Leagold Announces Positive Updated Feasibility Study for its Santa Luz Project

25.10.2018 | CNW

(All amounts in US dollars, unless otherwise indicated)

VANCOUVER, Oct. 25, 2018 - Leagold Mining Corp. (TSX:LMC; OTCQX:LMCNF) ("Leagold" or the "Company") reports that an updated feasibility study has been completed by independent consultants, RPA Inc., for the Company's Santa Luz Project in Brazil that incorporates project optimizations and updated capital and operating cost estimates (the "Updated Feasibility Study").

Highlights from the Updated Feasibility Study include:

- Capital cost to complete and re-start the mine of $82 million, including $12.3 million of working capital and first fills
- Proven and Probable open pit mineral reserves of 28.2Mt at 1.39 g/t containing 1.26 million ounces (see Table 6)
- Gold production of 1.06 million ounces over an 11-year mine life at AISC of $856/oz
- After-tax cash flow of $302 million, using $1,200/oz gold price
- Strong economics: IRR of 47% and $NPV_{5\%}$ of $149 million
- Operating plan includes an initial period with a significantly reduced open pit strip ratio (Phase 1 of LOM)

Leagold CEO Neil Woodyer commented: "We are making good progress with the integration of the three recently acquired operating mines in Brazil, and we have now completed an independent updated feasibility study on the Santa Luz project. The impressive results demonstrate the potential for Santa Luz to be a strong cash flow generator with potential to add over 100,000 ounces per year production following a short 10-month construction period. As Santa Luz was a previously operating mine, all major infrastructure is in place and the new construction is mostly limited to retrofitting the plant for gold recovery using resin versus carbon.

"Furthermore, we have designed the Santa Luz mine plan to include a phased open pit mining schedule. This mine schedule starts with a low-strip ratio pit design that is included within the full mine plan, which allows for future decision points that may also include further upside potential from underground mining. With a high IRR and low costs, Santa Luz is a very attractive project.

"A key next step for Leagold is completion of our site-wide review of the Los Filos mine in Mexico, with several studies nearing completion related to the Bermejal underground mine, a potential CIL plant, and an enlarged Los Filos open pit mine plan. Completion of these studies and their integration into a site wide long-term plan for Los Filos is anticipated for the end of 2018, so we can then determine our preferred capital allocation priorities."

Capital Cost Estimate

The Updated Feasibility Study includes updated capital cost estimates, with approximately 75% of the construction capital costs (before contingency) based on vendor contracts or quotes and therefore are substantially fixed. The total estimated cost to complete the Santa Luz Project and to re-start the mine is $82 million, inclusive of contingency and working capital, to be spent over a 10-month period. Most of the goods and services will be sourced from domestic Brazilian suppliers.

Table 1: Santa Luz Capital Cost Summary

Category	$M[1]	
Process plant alterations		$37.6
Tailings and water storage modifications		3.8
EPCM		2.7
Owner's costs, including pre-operation staff hiring		11.8
Contingency		4.6
Sub-total, construction costs		60.5
Pre-stripping mining cost		9.2
Working capital and first fills		
Consumables, inventories, other working capital	5.6	
Plant first fills	6.7	
		12.3
Grand total		$82.0

[1] Costs in Brazilian Reals converted to US dollars with an exchange rate of 3.7 BRL-USD

All necessary licences and permits are in place for construction and the resumption of operations, with only minor adjustments needed with respect to the updated plans for modifying the existing tailings facilities.

The original processing plant at Santa Luz was placed in operation in mid-2013 and was shutdown in September 2014 by a previous owner. The original plant was carbon-in-leach (CIL), which did not operate well, with low gold recovery rates associated with carbonaceous ores. Subsequent metallurgical testing programs, including the operation of a pilot-scale plant, has demonstrated that resin-in-leach (RIL) will be successful for the project with estimated gold recovery rates of 84%.

The updated process plant will include crushing and grinding, RIL, elution, and electrowinning. The crushing section of the plant is part of the original facility and requires only minor improvements. The grinding section will be upgraded to two mills operating in series: the original SAG mill and a new ball mill.

Most of the construction capital is related to the installation of the RIL circuit, which primarily consists of a pre-aeration tank, two conditioning tanks and five stirred RIL tanks in series. The process used in gold recovery using resin is similar to the use of activated carbon, but the gold is adsorbed onto the resin beads rather than activated carbon grains. Gold recovery using resin offers all the advantages of the more common carbon recovery, with some additional benefits: i) the size of the resin beads (1 mm) is more consistent than natural carbon, allowing for easier control, ii) improved flow characteristics of resin beads, and iii) better recovery rates from ores containing high levels of organic compounds. Resin technology for gold recovery has been used at mines in South Africa, USA (Nevada), Malaysia, and in Russia.

As a benefit from the prior operation at Santa Luz, all of the major infrastructure requirements for the project are already in place, including a 138 kV connection to the national electric grid. The existing plant is being regularly maintained, with only minor retrofitting needed to ensure a smooth re-start of the operation. There are currently two tailings facilities at Santa Luz that will be modified: one facility will be expanded with the installation of a geomembrane liner to accept additional tailings from the new operation, while the second facility will be modified to enable 2 million cubic metres of water storage.

Furthermore, the long lead time major equipment required for the project has already been purchased and is on site. This equipment includes the following: new ball mill, cyclones, leach tanks, leach tank agitators, screens (inter-tank, resin and vibratory), electrowinning cells, elution heaters and columns, lime bin, and various pumps and samplers.

Open Pit Mining and Processing Operations

Santa Luz will continue to be a conventional truck and shovel open pit mining operation, utilizing a mining contractor. Production will come from two open pits: one at the C1 deposit and one at the Antas 3 deposit. Processing throughput will be 2.7 million tonnes per year, or a nominal 7,400 tonnes per day. Gold recoveries are 84% in a blended feed of high carbonaceous material, low carbonaceous material, and dacite.

A portion of the C1 and Antas 3 pits were previously mined in 2013 and 2014. Currently, there is water stored in both pits. The water will be pumped to the water storage facility prior to re-starting the operation. Water for use at the site will be sourced from precipitation and from pumping from the adjacent Itapicurú River, with the water storage facility providing an additional water source during the dry season.

Table 2 summarizes the open pit mine plan and processing schedules for the life of mine (LOM), including existing stockpiles, along with the initial Phase 1 portion of the mine plan. Tables 7 and 8 in the appendix contain additional details on the open pit mining and processing profiles, presented on an annual basis. The LOM plan includes $56.8 million of capitalized waste stripping in years 3 to 6, which is an expansionary, non-sustaining capital expenditure as defined by the World Gold Council. A future decision regarding this capital investment can be taken in year 3 and would be required for the full LOM plan. The LOM plan does not include the potential opportunity of mining the down-dip extension of the C1 deposit with underground mining methods. Leagold intends to evaluate this upside opportunity with an additional drill program and study after the re-start of the project.

Table 2: Santa Luz Open Pit Mining and Processing Profile

	Units	Phase 1 of LOM	LOM Total
Total ore mined	kt	16,651	26,220
Total waste mined	kt	61,789	161,072
Total material mined	kt	78,440	187,292
Strip ratio	w:o	3.7	6.1
Gold grade	g/t	1.45	1.43
Contained gold	oz	773,588	1,205,456
Total ore processed	kt	18,710	28,279
Processed grade	g/t	1.38	1.39
Contained gold – processed	oz	832,419	1,264,072
Recovery	%	84%	84%
Gold production	oz	697,199	1,059,787
Mine life	years	7	11

Table 3: Santa Luz Average Operating Costs[1]

	Units	Phase 1 of LOM	LOM Total
Mining cost[2]	$/t mined	$2.19	$2.22
Processing costs	$/t milled	$13.63	$13.51
Site G&A	$M/year	$7.6	$7.6
Cash cost per ounce	$/oz	$704	$784
AISC per ounce[3]	$/oz	$788	$856

[1] Costs in Brazilian Reals converted to US dollars with an exchange rate of 3.7 BRL-USD

[2] Mining costs inclusive of drilling and blasting, load and haul, stockpile re-handling, mine management and administration, and grade control

[3] AISC includes mine cash costs, royalties, sustaining capital expenditures, and operational waste stripping costs

Project Cash Flow

The financial analysis in the Updated Feasibility Study has been performed on an after-tax basis using the parameters summarized in Tables 1, 2, and 3. The key economic assumptions include a 1% royalty to the Federal government, 1% royalty to a third-party, a 2% royalty on a portion of the production from the C1 deposit area, and corporate tax rate as provided for under the currently effective mining and tax legislation in Brazil and the incentives granted by the Superintendence for the Development of the Northeast (SUDENE).

Table 4: Santa Luz Summary Cash Flow at $1,200/oz gold[1]

	Units	Phase 1 of LOM	LOM Total
Revenue	$M	836.6	1,271.7
Refining and transportation		(17.4)	(21.0)
Royalties		(32.5)	(43.3)
Operating costs		(473.2)	(810.3)
Operating margin		313.6	397.1
Sustaining capital		(26.3)	(33.0)
Capitalized stripping (non-sustaining)		0.0	(56.8)
Working capital recovery		5.6	5.6
Salvage value		15.0	15.0
Reclamation		(8.7)	(10.9)
Taxes/net VAT		(8.6)	(15.5)
Net cash flow (LOM)		290.5	301.6
Net cash flow (years 1–5 only)	$M	233.1	137.2
AISC[2]	$/oz	$788	$856
Upfront capex	$M	$82.0	$82.0
Upfront capex payback period	years	< 2 years	< 2 years
IRR (after-tax)	%	63%	47%
Project $NPV_{5\%}$ (after-tax) - $1,200	$M	$165	$149

[1] Costs in Brazilian Reals converted to US dollars with an exchange rate of 3.7 BRL-USD

[2] AISC includes mine cash costs, royalties, sustaining capital expenditures, and operational waste stripping costs

At $1,200/oz gold, the life of mine will generate net cash flow of $301.6 million over 11 years. While the life of mine plan provides for greater scale and increased optionality to gold prices, it is noted the Phase 1 portion of the mine plan generates net cash flow of $290.5 million over years 1 to 7, and $233.1 million over years 1 to 5.

As previously noted, a phased approach to open pit mining permits future mining schedules to also consider the potential and benefits of underground mining, following completion of drilling and additional studies.

Community and Social Actions

The Santa Luz Project is expected to generate several positive impacts on the social and local environment, including:

- Creation of up to 975 jobs during construction and 650 jobs during operations
- Strong local employment, with most of the workers living within 75 km of the mine

- Economic growth in local areas in the provision of services, construction and manufacturing sectors
- Social and community development projects.

Leagold has commenced a community engagement program, which includes the completion of the construction and recent resettlement of 97 families to the Nova Esperanza village.

Mineral Resources and Reserves

The Mineral Resources utilized in the Updated Feasibility Study were prepared based on a total of 241,172 metres drilling by previous owners of the property during the period of 2003 to 2017, and are unchanged from the Mineral Resources used by Brio Gold in its Feasibility Study published on September 5, 2017.

Table 5: Santa Luz Project Mineral Resource Statement (Effective Date of June 30, 2017)

Classification	Tonnes (kt)	Gold grade (g/t)	Gold ounces (koz)	Cut-off Grade (g/t Au)
Measured – open pit	31,100	1.36	1,356	0.5
Indicated – open pit	1,700	1.25	69	0.5
Measured and Indicated – open pit	32,800	1.35	1,425	0.5
Inferred – open pit	1,100	1.17	40	0.5
Measured – underground	100	1.94	8	1.5
Indicated – underground	5,900	2.55	484	1.5
Measured and Indicated – underground	6,000	2.54	492	1.5
Inferred – underground	6,600	2.19	461	1.5
Indicated – stockpiles	2,100	0.89	59	-
Total Measured and Indicated	40,900	1.50	1,976	-
Total Inferred	7,700	2.02	501	-

Notes:

1. CIM (2014) definitions were followed for Mineral Resources.
2. Underground Mineral Resources are reported at a cut-off grade of 1.5 g/t Au.
3. Open Pit Mineral Resources are reported at a cut-off grade of 0.5 g/t Au.
4. Mineral resources are inclusive of mineral reserves and do not include dilution.
5. Metal price assumption for gold was $1,500/oz and constrained by a Whittle pit shell.
6. Tonnage and grade measurements are in metric units. Contained gold ounces are reported as troy ounces.
7. Summation errors may be present due to rounding.

The Mineral Reserves have been updated based on the parameters of the Updated Feasibility Study and have been estimated using a gold price of $1,200/oz. As detailed in Table 6 and as of June 30, 2017, the Proven and Probable mineral reserves totaled 28.2 Mt at an average grade of 1.39 g/t containing 1.259 million ounces of gold (including stockpiles). The LOM plan is based on the open pit mining of both the C1 and Antas 3 deposits, and does not yet include the potential of mining additional resources with underground mining methods.

Table 6: Santa Luz Mine Mineral Reserve Statement (Effective Date of October 22, 2018)

Classification	Tonnes (kt)	Gold grade (g/t)	Gold ounces (koz)
Proven – open pit	25,000	1.43	1,153
Probable – open pit	1,100	1.40	47
Probable – stockpiles	2,100	0.89	59
Total Proven and Probable	28,200	1.39	1,259

Notes:

1. CIM (2014) definitions were followed for Mineral Reserves.
2. Mineral Reserves were generated by Santa Luz Project personnel and adjusted by RPA to reflect the October 22, 2018 mining surface.
3. Mineral Reserves are quoted at cut-off grades of 0.53 g/t Au, for dacite-leachable, 0.39 g/t Au for dacite-high-sulphide, and 0.60 g/t Au for carbonaceous ore.
4. C1 uses 10 m bench height and Antas 3 uses 9 m bench height.
5. Process recovery of 86% for dacite-leachable, 84% for dacite-high-sulphide and 84% for carbonaceous ore.
6. Mineral Reserves are based on Measured and Indicated Mineral Resources.
7. Metal price assumption for gold was US$1,200/oz.
8. Tonnage and grade measurements are in metric units. Contained gold are reported as troy ounces.
9. Summation errors may be present due to rounding.

There are no known legal, political, environmental or other risks that could materially affect the potential development of the mineral resources or mineral reserves.

Technical Report

A technical report for the Updated Feasibility Study, prepared in accordance with National Instrument 43-101 – Standards of Disclosure for Mineral Projects (NI 43-101), will be filed under Leagold's profile on SEDAR at www.sedar.com within 45 days of the date of this news release.

Qualified Persons

The Updated Feasibility Study was prepared by RPA in accordance with standards as defined by the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") "CIM Definition Standards on Mineral Resources and Mineral Reserves", adopted by CIM Council on May 10, 2014. Messrs. Hugo Miranda, C.P.,

Mark Mathisen, C.P.G., and Richard Addison, P.E., are "Qualified Persons" as defined by NI 43-101. Messrs. Miranda, Mathisen, and Addison, all of whom are independent of the Company at the time of the Santa Luz Updated Feasibility Study, have approved the contents of this news release. They have also reviewed and verified that the technical information related to Santa Luz contained in this news release is accurate.

About Leagold Mining Corporation

Leagold is building a mid-tier gold producer with a focus on opportunities in Latin America. The Company is based in Vancouver, Canada and owns four operating gold mines in Mexico and Brazil, along with a near-term gold mine restart project in Brazil and additional expansion and growth opportunities. Leagold is listed on the TSX under the trading symbol "LMC" and trades on the OTCQX market as "LMCNF".

CAUTIONARY NOTE REGARDING FORWARD LOOKING STATEMENTS

This news release contains "forward looking information" or "forward looking statements" within the meaning of applicable securities legislation. All statements other than statements of historical fact, included herein, including without limitation, statements related to the completion of the Santa Luz project, the restart of the Santa Luz mine, the social and community impact of the Santa Luz project, the results of the Updated Feasibility Study including statements about future production, future operating costs and capital costs, the projected IRR, NPV, construction and production timelines for the Santa Luz project are forward looking statements. Generally, these forward looking information and forward looking statements can be identified by the use of forward looking terminology such as "plans", "expects" or "does not expect", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", "will continue" or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved". The material factors or assumptions used to develop forward looking information or statements are disclosed throughout this document.

Forward looking information and forward looking statements, while based on management's best estimates and assumptions, are subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of Leagold to be materially different from those expressed or implied by such forward-looking information or forward looking statements, including but not limited to: risks related to international operations; risks related to general economic conditions and credit availability, 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 mineral 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 obtaining governmental approvals or financing or 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 the Company operates, actual resolutions of legal and tax matters, as well as those factors discussed in the section entitled "Description of the Business – Risk Factors" in Leagold's most recent AIF available on SEDAR at www.sedar.com.

Although Leagold has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information and 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 information or statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information or statements. The Company has and continues to disclose in its Management's Discussion and Analysis and other publicly filed documents, changes to material factors or assumptions underlying the forward-looking information and forward-looking statements and to the validity of the information, in the period the changes occur. The forward-looking statements and forward-looking information are made as of the date hereof and Leagold disclaims any obligation to update any such factors or to publicly announce the result of any revisions to any of the forward-looking statements or forward-looking information contained herein to reflect future results. Accordingly, readers should not place undue reliance on forward-looking statements and information.

Appendix

Table 7: Santa Luz Open Pit Mining Profile

	Phase 1 of LOM					Life of Mine				
Project Year	Ore (kt)	Waste (kt)	Total Material Mined (kt)	Strip Ratio (w:o)	Contained Gold (oz)	Ore (kt)	Waste (kt)	Total Material Mined (kt)	Strip Ratio (w:o)	Contained Gold (oz)
Pre-Ops	262	4,138	4,400	15.8	13,069	262	4,138	4,400	15.8	13,069
1	2,157	9,979	12,136	4.6	134,257	2,157	9,979	12,136	4.6	134,257
2	2,767	15,912	18,679	5.8	161,313	2,767	15,912	18,679	5.8	161,313
3	2,928	16,856	19,785	5.8	147,164	2,797	25,000	27,797	8.9	144,441
4	3,041	8,039	11,079	2.6	119,299	2,832	23,156	25,988	8.2	121,589
5	3,339	4,714	8,053	1.4	124,120	3,448	26,318	29,766	7.6	122,003
6	2,157	2,151	4,308	1.0	74,365	3,178	27,000	30,178	8.5	105,902
7						2,937	13,641	16,577	4.6	131,598
8						3,027	12,108	15,136	4.0	136,583
9						2,816	3,819	6,636	1.4	134,701
LOM	16,651	61,789	78,440	3.7	773,588	26,220	161,072	187,292	6.1	1,205,456

Table 8: Santa Luz Processing and Gold Production Profile

	Phase 1 of LOM				Life of Mine			
Project Year	Ore Processed (kt)	Gold Grade (g/t)	Recovery (%)	Gold Production (oz)	Ore Processed (kt)	Gold Grade (g/t)	Recovery (%)	Gold Production (oz)
1	2,419	1.9	83%	121,720	2,419	1.9	83%	121,720
2	2,700	1.8	84%	133,879	2,700	1.8	84%	133,879
3	2,700	1.6	84%	118,895	2,700	1.6	84%	119,204
4	2,700	1.3	84%	93,237	2,700	1.4	84%	99,539
5	2,700	1.2	84%	88,018	2,700	1.2	84%	85,411
6	2,700	1.0	84%	69,659	2,700	1.0	84%	75,834
7	2,040	0.9	84%	52,208	2,700	1.4	84%	103,851
8	751	1.0	84%	19,583	2,700	1.4	84%	105,108
9					2,700	1.5	84%	108,489
10					2,010	0.9	84%	48,056
11					2,251	1.0	84%	58,697
LOM	18,710	1.4	84%	697,199	28,279	1.4	84%	1,059,787

SOURCE Leagold Mining Corp.

Contact
on Leagold please visit the Company website at www.leagold.com or contact: Meghan Brown - Vice President, Investor Relations, tel: +1-604-398-4525, email: mbrown@leagold.com