

DENVER GOLD FORUM 2016

Jeff Quartermaine Managing Director & CEO

20 September 2016



ASX/TSX: PRU www.perseusmining.com



Cautionary Statements

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This presentation contains forward-looking information which is based on the assumptions, estimates, analysis and opinions of management made in light of its experience and its perception of trends, current conditions and expected developments, as well as other factors that management of the Company believes to be relevant and reasonable in the circumstances at the date that such statements are made, but which may prove to be incorrect. Assumptions have been made by the Company regarding, among other things: the price of gold, continuing commercial production at the Edikan Gold Mine (EGM) without any major disruption, development of a mine at the Sissingué Gold Project, the timely receipt of required governmental approvals, the accuracy of capital and operating cost estimates, the completion of a feasibility study for the Yaouré Project on its exploration and development activities, the ability of the Company to obtain financing as and when required and on reasonable terms. Readers are cautioned that the foregoing list is not exhaustive of all factors and assumptions which may have been used by the Company. Although management believes that the assumptions made by the Company and the expectations represented by such information are reasonable, there can be no assurance that the forward-looking information will prove to be accurate. Forward-looking information involves known and unknown risks, uncertainties, and other factors include, among others, the actual results, performance or achievements expressed or implied by such forward-looking information. Such factors include, among others, the actual results of future exploration, changes in project parameters as plans continue to be evaluated, as well as those factors disclosed in the Company's publicly filed documents. Readers should not place undue reliance on forward-looking information. Perseus does not undertake to update any forward-looking information, except in accordance with applicable securities laws. This presentation contains forward-looking informat

ASX Listing Rule and National Instrument 43-101 Compliance Note

The information in this presentation in relation to the Mineral Resource for the EGM deposits was first reported by the Company in compliance with the JORC Code 2012 in market announcements released on 27 August 2014, 4 September 2014, 20 April 2015 and updated in a market release on 19 April 2016 and in its 2016 Financial Statements released on 29 August 2016. The information in this presentation in relation to the EGM Ore Reserves which were first reported by the Company in compliance with the JORC Code 2012 in a market announcement released on 20 April 2015 and updated in a market release on 19 April 2016 and its 2016 Financial Statements released on 20 April 2015 and updated in a market release on 19 April 2016 and its 2016 Financial Statements released on 29 August 2016. The Company confirms that it is not aware of any new information or data that materially affects the information in those market announcements and that all material assumptions and technical parameters underpinning the estimates in those market announcements continue to apply and have not materially changed.

The information in this presentation that relates to Mineral Resources and Ore Reserves for the Sissingué Gold Project (SGP) was first reported by the Company in compliance with the JORC Code 2012 in a market announcement released on 21 April 2015. The Company confirms that it is not aware of any new information or data that materially affects the information in that market announcement and that all material assumptions and technical parameters underpinning the estimates in those market announcements continue to apply and have not materially changed.

All production targets for the EGM and the SGP referred to in this presentation are underpinned by estimated Ore Reserves which have been prepared by competent persons in accordance with the requirements of the JORC Code. The Company confirms that all material assumptions underpinning those production targets, or the forecast financial information derived from those production targets, in the market releases dated 19 April 2016 (EGM) and 21 April 2015 (SGP) continue to apply and have not materially changed. Refer "Technical Report — Central Ashanti Gold Project, Ghana" dated 30 May 2011 and "Technical Report — Sissingué Gold Project, Côte d'Ivoire" dated 29 May 2015. Steffen Brammer and Paul Thompson, each of whom is a Qualified Person as defined in NI 43-101 and an employee of the Company, have approved the inclusion of technical and scientific information in this presentation.

Cautionary Statements

Yaouré

All information in this report in the Annual Group Ore Reserves and Mineral Resources Statement concerning the YGP are reported as Foreign Estimates as defined in the ASX Listing Rules in accordance with ASX Listing Rules 5.12.1 to 5.12.10 and as Historical Estimates as defined under NI 43-101. The Foreign Estimates and Historical Estimates are together referred to as "Estimates". The Estimates for the YGP have been sourced from the following report in accordance with NI 43-101: Technical Report and Prefeasibility Study of the YGP, Côte d'Ivoire. Document No 1494400100-REP-R0001-01 dated 14 May 2015. The Estimates have been classified as Inferred, Indicated and Measured under NI 43-101. The classification categories are considered by Perseus to be equivalent to the JORC categories of the same name (JORC 2012), thus the NI 43-101 compliant estimates are considered "gualifying foreign estimates" for the purposes of the ASX Listing Rules. Perseus has reviewed the relevant Technical Reports for the YGP and believes the foreign estimates were conducted in a professional and competent manner and are relevant for purposes of the Company's decision regarding these properties. However, neither Perseus nor its gualified persons have completed the work necessary to verify the Estimates and the estimates should not be relied upon. The Estimate for the YGP deposit is material to Perseus. The Mineral Resource Estimate is based on RC and diamond core drill holes, conducted by Amara since 2005. Drill holes were nominally spaced at 50x50m over the entire prospect,. A total of 630 RC holes for 59,096.65m and 405 DD holes for 116,383.35m were drilled. Resource wireframes were generated by combining manually digitized sectional polygons. A standard block model was created with 12.5x12.5x10m parent block size and grade estimation was performed using a combination of Ordinary Kriging and Cubed Inverse Distance algorithms, both with top-cuts applied. The oxides of the YGP deposits have been partly mined in open pit heap leach operations by the Compagnie Minière d'Afrique ("CMA") between 1999 and 2003, and between 2008 and 2011 by Amara. Historic data from drilling prior to 2005, and grade control data from the mining operations were not included in the Mineral Resource Estimate. The depletion due to mining by CMA and Amara, as well as backfilling of the historic CMA open pits have been taken into account. Mineralogical and metallurgical test work was carried out on several ore types at variable grades. Investigations indicated that the ores are free milling and non-refractory at a grind size of approximately P80 = 75 µm. The ore is hard and amenable to direct cyanidation, with an overall gold recovery of approximately 90%. Open pit mining using conventional drill and blast methods was adopted taking into consideration oxide and fresh material. Pits were optimised and then designed in staged cutbacks. Suitably sized mining equipment was adopted with total material movement determined based on the plant throughput rate with an elevated cut-off strategy in the early years of production to maximise grade. Owner mining was adopted. The process plant was designed for a 6.5Mt/a capacity. The flowsheet comprised a gyratory crusher, SAG mill, ball mill, gravity concentration, thickeners, agitated leach tanks, CIP circuit, elution and electrowinning to produce doré gold bars for refining. Infrastructure was designed to match the overall mining and processing rates, including tailings storage facility, power and water supply, camp, offices, workshops and roads. Cost estimates were completed to +/-25%. A \$1,250/oz gold price was used in the evaluation.

A statement was made by Amara on 26 February 2016 updating the Mineral Resource and Ore/Mineral Reserve at the YGP. An incomplete draft technical report was available to Perseus, but a fully compliant NI 43-101 document had not been completed. Therefore the May 2015 NI 43-101 technical report is the basis of the Estimate. Perseus has commenced a feasibility study on the YGP including a NI 43-101 technical report, with completion expected in the middle of 2017. The feasibility will be focussed on increasing geological information by carrying out closer spaced drilling in targeted areas than has been completed historically. Also significant additional metallurgical test work will be carried out, with a specific focus on comminution. The new information will be used to better define controls on mineralisation and thereby determine the tonnes and grade of the deposit with greater reliability and develop a geo-metallurgical model. The mining method for the deposit can then be optimised along with the mining and processing rates. The process plant design and associated infrastructure will then be finalised. Quotes will be sought from suitably experienced mining contractors to fully evaluate the option of contract mining compared to owner mining. The feasibility will be funded from funds from the recent equity raising.

Cautionary statement in respect of Yaouré

The Estimates are historical/foreign estimates and are not reported in accordance with the JORC Code. A qualified person has not completed sufficient work to classify the Estimates as current mineral resources or ore reserves in accordance with the JORC code and the Company is not treating the Estimates as current. It is uncertain that following evaluation and/or further exploration work the Estimates will be able to be reported as mineral resources or ore reserves in accordance with the JORC Code.

Competent Persons/Qualified Person Statement

The information in this presentation that relates to the reporting of Yaouré Mineral Resource Foreign Estimates is provided under ASX listing rules 5.12.2 to 5.12.7 and under Canadian National Instrument 43 101 (NI 43-101) and is an accurate representation of the available data and studies for those projects based upon information compiled and Historical Estimates by Mr Steffen Brammer, who is Member of The Australasian Institute of Mining and Metallurgy. Mr Steffen Brammer is an employee of the Company. Mr Steffen Brammer has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' and as a Qualified Person as defined in NI 43-101. Mr Steffen Brammer consents to and has approved inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this presentation that relates to the reporting of Yaouré Mineral Reserve Foreign Estimates and Historical Estimates is provided under ASX listing rules 5.12.2 to 5.12.7 and under NI 43-101 and is an accurate representation of the available data and studies for those projects based upon information compiled by Mr Paul Thompson, who is Fellow of The Australasian Institute of Mining and Metallurgy. Mr Paul Thompson is an employee of the Company and has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' and a Qualified Person as defined in NI 43-101. Mr Paul Thompson consents to and has approved inclusion in the report of the matters based on his information in the form and context in which it appears.

Investment Highlights

Successful diversified West African gold producer, developer and explorer:

- Edikan Gold Mine Large scale, low grade producing gold mine
- Sissingué Gold Mine Smaller, high grade gold mine currently in construction, first gold in Dec 2017 guarter
- Yaouré Gold Project DFS in progress, development decision for potentially as large scale mining operation expected in Dec 2017 quarter

Strong growth profile:

\$

Debt

Credible plan to increase annual gold production to 500,000⁺ ounces per year from FY2021

Significant Mineral Resource inventory:

6.4Moz of JORC M&I Mineral Resources, including 2.6Moz of P&P Ore Reserves (Edikan and Sissingué), plus 5.2Moz of CIMM M&I Mineral Resources, including 3.2Moz of P&P Ore Reserves (Yaouré)*

Enhanced balance sheet to fund growth:

- Sissingué being funded from existing cash plus new project loan
- Capacity to fund Yaouré from existing cash, future internal cash flows and/or corporate debt

A proven developer/operator led by an experienced Board & management team with a clear strategic plan to improve total shareholder returns

*Cautionary statement: These estimates are historical/foreign estimates and are not reported in accordance with the JORC Code. A qualified person has not completed sufficient work to classify these estimates as current mineral resources or ore reserves in accordance with the JORC code and the Company is not treating these estimates as current. It is uncertain that following evaluation and/or further exploration work these estimates will be able to be reported as mineral resources or ore reserves in accordance with the JORC Code. For further information regarding the treatment of these estimates, the reader is referred to slides 3 and 4

Capital Structure

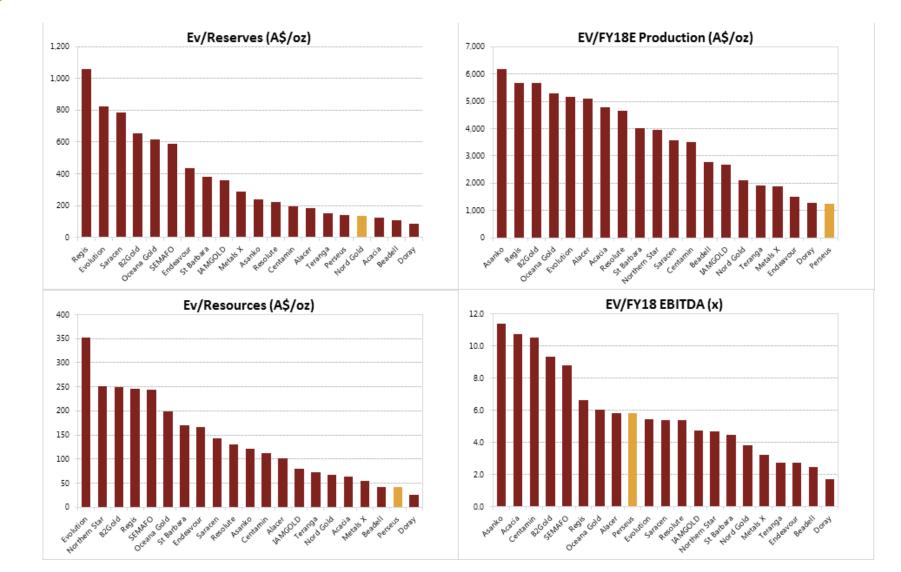
As at 16 September 2016	ASX	TSX
Share price	A\$0.51 ps	C\$0.50 ps
Shares outstanding	1,024 m	1,024 m
Warrants outstanding ¹	138 m	138 m
Market capitalisation	A\$522 m	C\$512 m
Cash ²	A\$151 m	C\$149 m
Debt	-	-
Enterprise value	A\$371 m	C\$363 m

Note:

1. 143,050,770 warrants were issued as part of the Amara acquisition consideration. Each warrant is exercisable at \$0.44 on or before 19 April 2019. If all remaining 138,414,972 warrants outstanding are exercised (4,635,798 warrants have already been exercised) Perseus will receive ~A\$61.3m / US\$45.6m assuming A\$/US\$ exchange rate of 0.7443 as at 30 June 2016

2. Includes 30 June 2016 cash of A\$151m. Cash balance excludes 8,342ozs of gold on hand which at 30 June 2016 was valued at A\$14.8m based on a gold price of US\$1,320.75/oz

Current Equity Capital Market Metrics



Our Strategy for Creating Value for Shareholders

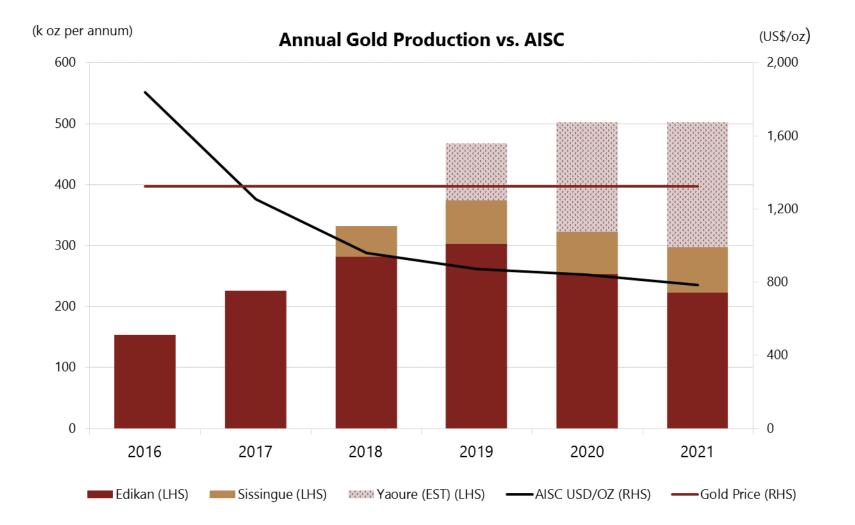
Drive increased productivity at Edikan through further optimisation and focussed capital investment Optimise shareholder value through successful development and operation of multiple, geopolitically diversified gold mines

Unlock the value of our growth assets, Yaouré and Sissingué by bringing to production quickly and efficiently

Finance growth through the prudent use of debt to supplement existing cash and future cash flows Leverage the skills and experience of our operating team and Board to deliver successful outcomes

Mitigate geopolitical risks through multi country projects and excellent long term in-country relationships

Future gold production target of ~500k ounces*



Experienced Board with Complementary Skillsets



Reginald Gillard Non-Executive Chairman

Jeff Quartermaine Managing Director and CEO



Colin Carson Executive Director

More than 30 years' experience in accounting and corporate finance. Chairman of Platina Resources and former Chairman of Aspen Group.

More than 25 years' experience in financial and management roles in resources companies. Certified Practising Accountant with business management & engineering qualifications.

Director of numerous Australian public companies since the 1980s. Oversees joint venture negotiations and corporate and legal matters for Perseus.



Sean Harvey Non-Executive Director



Significant management and M&A experience within public & private management companies, including Orvana Minerals, Samara Gold and TVX Gold.



Geologist by background who led the top rated Extel mining team in London before returning to industry as CEO of Amara Mining.



geologist

Alex Davidson Non-Executive Director

with over 25 years

experience, and multiple board

positions including Yamana, Orca

Gold and Capital Drilling.

exploration



Mike Bohm Non-Executive Director

Experienced mining professional with extensive corporate and operational and management experience across the resources sector.

Experienced and Capable Senior Management Team

Role	Team Member
Chief Executive Officer & Managing Director	Jeffrey Quartermaine
Executive Director – Commercial Services	Colin Carson
Chief Operating Officer	Chris Woodall
Chief Financial Officer	Elissa Brown
Group General Manager (Technical Services)	Paul Thompson
Group General Manager (Development)	Adam Smits
Group General Manager (Exploration)	Doug Jones
Executive General Manager – Edikan Mine	Brent Horochuk
General Counsel and Company Secretary	Martijn Bosboom
Investor Relations Manager	Cathy Moises



A Diversified West African Asset Portfolio

Our Locations	Assets	Overview
Sissingué (86%) ¹ M&I Mineral Resource: 0.9Moz Ore Reserve: 0.4Moz	Edikan	 Large scale gold mine producing since 2012 LOM annual avg. production 222,000 ozs over remaining 7.5 year life, & AISC of \$US865 per oz AISC to decline from US\$1,300-1,400 per oz in FY16 to US\$1,207 per oz in FY17 and US\$996 per oz in FY18 per LOMP
Yaouré (90%) ¹ M&I Mineral Resource: 5.2Moz	Sissingué	 Currently in development (capex US\$100 million) First gold forecast for Dec 2017 quarter LOM production 75,000 ozs per year over a 5 year life and AISC of \$US632 per oz
Ore Reserve: 3.2Moz (See cautionary statement below)	Yaouré	 DFS in progress with completion forecast for June 2017 quarter Potential for large scale, long life, low cost production

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¹ Note: Ore Reserve and Mineral Resource figures given on 100% basis. Please refer to the Appendix of this presentation for further details regarding Perseus's Mineral Resources and Ore Reserves

Edikan Gold Mine: The flagship of the company

Overview

- Open pit gold mine in southern Ghana in operation for over 4 years
- Average gold production of 222,000 ounces per year estimated over the remaining 7.5 year life
- Average AISC over LOMP estimated at US\$865 per ounce, significantly lower than current levels which reflect substantial capital investment
- Material improvements in operation since 2015 including:
 - ✓ Decreased unit mining and processing costs
 - ✓ Improved operating efficiency
 - ✓ Overcame power supply issues with additional generating capacity and third party deals
 - ✓ Modifying plant to reduce bottlenecks and unscheduled downtime



Edikan Gold Mine: Short-term spend for long-term gain¹

Intensive re-investment through to December 2016 including

- Facilities required to access to all mining areas/mining infrastructure
- Processing infrastructure (including plant improvements and power station)
- Waste stripping
- Tailings dam lift
- All capital investment included in All-In Site Cost



Edikan Capital Investment (\$USM)	JuneQ16	FY17	FY18	Total
Access to all Mining areas/mining infrastructure	4.5	10.5	0	15.0
Processing infrastructure (including plant improvements)	6.7	7.4	2.0	16.1
Tailings Dam Lift	2.7	2.5	2.9	8.1
Other	0.2	0.5	0.5	1.2
Total Capital	14.1	20.9	5.4	40.4

1. Forecast spend to the end of FY18

Edikan Gold Mine: Relocation housing







<u>Top Left:</u> Housing on Second Avenue

Bottom Left: General view of water tower and housing estate

Edikan Gold Mine: Diesel power station creates energy self sufficiency



Edikan Power Station includes 16 generating units providing 19.2MW of continuous power if needed to supplement grid power

Edikan Gold Mine: Plant modifications on schedule





Above: Steelwork for expansion of SAG Mill floor to facilitate efficient mill relines

Left: Newly designed SAG Feed chute



<u>Above:</u> Low profile loader to replace CV06 to transfer crushed material from crusher to crushed ore stockpile

Edikan Gold Mine: Waste stripping in Fetish Open Pit





Above: Blast hole rigs operating in Fetish open pit

Left: Aerial view of Fetish open pit

Edikan Gold Mine: The way forward

Current LOMP envisages a material increase in gold production in FY2017 compared to FY2016 with the increase in production weighted towards the second half of FY2017 as grades improve

Parameter	Units		2017 per LOMP		
		Dec 16 Half	Jun 17 Half	Full Year	Full Year
Gold Production	'000 ounces	80-100	125-145	205-245	226
Production costs ¹	\$US per ounce	1,145-1,420	950-1,080	1,030-1,210	1,115
All-In Site Costs ²	\$US per ounce	1,285-1,595	995-1,135	1,110-1,325	1,207

- ✓ Mining to progressively transition from Fetish and Chirawewa to Esuajah North, which is forecast to become the main ore source by the December 2016 quarter
- ✓ Relocation housing investment capital forecast to be largely completed by the December 2016 quarter
- ✓ Two week shutdown in October 2016 is factored into forecasts. Shutdown will involve the tie-in of all recent plant improvements and is expected to result in reduced operating costs and increased mill availability
- ✓ Grades forecast to increase significantly in June 2017 half, increasing production

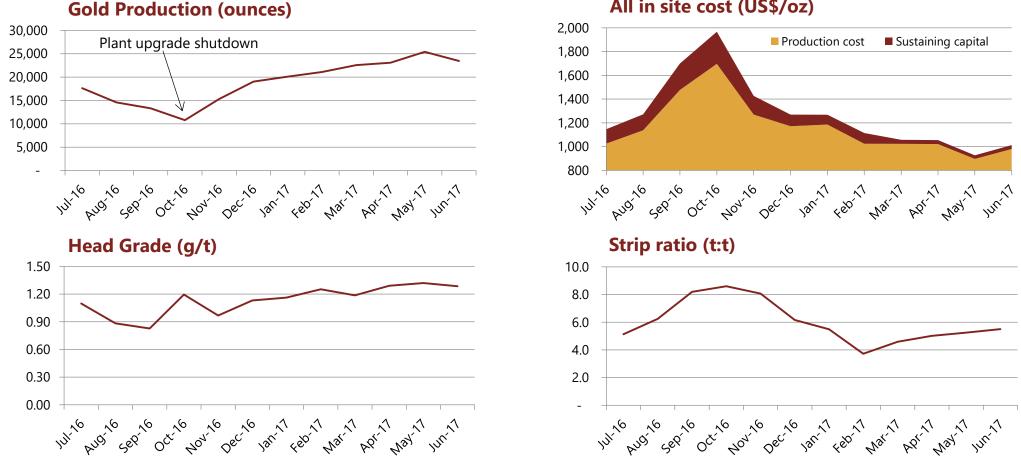
Notes:

^{1.} Production costs reflect All-In Site Costs excluding sustaining capital

^{2.} All-In Site Costs (AISC) include all production costs (including royalties), and sustaining capital

Progressive improvement expected over the course of FY2017

Based on current LOMP significant improvements to production and AISC are expected post plant upgrade in October 2016



All in site cost (US\$/oz)

Note: Charts present LOMP outputs for FY2017 and are forward looking estimates.

Edikan Gold Mine: Life-of-Mine Plan

Average annual gold production over life of mine of 222,000 ounces at AISC of US\$865/oz....

¹ Includes mining (incl.
all waste stripping),
processing, general and
administration cash
costs

	Parameter		FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
	PRODUCTION										
	Ore mined	Mt	7.5	11.3	11.2	7.6	6.0	4.0	0.1	-	47.7
	Waste mined	Mt	42.0	40.7	35.8	19.7	11.5	1.7	-	-	151.4
	Total Material Mined	Mt	49.5	52.0	47.0	27.3	17.5	5.7	0.1	-	199.1
	Strip ratio	t:t	5.6	3.6	3.2	2.6	1.9	0.4	-	-	3.2
	Ore processed	Mt	7.2	7.6	7.4	7.0	7.3	7.7	6.1	3.4	53.8
	Head grade	g/t gold	1.1	1.3	1.4	1.3	1.1	0.9	0.7	0.6	1.1
	Recovery	%	86.0	88.4	89.1	89.1	87.4	87.6	89.4	88.3	88.1
	Gold production	kozs	226	282	303	253	223	203	118	55	1,663
S	COSTS										
	Unit mining costs	US\$/t mined	3.06	3.27	3.34	3.59	3.48	4.34	34.88	-	3.37
	Unit processing costs	US\$/t milled	8.71	8.38	8.62	9.05	8.66	8.26	9.74	8.41	8.72
	Unit G&A costs	US\$/t milled	2.67	2.53	2.59	2.75	1.98	1.88	1.76	1.38	2.26
	Production cash costs ¹	US\$/oz	1,033	896	793	713	619	506	644	655	758
	Royalties	US\$/oz	82	81	81	81	81	81	81	81	81
	Sustaining capital costs	US\$/oz	92	19	7	15	11	23	9	68	26
	Total all-in site cash cost	US\$/oz	1,207	996	881	809	711	610	734	804	865
	Sustaining Capital										
	Access to all mining areas	USDM	10.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.5
	Mining infrastructure	USDM	0.0	0.0	0.0	1.2	0.5	0.0	0.0	0.0	1.7
	Processing infrastructure	USDM	7.4	2.0	1.5	1.5	1.0	1.0	0.5	0.0	14.9
	G&A sustaining	USDM	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	3.5
	Tailings storage facility	USDM	2.5	2.9	0.0	0.0	0.0	0.0	0.0	0.0	5.4
	Reclamation & Closure	USDM	0.0	0.0	0.0	0.5	0.5	3.2	0.0	3.7	7.8
	Total sustaining capital	USDM	20.9	5.4	2.0	3.7	2.5	4.7	1.0	3.7	43.9

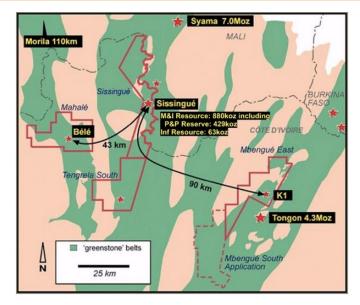
Sissingué Gold Project – Providing Perseus with near term growth

Overview

- Development project in northern Côte d'Ivoire
- Ore Reserves of 0.43Moz of gold (5.5Mt at 2.4g/t) based on pit shells calculated at US\$1,200/oz gold
- Forecast average annual production of 75,000 ounces at a LOM All-In Site Cost of US\$632 per ounce
- Capital payback estimated within 32 months based on US\$1,200 per ounce gold price
- Expected mine life of 5.25 years with potential to extend
- Permitting complete and fiscal stability agreement guaranteed by the government

Project Timeline

- Activated execution plan for full scale development of the mine and associated infrastructure on 1 July 2016
- Finalising project debt funding on coming months
- First gold production expected by the December 2017 quarter



Definitive Feasibility Study								
Parameter								
IRR at US\$1,200/oz ¹	27%							
Total upfront capital cost	US\$100m							
Total production	385,000oz							
Average All-In Site Cost over life of mine	US\$632/oz							

Sissingué Gold Project: Life-of-Mine Plan

Average annual gold production over life of mine of 75,000 ounces at AISC of US\$632/oz with Mineral Resource extensions in prospect.....

¹Includes mining (incl. all waste stripping), processing, general and administration cash costs

Parameter		FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	Total
PRODUCTION									
Ore mined	Mt	_	0.9	1.8	0.9	0.6	1.0	0.3	5.5
Waste mined	Mt	-	6.1	4.2	4.3	2.2	0.7	0.1	17.7
Total Material Mined	Mt	_	7.0	6.0	5.3	2.8	1.7	0.4	23.
Strip ratio	tt	-	5.8	2.3	4.8	3.4	0.8	0.2	3.
Ore processed	Mt	-	0.8	1.1	1.0	1.1	1.0	0.5	5.
Head grade	g/t gold	-	2.0	2.2	2.3	2.4	3.1	2.2	2.
Recovery	%	-	91.9	90.6	88.9	90.9	90.0	82.5	89.
Gold production	kozs	-	49.8	70.9	69.6	74.3	92.7	27.8	38
COSTS									
Unit mining costs	US\$/t mined	-	3.14	3.34	3.60	5.80	7.64	8.43	3.7
Unit processing costs	US\$/t milled	-	13.56	16.08	17.69	16.70	17.80	19.66	16.7
Unit G&A costs	US\$/t milled	-	7.44	7.59	7.91	7.76	7.61	8.06	7.7
Production cash costs ¹	US\$/oz	-	628	642	653	564	423	583	56
Royalties	US\$/oz	-	49	49	49	49	49	49	2
Sustaining capital costs	US\$/oz	-	7	7	8	13	11	66	-
Total all-in site cash cost	US\$/oz	-	684	698	710	628	483	699	63
Sustaining Capital	USDM	-	0.4	0.5	0.5	1.0	1.0	1.8	5
Development Capital									
Construction Indirects	USDM	6.9	2.1	-	-	-	-	-	9
Treatment Plant Costs	USDM	15.8	5.6	-	-	-	-	-	21
Reagents & Plant Services	USDM	7.4	2.2	-	-	-	-	-	9
Infrastructure	USDM	19.7	5.9	-	-	-	-	-	25
Mining	USDM	9.2	2.8	-	-	-	-	-	11
Management Costs	USDM	7.5	2.2	-	-	-	-	-	9
Owners project Costs	USDM	7.4	3.0	-	-	-	-	-	10
Owners Operations Costs	USDM	2.1	0.6	-	-	-	-	-	2
Total Development Capital	USDM	76.1	24.4	-	-	-	-	-	100

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Sissingué Gold Project: Development Schedule

Description		Q3 2016			Q4 2016			Q1 2017			Q2 2017			Q3 2017			4 17
	J	А	S	0	Ν	D	J	F	М	А	Μ	J	J	А	S	0	N D
Lycopodium Contract Award																	
Permanent Village & Site Buildings																	
Formal Lycopodium Project Commencement																	
Earthworks inc Tails Dam																	
Concrete Works																	
SMP & E-I Works																	
Mining Commence and Waste Removal																	
First Ore to Mill																	
First Gold Pour																	
Performance Test Complete																	

Key Points:-

- 60 week build from 1 September 2016
- Village will be opened up in two phases to match manning requirements
- Key owners activities are earthworks and camp construction

Sissingué Gold Project: Project cost to first gold pour

	Budget
Broad Work Areas	US \$M
Camp & Buildings	\$ 6.4
Owners Equipment	\$ 5.5
PowerStation	\$ 5.0
Earthworks	\$ 8.8
Other	\$ 0.5
Mining	\$ 7.4
Abidjan, Owners, PreOps & Common Indirects	\$ 20.6
Sub-total Owner's Costs	\$ 54.1
Sub-Total Non-Owners Costs	\$ 46.5
TOTAL Project	\$100.5



<u>Left</u>: Sissingué access road works underway

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<u>Right:</u> Sissingué SAG Mill delivered to Abidjan



Yaouré Gold Project: Providing Perseus with medium term growth

Overview

- DFS stage development project in central Côte d'Ivoire
- Measured and Indicated Mineral Resources of 5.2Moz (104.1Mt at 1.54g/t)* (see cautionary statement below)
- Potential for large scale, long life, low cost production
- Ideally located with excellent existing infrastructure

Next Steps

- Definitive Feasibility Study (DFS) underway to be completed by June 2017 quarter
- 42,000 metre drilling programme planned planned to commence in near term
- Completion of DFS, financing, negotiation of Mining Convention, and execution plan estimated at 18-24 months
- Construction period estimated at 18 months

*Cautionary statement: These estimates are historical/foreign estimates and are not reported in accordance with the JORC Code. A qualified person has not completed sufficient work to classify these estimates as current mineral resources or ore reserves in accordance with the JORC code and the Company is not treating these estimates as current. It is uncertain that following evaluation and/or further exploration work these estimates will be able to be reported as mineral resources or ore reserves in accordance with the JORC Code. For further information regarding the treatment of these estimates, the reader is referred to slides 3 and 4.





Yaouré Gold Project : Ideally located, large Mineral Resource







Dual carriageway within 40km





Yaouré Gold Project: DFS Schedule

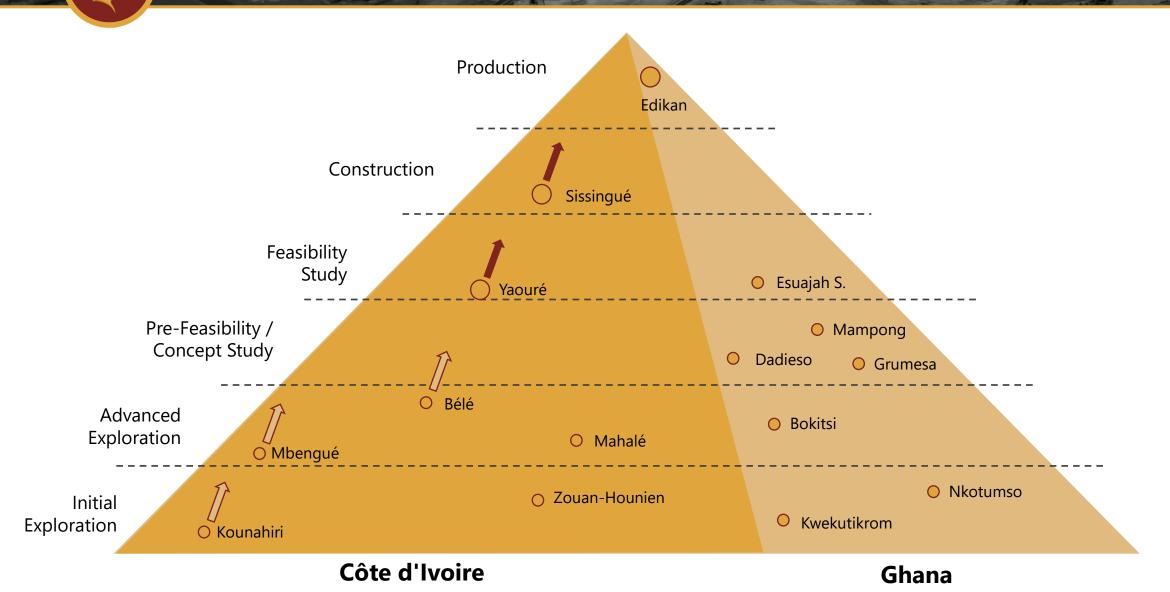
Yaoure Definitive Feasibility Study Schedule

Project Breakdown	Ju	l Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
1. Project Stages																
a. Stage 1 - Review & Option Identification																
b. Stage 2 - Assessment & Narrowing of Options											_					
c. Stage 3 - Identification of Preferred Option																
d. Stage 4 - Cost Estimate <20% for Preferred Option																
e. Stage 5 - Cost Estimate <10% for Preferred Option																
2. Technical and Financial Components																
a. Technical Scope Finalisation																
b. Geological Resource Assessment																
c. Mining, Processing & Infrastructure Assessment																
d. Engineering and Design Assessment											-					
e. Progressive Financial Assessments																
Definitive Feasibility Study (DES)																

Definitive Feasibility Study (DFS)

Front End Engineering and Design (FEED)

The Future: Strong Pipeline from Exploration to Production



The Future: Corporate Outlook

- Corporate growth strategy designed to transform Perseus from a single mine-single country business to a credible mid-tier, multi-operation enterprise spanning several geopolitical settings
- Implementation of our corporate growth strategy requires:
 - Physical assets Amara acquisition materially expanded the portfolio and introduced the very high quality Yaoure Project into the mix
 - □ **Human assets** Over the last three years we have progressively built our team and now employ a group of highly capable and experienced practitioners covering the critical disciplines. Continuing to opportunistically employ high quality people when identified.
 - Financial assets Following a recent capital raising, Perseus had \$166 million in cash and bullion on the BS at 30 June 2016, and with no existing debt and material forecast cash flows from Edikan and Sissingue, the Company is well positioned to borrow additional funds required to implement its growth strategy.
 - Social licence Social licence in Ghana and Cote d'Ivoire is robust supported by years of delivering on undertakings to host governments and communities
- Targeting progressive growth in gold production from FY2017 (~226koz) to FY2021 (500koz+)
- Ingredients are in place, and it is now **all about successful execution**

Perseus: Transforming into a Mid-Tier Gold Producer



Successful West African-focused gold producer



Producing mine and strong development pipeline



Large Ore Reserve and Mineral Resource inventory





Robust balance sheet – strong cash position and no debt





Contact Us

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APPENDICES



Edikan Mineral Resources and Reserves*

5.0Moz of gold

in Measured & Indicated Mineral Resources (143.7Mt at 1.1g/t)

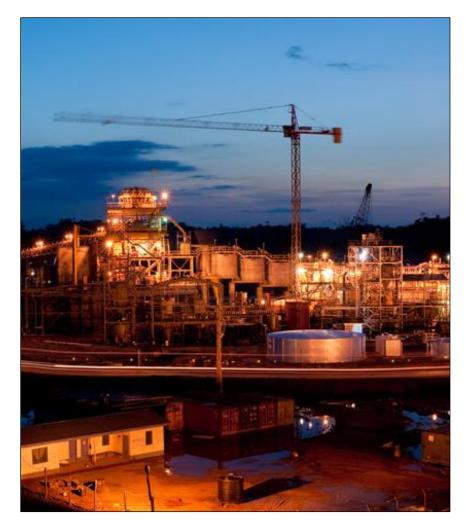
INCLUDING

2.2Moz of gold

in Proven & Probable Reserves (55.8Mt at 1.2g/t) PLUS

2.0Moz of gold

in Inferred Mineral Resources (61.6Mt at 1.0g/t)





Edikan Mineral Resources and Reserves

EDIKAN ORE RESERVES

							Prove	ed+Proba	able	
Deposit	Prov	ed Reserv	ves	Proba	ble Rese	rves	Reserves			
	Quantity	Grade	Gold	Quantity	Grade	Gold	Quantity	Grade	Gold	
	Mt	gt Au	Koz	Mt	gt Au	Koz	Mt	gt Au	Koz	
AF Gap-Fobinso	12.9	1.2	495	2.0	1.0	63	14.9	1.2	558	
Fetish	6.9	1.0	221	5.8	1.5	276	12.7	1.2	497	
Chirawewa	1.5	0.9	45	2.3	1.4	101	3.8	1.2	146	
Bokitsi South	0.6	3.5	69	0.2	1.9	9	0.8	3.5	79	
Esuajah North	11.5	1.0	360	3.8	0.9	114	15.3	1.0	475	
Esuajah South	5.8	1.8	334	0.9	2.0	57	6.7	1.8	391	
Stockpile	1.6	0.6	32				1.6	0.6	32	
Total	40.8	1.2	1,556	15.0	1.3	620	55.8	1.2	2,177	

Notes:

- 1. Allows for mining depletion to 30 June 2016.
- 2. All Ore Reserves current as at 30 June 2016.
- Variable gold grade cut-off based on recovery of each material type in each deposit: Oxide 0.35 – 0.40 g/t, Transition 0.50 – 0.65 g/t and Fresh 0.45 – 0.55 g/t.
- 4. Inferred Mineral Resource is considered as waste, t : t.
- 5. Numbers contain some rounding.

EDIKAN MINERAL RESOURCES

Deposit	Measured Resources			Indicated Resources			Measured + Indicated Resources			Inferred Resources		
	Quantity	Grade	Gold	Quantity	Grade	Gold	Quantity	Grade	Gold	Quantity	Grade	Gold
	Mt	gt Au	Koz	Mt	gt Au	Koz	Mt	gt Au	Koz	Mt	gt Au	Koz
AF Gap-Fobinso	27.6	1.1	933	3 23.7	0.9	677	51.3	1.0	1,609	28.3	0.8	728
Bokitsi South	0.7	3.7	86	5 0.9	2.3	68	1.6	2.9	154	1.2	1.5	56
Fetish	11.4	0.9	343	16.2	1.2	635	27.6	1.1	979	11.3	1.2	451
Chirawewa	1.7	0.9	49	3.9	1.3	158	5.6	1.1	207	4.0	1.1	136
Dadieso	-	-	-		-	-	-	-	-	5.3	1.5	253
Esuajah North	16.9	0.9	494	18.4	0.8	493	35.3	0.9	986	3.6	0.9	105
Esuajah South	9.5	1.8	546	5 7.3	1.6	370	16.8	1.7	916	5.7	1.1	211
Mampong	0.2	0.9	6	5 3.7	1.0	122	3.9	1.0	128	2.1	1.0	65
ROM Stockpiles	1.6	0.6	32	2 -	-	-	1.6	0.6	32			
Total	69.6	1.1	2,489	74.1	1.1	2,522	143.7	1.1	5,011	61.6	1.0	2,005

<u>Notes</u>

- 1. Allows for mining depletion to 30 June 2016.
- 2. All Mineral Resources current as at 30 June 2016.
- 3. 0.4g/t gold cut-off applied.
- 4. The boundary between Mineral Resources of the Fetish and Bokitsi deposits has been modified since the last annual financial report 2015. The northern portion of the mineralised material that was previously included in the Bokitsi estimate is now included as part of the Fetish estimate.
- 5. Numbers contain some rounding.



Sissingué Mineral Resources and Reserves*

880koz of gold

in Measured & Indicated Mineral Resources (16.0Mt at 1.7g/t)

INCLUDING

429koz of gold

in Proven & Probable Reserves (5.5Mt at 2.4g/t) PLUS

63koz of gold

in Inferred Mineral Resources (1.1Mt at 1.7g/t)



Sissingué Mineral Resources and Ore Reserves

SISSINGUE ORE RESERVES

							Proved+Probable			
Deposit		Proved Rese	rves	Prob	able Rese	erves	Reserves			
	Quantity Grade		Gold	Quantity	Grade	Gold	Quantity	Grade	Gold	
	Mt	gt Au	Koz	Mt	gt Au	Koz	Mt	gt Au	Koz	
Oxide/Transition	1.4	2.2	97	1.4	1.4	61	2.8	1.8	159	
Primary	2.0	3.3	215	0.7	2.3	54	2.7	3.1	270	
Total	3.4	2.8	312	2.1	1.7	115	5.5	2.4	429	

Notes:

- 1. Based on February 2015 Ore Reserve estimation.
- Variable gold grade cut-off based on recovery of each material type: Oxide 0.6 g/t, Transition 0.8 g/t, Granite – Porphyry 0.8 g/t and Sediment 1.0 g/t.
- 3. Inferred Mineral Resource is considered as waste, t : t.
- 4. Ore Reserve current as at 30 June 2016.
- 5. Numbers contain some rounding.

SISSINGUE MINERAL RESOURCES

Deposit	Measured Resources			Indicated Resources				red + Indi lesources		Inferred Resources		
	Quantity	Grade	Gold	Quantity	Grade	Gold	Quantity	Grade	Gold	Quantity	Grade	Gold
	Mt	gt Au	Koz	Mt	gt Au	Koz	Mt	gt Au	Koz	Mt	gt Au	Koz
Oxide	1.0	1.8	59	3.1	1.3	130	4.1	1.4	190	0.3	1.2	12
Transition	0.6	2.3	49	0.8	1.5	38	1.4	1.9	87	0.1	1.2	2
Primary	3.2	2.5	260	7.1	1.5	350	10.0	1.8	600	0.8	2.0	49
Total	4.8	2.4	370	11.0	1.4	510	16.0	1.7	880	1.1	1.7	63

Notes:

- 1. Based on October 2014 Mineral Resource estimation.
- 2. 0.6g/t gold cut-off applied.
- 3. Mineral Resource and Ore Reserves current as at 30 June 2016.
- 4. Numbers contain some rounding.

Yaouré Mineral Resources and Reserves^{1,2}

5.2Moz of gold

in Measured & Indicated Mineral Resources (104.1Mt at 1.5g/t) (see cautionary statement below)

INCLUDING

3.2Moz of gold

in Proven & Probable Reserves (62.3Mt at 1.6g/t) PLUS

2.2Moz of gold

in Inferred Mineral Resources (47.7Mt at 1.4g/t)

Cautionary statement: These estimates are historical/foreign estimates and are not reported in accordance with the JORC Code. A qualified
person has not completed sufficient work to classify these estimates as current mineral resources or ore reserves in accordance with the JORC
code and the Company is not treating these estimates as current. It is uncertain that following evaluation and/or further exploration work these
estimates will be able to be reported as mineral resources or ore reserves in accordance with the JORC Code. For further information regarding
the treatment of these estimates, the reader is referred to slides 3 and 4.



Yaouré Mineral Resources and Reserves^{1,2}

YAOURE ORE RESERVES

Deposit	Pro	ved Reser	ves	Prob	able Rese	rves	Proved+Probable Reserves			
	Quantity	Grade Gold		Quantity	uantity Grade		Quantity	Grade	Gold	
	Mt	gt Au	Koz	Mt	gt Au	Koz	Mt	gt Au	Koz	
Yaouré	18.1	1.8	1,100	44.2	1.5	2,200	62.3	1.6	3,200	
Total	18.1	1.8	1,100	44.2	1.5	2,200	62.3	1.6	3,200	

YAOURE MINERAL RESOURCES

Deposit	Measured Resources			Indicated Resources				ired + Indi Resources		Inferred Resources		
	Quantity	Grade	Gold	Quantity	Grade	Gold	Quantity	Grade	Gold	Quantity	Grade	Gold
	Mt	gt Au	Koz	Mt	gt Au	Koz	Mt	gt Au	Koz	Mt	gt Au	Koz
Yaouré	18.6	1.9	1,114	85.5	1.5	4,042	104.1	1.5	5,155	47.7	1.4	2,156
Total	18.6	1.9	1,114	85.5	1.5	4,042	104.1	1.5	5,155	47.7	1.4	2,156

Notes:

- Cautionary statement: This estimate is a Foreign Estimate under the ASX Listing Rules and a Historical Estimate under Canadian NI 43-101 as at 14 May 2015 and is not reported in accordance with the JORC Code. A qualified person has not completed sufficient work to classify this estimate as current Mineral Resources or Ore Reserves in accordance with the JORC code and the Company is not treating these estimates as current. It is uncertain that following evaluation and/or further exploration work these estimates will be able to be reported as Mineral Resources or Ore Reserves in accordance with the JORC Code. For further information regarding the treatment of the estimate, the reader is referred to slides 3 and 4.
- 2. Numbers contain some rounding.
- 3. As at 24 November 2015

Key Milestones for Remainder of CY2016



Edikan operating performance to continue to remain on plan with improved head grade and plant throughput as December 2016 Half Year progresses

Expect: Deliver gold production and costs in line with guidance



Edikan capital enhancement projects

Expect: Relocation housing and plant upgrade completion in December 2016 quarter



Announcement of credit approval of Sissingué financing package and construction progress at Sissingue

Expect: Credit approval in September 2016 quarter and construction in line with schedule



Commencement of Yaouré 42,000m drilling programme and announcement of drilling results

Expect: On time commencement with results throughout December 2016 quarter

