

# ENDEAVOUR ANNOUNCES POSITIVE PFS RESULTS FOR ASSAFOU PROJECT IN CÔTE D'IVOIRE

\$1,526m NPV(5%) and IRR of 28% at \$2,000/oz • 329kozpa at AISC of \$892/oz over first 10 years

## **HIGHLIGHTS:**

- PFS confirms Assafou's potential to become a tier 1 asset for Endeavour
- PFS highlights 329kozpa production at AISC of \$892/oz over first 10 years:
  - > 15-year mine life based on maiden reserve of 4.1Moz
  - > Robust project economics with after-tax NPV<sub>(5%)</sub> of \$1,526m and IRR of 28%, at a \$2,000/oz gold price
  - > Initial capital of \$734m based on a 5Mtpa design nameplate capacity with a similar processing plant configuration as the nearby Lafigué mine
- 90% resource to reserve conversion with defined maiden reserves of 72.8Mt at 1.76g/t for 4.1Moz
  - Indicated resources of 73.6Mt at 1.95g/t for 4.6Moz based on a drilling cutoff in October 2023, with over 70,000 metres of drilling completed subsequently
  - > Further resource expansion and definition at Assafou, and satellite deposits in close proximity to Assafou, is expected to be incorporated into the DFS
- Given the high-quality project and attractive economics, the DFS will now commence with completion expected between late 2025 and early 2026

Abidjan, 11 December 2024 – Endeavour Mining plc (LSE:EDV, TSX:EDV, OTCQX:EDVMF) ("Endeavour", the "Group" or the "Company") is pleased to announce that it has recently completed a positive Pre-Feasibility Study ("PFS") for the Assafou-Dibibango ("Assafou") project on the Tanda-Iguela property in Côte d'Ivoire. The PFS results meet Endeavour's strategic targets and confirm Assafou's potential to be a tier 1 asset, which justifies advancing the project to the Definitive Feasibility Study ("DFS") stage.

Ian Cockerill, CEO, commented: "I am delighted with the results of this pre-feasibility study that highlight the potential for Assafou to become a tier 1 asset for Endeavour.

We have defined a large, low-cost and long mine life project, capable of producing 330koz a year over the first ten years, while remaining firmly in the lowest cost quartile. The attractive returns profile ensures this project will remain a capital allocation priority for us and it demonstrates our ability to generate highly value accretive projects, organically, through our pipeline.

Our exploration team discovered Assafou in late 2021, and in less than three years we have defined a highquality project with close to 5 million ounces of high-grade Indicated resource endowment. We expect that we will continue to grow the Assafou deposit's resource, and delineate several exciting near-mine targets across the wider Tanda-Iguela property.

Given the excellent project economics, we will now launch the Definitive Feasibility Study and simultaneously advance the permitting process so that we are well positioned to potentially launch construction, with our bestin-class projects team, in the second half of 2026.

With a robust pipeline of organic growth opportunities, we expect to continue to unlock value and deliver longterm production growth towards our 1.5 million ounce target, from a diversified portfolio of assets, by the end of the decade, while maintaining best-in-class margins. This underpins our capital allocation framework, and we expect to continue to deliver supplemental shareholder returns in line with our existing policy, and maintain attractive shareholder returns through this next growth phase."

Table	1:	Assafou	Project	Highlights
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	ASSAFOU	STRATEGIC TARGETS
	4.1	>2.0
	14.5	>10
First 10 years	329	>200
Life of mine	265	>200
First 10 years	892	Best-in-class
Life of mine	936	Dest-III-class
	1,526	n.a.
	28	>20
	Life of mine First 10 years	4.1   14.5   First 10 years 329   Life of mine 265   First 10 years 892   Life of mine 936   1,526

<sup>1</sup>Based on a \$1,500/oz reserve price. <sup>2</sup>Based on a gold price of \$2,000/oz

The key operational and economic highlights of the Assafou PFS are summarised in Tables 2 and 3 below.

OPERATION TYPE	
Mine type	Open Pit
Plant type	5.0Mtpa Gravity / CIL Plant
RESERVES & RESOURCES <sup>1</sup>	
P&P reserves	72.8Mt at 1.76g/t Au for 4.1Moz
M&I resources (inclusive of reserves)	73.6Mt at 1.95g/t Au for 4.6Moz
Inferred resources	3.3Mt at 1.97g/t Au for 0.2Moz
LIFE OF MINE PRODUCTION	
Mine life, years	14.5
Strip ratio, W:O	5.9
Tonnes processed, Mt	72.8
Grade processed, Au g/t	1.76
Gold contained processed, Moz	4.1
Average recovery rate, %	94
Gold production, Moz	3.9
Average annual production, kozpa	265
Cash costs, \$/oz	863
AISC, \$/oz <sup>2</sup>	936
AVERAGE FOR YEARS 1 TO 10	
Production, kozpa	329
Cash costs, \$/oz	812
AISC, \$/oz <sup>2</sup>	892
CAPITAL COST	
Upfront capital cost, \$m	734
ENVIRONMENTAL DATA	
GHG Emissions Intensity <sup>3</sup> , t CO2e/oz	0.55
Energy Intensity, GJ/oz	7.23

<sup>1</sup>Based on a reserves gold price of \$1,500/oz and a resource gold price of \$1,900/oz <sup>2</sup>Based on a gold price of \$2,000/oz <sup>3</sup>GHG Emissions Intensity considers only Scope 1 and 2 emissions

Table 3: Assa	fou PES Pro	iect Economics

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Gold Price	\$1,500/oz	\$1,900/oz	\$2,000/oz	\$2,500/oz
PRE-TAX	-			
NPV5%, \$m	860	1,882	2,148	3,408
IRR, %	18	31	34	48
Payback Period, yr <sup>1</sup>	5.6	3.6	3.3	2.4
AFTER-TAX				
NPV5%, \$m	536	1,322	1,526	2,485
IRR, %	14	25	28	40
Payback Period, yr <sup>1</sup>	6.4	4.2	3.8	2.7

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

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 Assafou PFS within 45 days of this news release.

## Table 2: Assafou PFS Summary

### Overview

The 100% owned Tanda and Iguela permits ("Tanda-Iguela") are located in the eastern region of Côte d'Ivoire, approximately 600km northeast of Abidjan, adjacent to the Ghana border. The northern permit, Tanda, was added to Endeavour's portfolio in late 2015 following Endeavour's transaction with La Mancha. Endeavour conducted an initial drilling campaign in early 2016 that yielded positive results and quickly identified the southern permit, Iguela, as having a high degree of geological prospectivity. The Iguela permit was awarded to Endeavour in May 2017, through Côte d'Ivoire's permitting application process.



Figure 1 : Tanda-Iguela Map

A maiden Indicated resource of 1.1Moz at 2.33 g/t Au was published on 21 November 2022 and was subsequently increased to 4.5Moz at 1.97 g/t Au on 29 November 2023, based on a \$1,500/oz gold price.

As shown in Figure 2 below, the PFS demonstrates Assafou's ability to deliver 329kozpa at AISC of \$892/oz over the first ten years of operations, with average production exceeding 350kozpa over an 8-year period once the operation is ramped up, and average production of 265kozpa and AISC of \$936/oz over life of mine.



<sup>1</sup>Assafou PFS production is based on the 2024 Mineral Reserve Estimate, and does not incorporate drilling completed after November 2023, which provides significant upside to the production profile from Y-10 onwards. <sup>2</sup>AISC based on a gold price of \$2,000/oz

The PFS production profile is based on the mineral reserves only with an effective date of 31 August 2024, which are constrained by a resource with a drilling cutoff of 31 October 2023. Significant exploration drilling has been completed since this cutoff, which is expected to contribute to resource and reserve upside supporting higher levels of production, particularly in years 10 to 15 of the production profile.

#### **Reserves and Resources**

As shown in Table 4 below, the PFS mineral resource is based on the 2023 Mineral Resource Estimate ("MRE"), as published on 29 November 2023, which has been restated using a \$1,900/oz gold price, compared to the \$1,500/oz gold price used when it was published. The drilling cut-off for the 2023 MRE was 31 October 2023, with the MRE constituting 183,000 metres of drilling at the Assafou deposit. Subsequently, a further 70,000 metres of drilling has been completed during late 2023 and year-to-date 2024 at the Assafou deposit and satellite targets in close proximity to Assafou, which are expected to be incorporated into a future mineral resource update that will underpin the DFS.

#### Table 4: Assafou Reserves and Resources

	Tonnage	Grade	Content		
On a 100% basis	(Mt)	(Au g/t)	(Au koz)		
Proven Reserves	-	-	-		
Probable Reserves	72.8	1.76	4,115		
P&P Reserves	72.8	1.76	4,115		
Measured Resource (incl. reserves)	-	-	-		
Indicated Resources (incl. reserves)	73.6	1.95	4,604		
M&I Resources	73.6	1.95	4,604		
Inferred Resources	3.3	1.97	208		

<sup>1</sup>Mineral Resource Estimate effective 30 June 2024. Mineral Reserve Estimate effective 31 August 2024. Mineral Resource and 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 based on a cut-off grade of 0.5g/t at a \$1,900/oz gold price. Reserves are based on a cut-off grade of 0.4g/t for oxide ore and 0.5g/t for fresh ore and \$1,500/oz gold price.

The updated mineral resource estimate for the Assafou deposit comprises an Indicated resource of 73.6Mt at 1.95g/t for 4.6Moz and an Inferred resource of 3.3Mt at 1.97g/t for 0.2Moz, based on a cut-off grade of 0.5 g/t Au and a \$1,900/oz gold price. The mineral resource at the Assafou deposit is robust, as it is high-grade and hosted in thick, continuous lenses, as demonstrated by the sensitivity analysis presented in Table 5 below. Inferred material within the pit design was treated as waste in the PFS.

#### Table 5: Assafou Mineral Resource Estimate Sensitivity<sup>1</sup>

	TONNAGE	GRADE	CONTENT
	(Mt)	(Au g/t)	(Au koz)
INDICATED RESOURCE			
Based on a gold price of \$1,500/oz	70.9	1.97	4,493
Based on a gold price of \$1,700/oz	72.7	1.95	4,560
Based on a gold price of \$1,900/oz	73.6	1.95	4,604
Based on a gold price of \$2,000/oz	74.1	1.94	4,620
INFERRED RESOURCE			
Based on a gold price of \$1,500/oz	2.9	1.91	176
Based on a gold price of \$1,700/oz	3.2	1.98	203
Based on a gold price of \$1,900/oz	3.3	1.97	208
Based on a gold price of \$2,000/oz	3.4	2.01	220

<sup>1</sup> Mineral Resource is estimated effective 30 June 2024. No Measured resources have been estimated. Mineral Resources estimates follow the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") definitions standards for mineral resources 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 are reported undiluted and were constrained by MII \$1,900/oz Pit Shell and for sensitivity purpose by approximate MII at \$1,500/oz and \$1,700/oz and \$2,000/oz pit shells and based on a cut-off of 0.5 g/t Au.

For technical notes and drilling results from the Assafou drill programme, please see the Technical Notes section below.

## **Mining Operations**

The Assafou deposit mineralisation extends from surface to depths in excess of 300 metres and is 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 capacity of 62.5 Mt per year. Mining capacity is expected to exceed processing capacity in order to accumulate stockpiles to allow high grade material to be preferentially processed early in the mine life. During the pre-commercial production period approximately 36.5 Mt of pre-stripping is expected to support an accelerated ramp up of the production profile. The DFS will review opportunities to reduce the impact of pre-stripping at the Assafou deposit through supplementing the ore feed with near-surface ore from the Pala Trend 3 deposit, located 1km away from Assafou.

Diesel excavators and trucks will be used for loading and haulage, with a contractor fleet expected to comprise of 300-tonne and 200-tonne class face excavators to load 140-tonne capacity dump trucks for waste mining, and 200-tonne class excavators to load 140-tonne capacity dump trucks for ore mining.

#### **Processing Operations**

Ore will be processed via a 5.0 Mtpa processing plant. Over the life of mine, the plant will be fed with approximately 89% fresh ore and 11% oxide and transitional ore.

Two-stage crushing followed by a high-pressure grinding roll and a ball milling circuit is planned. A primary gyratory crusher will crush ore to a coarse crush size, followed by dual secondary cone crushers. This will feed a crushed ore stockpile that feeds into a high-pressure grinding roll circuit. Ore will then be passed through a conventional ball mill and milled to 80% passing 106µm (microns).

The milled ore will pass through a gravity circuit comprising two Knelson concentrators for separation and recovery of coarse free gold, to produce a gravity concentrate for cyanidation and electrowinning that can be smelted to produce gold doré. High gravity recovery of approximately 60% is estimated for fresh and oxide/transitional ores at Assafou.

The remaining milled gravity tail will be screened and passed to a carbon-in-leach ("CIL") circuit containing one pre-leach tank and six CIL tanks in series for leaching and absorption. Leach residence time will be approximately 36 hours.

Following leaching and absorption, gold will be recovered from activated carbon by elution, electrowinning, and gold smelting to produce gold doré.

Extensive and representative metallurgical testwork has indicated that gold is free milling with very high gravity and leach extraction potential, with a projected gold recovery rate of 94% over the life of mine.

### **Operating Cost Summary**

Mining operating cost estimates, prepared by Endeavour, are based on a contractor mining model. Process operating cost estimates were prepared by Lycopodium, who have successfully supported Endeavour through five engineering and construction projects in West Africa over the last ten years. General and Administration ("G&A") cost estimates were also prepared by Lycopodium with input from Endeavour, as summarised in the table below.

Table 6: Assafou Life of Mine Opera	ting Unit Costs (-15/+20%)
	UNIT COSTS (US\$)
Open Pit Mining & Rehandling	\$4.08/t mined
Processing	\$12.25/t processed
G&A	\$4.10/t processed

Based on estimates that exclude escalation

Operating costs have been based on a delivered diesel price of \$0.92 per litre and are in line with current local pricing. Power will be sourced from the grid supplying 90kV to site via a ring main system providing power from two different sources of transmission to increase reliability, with power costs estimated at \$0.16/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, from Digby Wells on relocation, and from ECG Engineering on the power infrastructure. Endeavour has provided project specific estimates for mine establishment, facilities and owner's costs.

The initial capital cost is summarized in the table below.

7: Assafou Upfront Capital Cost	Estimate Summary (-20/- CAPITAL COSTS (US\$M)
Mining	156.3
Treatment Plant Costs	115.5
Reagents and Plant Services	34.9
Site Infrastructure	109.2
Offsite Infrastructure	79.7
Contractor Distributables	36.6
Indirect Costs	120.3
Subtotal	652.5
Contingency	79.0
Taxes and Duties	2.7
Total Upfront Capital Cost	734.2

Based on estimates that exclude escalation

The Assafou project capital cost estimate assumes a contractor mining model, selected due to the lower upfront capital costs and the additional fleet flexibility that can accommodate the pre-production mining ramp-up. Within the subsequent DFS, a hybrid approach to contract and owner mining may be considered to ensure capital and operating costs are optimised, while the mining ramp-up is de-risked.

The Assafou project benefits from good surrounding infrastructure, including access to the 90kV power supply within 14km of the project, and access to the A1 national road, which will be diverted around the operation and provide access to the operation. An airstrip will be built 3.5km from the permanent accommodation. Resettlement of two villages, within close proximity to the project, is required and is included in the capital cost estimate.

The tailings storage facility ("TSF") is expected to be a cross-valley storage facility, utilising the natural topography of the project area, that will be formed by multi-zoned earth fill embankments, with a total footprint area (including the basin area) of approximately 252ha for the stage 1 TSF to 278ha for the final TSF. TSF construction will benefit from the high availability of fresh waste rock from the mining pre-stripping activities. The TSF is designed to a life-of-mine capacity accommodating a total of 73Mt of tailings, with the potential to be expanded to 110Mt. The Stage 1 TSF is designed for 7.5Mt, approximately 18 months storage capacity, and subsequently, downstream raise construction will be used to progressively increase capacity.

The recommendations from the Environmental Social Impact Assessment ("ESIA") which is underway, will be used to compile an Environmental and Social Management Plan ("ESMP") which will guide Endeavour's local community engagement as well as ensuring it fulfils its environment obligations, minimising the mine's impacts where possible. The ESMP will be used to monitor and ensure compliance with environmental specifications, monitoring and management measures and will be implemented from site preparation through to decommissioning and closure.

## Figure 3 below highlights the proposed site and infrastructure layout.



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

Endeavour acquired the Tanda exploration permit in 2015, subsequently acquiring the Iguela permit, which contains the Assafou project, in 2017. Endeavour will retain full ownership of the Tanda-Iguela permits until the permits are converted into an exploitation permit. Based on the current 2014 Mining Convention, once the exploitation permit is granted, Endeavour will be entitled to an 80% stake in the Assafou project, while SODEMI (the Ivorian state-owned mining company) and the Government of Côte d'Ivoire will each have a 10% stake.

A corporate tax rate of 25% of gross profit has been applied in the PFS. A royalty of 5.0% and a community levy royalty of 0.5% was applied to all sales. Gold royalties in Côte d'Ivoire are based on a sliding scale with the gold price, and vary between 3.0% and 6.0%. A transport and refining charge of \$4/oz Au was also applied.

The mining code is currently under review and if the proposed new mining code is passed into law before the Assafou exploration permit is converted into an exploitation permit, then the fiscal terms applicable to the Assafou project are expected to reflect those of the new mining code. If the new mining code is passed into law in its current draft state, it is expected to include an increase in the Governments free-carried interest from 10% to 15%. This would result in Endeavour's potential stake in the Assafou project, once the exploration permit has been converted into an exploitation permit, decreasing from 80% to 75%.

### Geology

Mineralisation at the Assafou deposit is both disseminated and hosted in quartz veins within the Tarkwaian Sandstones. The deposit appears to be monometallic containing no potentially penalising elements associated with the gold. Mineralisation starts at surface, extending down to more than 300 metres in depth, and is continuous along strike, along the prominent northwest trending structure that separates the Tarkwaian Sandstones from the mafic Birimian Basement rocks. The deposit comprises a thick main (up to 60 metres) continuous lens, appearing to be dipping at a low angle to the southwest, overlaid by a series of stacked lenses.

High grade mineralisation and the thickest mineralised intercepts are located adjacent to the structural contact between the mafic Birimian Basement rocks and the Tarkwaian Sandstones along the northeast boundary of the Assafou deposit. Mineralisation at Assafou remains open along strike towards the northwest and towards the southeast, as well as at depth, where deep drilling below 250 metres intercepted mineralisation below the existing resource pit shell and within the Birimian Basement rocks below the sedimentary basin.

## Assafou Exploration

The Assafou deposit was discovered in late 2021 and the maiden Indicated resource of 14.9Mt at 2.33g/t containing 1.1Moz and an Inferred resource of 32.9Mt at 1.80g/t containing 1.9Moz was defined on 31 October 2022, less than one year after the initial discovery, based on 58,000 metres of drilling.

Subsequently, an updated Indicated resource of 70.9Mt at 1.97g/t containing 4.5Moz and an Inferred resource of 2.9Mt at 1.91g/t containing 0.2Moz was defined on 14 November 2023, based on 183,000 metres of drilling.

Since the 14 November 2023 resource was defined, a further 44,000 metres of drilling has been completed at the Assafou deposit, extending the mineralised trend by over 0.4km or 12%, to 3.7km, and 26,000 metres of drilling has been completed at near-mine targets, within less than 5km of the Assafou deposit.

Mineralisation at Assafou remains open along strike along the 20km long structural corridor extending from Koume Nangare in the northwest to Kongojdan in the southeast, as well as at depth where mineralisation has been identified below the current resource pit shell, and within the basement mafic Birimian volcanic rocks.

During the first nine months of 2024, 67,000 metres of drilling has been completed for a total spend of \$13.4 million, consisting of resource expansion and resource infill drilling at the Assafou deposit, resource definition drilling at the Pala Trend 3 target and reconnaissance drilling at other satellite targets in close proximity to Assafou.



Figure 5 below highlights that 2024 drilling, that has not been included in the PFS reserves and resources estimate, has identified mineralisation that extends towards the northwest of Assafou, outside of the existing

pit shell. Mineralisation starts at surface within the Tarkwaian Sandstones but extends into the Birimian Basement and it remains open, with further drilling planned for FY-2025.



Figure 6 below highlights the occurrence of high-grade, stacked lenses of mineralisation in the southeast of the Assafou deposit, where additional drilling was completed in 2023 and 2024.



Figure 7 below highlights that 2024 drilling towards the southeast of the Assafou deposit has identified highgrade mineralisation below the current Assafou pit shell.



Figure 8 below highlights that drilling completed in 2023 and 2024 towards the southeast of the Assafou deposit, that was not included in the reserves and resources estimate for the PFS, has identified multiple lenses of mineralisation below the current Assafou pit shell, with follow-up drilling planned for 2025.



Figure 8: Assafou Cross Section A0200

## **Regional Exploration**

Regional exploration continues to advance at nine targets within 6km of the Assafou deposit. The regional exploration programme is targeting both Tarkwaian and Birimian style deposits within close proximity to Assafou that could potentially form satellite pits to the Assafou project.

Figure 9 below, highlights some of the high-grade mineralised intercepts identified at these potential satellite targets, of which the Pala trend 3 target is the most advanced, while further delineation drilling will continue at the other high priority Koume Nangare and Pala Trend 1 and 2 targets.



Figure 10 below highlights the drilling completed at the Pala Trend 3 target in 2024. Pala Trend 3 is located approximately 1km west of the Assafou deposit, within the same sedimentary basin.

Drilling has identified continuous, stacked lenses of shallow mineralisation that are dipping towards the northeast, towards the Assafou deposit. While mineralisation at Assafou is largely hosted within the Tarkwaian Sandstones, at Pala Trend 3 mineralisation is largely hosted within the Birimian greenstone rocks, similar to other Birimian greenstone deposits in the region. The Tanda-Iguela property remains highly prospective for both types of mineralisation.

The exploration programme will continue to advance the Pala Trend 3 target and a maiden resource is expected to be defined in 2025 and incorporated into the DFS.

Figure 10: Pala Trend 3 P1300



#### **Next Steps**

- The DFS is expected to commence immediately and is due to be completed between late 2025 and early 2026
- > Updated mineral reserves and resources will be defined during 2025, which will include additional drilling at the Assafou deposits and the Pala Trend 3 satellite target, and will be incorporated into the DFS
- The exploitation permit application process and the ESIA submission are expected to commence in early 2025
- > Further exploration is planned during 2025 on the Assafou deposit and on near-mine satellite targets within close proximity to Assafou

## **ASSAFOU TECHNICAL NOTES**

All figures are expressed in United States dollars unless otherwise stated.

## Assafou Geology

Mineralisation at Assafou is mainly hosted in Tarkwaian Sandstone, at/or immediately in the vicinity of the structural contact with Birimian Basement rocks (mainly mafic rocks). Gold mineralisation occurs both as disseminated occurrences within pervasively altered sandstone and within, or at the edges of, quartz (±carbonate) veins and breccias that crosscut the altered sandstones. Alteration is reflected by an induration (silicification) and by the presence of sulphides (pyrite), disseminated within the matrix and distributed along the sandstone bedding. The more intense the silicification (and presence of pyrite), the more mineralised the sandstones tend to be.

The structural contact likely controlled the initial sandstone deposition (normal fault in extensional regime). It was then reactivated under an SSW-NNE compressive regime at the brittle-ductile transition, associated with strong mylonitisation and alteration (quartz, carbonate, pyrite, ± sericite, ± chlorite) of the Birimian Basement rocks, and to mafic and felsic intrusions as dykes and sills. Gold mineralisation is likely to have occurred during this reversal, in the post-Tarkwaian reactivation event. Mineralising hydrothermal fluids are believed to have preferentially invaded the Tarkwaian Sandstones rather than the Birimian Basement rocks, due to their higher initial porosity, permeability and competency.

### Assafou Resource Modelling

The statistical analysis, geological modelling and resource estimation were prepared by a resource team of Endeavour. The Qualified Person as defined by NI 43-101 is Kevin Harris, Vice President of Resources with Endeavour Mining.

The Assafou mineral resource model was developed in Seequent's Leapfrog Geo, Snowden's Supervisor and Geovia's Surpac software. The database used to generate the mineral resources comprised some 868 drill holes, totalling 183,081 metres. The drill hole data was supported by industry-standard quality assurance and quality control systems, with quality control sampling comprising blanks, coarse blanks, certified reference materials, and field and pulp duplicates. Endeavour's resource team has reviewed the QAQC data available and considers the assay data to be suitable for use in the subsequent mineral resource estimate.

Mineralisation domains were modelled with the Vein System tool in Leapfrog Geo using the interval selection for each vein. The gold assays from the drill holes were composited to 1.0 metre intervals. Grade capping values were applied depending on the mineralised domain, between no cap and 45 g/t. Spatial analysis of the gold distribution within the mineralised zone indicated good continuity of the grades along strike and down dip within the mineralised zones. Variography has been applied using Snowden's Supervisor for the largest mineralised zones (101, 102, 103, 104, 105, 106, 110 and 112) and variogram models were produced for these domains. These largest domains represent almost half of the entire population and have a good geological and grade continuity.

Density measurements from 401 drill holes and covering each of the lithologies, were averaged based on the material type (and lithology, in the case of fresh material). Average density values were applied to the associated portions of the block model as outlined below:

- Laterite 1.79 g/cm<sup>3</sup>
- Saprolite: 1.96 g/cm<sup>3</sup>
- Saprock: 2.36 g/cm<sup>3</sup>
- Fresh: 2.76 g/cm<sup>3</sup>

Gold grades were estimated in Geovia's Surpac using Inverse Distance Squared ("IDW2") for most of the modelled mineralisation. Ordinary Kriging was only used for the largest domains which include sufficient data for variogram models. The Ordinary Kriging estimation represents almost half of the mineralised volume. The grade was estimated in multiple passes to define the higher confidence areas and extend the grade to the interpreted mineralised zone extents.

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

The majority of the resource is within the fresh rock, approximately 0.5% of the ounces is oxide, 5.7% is transition and 93.8% is fresh rock.

Endeavour considers that the quality and spatial distribution of the data used, the geological continuity of the mineralisation and the quality of the estimated block model for the Assafou deposit are sufficient for the reporting of Indicated and Inferred mineral resources, in accordance with the CIM Definition Standards. Indicated mineral resources have typically been defined in areas with a drill hole spacing of 30-40 metres along sections, and 30-40 metres between sections, where there is a reasonable level of confidence in geological and grade continuity. Inferred mineral resources have typically been defined in areas with a drillhole spacing of 50 to 75 metres, and where the controls on mineralisation are less well understood, or the continuity is reduced.

Mineral resources are reported within an optimised pit shell using a cut-off grade of 0.5 g/t Au and a gold price of \$1,900 per ounce. Technical and economic assumptions were agreed for mining factors (mining and selling costs, mining recovery and dilution, pit slope angles) and processing factors (gold recovery, processing costs), which were used for optimisation. The optimised factors are summarised below:

- Mining cost: \$3.75/t ore and \$2.72/t waste
- Processing cost: Oxide/Transitional: \$1.08/t ore; Fresh: \$11.66/t ore
- G&A cost: \$4.68/t ore
- Sustaining Capital cost: \$1.45/t/ore
- Other ore related costs (including grade control): \$0.78/t ore
- Selling cost: \$89.5/oz Au
- Mining recovery: 95%; Dilution 0%
- Processing recovery: 95.7% for Oxide/Transition and 93.1% for Fresh at the average grade
- Average slope angles: 28-43°, dependent on geotechnical domain

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

Reverse Circulation ("RC") and Air Core ("AC") drilling uses high pressure compressed air to deliver rock materials to the surface. The compressed air is delivered via a dual tube drill rod system, with an outer tube for air going down-hole, and an inner-tube for return going back to surface. In RC drilling, compressed air drives a percussion hammer. In both RC and AC drilling, compressed air carries rock particles back to surface via the inner tube, minimizing potential contamination affects.

The samples are collected from the cyclone at surface at 1 metre intervals. The cyclone is cleaned after every 6metre rod by flushing the hole and physical opening of the cyclone and blowing out with compressed air at the end of each hole. Additional manual cleaning is required in saprolitic or wet ground, closely monitored by the site geologist / geo-technician to ensure no sample-to-sample contamination occurs. Samples are manually split at the drill site using several different riffle splitters, based on bulk sample weight. 2 to 5 kilograms laboratory samples and a second 2 to 5 kilograms reference sample are collected. Bulk and laboratory sample weights, in addition to moisture levels are recorded. Representative samples for each interval were collected with a spear, sieved into chip trays and retained for reference.

Drill core (PQ, HQ and NQ size) samples are selected by Endeavour geologists and cut in half with a diamond blade at the project site. Half of the core is retained at the site for reference purposes. Sample intervals are generally 1 metre in length, adjusted with geologic and/or structural contacts. All samples are transported by road to Bureau Veritas in Abidjan. Each laboratory sample is secured in poly-woven bags ensuring that there is a clear record of the chain of custody. On arrival samples are weighed. Complete samples are crushed to 2 mm (70% passing) with 1 kilogram split out for pulverization. The entire 1 kilogram is pulverized to 75  $\mu$ m (85% passing). A 50-gram sample is extracted and analysed for gold using standard fire assay technique. An Atomic Absorption ("AA") finish provides the final gold value.

Blanks, field duplicates and certified reference material ("CRM's") are inserted into the sample sequence by Endeavour geologists at a rate of one of each samples type per 20 samples. This ensures that there is a 5% Quality Assurance / Quality Control ("QA/QC") sample insertion rate applied to each fire assay batch. The sampling and assaying are monitored through analysis of these QA/QC samples. This QA/QC program was audited by a consultant, independent from Endeavour Mining and has been verified to follow industry best practices.

In 2021 and 2022, 1,757 samples were sent to ALS Ouagadougou for umpire (referee) analysis. Comparison of the Original analysis against the umpire analysis revealed a very strong Correlation Coefficient of 95.90% suggesting

that the original assays provided by Bureau Veritas in Abidjan are accurate. Core sampling and assay data were monitored through a quality assurance/quality control program designed to follow NI 43-101 and industry best practice.

#### Assafou Mineral Reserve estimate

This maiden Mineral Reserve Estimate (as at 30 August 2024) for the Project is supported by engineering designs and modifying factors in accordance with CIM Definition Standards.

The open pit is designed with two starter phases, an interim stage, a final phase, and a southern extension. The life of mine plan (LoMp) for the Project includes modification to the Resource model to generate the mining block through re-blocking, which introduces a degree of dilution, the pre-mining topographic surface and the Open Pit optimisation analysis. The same economic parameters were used to generate the pit shells for the Mineral Resource and the Mineral Reserve, with the exception of gold price and sales costs, which were \$1900/oz and \$1500/oz respectively.

A marginal gold cut-off grade of 0.4 g/t was used in the calculation of the open pit quantities for the production schedule and the Mineral Reserve estimate. The economic cut-off grade is calculated based on the processing cost parameters including cost of; grade control and RoM re-handling; ore premium; processing the ore, plant/infrastructure maintenance, general and administration charges, and sustaining capital costs. Mineral Reserve cut-off grades are 0.4 g/t Au for Laterite/, Saprolite/ and Saprock, and 0.5 g/t Au for Fresh rock.

The Mineral Reserve is reported from an engineered pit design, as a scheduled mining and processing estimate, that includes stockpiling. The scheduled Mineral Reserve is reported based on aggregating all Measured and Indicated Mineral Resource blocks incorporated within the LoMp, and reported inclusive of all appropriate dilution, diluted grade and losses; and all inferred material treated as waste.

The Qualified Person as defined by NI 43-101 for the Mineral Reserve estimate is Dr Salih Ramazan FAusIMM. Dr Ramazan is a full-time employee of Endeavour Mining Corporation is not considered to be independent from the company.

## **QUALIFIED PERSONS**

Kevin Harris, Vice President of Resources with Endeavour, a "Qualified Person" as defined by NI 43-101, has reviewed and approved the statistical analysis, geological modelling, and resource estimation disclosed herein in respect of Assafou. Dr Salih Ramazan FAusIMM, Vice President of Mine Planning with Endeavour, a "Qualified Person" as defined by NI 43-101, has reviewed and approve the mineral reserve estimate disclosed herein in respect of Assafou. Ross McMillan, SVP Technical Services of Endeavour Mining plc., a Fellow of the Australian Institute of Mining and Metallurgy, a "Qualified Person" as defined by NI 43-101, has reviewed the statistical analysis, geological modelling, and resource estimation other than in respect of the statistical analysis, geological modelling, and resource estimation and mineral reserve estimate in respect of Assafou disclosed in this release.

## **CONTACT INFORMATION**

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## **ABOUT ENDEAVOUR MINING PLC**

Endeavour Mining is one of the world's 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 London and Toronto Stock Exchanges, under the symbol EDV.

For more information, please visit www.endeavourmining.com.

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

This news release contains "forward-looking statements" within the meaning of applicable securities laws. All statements, other than statements of historical fact, are "forward-looking statements". Generally, these forward-looking statements can be identified by the use of forward-looking terminology such as "expects", "expected", "budgeted", "forecasts", and "anticipates".

Forward-looking statements, while based on management's best estimates and assumptions, are subject to risks and uncertainties that may cause actual results to be materially different from those expressed or implied by such forward-looking statements, including but not limited to: risks related to the successful integration of acquisitions; risks related to international operations; risks related to general economic conditions and credit availability, actual results of current exploration activities, unanticipated reclamation expenses; changes in project parameters as plans continue to be refined; fluctuations in prices of metals including gold; fluctuations in foreign currency exchange rates, increases in market prices of mining consumables, possible variations in ore reserves, grade or recovery rates; failure of plant, equipment or processes to operate as anticipated; accidents, labour disputes, title disputes, claims and limitations on insurance coverage and other risks of the mining industry; delays in the completion of development or construction activities, changes in national and local government regulation of mining operations, tax rules and regulations, and political and economic developments in countries in which Endeavour operates. Although Endeavour has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking statements, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements. Please refer to Endeavour's most recent Annual Information Form filed under its profile at www.sedarplus.ca for further information respecting the risks affecting Endeavour and its business.

## APPENDIX 1: ASSAFOU PFS SUMMARY at \$2,000/oz

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	Y-13	Y-14	Y-15
Mining Schedule																		
Total Material Mined	kt	503,097	36,543	58,568	62,460	60,169	61,042	59,898	53,199	31,980	25,453	25,032	18,914	8,437	1,403	-	-	-
Waste	kt	430,311	33,742	53,844	54,479	53,401	52,018	53,396	46,225	25,857	20,070	18,586	12,664	5,201	828	-	-	-
Ore	kt	72,786	2,801	4,725	7,981	6,767	9,024	6,502	6,974	6,123	5,383	6,446	6,250	3,235	574	-	-	-
Grade	g/t	1.76	0.82	0.96	1.67	1.81	1.72	1.89	1.88	2.03	2.16	1.98	1.80	1.71	1.68	-	-	-
Contained Gold	koz	4,115	74	147	430	395	500	394	421	400	374	411	361	178	31	-	-	-
Strip ratio	:	5.9	12.0	11.4	6.8	7.9	5.8	8.2	6.6	4.2	3.7	2.9	2.0	1.6	1.4	-	-	-
Processing Schedule																		
Total Ore Processed	kt	72,786	-	4,997	5,000	5,000	5,003	5,007	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	2,779
Au Grade - Ore Processed	g/t	1.76	-	1.07	2.26	2.24	2.45	2.26	2.34	2.35	2.33	2.35	2.09	1.45	0.79	0.63	0.63	0.63
Contained Gold - Ore Processed	koz	4,115	-	173	364	360	394	364	376	377	374	378	336	234	127	101	101	56
Au Recovery	%	94%	-	93%	94%	94%	94%	94%	94%	94%	94%	94%	94%	93%	91%	90%	90%	90%
Recovered Gold	koz	3,853	-	160	342	338	371	342	354	355	352	356	316	218	116	91	91	51
Gold sold	koz	3,851	-	160	342	338	371	342	354	355	351	356	316	218	116	91	91	51
Operating Unit Cost Summary																		
Mining and secondary haulage	\$/t Mined	4.08	-	3.42	3.81	4.16	4.27	3.67	3.56	4.07	4.12	4.09	4.49	7.17	15.97	-	-	-
Processing	\$/t Ore Processed	12.25	-	11.38	12.33	12.27	12.40	12.38	12.41	12.39	12.39	12.42	12.43	12.38	12.18	12.12	12.12	12.12
General & Administrative	\$/t Ore Processed	4.10	-	4.58	4.58	4.58	3.98	3.97	3.98	3.98	3.98	3.98	3.98	3.98	3.98	3.98	3.98	3.99
Total Cash Costs	\$/oz Gold Sold	863	-	1,518	929	870	834	828	790	746	687	645	647	773	1,150	1,397	1,502	1,792
All-In-Sustaining Costs	\$/oz Gold Sold	936	-	1,521	1,039	1,056	937	1,014	861	771	714	667	672	802	1,182	1,428	1,556	1,815
Environmental Data																		
GHG Emissions Intensity	t CO2e/oz	0.55	-	1.13	0.57	0.56	0.54	0.57	0.55	0.36	0.36	0.37	0.34	0.44	0.79	1	1	1
Energy Intensity	GJ/oz	7.23	-	15.24	7.62	7.53	7.21	7.61	7.36	4.79	4.78	4.82	4.45	5.63	10.12	9.78	9.78	10.53
Operating Cash Flow Summary																		
Gold Revenue (A)	\$M	7,703	-	320	684	676	742	684	707	710	703	712	631	435	232	182	182	101
Mining and secondary haulage	\$M	(1,903)	-	(200)	(238)	(250)	(261)	(220)	(189)	(130)	(105)	(102)	(85)	(61)	(22)	(13)	(14)	(12)
Processing	\$M	(892)	-	(57)	(62)	(61)	(62)	(62)	(62)	(62)	(62)	(62)	(62)	(62)	(61)	(61)	(61)	(34)
General & Administrative	\$M	(299)	-	(23)	(23)	(23)	(20)	(20)	(20)	(20)	(20)	(20)	(20)	(20)	(20)	(20)	(20)	(11)
Royalties	\$M	(424)	-	(18)	(38)	(37)	(41)	(38)	(39)	(39)	(39)	(39)	(35)	(24)	(13)	(10)	(10)	(6)
Other (inventory movement, etc.)	\$M	193	-	55	43	78	74	56	31	(14)	(16)	(6)	(2)	(2)	(17)	(24)	(32)	(29)
Subtotal: Total Cash Cost (B)	\$M	(3,323)	-	(242)	(318)	(294)	(310)	(283)	(279)	(265)	(241)	(230)	(204)	(168)	(133)	(127)	(137)	(91)
Sustaining Capital	\$M	(281)	-	(1)	(38)	(63)	(38)	(64)	(25)	(9)	(9)	(8)	(8)	(6)	(4)	(3)	(5)	(1)
Subtotal: All-In-Sustaining Costs (C)	\$M	(3,604)	-	(243)	(355)	(357)	(348)	(347)	(304)	(274)	(251)	(238)	(212)	(175)	(137)	(130)	(142)	(92)
Sustaining Margin (A-C)	\$M	4,098	-	77	328	319	395	337	403	436	452	474	419	261	95	52	41	9
Working Capital Movement	\$M	69	-	22	(19)	(24)	(43)	(2)	(14)	16	15	4	3	3	19	23	32	32
Taxes	\$M	(881)	-	(5)	(20)	(81)	(81)	(88)	(86)	(87)	(92)	(94)	(100)	(82)	(43)	(10)	(8)	(4)
FCF Before Non-Sustaining Capital	\$M	3,285	-	94	289	214	270	248	303	366	375	384	322	182	71	65	65	37
Non-Sustaining Capital	\$M	(124)	-	(89)	-	-	-	-	-	-	-	-	(4)	(6)	(6)	(6)	(6)	(7)
Growth Capital	\$M	(734)	(734)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mine Free Cash Flow	\$M	2,427	(734)	5	289	214	270	248	303	366	375	384	318	176	65	59	59	30

## APPENDIX 2: ASSAFOU PFS SUMMARY at \$1,500/oz

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	Y-13	Y-14	Y-15
Mining Schedule																		
Total Material Mined	kt	503,097	36,543	58,568	62,460	60,169	61,042	59,898	53,199	31,980	25,453	25,032	18,914	8,437	1,403	-	-	-
Waste	kt	430,311	33,742	53,844	54,479	53,401	52,018	53,396	46,225	25,857	20,070	18,586	12,664	5,201	828	-	-	-
Ore	kt	72,786	2,801	4,725	7,981	6,767	9,024	6,502	6,974	6,123	5,383	6,446	6,250	3,235	574	-	-	-
Grade	g/t	1.76	0.82	0.96	1.67	1.81	1.72	1.89	1.88	2.03	2.16	1.98	1.80	1.71	1.68	-	-	-
Contained Gold	koz	4,115	74	147	430	395	500	394	421	400	374	411	361	178	31	-	-	-
Strip ratio	:	5.9	12.0	11.4	6.8	7.9	5.8	8.2	6.6	4.2	3.7	2.9	2.0	1.6	1.4	-	-	-
Processing Schedule																		
Total Ore Processed	kt	72,786	-	4,997	5,000	5,000	5,003	5,007	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	2,779
Au Grade - Ore Processed	g/t	1.76	-	1.07	2.26	2.24	2.45	2.26	2.34	2.35	2.33	2.35	2.09	1.45	0.79	0.63	0.63	0.63
Contained Gold - Ore Processed	koz	4,115	-	173	364	360	394	364	376	377	374	378	336	234	127	101	101	56
Au Recovery	%	94%	-	93%	94%	94%	94%	94%	94%	94%	94%	94%	94%	93%	91%	90%	90%	90%
Recovered Gold	koz	3,853	-	160	342	338	371	342	354	355	352	356	316	218	116	91	91	51
Gold sold	koz	3,851	-	160	342	338	371	342	354	355	351	356	316	218	116	91	91	51
Operating Unit Cost Summary																		
Mining and secondary haulage	\$/t Mined	4.08	-	3.42	3.81	4.16	4.27	3.67	3.56	4.07	4.12	4.09	4.49	7.17	15.97	-	-	-
Processing	\$/t Ore Processed	12.25	-	11.38	12.33	12.27	12.40	12.38	12.41	12.39	12.39	12.42	12.43	12.38	12.18	12.12	12.12	12.12
General & Administrative	\$/t Ore Processed	4.10	-	4.58	4.58	4.58	3.98	3.97	3.98	3.98	3.98	3.98	3.98	3.98	3.98	3.98	3.98	3.99
Total Cash Costs	\$/oz Gold Sold	820	-	1,475	887	828	791	785	747	704	644	602	604	731	1,108	1,355	1,460	1,750
All-In-Sustaining Costs	\$/oz Gold Sold	893	-	1,479	997	1,013	895	971	818	729	671	625	629	759	1,140	1,386	1,513	1,773
Environmental Data																		
GHG Emissions Intensity	t CO2e/oz	0.55	-	1.13	0.57	0.56	0.54	0.57	0.55	0.36	0.36	0.37	0.34	0.44	0.79	1	1	1
Energy Intensity	GJ/oz	7.23	-	15.24	7.62	7.53	7.21	7.61	7.36	4.79	4.78	4.82	4.45	5.63	10.12	9.78	9.78	10.53
Operating Cash Flow Summary																		
Gold Revenue (A)	\$M	5,777	-	240	513	507	557	513	530	533	527	534	473	326	174	137	137	76
Mining and secondary haulage	\$M	(1,903)	-	(200)	(238)	(250)	(261)	(220)	(189)	(130)	(105)	(102)	(85)	(61)	(22)	(13)	(14)	(12)
Processing	\$M	(892)	-	(57)	(62)	(61)	(62)	(62)	(62)	(62)	(62)	(62)	(62)	(62)	(61)	(61)	(61)	(34)
General & Administrative	\$M	(299)	-	(23)	(23)	(23)	(20)	(20)	(20)	(20)	(20)	(20)	(20)	(20)	(20)	(20)	(20)	(11)
Royalties	\$M	(260)	-	(11)	(23)	(23)	(25)	(23)	(24)	(24)	(24)	(24)	(21)	(15)	(8)	(6)	(6)	(3)
Other (inventory movement, etc.)	\$M	193	-	55	43	78	74	56	31	(14)	(16)	(6)	(2)	(2)	(17)	(24)	(32)	(29)
Subtotal: Total Cash Cost (B)	\$M	(3,160)	-	(236)	(303)	(280)	(294)	(269)	(264)	(250)	(226)	(214)	(191)	(159)	(128)	(124)	(133)	(89)
Sustaining Capital	\$M	(281)	-	(1)	(38)	(63)	(38)	(64)	(25)	(9)	(9)	(8)	(8)	(6)	(4)	(3)	(5)	(1)
Subtotal: All-In-Sustaining Costs (C)	\$M	(3,441)	-	(236)	(341)	(343)	(332)	(332)	(289)	(259)	(236)	(222)	(199)	(165)	(132)	(126)	(138)	(90)
Sustaining Margin (A-C)	\$M	2,336	-	3	172	164	225	181	241	274	291	312	275	161	42	10	(1)	(14)
Working Capital Movement	\$M	69	-	22	(19)	(24)	(43)	(2)	(14)	16	15	4	3	3	19	23	32	32
Taxes	\$M	(467)	-		-	(39)	(41)	(47)	(46)	(46)	(52)	(54)	(59)	(48)	(21)	(5)	(5)	(4)
FCF Before Non-Sustaining Capital	\$M	1,938	-	25	153	101	140	132	181	244	255	262	219	117	40	29	26	14
Non-Sustaining Capital	\$M	(124)	-	(89)	-	-	-	-	-	-	-	-	(4)	(6)	(6)	(6)	(6)	(7)
Growth Capital	\$M	(734)	(734)		-		-	-	-			-	-		-	-		-
Mine Free Cash Flow	\$M	1,080	(734)	(63)	153	101	140	132	181	244	255	262	214	111	34	23	20	7