BRIO GOLD COMPLETES SANTA LUZ PROJECT FULL FEASIBILITY STUDY WITH LOWER COSTS, INCREASED RESERVES, SIMPLIFIED FLOWSHEET AND ROBUST GOLD RECOVERY

TORONTO, ONTARIO, September 5, 2017 — BRIO GOLD INC. (TSX: BRIO) ("BRIO GOLD" or the "Company") is pleased to announce positive feasibility study (or "FS") results for its Santa Luz Project, which demonstrate improved operating costs and initial capital expenditures, when compared to the July 2016 pre-feasibility study (or "PFS"). Continuous pilot plant test work since completion of the PFS has confirmed an overall gold recovery of 84% with a greatly simplified flowsheet. *All dollar figures are in U.S. dollars, unless otherwise indicated.*

Santa Luz Feasibility Study Highlights

Highlights from the Santa Luz 2017 feasibility study are summarized below and compared to the 2016 pre-feasibility study results, with all costs and values assuming a gold price of $1,300 per ounce, and a Brazilian Real to U.S. Dollar exchange rate of 3.5 to 1.

	2017 FS	**2016 PFS**
Average annual gold production (koz) (full years)	100	103
First full year of production (koz)	150	130
Total gold production (koz)	1,056	1,028
Average gold recoveries	84%	84%
Initial capital	$82M	$88M
Average cash costs ($ per oz)	$695	$814
Average all-in sustaining costs (AISC) ($ per oz)	$808	$923
After-tax net present value (NPV) (5%)	$210M	$209M

"We can confidently say that we have 'cracked the nut' on Santa Luz gold recovery and de-risked this great project," said Gil Clausen, Brio Gold's president and CEO. "We are highly confident in the flow sheet with the success of continuous dual pilot plant runs conducted over the last eight months. Recoveries are now reliably consistent at 84% with over 20 tons of varying ore types having been processed in the pilot plants. Further, we can blend ore in any combination, carbonaceous or non-carbonaceous, without impact to the circuit or overall recoveries. A simple and effective flow sheet, using a resin-in-leach ("RIL") circuit is being installed. Construction is already underway on the Project with finalized cost estimates lower than the PFS. We expect construction completion and commissioning in Q2 2018."

Mr. Clausen added, "Our intention is to finance the capital spend through corporate debt and operating cash flow. We are currently engaged in late stage discussions on debt options with several lending groups. In addition to the results of this Feasibility Study, we believe the underground higher grade bulk potential at Santa Luz can contribute significant upside in the future and we intend to complete our initial evaluation including an updated reserve and resource by the end of this year. Underground production combined with the current open pits has the potential to make our flagship asset even bigger and better."

Mining and Processing

Santa Luz is a fully constructed open pit operation, which was placed on care and maintenance in 2014, and is currently in development for re-commissioning in the second quarter of 2018. Plant capacity is

planned to be 2.7 million tonnes per annum (tpa). With average overall recoveries of 84%, Santa Luz is expected to produce approximately 100,000 ounces per year over the life of mine, with the first full year of production of approximately 150,000 ounces. Total gold produced is expected to be 1.06 million ounces of gold.

The process flowsheet is a "whole ore leach" flowsheet and allows for the processing of non-carbonaceous and carbonaceous minerals at Santa Luz. The process incorporates adding kerosene to the ground ore ahead of the leaching circuit in order to blank (render inert) naturally occurring "preg-robbing" carbon. The gold mineral is leached in cyanide and adsorbed in a standard resin-in-leach (RIL) circuit. The Company has been running the pilot plant since the 2016 PFS last year, testing all ore types in the RIL circuit. The results have been consistent, and confirm the overall average recoveries in the PFS of 84%. Notably, the recoveries are consistent for all ore types, high or low carbonaceous ore, dacitic ore, and blended ore.

A summary of the production parameters is provided below and a detailed LOM production schedule is available in Appendix 1.

Total material mined (million tonnes)	186.7M
Total waste (million tonnes)	160.6M
Stripping ratio*	5.7
Total ore processed (million tonnes)	28.2M
Average LOM annual production (full years, koz)	100
Total gold production (koz)	1,056
Total mine life (years)	10
Average LOM gold recoveries	84%
Average LOM gold feed grade (g/t)*	1.39

** Includes existing low-grade stockpiles.*

The underground mineralization represents significant potential to supplement production, and extend the mine life at Santa Luz. The underground mineralization is the down dip extension of the open pit deposit, following the trend of higher grade ore shoots. The Company is currently evaluating this potential, and is expected to complete initial analysis by the end of 2017. The down dip mineralization is not included in the current production schedule.

Capital and Operating Costs

The total capital cost for the re-commissioning of Santa Luz is estimated at $82.3 million, which is 7% lower than the cost estimate in the 2016 PFS. This estimate is based on recent quotes and estimates received specific to the project and includes the costs for the planned plant modifications, contingency and all social and owner's costs. A summary of the initial capital expenditures, which is calculated using a Brazilian Real to U.S. Dollar exchange rate of 3.5 to 1 is provided below. Capital expenditures are expected to be spent about equally between 2017 and 2018. The costs in 2017 are planned to be more heavily weighted in the fourth quarter.

Capital Expenditures ($M)	
Plant Capital Expenditures	
Plant	43.1
Contingency	7.4

Plant Capital Expenditures Sub-total	**50.5**
Other Capital Expenditures	
EPCM	4.9
Infrastructure	9.9
Owner's Cost	2.2
Tailings Dam Improvements	5.9
Community Related Costs	6.4
Other	2.4
Other Capital Expenditures Sub-total	**31.7**
Total Initial Capital Expenditures	**82.3**

Total operating unit costs are estimated to be $30.50 per tonne milled, which includes mining, processing, direct general & administration (G&A) expenses, doré transportation and stockpile re-handling costs. Total operating unit costs are 16% lower than the 2016 PFS, when comparing in Brazilian Reais, driven by decreased mining and plant operating cost. The decrease in expected plant operating costs is a result of lower reagent consumption as well as lower reagent and consumable pricing**.** Average LOM cash costs and AISC have also improved, decreasing to $695 per ounce and $808 per ounce, respectively. When compared to 2016 in Brazilian Reais, LOM cash cost estimates are 22% lower and AISC estimates are 12% lower. A summary of the cost metrics from the 2017 feasibility study compared to the 2016 PFS, in U.S. Dollars (assuming a 3.5:1 Brazilian Real to U.S. Dollar exchange rate) and Brazilian Real is provided below.

	U.S. Dollar [(1)]	
	2017 FS	**2016 PFS**
Operating Unit Costs		
Mining ($/t moved)	$1.85	$2.08
Mining ($/t milled)	$12.28	$14.01
Processing ($/t milled)	$14.13	$15.63
G&A and Other ($/t milled)[(2)]	$4.09	$2.88
Total Operating Costs ($/t milled)	**$30.50**	**$32.51**
Cash Costs ($ per oz)	**$695**	$887
AISC ($ per oz)	**$808**	$923

(1) Assumes a BRL to USD exchange rate of 3.5:1. The 2016 Pre-feasibility Study costs have also been adjusted to reflect a BRL to USD exchange rate of 3.5:1 to allow for comparison.

(2) Other includes re-handling costs.

Project Economics

The after-tax NPV assuming a 5% discount rate for the Santa Luz project is $210 million and the after-tax IRR is 43%, based on a Brazilian Real to U.S. Dollar exchange of 3.5 to 1 and a gold price of $1,300 per ounce of gold. A sensitivity analysis on varying gold prices and exchange rates was completed on the after-tax NPV (5%). The results are summarized below.

After-tax NPV (5%)	**Gold Price ($ per ounce)**

($M)		$1,200	$1,300	$1,400
BRL:USD	3.25	$65M	$127M	$231M
	3.5	$127M	**$210M**	$292M
	3.75	$181M	$264M	$342M

Brio Gold's current currency hedges are expected to reduce the exposure and risk to the Company's Brazilian cost structure, including the costs associated with the Santa Luz project. The Company has hedging arrangements in place for 2017 and 2018 covering R$672 million of forward rate contracts at a rate of R$3.55 to US$1.00, and R$672 million of zero-cost collars with average call and put strike prices of R$3.30 and R$3.90, respectively.

Mineral Reserve and Mineral Resource

The Santa Luz mineral reserve and mineral resource is based on historic drill holes, plus drill holes from Brio Gold's most recent drilling programs, which occurred from October 2015 to March 2017. The latest program, which started in December 2016 and was completed in March 2017, included 4,200 metres of drilling from a total of 37 core holes. The drilling program was largely focused on detailing and expanding a north-west trending zone of high-grade gold mineralization in the north-eastern portion of the C1 open pit orebody and localized infill drilling in both the C1 and Antas 3 orebodies. The Mineral Reserves and Mineral Resources are summarized in the table below, and are as of June 30, 2017.

The LOM plan is based on the open pit Mineral Reserves only, and does not include the underground Mineral Resources. The Company intends to study and analyze the underground potential in 2017 with the plan to provide a mine plan and economics by the end of the year.

Proven and Probable Mineral Reserves			
Category of Mineral Reserves	Tonnes (kt)	Gold Grade (g/t)	Contained Gold (oz)
Proven – Open Pit	25,000	1.43	1,153,000
Probable – Open Pit	1,100	1.40	47,000
Probable – Stock Pile	2,100	0.89	59,000
Total Proven and Probable	28,200	1.39	1,259,000

Notes:

1. CIM Definition Standards (2014) were followed for Mineral Reserves
2. Mineral Reserves were generated by Brio and adjusted by RPA to reflect the June 30, 2017 mining surface.
3. Mineral Reserves are quoted at a cut-off grades of 0.53 g/t Au for Dacite-Leachable, 0.60 g/t Au for Carbonaceous and 0.39 g/t Au for Dacite-High Sulfide.
4. C1 uses 10m bench height, and Antas 3 uses 9m bench height
5. Process recovery of 86% for Dacite-Leachable, 84% for Carbonaceous and 84% for Dacite-High Sulfide.
6. Mineral Reserves are reported using a long-term gold price of US$1,250/oz.
7. Totals may not add due to rounding.

Mineral Resources (Exclusive of Mineral Reserves)			
Category of Mineral Resources	Tonnes (kt)	Gold Grade (g/t)	Contained Gold (oz)
Measured – Open Pit	4,800	1.18	182,000

Measured – Underground	100	1.94	8,000
Indicated – Open Pit	600	1.06	21,000
Indicated – Underground	5,900	2.55	484,000
Total Measured & Indicated	11,400	1.90	695,000
Inferred – Open Pit	700	1.28	28,000
Inferred – Underground	6,600	2.19	461,000
Total Inferred	7,300	2.08	489,000

Notes:

1. CIM 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 0.50 g/t Au
4. Mineral Resources are exclusive of Mineral Reserves
5. Mineral Resources are estimate using a gold price of US$1,500 per ounce and constrained by a pit shell.
6. Totals may not add due to rounding.

Technical Report

An NI 43-101-compliant technical report for the Santa Luz Project Feasibility Study will be filed on SEDAR within 45 days of the date of this news release.

Qualified Persons

The Mineral Resource estimate for Santa Luz was prepared by RPA in accordance with standards as defined by the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") "CIM Definition Standards-For Mineral Resources and Mineral Reserves", adopted by CIM Council on May 10, 2014. Messrs. Hugo Miranda, C.P., Mark Mathisen, Stuart Collins, P.E., and Richard Addison, P.E., serve as the Qualified Persons as defined by National Instrument 43-101 for the Technical Report related to Santa Luz. Mr. Collins is the Qualified Person for the Mineral Reserve. Mr. Mathisen is the Qualified Person for the related Mineral Resource. Mr. Addison is the Qualified Person for the Ore Processing and Infrastructure. Messrs. Miranda, Mathisen, Collins, and Addison, all of who are independent of the Company at the time of the mineral reserve and mineral resource estimate, have approved the contents of this news release related to Santa Luz. They have also reviewed and verified that the technical information related to Santa Luz contained in this news release is accurate.

About Brio Gold

Brio Gold is a new Canadian mining company with significant gold producing, development and exploration stage properties in Brazil. Brio Gold's portfolio includes three operating gold mines and a fully-permitted, fully-constructed mine that was on care and maintenance and currently is in development to be re-started in 2018. Brio Gold produced approximately 190,000 ounces of gold in 2016 and at full run-rate expects annual production to be approximately 400,000 ounces of gold.

FOR FURTHER INFORMATION PLEASE CONTACT:

Letitia Wong
Vice President, Corporate Development
Telephone: +1 (416) 860-6310
Email: info@briogoldinc.com

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS: This news release contains or incorporates by reference "forward-looking statements" and "forward-looking information" under applicable Canadian securities legislation. Forward-looking information includes, but is not limited to information with respect to the Company's strategy, plans or future financial or operating performance, the outcome of the legal matters involving the damages assessments and any related enforcement proceedings. Forward-looking statements are characterized by words such as "plan," "expect", "budget", "target", "project", "intend", "believe", "anticipate", "estimate" and other similar words, or statements that certain events or conditions "may" or "will" occur. Forward-looking statements are based on the opinions, assumptions and estimates of management considered reasonable at the date the statements are made, and are inherently subject to a variety of risks and uncertainties and other known and unknown factors that could cause actual events or results to differ materially from those projected in the forward-looking statements. These factors include the Company's expectations in connection with the production and exploration, development and expansion plans at the Company's projects discussed herein being met, the impact of proposed optimizations at the Company's projects, the impact of the proposed new mining law in Brazil, and the impact of general business and economic conditions, global liquidity and credit availability on the timing of cash flows and the values of assets and liabilities based on projected future conditions, fluctuating metal prices (such as gold and silver), currency exchange rates (such as the Brazilian real versus the United States dollar), the impact of inflation, possible variations in ore grade or recovery rates, changes in the Company's hedging program, changes in accounting policies, changes in mineral resources and mineral reserves, risks related to asset disposition, risks related to metal purchase agreements, risks related to acquisitions, changes in project parameters as plans continue to be refined, changes in project development, construction, production and commissioning time frames, unanticipated costs and expenses, higher prices for fuel, steel, power, labour and other consumables contributing to higher costs and general risks of the mining industry, failure of plant, equipment or processes to operate as anticipated, unexpected changes in mine life, final pricing for concentrate sales, unanticipated results of future studies, seasonality and unanticipated weather changes, costs and timing of the development of new deposits, success of exploration activities, permitting timelines, government regulation and the risk of government expropriation or nationalization of mining operations, risks related to relying on local advisors and consultants in foreign jurisdictions, environmental risks, unanticipated reclamation expenses, risks relating to joint venture operations, title disputes or claims, limitations on insurance coverage and timing and possible outcome of pending and outstanding litigation and labour disputes, risks related to enforcing legal rights in foreign jurisdictions, as well as those risk factors discussed or referred to herein. Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be anticipated, estimated or intended. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. The Company undertakes no obligation to update forward-looking statements if circumstances or management's estimates, assumptions or opinions should change, except as required by applicable law. The reader is cautioned not to place undue reliance on forward-looking statements. The forward-looking information contained herein is presented for the purpose of assisting investors in understanding the Company's expected financial and operational performance and results as at and for the periods ended on the dates presented in the Company's plans and objectives and may not be appropriate for other purposes.

APPENDIX 1: LIFE OF MINE PRODUCTION PLAN

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Material Mined (kt)	16,571	22,897	31,833	28,094	20,215	26,339	16,731	8,977	7,241	6,048	1,579
Ore Mined (kt)	1,069	2,700	2,700	2,641	2,452	2,700	2,700	2,700	2,700	2,700	1,037
Waste (kt)	15,502	20,179	29,133	25,452	17,763	23,639	14,031	6,277	4,721	3,348	542
Rehandle Tonnes (kt)	225	13	-	341	378	211	407	478	6	-	2,251
Ore Processed – Dacite (kt)	657	945	976	1,614	1,481	1,171	1,216	1,282	839	822	2,603
Ore Processed – Carbonaceous (kt)	637	1,755	1,724	1,086	1,219	1,529	1,484	1,418	1,439	1,640	620
Total Ore Processed (kt)	1,294	2,700	2,700	2,700	2,700	2,700	2,700	2,700	2,278	2,462	3,224
Processed Grade (g/t)	1.57	2.05	1.58	1.15	1.24	1.28	1.12	1.26	1.39	1.53	1.26
Recovery (%)	82%	84%	84%	84%	84%	84%	84%	84%	84%	84%	84%
Recovered Ounces (koz)	53	150	116	84	90	93	82	92	85	101	109