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Perseus Mining Ltd. (ASX:PRU)(TSX:PRU) is pleased to announce details of its updated Life of Mine Plan ("LOMP") for the Sissingué Gold Mine in Côte d'Ivoire, West Africa ("SGM").

HIGHLIGHTS

- Perseus has updated its LOMP for the SGM assuming that re-estimated Mineral Resources and Ore Reserves for the Sissingué mineral deposit ("Sissingué") as well as estimated Mineral Resources and Ore Reserves for the nearby Bélé East and Bélé West mineral deposits are processed through the SGM processing facility. The combined Proved and Probable Ore Reserves for three deposits total 5.9 million tonnes of ore, grading 2.1 g/t gold and containing 400 kozs ounces of gold;
- SGM's estimated life of mine gold production totals 358 kozs including approximately 80,000 ounces/annum for the first 3.25 years of production and approximately 70,000 ounces/annum over the full 5 year life of mine;
- Forecast average weighted all-in site costs ("AISC"), including all direct production costs, royalties, waste stripping costs and sustaining capital expenditure, are estimated at approximately US\$624 per ounce in the first 3.25 years of production and approximately US\$628 per ounce over the full life of mine;
- The total capital cost estimate for the development of the SGM is US\$107 million and the forecast sustaining capital costs (including the cost of site rehabilitation) which are included in the estimate of the AISC, total US\$13 million;
- The SGM LOMP forecasts strong positive after tax cash flow totalling approximately US\$104 million (or approximately A\$0.13 per share at an A\$:US\$ exchange rate of 0.75), assuming a flat spot gold price of US\$1,200 per ounce for unhedged ounces over the life of the mine starting from 1 March 2018 and assuming existing designated hedges for 67 kozs at a weighted average price of US\$1,301 per ounce;
- Based on a total estimated construction cost of US\$107 million, the ungeared, after tax internal rate of return from the project is approximately 28% (real) and the capital payback period is estimated at 39 months;
- Construction of the SGM is currently approximately 40% complete and is running on schedule and slightly under budget. Development is fully funded to completion through a combination of internal cash of US\$67 million and bank provided project debt finance of US\$40 million;
- First gold production at the SGM is expected to occur in the March Quarter of 2018.
- Recent exploration drilling on both the Sissingué Mining Lease and the nearby Mahalé Exploration Licence (all within trucking distance of the SGM processing facility) have demonstrated the potential for further increases in the inventory of material able to be processed at the SGM.
- 1. Overview

The updated LOMP for the SGM involves mining and processing of ore from three open pit mining areas based on the Sissingué, Bélé East and Bélé West mineral deposits as shown below in *Figure 1*.

To view Figure 1: SGM layout, please visit the following link: http://media3.marketwire.com/docs/Figure1-PRU.pdf.

Pit optimisation, design and scheduling used a gold price of US\$1,200 per ounce and input parameters based on Perseus's operating experience including costs from recently contracted supply contracts. Based on the LOMP, the key forecast operating statistics for the SGM are summarised below in *Table 1*.

Table 1: Overview Key Parameters of the updated LOMP

Parameter	Units	Average per year	⁻ Total
Ex-Pit Mining		FY18-21 ^{1,2}	Life of Mine
Total ore + waste mined	Mt	6.7	25.0
Waste mined	Mt	5.1	19.2
Ore mined	Mt	1.6	5.8
Head grade	g/t gold	2.1	2.1
Strip ratio	t:t	3.2	3.3
Processing			
Quantity ore processed	Mt	1.3	5.8

Head grade processed	g/t gold	2.2	2.1
Contained gold	'000 ounces	91	400
Gold recovery rate	%	90.0	89.6
Gold production	'000 ounces	82	358
Parameter	Units	Average per year	Total
Operating and Capital Costs		FY18-21 ^{1,2}	Life of Mine
Average mining costs	US\$/tonne mined	3.29	3.17
Average processing costs	US\$/tonne processed	12.27	13.16
Average general & administration ("G&A") costs	US\$/tonne processed	6.33	6.71
Production costs	US\$/ounce	541	543
Royalty	US\$/ounce	50	50
Sustaining capital	US\$/ounce	33	35
All-in site costs	US\$/ounce	624	628

Notes:

1. Perseus has a financial year that ends on 30 June.

2. Covers the 3.25 year period from 1 April 2018 to 30 June 2021

1. Comparison of current updated LOMP relative to the previous LOMP

The current updated LOMP for the SGM differs from the previous version of the LOMP that was published in April 2015, as shown below in *Table 2*.

Table 2: Overview Key Parameters

Parameter	Units	Current LOMP	% Change	
Mining				
Total ore + waste mined	Mt	25.0	23.2	8
Waste mined	Mt	19.2	17.7	8
Ore mined	Mt	5.8	5.5	6
Head grade	g/t gold	2.1	2.4	(12)
Strip ratio	t:t	3.3	3.2	3
Processing				
Quantity ore processed	Mt	5.8	5.5	6
Head grade processed	g/t gold	2.1	2.4	(12)
Contained gold	'000 ounces	400	429	(7)
Gold recovery rate	%	89.6	89.7	0
Gold production	'000 ounces	358	385	(7)
Average gold production	'000 ounces/ year	71.6	73.4	(2)
Operating and Capital Costs	i			
Average mining costs	US\$/tonne mined	3.17	3.70	(14)
Average processing costs	US\$/tonne processed	13.16	16.75	(21)
Average Site G&A costs	US\$/tonne processed	6.71	7.70	(13)
Production costs	US\$/ounce	543	569	(5)
Royalty	US\$/ounce	50	49	(2)
Sustaining capital	US\$/ounce	35	14	150
All-in site costs	US\$/ounce	628	632	(1)

1. Mineral Resources and Ore Reserves

The updated global Measured and Indicated Mineral Resource for the SGM that combines the Sissingué and Bélé East and West deposits is now estimated as 15.0 Mt grading at 1.7 g/t gold, containing 820 kozs of gold as shown in *Table 3*. A further 1.4 Mt of material grading at 1.9 g/t gold and containing a further 80 kozs of gold are classified as Inferred Resources. Details of these estimates are shown below in *Table 4*.

Deposit	Deposit Type	Measured Resources		Indicated Resources			Measured + Indicated Resources			
		Quantity	Grade	Gold	Quantity	Grade	Gold	Quantity	Grade	Gold
		Mt	g/t gold	koz	Mt	g/t gold	koz	Mt	g/t gold	koz
Sissingué ¹	Oxide	0.78	1.9	48	2.40	1.3	100	3.20	1.5	150
	Transitional	0.59	1.9	36	0.67	1.4	29	1.30	1.6	66
	Fresh	2.90	2.1	200	5.90	1.5	280	88.0	1.7	480
Sub-Total		4.30	2.1	290	8.90	1.4	410	13.00	1.6	700
Bélé East ²	Laterite	-	-	-	0.03	1.9	2	0.03	1.9	2
	Completely weathered	-	-	-	0.08	2.1	5	0.08	2.1	5
	Partially weathered	-	-	-	0.05	1.9	3	0.05	1.9	3
	Weakly weathered	-	-	-	0.12	2.0	8	0.12	2.0	8
	Fresh	-	-	-	0.36	2.6	30	0.36	2.6	30
Sub-Total		-	-	-	0.65	2.3	49	0.65	2.3	49
Bélé West ²	Laterite	-	-	-	0.04	1.7	2	0.04	1.7	2
	Completely weathered	-	-	-	0.08	1.7	4	0.08	1.7	4
	Partially weathered	-	-	-	0.09	1.6	5	0.09	1.6	5
	Weakly weathered	-	-	-	0.19	1.6	10	0.19	1.6	10
	Fresh	-	-	-	0.87	2.0	57	0.87	2.0	57
Sub-Total		-	-	-	1.300	1.8	78	1.30	1.8	78
Grand Total		4.30	2.1	290	11.00	1.5	540	15.00	1.7	820

Table 4: Inferred Mineral Resources - March 2017

Deposit	Deposit Type	Inferred	rred Resources			
		Quantity	Grade	Gold		
		Mt	g/t gold	l koz		
Sissingué	Oxide	0.23	1.2	9	Notes on Tables 3 and 4:	
	Transitional	0.06	1.0	2	1. 0.6g/t gold cut-off applied at Sissingué	
	Fresh	0.66	2.3	48	2. 0.8g/t gold cut-off grade applied at Bélé	
Sub-total		0.94	1.9	58	3. Mineral Resources are inclusive of any Ore Reserves	
Bélé East	Laterite	0.02	1.5	1	4. Numbers are rounded and may not add up correctly	
	Completely weathered	0.01	1.9	1		
	Partially weathered	-	-	-		
	Weakly weathered	0.02	1.5	1		
	Fresh	0.24	1.8	14		
Sub-total		0.28	1.8	16		
Bélé West	Laterite	0.02	2.0	1		
	Completely weathered	0.02	1.7	1		
	Partially weathered	0.01	1.3	1		
	Weakly weathered	0.02	1.6	1		
	Fresh	0.08	2.0	5		
Sub-total		0.14	1.8	8		
Grand Total		1.400	1.9	80		

The SGM's updated Ore Reserve which is summarised below in *Table 5* is estimated at 5.9 million tonnes of ore, grading 2.1 g/t gold and containing 400 kozs of gold and is based on the re-estimated Sissingué Mineral Resource and the Bélé East and West Mineral Resource estimates as at February 2017 and updated pit optimisation, design and scheduling of the open pit resources. Table 5 reports the Ore Reserves by category, deposit and type, above variable cut-off grades. The classification categories of Proved and Probable under the JORC Code are equivalent to the CIM categories of the same name (CIM, 2010).

Table 5: Proved and Probable Ore Reserves - 31 March 2017

Deposit	Deposit Type	Proved			Probable	•		Proved +	- Probab	ole
		Quantity	Grade	Gold	Quantity	Grade	Gold	Quantity	Grade	Gold
		Mt	g/t gold	koz	Mt	g/t gold	koz	Mt	g/t gold	koz
Sissingué ^{3,5}	Open pit	3.1	2.4	240	1.8	1.5	86	4.8	2.1	330
Bélé East ^{4,5}	Open pit	-	-	-	0.5	2.5	39	0.5	2.5	39

Bélé West ^{3,4} Open pit	-	-	-	0.5	2.1	35	0.5	2.1	35
Total	3.1	2.4	240	2.8	1.8	160	5.9	2.1	400

Notes:

- 1. Numbers are rounded and may not add up correctly in the table
- 2. All the estimates are on a dry tonne basis
- 3. Based on December 2016 Mineral Resource Estimate
- 4. Based on February 2017 Mineral Resource estimation
- 5. Variable gold cut-off grade based on material type and mining method
- 6. Inferred Mineral Resource is treated as mineralised waste

Proven and Probable Ore Reserves are found within the economic limits of three discrete open pit mining areas that have been designed based on Measured and Indicated Mineral Resources that incorporated all available Resource drilling results, a gold price of US\$1,200 per ounce and mining, processing and general and administration costs derived from recent operating experience.

Economic assumptions used for Ore Reserve Estimation

- 1. Gold metal price US\$1,200 per ounce.
- 2. A discount rate of 10% (real) has been assumed to calculate net present values of forecast cash flows unless specified otherwise.
- 3. Un-escalated average costs used in optimising pit designs included:

Table 6: Operating costs (US\$)

DepositMiningProcessing^{1,5}G&ASelling cost²RoyaltySissingué^{3,4}3.22/t mined14.77/t processed6.24/t processed1.00 per ounce sold4.5%Bélé East^{3,4}2.96/t mined16.91/t processed6.85/t processed1.00 per ounce sold4%Bélé West^{3,4}2.96/t mined16.91/t processed6.85/t processed1.00 per ounce sold4%

Notes:

- 1. Processing cost per tonne includes selling costs.
- 2. Selling costs include bullion transportation and refining.
- 3. Royalty includes amounts paid to the State (3.5%) and community development fund (0.5%) for all deposits, and Franco Nevada (0.5%) and Ivorian parties (US\$0.80 per ounce) on the Sissingué pit only.
- 4. Government royalty operates on a sliding scale as follows:
- 1. 3.0%, where the spot sale price per ounce of gold is less than or equal to US\$1,000;
 - 3.5%, where the spot sale price per ounce of gold is more than US\$1,000 and less than or equal to US\$1,300; 4.0%, where the spot sale price per ounce of gold is more than US\$1,000 and less than or equal to US\$1,600; 5.0%, where the spot sale price per ounce of gold is more than US\$1,000 and less than or equal to US\$2,000; 6.0%, where the spot sale price of an ounce of gold is more than US\$2,000s.
- 2. The assumed processing cost per tonne is lower than the processing cost per tonne in Table 2 due to recent tendering processes for key commodities subsequent to completion of the Ore Reserve estimates.

Mining parameters

- 1. At Sissingué and Bélé, the chosen method of mining is conventional open pit mining utilising hydraulic excavators and trucks, mining bench heights of 5 m in ore and 10m in waste with 2.5 m flitches to minimise ore loss and waste rock dilution.
- The Sissingué optimisation cut-off grade calculations and pit designs were based on a gold price of US\$1,150 per ounce, while the equivalent Bélé cut-off grades were based on US\$1,200 per ounce. All financial evaluations were completed at US\$1,200 per ounce.
- The economic pit shells were defined using Whittle 4X pit optimisation software ("Whittle 4X") with inputs such as geotechnica parameters, ore loss and dilution, metallurgical recovery and mining costs.
- 4. The pit optimisations were run with revenue generated only by Measured and Indicated Mineral Resources. No value was allocated to Inferred Mineral Resources.
- 5. Whittle 4X input parameters were a combination of Perseus's operating site experience at Edikan, supporting technical studies and contracts established specifically for Sissingué.

- 6. Geotechnical parameters for Sissingué vary depending on the material type and Pit Sector. The inter-ramp slope angles are between 38 to 53 degrees. Similarly slope angles at Bélé vary between 38 and 56 degrees.
- 7. Appropriate mining modifying factors such as ore loss, dilution and design parameters were used to convert the Mineral Resource to an Ore Reserve.
- 8. At Sissingué, a smallest mining unit ("SMU") of 5.0 m east x 5.0 m west x 5.0 m high was selected resulting in approximately 9% ore loss and 15% mining dilution. At Bélé East the SMU of 2.5 m east x 5 m west x 5 m high was selected resulting in approximately 3% ore loss and 5% mining dilution. For Bélé West the SMU is 5 m east x 2.5 m west x 5 m high was selected, resulting in 6% ore loss and 10% mining dilution.
- 9. Minimum mining width of 40 m was generally applied to the pit designs.
- 10. As the mine is a green fields site, all surface infrastructure is required to enable the aforementioned mining method to be successfully implemented.
- 11. There are no physical constraints to mining within the lease areas. No property, infrastructure or environmental issues are known to exist which may limit the extent of mining within the mining lease.
- 12. Ore cut-off grades are based on the economic and mining parameters described above and are as follows:

Table 7: Cut-off Grades

Deposit	Cut-Off Grade by Ore Type (g/t gold)						
	Oxide/Laterite	Transition	Granite/ Porphyry	Sediment	Mafic		
Sissingué	0.45	0.85	0.85	1.05	NA		
Bélé East	0.65	1.00	1.05	NA	1.20		
Bélé West	0.65	1.00	1.05	NA	1.20		

Processing Parameters

- The Sissingué processing plant will use crushing, grinding, gravity recovery and cyanide leaching to extract gold. The plant will have a nameplate throughput capacity of 1.8Mtpa on Sissingué oxide ore and 1.7Mtpa on Bélé oxide ore and 1.0Mtpa on fresh ore. Sissingué ore will be processed before Belé ore. Sissingué ore will have a grind size of 106μm and Bélé has a grind size of 75μm.
- 2. The technology to be used in the processing plant is well proven in many other operations globally.
- 3. The processing test work is representative of the different material types throughout the mining areas.
- 4. No deleterious material has been identified.
- 5. Metallurgical test work has been carried out to a standard that is considered representative of the orebodies as a whole.
- 6. The process metallurgical recovery for gold is fixed by material type.

Table 8: Recoveries

Deposit	Cut-Off Grade by Ore Type (g/t gold)					
	Oxide/Laterite Transition Granite/ Sediment Mafic					
			Porphyry			
Sissingué	91	91	90	83 ¹	NA	
Bélé East	94	93	91	NA	91	
Bélé West	94	93	91	NA	91	

Notes:

1. Average recovery based on the formula of log $(Au \times 7.63) + 78.5$.

Classification

- 1. Ore Reserves have been classified based on the underlying Mineral Resource classifications and the level of detail in the mine planning. The Mineral Resources were classified as Measured, Indicated and Inferred. The Ore Reserves, based only on the Measured and Indicated Resources, have been classified as Proved and Probable Ore Reserves, respectively.
- 2. The Ore Reserve is classified as Proved and Probable in accordance with the JORC Code, corresponding to the Mineral Resource classifications of Measured and Indicated and taking into account other factors where relevant. Each deposit's geological model is well constrained. The Ore Reserve classification is considered appropriate given the nature of the deposits, the moderate grade variability, drilling density, structural complexity and mining history. Therefore it was deemed appropriate to use Measured Mineral Resources as a basis for Proved Reserves and Indicated Mineral Resources as a basis for Probable Reserves.
- 3. No Inferred Mineral Resources were included in the Ore Reserve estimate.
- 1. Gold production profile

With the aim of maximising the return on funds employed at the SGM, the mining sequence of the pits along with mill feed profile has been optimised and scheduled. The result of this scheduling is that the gold production profile and resulting cash flows from the SGM remain strong for the remainder of the mine life. (Refer to *Figures 2, 3 and 4* below.)

To view *Figure 2: Sissingué Gold Mine - scheduled monthly material movement ex-pit (tonnes)*, please visit the following link: http://media3.marketwire.com/docs/Figure2-PRU.pdf.

To view *Figure 3: Sissingué Gold Mine - Monthly tonnes and grade to Mill*, please visit the following link: http://media3.marketwire.com/docs/Figure3-PRU.pdf.

To view *Figure 4: Sissingué Gold Mine - Gold Production by Pit*, please visit the following link: http://media3.marketwire.com/docs/Figure4-PRU.pdf.

1. Future cash flows and sensitivity analysis

Based on the LOM gold production and cost parameters, the net after tax cash flows forecast to be generated by the SGM from 1 March 2018, at US\$1,200 per ounce gold price, are estimated to total US\$104 million or approximately A\$0.13 per share (assuming an A\$:US\$ exchange rate of 0.75).

The sensitivity analysis shown below in *Table 9* summarises the sensitivity of the SGM's net after tax cash flows to movements in the gold price. Within an expected short term trading range of US\$1,100 per ounce to US\$1,300 per ounce, the projected cash flows of the mine remain robust and together with strong cash flows from Perseus's producing Edikan Gold Mine in Ghana, is capable of materially contributing to the development funding of Perseus's third project, namely the Yaouré Gold Mine, also located in Côte d'Ivoire.

Table 9: Sensitivity of SGM's After Tax Cash flow and IRR to gold price movements

		Gold Price US\$1,100/ounce	US\$1,200/ounce	US\$1,300/ounce
After Tax Cash Flow	USD million	77	104	130
Internal Rate of Return (IRR)	%	21	28	33
Payback Period	Months	40	39	38

Caution Regarding Forward Looking Information:

This report 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 without any major disruption, development of a mine at Tengrela, the receipt of required governmental approvals, the accuracy of capital and operating cost estimates, the ability of the Company to operate in a safe, efficient and effective manner and 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 which may cause the actual results, performance or achievements of the Company to be materially different from any anticipated future results, performance or achievements expressed or implied by such forward-looking information. Such factors include, among others, the actual market price of gold, the actual results of current exploration, 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. The Company believes that the assumptions and expectations reflected in the forward-looking information are reasonable. Assumptions have been made regarding, among other things, the Company's ability to carry on its exploration and development activities, the timely receipt of required approvals, the price of gold, the ability of the Company to operate in a safe, efficient and effective manner and the ability of the Company to obtain financing as and when required and on reasonable terms. 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.

Competent Person Statement

All production targets for the Sissingué Gold Mine referred to in this report are underpinned by estimated Ore Reserves which have been prepared by competent persons in accordance with the requirements of the JORC Code. The information in this report that relates to Mineral Resources for Sissingué was first reported by the Company in compliance with the JORC Code 2012 and NI43-101 in a market announcement released on 15 December 2016. The information in this report that relates to Mineral Resources for Bélé was first reported by the Company in compliance with the JORC Code 2012 and NI43-101 in a market announcement released on 20 February 2017. 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 that market announcement continue to apply and have not materially changed. The Company further confirms that material assumptions underpinning the estimates of Ore Reserves described in "Technical Report - Sissingué Gold Project, Côte d'Ivoire" dated 29 May 2011 continue to apply.

Mr Joe McDiarmid, who is a Chartered Professional Member of the Australasian Institute of Mining and Metallurgy, and is an employee of RungePincockMinarco Limited has compiled and reviewed the information in this release and Appendix 1 which relate to the Sissingué Ore Reserves. Mr Joe McDiarmid has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person, as defined in the JORC Code 2012 and a Qualified Person as defined NI 43-101. Mr McDiarmid has no economic, financial or pecuniary interest in the Company and consents to the inclusion in this report of the matters based on this information in the form and context in which it appears and has approved the inclusion of technical and scientific information in this report.

Mr Paul Thompson, who is a Fellow of the Australasian Institute of Mining and Metallurgy and is an employee of <u>Perseus Mining</u> <u>Ltd.</u> has compiled and reviewed the information in this release and Appendix 2 which relates to the Bélé Ore Reserves. Mr Thompson has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the JORC Code 2012 and a Qualified Person as defined in NI43-101 and consents to the inclusion in this report of the matters based on this information in the form and context in which it appears and has approved the inclusion of technical and scientific information in this report.

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