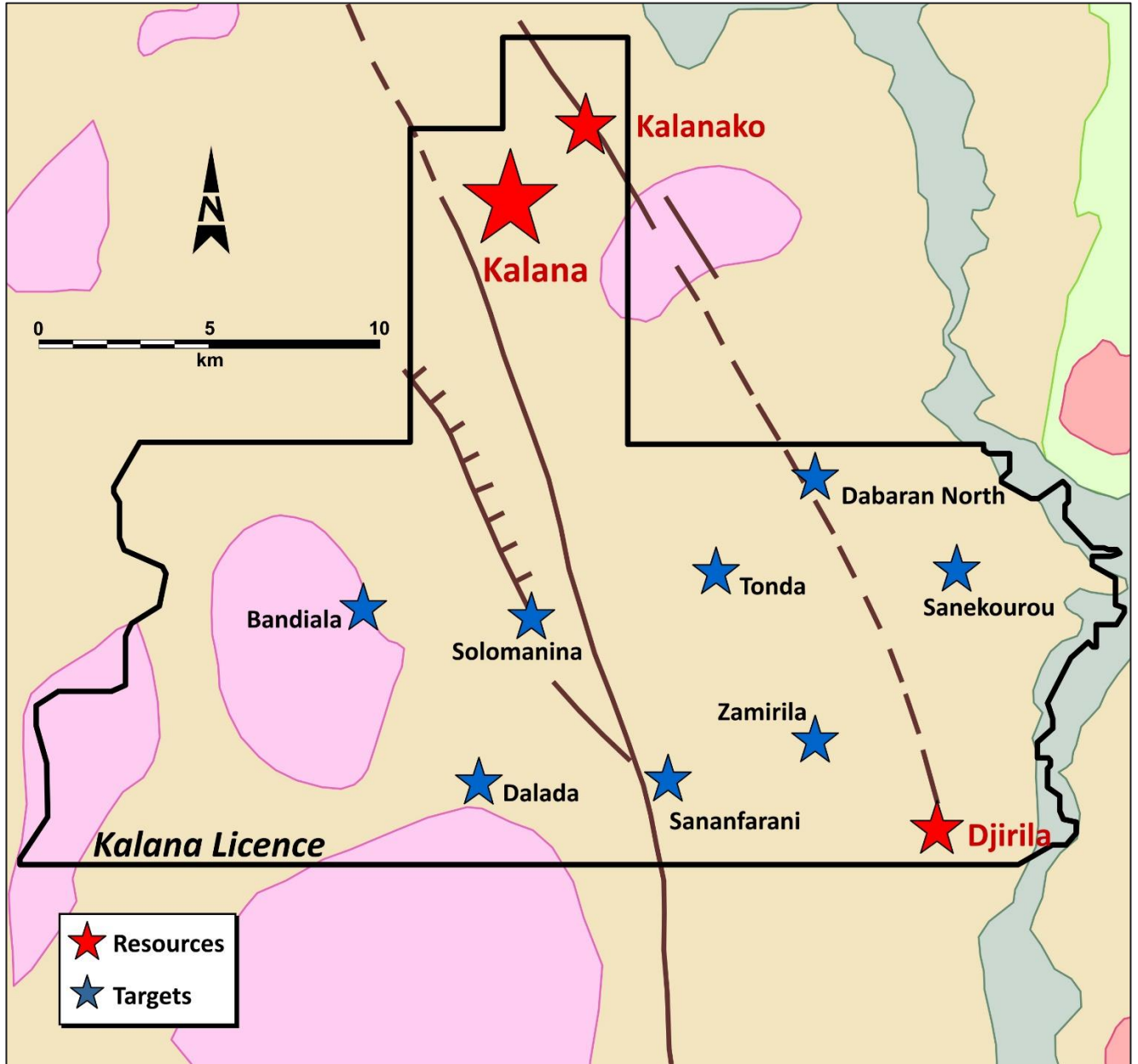
SOMIKA is subject to a royalty which is a special tax on mining products (Impôt Spécial sur Certains Produits or ISCP) at a rate of 3% and is calculated on the basis of turnover before tax. Pursuant to the stability clauses in the Company’s Foundation Agreement, the 3% Ad Valorem Net Smelter Return Tax, introduced as part of the 2012 Mining Code, is not applicable to SOMIKA.

### *Exploration Upside*

The Kalana Project is highly prospective, particularly the Kalanako Northwest area and the Djirila deposit. Discovery of additional deposits may provide an extension of the Kalana mining operation. In addition, potential high-grade free-digging soft material may provide further operating flexibility.

The Kalanako Northwest area is highly prospective due to the presence of historical artisanal workings, gold showings and soil and geophysical anomalies. The Djirila deposit, located 22km southwest of the proposed plant location, is within a reasonable trucking distance from the Kalana plant and should be reviewed in regard to identifying possible additional mineral resources.

Figure 6: Kalana Plan Map with Exploration Targets



**Next steps**

- › The Definitive Feasibility Study is expected to commence immediately and is due to be completed in Q1-2022
- › Further exploration is envisaged on near-mine exploration targets

## FETEKRO TECHNICAL NOTES

### *Mineral Resource Estimate*

Fetekro's Lafigué Mineral Resource model was developed in Geovia's Surpac software. A total of 26 mineralized zones were defined from the current drilling data and geologic interpretations made across Lafigué South, Center and North areas. The gold assays from the drill holes were composited to one metre intervals within the mineralized wireframes and capped from 15 g/t to 30 g/t Au. Spatial analysis of the gold distribution within the mineralized zone using variograms indicated a good continuity of the grades along strike and down dip of the mineralized zones.

Density was measured in 2,282 core samples within the various rock types then averaged within the model by the weathered zones. The laterite density is 2.0t/m<sup>3</sup>, the saprolite density is 1.80t/m<sup>3</sup>, the transition is 2.4t/m<sup>3</sup>, and the fresh rock is 2.80t/m<sup>3</sup>.

The gold grade was estimated using Ordinary Kriging constrained within the mineralized domains. The grade was estimated in multiple passes to define the higher confidence areas and extend the grade to the interpreted mineralized zone extents.

The grade estimation was validated with visual analysis and comparison with the drilling data on sections and with swath plots comparing the block grades with the composites.

The mineralized domains were classified into Indicated and Inferred Resource classifications, depending on the sample spacing, number samples, confidence in mineralized zone continuity, and geostatistical analysis. The Indicated classification was generally applied to blocks within the mineralized zone defined by a minimum of seven samples from at least three drill holes with a 50 m search. The Inferred classification is defined by a minimum of three samples within a 75m search from two drill holes.

The Mineral Resource was constrained by a \$1,500/oz Au pit shell and 0.50 Au g/t cut-off. The Whittle pit shell optimization assumed a base mining cost of \$2.50/t, and \$2.75/t for oxide mineralized zones, \$3.25/t for transition mineralized zones and \$3.75/t for fresh rock mineralized zones, mining recovery of 95%, mining dilution of 10%, pit slope of 40°, recovery of 96% of the gold in the oxide, 95% in the transition and 94% in the fresh, and processing and a G&A cost of \$19.85/t in the oxide and \$21.17/t in the transition and fresh.

### *Drilling, Assay Procedures and Quality Assurance and Quality Control Procedures*

The Reverse Circulation drill program samples were collected on a one metre interval using dual tube, a percussion hammer and drop centre bit. The material passes through a cyclone which is thoroughly cleaned after every sample by flushing the hole. Samples were split at the drill site using a three-tier riffle splitter with both bulk, laboratory and retained duplicate samples weights and moisture recorded. Representative samples chips for each interval were collected with a spear, sieved and retained into chip trays for reference.

Drill core (PQ, HQ and NQ size) sampling intervals are selected by LMCI geologists and cut in half with a diamond blade saw at the project site. Half of the core is retained at the site for reference purposes. Sample intervals are generally on metre in length.

All samples are transported by road to Bureau Veritas (BV) in Abidjan (Côte d'Ivoire). Every laboratory sample is secured in poly-woven bag ensuring that there is a clear record number of the chain of custody. On arrival at the laboratory, the entire sample is weighted, dried and crushed to <2mm (70% passing) and 250g pulverized to 75µm (85% passing). Samples are analyzed for gold using standard fire assay technique with a 50g charge and an Atomic Absorption (AA) finish. Blanks, field duplicates and certified reference material (CRM's from Geostats Pty Ltd) are inserted by LMCI geologists in the sample sequence for quality control and to ensure there are a suite of QC samples in each fire assay batch.

The sampling and assaying at Lafigué is monitored through the implementation of a quality assurance / quality control (QA/QC) program. This QA/QC program was audited by international mining consultants CSA Global in 2019 and consequently designed to follow industry best practices.

## KALANA TECHNICAL NOTES

### *Mineral Resource Estimate*

The Mineral Resource Estimate ("MRE") for the Kalana Project, including the Kalana and Kalanako deposits and two TSFs, has been updated with additional drilling in 2017-18 including 165 reverse circulation (RC) drill holes for 24,900 m and 81 diamond drill (DD) holes for 27,200 m at Kalana and 63 RC holes for 7,800 m and three DD

holes for 540 m at Kalanako. The drilling results facilitated the advancement of the geological models and an updated Pre-Feasibility Study (PFS). The MREs also utilised the IAMGOLD-SOMIKA joint venture (2009-13) and SOMIKA (2008, 2014-16) exploration results. The drilling and sampling protocols are largely the same and are considered to be suitable for use in an MRE.

The Kalana deposit gold mineralisation has been modelled at a threshold of 0.2 ppm Au to 0.3 ppm Au with a thickness of three metres down-the hole (DTH, equivalent to two metres vertically). One hundred and thirty-five (135) veins have been modelled within 61 Vein Packages, grouped into eight types or domains based on geometry, orientation and/or location. The veins have a typical thickness of four to five metres (DTH), but may exceed 40 m. There is no gold enrichment or depletion in the saprolite which has a typical thickness of 30 m.

Gold mineralisation at Kalanako has been modelled at a threshold of 0.2 ppm Au with a minimum thickness of three metres DTH into 34 wireframes (of which six represent two-thirds of the total mineralised volume). The mineralised wireframes are considered to be a single domain and have an average thickness of seven metres.

The grade estimation of the mineralised veins at Kalana and Kalanako are hampered by the very coarse nature of the gold; the drill hole databases have numerous instances of barren assays with a number of visible gold grains logged in a known mineralised vein. The resource estimation methodology applied uses Categorical and Ordinary Kriging.

An appraisal of downhole sample length demonstrated that over 99% of the drillhole data had sample lengths of one metre or less. Consequently, the drillhole data was composited to a target length of one metre within the constraints provided by the vein package, weathering and lithology interpretations. This composited data was used for all further analysis.

The MRE classification criteria follows the CIM Definition Standards for Mineral Resources and Reserves 2014.

## **KALANA**

The June 2020 independent Kalana Mineral Resource Estimate done by Optiro Consulting utilises data and geological interpretations compiled by Endeavour in 2018. The average grade of the encapsulated samples in the mineralised wireframes is 1.37 Au g/t. Variable top-caps on composited data were applied based on categorical grade categories and geological domains.

The Kalana gold grades were estimated by Categorical and Ordinary Kriging in a block model created with topography, weathering, lithology, vein package and TSF wireframes. The wireframes were represented by 10 mE by 10 mN by 5 mRL parent blocks with 5 mE by 5 mN by 1.25 mRL subcells at boundaries in Datamine Studio RM. Parent block grade estimation was undertaken using Ordinary Kriging of the top-cut, one metre downhole composite samples. The model was depleted for underground mining using a stope and development wireframe model.

The Kalana Mineral Resource Estimate is constrained within a US\$1,500/oz gold Whittle open-pit shell as a limit of economic extraction, defined using the following parameters (all costs are in US dollars), and a cut-off grade of 0.5 Au g/t:

- › Slope angles – Laterite & Oxide 28.5°; Transition 42° W & 45° E; Fresh 48° W & 52° E
- › Au recovery – Laterite & Oxide 95.4%; Transition 92.4%; Fresh 92.7%
- › Gold price – \$1,500/oz
- › Mining cost – Laterite \$1.64/t; Oxide \$1.80/t; Transition \$2.08/t; Fresh \$2.95/t
- › Processing cost – Laterite \$19.82; Oxide \$19.96/t; Transition \$24.52/t; Fresh \$23.00/t
- › Selling cost – \$4/oz Au
- › Royalty – 3.6%

Endeavour considers the updated 2018 Kalana geological model to be a more robust and accurate model, as compared to the previous 2016 estimate prepared on behalf of Avnel as:

- › The geological model was updated with over 30,000 metres of in-fill drilling completed since the Project was acquired in mid-2017. In total, more than 2,200 holes and more than 221,000 assays (including over 103,000 LeachWELL assays) were used to refine the geological model

- › A total of 135 veins within 61 vein packages were individually modelled as opposed to the previous approach of applying geostatistics to 56 grouped vein packages, and thereby provided an upgraded confidence in the vein packages/domain boundaries
- › Mineralised intersections outside of the defined wireframes where continuity was not proven were excluded
- › The cut-off grade was lowered from 0.9 Au g/t to 0.5 Au g/t

In addition, different algorithms were used to estimate the grade, whereby Categorical and Ordinary Kriging were used by Optiro Consultants as opposed to Multiple Indicator Kriging.

## KALANAKO

The June 2020 Kalanako Mineral Resource Estimate by Optiro Consulting utilises data and geological interpretations compiled by Endeavour in 2018. The average grade of the encapsulated samples in the mineralised wireframes is 1.42 Au g/t. Variable top-caps were applied based on categorical grade category. The saprolite is deep, with a typical depth of 50 m to 70 m.

The Kalanako gold grades have been estimated by Categorical and Ordinary Kriging into an azimuth rotated (310°) block model. The topography, weathering, oxidation, graphitic and mineralisation wireframes were represented by 5 mX by 20 mY by 10 mRL parent blocks with 1.25 mX by 5 mY by 2.5 mRL subcells at boundaries.

The Kalanako MRE is constrained within a US\$1,500/oz gold Whittle open-pit shell as a limit of economic extraction, defined using the following parameters (all costs are in US dollars), and a cut-off grade of 0.5 Au g/t:

- › Slope angles – Laterite & Oxide 28.5°; Transition 42° W & 45° E; Fresh 48° W & 52° E
- › Au recovery – Laterite & Oxide 96.0%; Transition 88.5%; Fresh 89.0%
- › Gold price – \$1,500/oz
- › Mining cost – Laterite \$1.53/t; Oxide \$1.68/t; Transition \$2.11/t; Fresh \$2.82/t
- › Processing cost – Laterite \$20.19; Oxide \$20.26/t; Transition \$24.78/t; Fresh \$23.41/t
- › Selling cost – \$4/oz Au
- › Royalty – 3.6%

## TAILINGS STORAGE FACILITIES

Two TSFs exist within the Kalana Project: the principal TSF located halfway between Kalana and Kalanako, and the small TSF (“Shaft No. 2 TSF” filling an old open-pit) within the fence close to the historical plant. The TSF volumes have been estimated with consideration of their estimated volume in 2004, preliminary dam design reports, the estimate in the 2016 NI 43-101-compliant DFS Technical Report, production plant discharge data, depletion records and various topographic surveys. The significant grade of the TSFs is based on the high underground mining grades, the gravity-only recovery, plant tailing samples and limited drilling. The TSFs are estimated to contain 845,000 t at a grade of 1.8 Au g/t for 48 koz Au as of June 2020 by Endeavour.

### Density

Density measurements for Kalana and Kalanako were taken from diamond core samples using a water displacement (Archimedes) method. Density values, as shown below, were assigned to the resource models based on the interpreted weathering domain.

*Table 14: Block Model Assigned Densities, t/m<sup>3</sup>*

ROCK TYPE	KALANA	KALANAKO	TAILINGS
Laterite / Mottled Zone / Regolith	1.67	1.70	1.50
Saprolite	1.64	1.76	1.50
Saprock	2.15	2.09	1.50
Fresh	2.68	2.64	1.50

### Drilling Procedures

The RC drill programme samples were collected on one metre intervals using dual tube, percussion hammer and a drop centre bit. The material passed through a cyclone which was thoroughly cleaned after every sample by flushing the hole. Samples were split at the drill site using a three-tier riffle splitter with both bulk and laboratory



sample weights and moisture recorded. Samples sent to the laboratory are between four and five kilograms in weight. Representative samples for each interval were collected with a spear, sieved into chip trays and retained for reference. Washed chips were also glued onto display boards. A small proportion of the reject sample material was washed for visible gold.

Drill core (PQ, HQ and NQ size) samples were selected by Endeavour geologists and sawn in half with a diamond blade at the project site. Half of the core was retained at the site for reference purposes. Sample intervals were generally one metre in length.

All samples were transported by road to ALS in Ouagadougou, Burkina Faso or in Kumasi, Ghana, or to the BIGS Global Burkina SARL Laboratory in Ouagadougou in secured, poly-woven bags.

### **Assay Procedures**

On arrival at the analytical laboratory, the RC and DD samples were weighed and crushed to 6 mm (70% passing), and a two-kilogram sample taken by a rotary split which was pulverised to 75 µm (85% passing).

The two kilogram pulverised samples were analysed for gold using the LeachWELL (LW) method. LW tails were further analysed by Fire Assay (50 g charge) with an Atomic Absorption (AA) finish when returning an assay of over 0.3 ppm Au.

A systematic re-assaying programme of the IAMGOLD-Avnel joint venture drill samples was undertaken in 2013-15 in three (depth constrained) phases due to the visible gold in samples with barren assays. Sample selection criteria was based on:

- › Gold grade above 0.1 g/t, or a sample below 0.1 Au g/t and included in a mineralised intercept.
- › Visible gold.
- › Sample located with a geologically mineralised zone but with no grade.

During the re-assay programme, the leaching tails were systematically assayed using fire assay to ensure that the leaching process was complete if the LeachWELL grade was over 0.1 Au g/t. Since 2015, all samples are routinely sent for LeachWELL analysis.

### **Quality Assurance and Quality Control Procedures**

The sampling and assaying in the Kalana Project were monitored through the implementation of a quality assurance/quality control (QA/QC) programme with the use of Certified Reference Materials ("standards"), blanks and duplicates inserted into the sample stream by Endeavour geologists.

QA/QC results are reviewed on a certificate basis and "failed" samples are identified and re-assayed according to the Endeavour QA/QC protocol.

The Kalana Project exploration database is held within a propriety electronic secure database system with a dedicated Database Manager.

## **QUALIFIED PERSONS**

Patrick Pérez, P.Eng , Director of Technical Studies for Endeavour Mining - a registered member of APEGS (Association of Professional Engineers and Geoscientists of Saskatchewan), is a "Qualified Person" as defined by National Instrument 43-101 - Standards of Disclosure for Mineral Projects ("NI 43-101") and has reviewed and approved the technical information in this news release.

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*The Toronto Stock Exchange has neither reviewed nor accepts responsibility for the adequacy or accuracy of this news release.*

## **ABOUT ENDEAVOUR MINING CORPORATION**

*Endeavour Mining is one of the world's top ten senior gold producers and the largest in West Africa, with operating assets across Senegal, Cote d'Ivoire and Burkina Faso and a strong portfolio of advanced development projects and exploration assets in the highly prospective Birimian Greenstone Belt across West Africa.*

*A member of the World Gold Council, Endeavour is committed to the principles of responsible mining and delivering sustainable value to its employees, stakeholders and the communities where it operates. Endeavour is listed on the Toronto Stock Exchange, under the symbol EDV and will be seeking a secondary listing as a Premium issuer on the London Stock Exchange during Q2-2021.*

*For more information, please visit [www.endeavourmining.com](http://www.endeavourmining.com).*

## **CAUTIONARY NOTE REGARDING FORWARD-LOOKING INFORMATION**

*This press release contains statements which constitute "forward-looking information" within the meaning of applicable securities laws, including statements regarding the plans, intentions, beliefs and current expectations of Endeavour with respect to future business activities and operating performance. Forward-looking information is often identified by the words "may", "would", "could", "should", "will", "intend", "plan", "anticipate", "believe", "estimate", "expect" or similar expressions and includes information regarding Endeavour's estimates, expectations, forecasts and guidance for production, all-in sustaining cost, capital expenditures, cost savings, project economics (including net present value and internal rates of return) and other information contained in the feasibility study; as well as references to other possible events, the future price of gold, the estimation of mineral reserves and mineral resources, the realization of mineral reserve and mineral resource estimates, the timing and amount of estimated future production, costs of production, capital expenditures, costs and timing of the development of the project and mining and processing activities, permitting timelines, requirements for additional capital, government regulation of mining operations, and environmental risks..*

*Investors are cautioned that forward-looking information is not based on historical facts but instead reflect Endeavour management's expectations, estimates or projections concerning future results or events based on the opinions, assumptions and estimates of management considered reasonable at the date the statements are made. Although Endeavour believes that the expectations reflected in such forward-looking information are reasonable, such information involves risks and uncertainties, and undue reliance should not be placed on such information, as unknown or unpredictable factors could have material adverse effects on future results, performance or achievements of the combined company. This forward-looking information may be affected by risks and uncertainties in the combined business of Endeavour and market conditions, including (1) there being no significant disruptions affecting Endeavour's operations whether due to extreme weather events and other or related natural disasters, labor disruptions, supply disruptions, power disruptions, damage to equipment or otherwise; (2) permitting, development, operations and production for the Fetekro and Kalana projects, respectively, being consistent with Endeavour's expectations; (3) political and legal developments in Côte d'Ivoire and Mali, respectively, being consistent with current expectations; (4) certain price assumptions for gold; (5) prices for diesel, electricity and other key supplies being approximately consistent with current levels; (6) the accuracy of Endeavour's mineral reserve and mineral resource estimates; and (7) labor and materials costs increasing on a basis consistent with Endeavour's current expectations. This information is qualified in its entirety by cautionary statements and risk factor disclosure contained in filings made by Endeavour with the Canadian securities regulators, including Endeavour's annual information form, financial statements and related MD&A for the financial year ended December 31, 2019 filed with the securities regulatory authorities in certain provinces of Canada and available at [www.sedar.com](http://www.sedar.com).*

*Should one or more of these risks or uncertainties materialize, or should assumptions underlying the forward looking information prove incorrect, actual results may vary materially from those described herein as intended, planned, anticipated, believed, estimated or expected. Although Endeavour has attempted to identify important risks, uncertainties and factors which could cause actual results to differ materially, there may be others that cause results not to be as anticipated, estimated or intended. Endeavour does not intend, and do not assume any obligation, to update this forward-looking information except as otherwise required by applicable law.*

*Neither the Toronto Stock Exchange nor the Investment Industry Regulatory Organization of Canada accepts responsibility for the adequacy or accuracy of this release.*

## FETEKRO PLAN

Item	Unit	LOM Total / Average	Pre-prod	Y-1	Y-2	Y-3	Y-4	Y-5	Y-6	Y-7	Y-8	Y-9	Y-10	Y-11	Y-12
<b>Mining Schedule</b>															
Total Material Moved	kt	361,808	15,545	51,609	50,243	41,412	49,287	49,776	51,166	25,678	17,549	9,299	245	0	0
Total Waste Moved	kt	329,911	15,210	47,077	46,317	37,522	46,845	45,669	48,009	21,145	14,499	7,496	122	0	0
Total Ore Mined	kt	31,897	334	4,532	3,926	3,890	2,442	4,106	3,157	4,533	3,051	1,804	123	0	0
Stripping Ratio	w:o	10.3	45.5	10.4	11.8	9.6	19.2	11.1	15.2	4.7	4.8	4.2	1.0	0.0	0.0
Au Grade - Ore Mined	g/t	2.05	1.53	1.76	1.58	2.13	2.56	2.06	2.49	2.16	1.64	2.48	3.10	0.00	0.00
Contained Gold - Ore Mined	oz	2,097	16	257	199	267	201	272	253	315	161	144	12	0	0
<b>Processing Schedule</b>															
Total Ore Processed	kt	31,897	0	3,424	3,530	3,300	3,319	3,300	3,300	3,300	3,300	3,302	1,823	0	0
Au Grade - Ore Processed	g/t	2.05	0.00	1.96	1.90	2.39	2.07	2.39	2.39	2.26	2.04	1.67	0.84	0.00	0.00
Contained Gold - Ore Processed	oz	2,097,262	0	216,063	215,856	253,700	221,207	253,700	253,700	239,668	216,702	177,357	49,309	0	0
Au Recovery	%	94.7%	0.0%	94.9%	95.0%	94.6%	94.6%	94.6%	94.6%	94.6%	94.6%	94.6%	94.6%	0.0%	0.0%
Recovered Gold	oz	1,985,443	0	205,000	205,000	240,000	209,287	240,000	240,000	226,726	205,000	167,782	46,648	0	0
Payable Gold	oz	1,984,451	0	204,897	204,897	239,880	209,182	239,880	239,880	226,613	204,897	167,698	46,625	0	0
<b>Operating Unit Cost Summary</b>															
Mining & Rehandling	\$/t Mined	2.83	0.00	2.46	2.75	2.83	2.92	3.09	2.84	3.40	3.50	4.33	38.53	0.00	0.00
Processing	\$/t Ore Processed	9.23	0.00	8.68	8.73	9.42	9.36	9.42	9.42	9.42	9.42	9.41	9.03	0.00	0.00
General & Administrative	\$/t Ore Processed	5.24	0.00	5.43	5.26	5.63	5.60	5.63	5.63	5.63	5.63	5.63	0.00	0.00	0.00
Total Cash Costs	\$/oz Gold Sold	684	0	791	842	704	625	795	636	591	577	586	655	0	0
All-In-Sustaining Costs	\$/oz Gold Sold	838	0	875	1,004	788	1,013	922	903	678	663	680	768	0	0
<b>Environmental Data</b>															
GHG Emissions Intensity <sup>1</sup>	t CO2e/oz	0.36	0.00	0.50	0.49	0.35	0.48	0.41	0.43	0.24	0.19	0.15	0.14	0.00	0.00
Energy Intensity	GJ/oz	6.99	0.00	9.05	8.97	6.54	8.63	7.48	7.65	5.04	4.55	4.42	7.60	0.00	0.00
<b>Operating Cash Flow Summary</b>															
<b>Gold Revenue (A)</b>	<b>\$M</b>	<b>2,977</b>	<b>0</b>	<b>307</b>	<b>307</b>	<b>360</b>	<b>314</b>	<b>360</b>	<b>360</b>	<b>340</b>	<b>307</b>	<b>252</b>	<b>70</b>	<b>0</b>	<b>0</b>
Mining & Rehandling	\$M	-1,023	0	-127	-138	-117	-144	-154	-145	-87	-62	-40	-9	0	0
Less: Capitalised Waste	\$M	133	0	1	16	0	63	10	44	0	0	0	0	0	0
Processing	\$M	-295	0	-30	-31	-31	-31	-31	-31	-31	-31	-31	-16	0	0
General & Administrative	\$M	-167	0	-19	-19	-19	-19	-19	-19	-19	-19	-19	0	0	0
Inventory Adjustments and Other	\$M	-6	0	13	-1	-2	0	3	-1	3	-7	-8	-5	0	0
<b>Subtotal: Total Cash Cost (B)</b>	<b>\$M</b>	<b>-1,358</b>	<b>0</b>	<b>-162</b>	<b>-173</b>	<b>-169</b>	<b>-131</b>	<b>-191</b>	<b>-153</b>	<b>-134</b>	<b>-118</b>	<b>-98</b>	<b>-31</b>	<b>0</b>	<b>0</b>
Royalties	\$M	-134	0	-14	-14	-16	-14	-16	-16	-15	-14	-11	-3	0	0
Sustaining Capital	\$M	-171	0	-3	-19	-4	-67	-14	-48	-4	-4	-5	-2	0	0
<b>Subtotal: All-In-Sustaining Costs (C)</b>	<b>\$M</b>	<b>-1,663</b>	<b>0</b>	<b>-179</b>	<b>-206</b>	<b>-189</b>	<b>-212</b>	<b>-221</b>	<b>-217</b>	<b>-154</b>	<b>-136</b>	<b>-114</b>	<b>-36</b>	<b>0</b>	<b>0</b>
<b>Sustaining Margin (A-C)</b>	<b>\$M</b>	<b>1,314</b>	<b>0</b>	<b>128</b>	<b>102</b>	<b>171</b>	<b>102</b>	<b>139</b>	<b>143</b>	<b>186</b>	<b>171</b>	<b>138</b>	<b>34</b>	<b>0</b>	<b>0</b>
Working Capital Movement	\$M	0	0	7	5	-4	17	-14	7	-20	3	6	-7	0	0
Taxes	\$M	-258	0	0	-4	-13	-26	-28	-31	-41	-41	-37	-31	-7	0
<b>FCF Before Non-Sustaining Capital</b>	<b>\$M</b>	<b>1,056</b>	<b>0</b>	<b>135</b>	<b>103</b>	<b>154</b>	<b>93</b>	<b>97</b>	<b>119</b>	<b>125</b>	<b>134</b>	<b>106</b>	<b>-3</b>	<b>-7</b>	<b>0</b>
Non-Sustaining Capital	\$M	-35	0	0	0	0	0	0	0	0	0	0	-13	-18	-4
Growth Capital	\$M	-338	-338	0	0	0	0	0	0	0	0	0	0	0	0
<b>Mine Free Cash Flow</b>	<b>\$M</b>	<b>683</b>	<b>-338</b>	<b>135</b>	<b>103</b>	<b>154</b>	<b>93</b>	<b>97</b>	<b>119</b>	<b>125</b>	<b>134</b>	<b>106</b>	<b>-16</b>	<b>-25</b>	<b>-4</b>

<sup>1</sup> GHG Emissions Intensity calculated as Scope 1 and 2 emissions.

## KALANA PLAN

Item	Unit	LOM Total / Average	Pre-prod	Y-1	Y-2	Y-3	Y-4	Y-5	Y-6	Y-7	Y-8	Y-9	Y-10	Y-11	Y-12
<b>Mining Schedule</b>															
Total Material Moved	kt	275,775	3,724	28,447	30,440	29,961	30,736	29,236	26,716	30,365	27,408	26,071	11,306	1,363	0
Total Waste Moved	kt	240,179	3,147	24,208	26,347	25,536	27,389	25,661	23,134	28,529	24,216	22,296	8,678	1,039	0
Total Ore Mined	kt	35,596	577	4,239	4,093	4,426	3,347	3,575	3,582	1,837	3,192	3,776	2,628	324	0
Stripping Ratio	w:o	6.7	5.5	5.7	6.4	5.8	8.2	7.2	6.5	15.5	7.6	5.9	3.3	3.2	0.0
Au Grade - Ore Mined	g/t	1.60	1.42	2.11	1.66	1.52	1.68	1.48	1.74	1.73	1.16	1.43	1.40	1.61	0.00
Contained Gold - Ore Mined	oz	1,829	26	288	219	216	180	170	200	102	119	173	118	17	0
<b>Processing Schedule</b>															
Total Ore Processed	kt	35,596	0	3,124	3,706	3,556	3,387	3,196	3,032	3,511	3,078	3,000	3,002	3,003	0
Au Grade - Ore Processed	g/t	1.60	0.00	2.75	1.76	1.70	1.53	1.64	1.73	1.47	1.18	1.60	1.32	0.83	0.00
Contained Gold - Ore Processed	oz	1,828,838	0	275,855	209,874	194,822	166,647	168,672	169,116	165,455	116,548	154,599	127,069	80,183	0
Au Recovery	%	90.1%	0.0%	94.2%	91.8%	91.4%	90.0%	88.9%	88.7%	90.7%	88.8%	88.6%	88.6%	88.6%	0.0%
Recovered Gold	oz	1,654,629	0	259,806	192,736	177,976	150,000	150,000	150,000	150,000	103,479	136,974	112,591	71,067	0
Payable Gold	oz	1,654,629	0	259,806	192,736	177,976	150,000	150,000	150,000	150,000	103,479	136,974	112,591	71,067	0
<b>Operating Unit Cost Summary</b>															
Mining & Rehandling	\$/t Mined	2.71	0.00	1.93	2.04	2.41	2.53	2.82	3.05	2.60	3.08	3.38	3.97	14.42	0.00
Processing	\$/t Ore Processed	13.28	0.00	11.21	11.19	11.89	12.74	14.04	14.62	12.31	14.62	14.82	14.81	14.79	0.00
General & Administrative	\$/t Ore Processed	3.97	0.00	4.11	3.46	3.61	3.79	4.02	4.23	3.66	4.17	4.28	4.28	4.28	0.00
Total Cash Costs	\$/oz Gold Sold	785	0	342	555	652	718	856	871	688	1215	1077	1053	1762	0
All-In-Sustaining Costs	\$/oz Gold Sold	901	0	404	626	726	879	967	953	1,051	1,385	1,155	1,132	1,830	0
<b>Environmental Data</b>															
GHG Emissions Intensity <sup>1</sup>	t CO2e/oz	0.30	0.00	0.22	0.31	0.33	0.40	0.38	0.35	0.42	0.52	0.38	0.23	0.18	0.00
Energy Intensity	GJ/oz	7.65	0.00	4.73	6.93	7.33	8.74	8.31	7.79	9.04	11.48	8.36	6.96	8.30	0.00
<b>Operating Cash Flow Summary</b>															
<b>Gold Revenue (A)</b>															
Mining & Rehandling	\$M	-747	0	-55	-62	-72	-78	-82	-81	-79	-84	-88	-45	-20	0
Less: Capitalised Waste	\$M	67	0	0	0	0	12	4	0	42	8	0	0	0	0
Processing	\$M	-473	0	-35	-41	-42	-43	-45	-44	-43	-45	-44	-44	-44	0
General & Administrative	\$M	-141	0	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13	0
Inventory Adjustments and Other	\$M	-5	0	14	9	11	14	7	8	-10	8	-2	-16	-48	0
<b>Subtotal: Total Cash Cost (B)</b>	<b>\$M</b>	<b>-1,299</b>	<b>0</b>	<b>-89</b>	<b>-107</b>	<b>-116</b>	<b>-108</b>	<b>-128</b>	<b>-131</b>	<b>-103</b>	<b>-126</b>	<b>-148</b>	<b>-119</b>	<b>-125</b>	<b>0</b>
Royalties	\$M	-89	0	-14	-10	-10	-8	-8	-8	-8	-6	-7	-6	-4	0
Sustaining Capital	\$M	-103	0	-2	-3	-4	-16	-9	-4	-46	-12	-3	-3	-1	0
<b>Subtotal: All-In-Sustaining Costs (C)</b>	<b>\$M</b>	<b>-1,491</b>	<b>0</b>	<b>-105</b>	<b>-121</b>	<b>-129</b>	<b>-132</b>	<b>-145</b>	<b>-143</b>	<b>-158</b>	<b>-143</b>	<b>-158</b>	<b>-127</b>	<b>-130</b>	<b>0</b>
<b>Sustaining Margin (A-C)</b>															
Working Capital Movement	\$M	0	0	-4	-5	-10	-14	-9	-10	19	-15	0	11	52	-15
Taxes	\$M	-215	0	0	-34	-36	-24	-19	-24	-30	-25	-4	-12	-8	0
<b>FCF Before Non-Sustaining Capital</b>	<b>\$M</b>	<b>775</b>	<b>0</b>	<b>281</b>	<b>129</b>	<b>92</b>	<b>55</b>	<b>52</b>	<b>48</b>	<b>57</b>	<b>-29</b>	<b>44</b>	<b>41</b>	<b>20</b>	<b>-15</b>
Non-Sustaining Capital	\$M	-51	0	0	-6	-13	-3	0	0	0	0	0	0	-30	0
Growth Capital	\$M	-297	-289	-8	0	0	0	0	0	0	0	0	0	0	0
<b>Mine Free Cash Flow</b>	<b>\$M</b>	<b>427</b>	<b>-289</b>	<b>273</b>	<b>124</b>	<b>79</b>	<b>52</b>	<b>52</b>	<b>48</b>	<b>57</b>	<b>-29</b>	<b>44</b>	<b>41</b>	<b>-10</b>	<b>-15</b>

<sup>1</sup>GHG Emissions Intensity calculated as Scope 1 and 2 emissions.