SILVER STANDARD

Q2 2016 CONFERENCE CALL

August 11, 2016



Cautionary Notes

Cautionary Note Regarding Forward-Looking Statements

This presentation contains forward-looking information within the meaning of Canadian securities laws and forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995 (collectively, "forward-looking statements"). All statements, other than statements of historical fact, are forward-looking statements. Generally, forward-looking statements can be identified by the use of words or phrases such as "expects," "anticipates," "plans," "projects," "estimates," "assumes," "intends," "strategy," "goals," "objectives," "potential," "believes," or variations thereof, or stating that certain actions, events or results "may," "could," "would," "might" or "will" be taken, occur or be achieved, or the negative of any of these terms or similar expressions. These forward-looking statements or information relate to, among other things: future production of gold, silver and other metals; future costs of inventory, and cash costs per payable ounce of precious metals sold; expected exploration and development expenditures; the prices of precious metals; the timing of cessation of San Miguel open pit mining activities and stockpile processing at the Pirquitas mine; the effects of laws, regulations and government policies affecting our operations or potential future operations; future successful development of our projects; the anticipated benefits from the acquisition of Claude Resources Inc.; expected timing to complete engineering studies at the Chinchillas project and make a decision about whether to move forward with the project; the timing of the issuance by the CRA of new notices of reassessment and repayment of the deposit; the sufficiency of our current working capital, anticipated operating cash flow or our ability to raise necessary funds; estimated production rates for gold, silver and other metals produced by us; timing of production and the cash costs and total costs of production at the Marigold mine, the Seabee Gold Operation and the Pirquitas mine; the estimated cost of sustaining capital; ongoing or future development plans and capital replacement, improvement or remediation programs; the estimates of expected or anticipated economic returns from our mining projects, including future sales of metals, concentrate or other products produced by us; and our plans and expectations for our properties and operations.

These forward-looking statements are subject to a variety of known and unknown risks, uncertainties and other factors that could cause actual events or results to differ from those expressed or implied, including, without limitation, the following: uncertainty of production, development plans and cost estimates for the Marigold mine, the Seabee Gold Operation, the Pirquitas mine and our projects; our ability to replace Mineral Reserves; our ability to successfully integrate the acquisition of Claude Resources Inc.; subject to exercising our election to proceed, our ability to complete and successfully integrate Golden Arrow Resources Corporation's Chinchillas project, on a joint venture basis, into our current operations; commodity price fluctuations; political or economic instability and unexpected regulatory changes; currency fluctuations; the possibility of future losses; general economic conditions; fully realizing the value of our shareholdings in Pretium Resources Inc. and our other marketable securities, due to changes in price, liquidity or disposal cost of such marketable securities; potential export duty and related interest on past production and sales of silver concentrate from the Pirquitas mine; counterparty and market risks related to the sale of our concentrate and metals; uncertainty in the accuracy of Mineral Reserves and Mineral Resources estimates and in our ability to extract mineralization profitably; differences in U.S. and Canadian practices for reporting Mineral Reserves and Mineral Resources; lack of suitable infrastructure or damage to existing infrastructure; future development risks, including start-up delays and cost overruns; our ability to obtain adequate financing for further exploration and development programs and opportunities; uncertainty in acquiring additional commercially mineable mineral rights; delays in obtaining or failure to obtain governmental permits, or non-compliance with our permits; our ability to attract and retain qualified personnel and management; potential labour unrest, including labour actions by our unionized employees at the Pirquitas mine; the impact of governmental regulations, including health, safety and environmental regulations, including increased costs and restrictions on operations due to compliance with such regulations; reclamation and closure requirements for our mineral properties; social and economic changes following closure of a mine, including the expected closure of the Pirquitas mine in 2017, may lead to adverse impacts and unrest; unpredictable risks and hazards related to the development and operation of a mine or mineral property that are beyond our control; indigenous peoples' title claims and rights to consultation and accommodation may affect our existing operations as well as development projects and future acquisitions; assessments by taxation authorities in multiple jurisdictions, including the reassessment by the CRA; recoverability of value added tax and changes to the collection process in Argentina; claims and legal proceedings, including adverse rulings in litigation against us and/or our directors or officers; compliance with anti-corruption laws and internal controls, and increased regulatory compliance costs; complying with emerging climate change regulations and the impact of climate change; uncertainties related to title to our mineral properties and the ability to obtain surface rights; the sufficiency of our insurance coverage; civil disobedience in the countries where our mineral properties are located; operational safety and security risks; actions required to be taken by us under human rights law; competition in the mining industry for mineral properties; shortage or poor quality of equipment or supplies; an event of default under our convertible notes may significantly reduce our liquidity and adversely affect our business; failure to meet covenants under our senior secured revolving credit facility; conflicts of interest that could arise from certain of our directors' involvement with other natural resource companies; information systems security threats; and those other various risks and uncertainties identified under the heading "Risk Factors" in our most recent Annual Information Form filed with the Canadian securities regulatory authorities and included in our most recent Annual Report on Form 40-F filed with the U.S. Securities and Exchange Commission ("SEC").

The foregoing list is not exhaustive of all factors and assumptions which may have been used. We cannot assure you that actual events, performance or results will be consistent with these forward-looking statements, and management's assumptions may prove to be incorrect. Our forward-looking statements reflect current expectations regarding future events and operating performance and speak only as of the date hereof and we do not assume any obligation to update forward-looking statements if circumstances or management's beliefs, expectations or opinions should change other than as required by applicable law. For the reasons set forth above, you should not place undue reliance on forward-looking statements.

Qualified Persons

The scientific and technical information contained in this presentation relating to the Marigold mine has been reviewed and approved by Thomas Rice and James N. Carver, each of whom is a SME Registered Member, a Qualified Person under National Instrument 43-101 — Standards of Disclosure for Mineral Projects ("NI 43-101") and our employee. The scientific and technical data relating to the Seabee Gold Operation has been reviewed and approved by Gordon Reed, P.Eng., and F. Carl Edmunds, P. Geo., each of whom is a Qualified Person under NI 43-101 and our employee. The scientific and technical information relating to the Pirquitas mine has been reviewed and approved by Bruce Butcher, P.Eng., and F. Carl Edmunds, P. Geo., each of whom is a Qualified Person under NI 43-101 and our employee.

Cautionary Note to U.S. Investors

This presentation includes Mineral Reserves and Mineral Resources classification terms that comply with reporting standards in Canada and the Mineral Reserves and the Mineral Resources estimates are made in accordance with NI 43-101. NI 43-101 is a rule developed by the Canadian Securities Administrators that establishes standards for all public disclosure an issuer makes of scientific and technical information concerning mineral projects. These standards differ significantly from the requirements of the SEC set out in SEC Industry Guide 7. Consequently, Mineral Reserves and Mineral Resources information included in this presentation is not comparable to similar information that would generally be disclosed by domestic U.S. reporting companies subject to the reporting and disclosure requirements of the SEC. Under SEC standards, mineralization may not be classified as a "reserve" unless the determination has been made that the mineralization could be economically produced or extracted at the time the reserve determination is made. In addition, the SEC's disclosure standards normally do not permit the inclusion of information concerning "Measured Mineral Resources," "Indicated Mineral Resources" or "Inferred Mineral Resources" or other descriptions of the amount of mineralization in mineral deposits that do not constitute "reserves" by U.S. standards in documents filed with the SEC.

Cautionary Note Regarding Non-GAAP Measures

This presentation includes certain terms or performance measures commonly used in the mining industry that are not defined under International Financial Reporting Standards ("IFRS"), including cash costs per payable ounce of precious metals sold and adjusted net income (loss). We believe that, in addition to conventional measures prepared in accordance with IFRS, certain investors use this information to evaluate our performance. The data presented is intended to provide additional information and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with IFRS. These non-GAAP measures should be read in conjunction with our consolidated financial statements.

The Business Delivering on Scale and Margin

- Completed Claude Resources acquisition
- Delivered higher production at lower cash costs
- Improved annual guidance and provided Seabee H2 guidance
- Increased cash position to $233M
- Marketable securities doubled to $193 million quarter-on-quarter
- Favorable CRA tax resolution, refund of deposit plus interest in Q3
- Chinchillas project on track for Q4 development decision
- Continued exploration success and investing for the future

Marigold Mine: Q2 2016 Results; Strong H2 2016

- Produced 47,195 oz of gold at cash costs of $663/oz gold
- Improved 2016 cash cost guidance
- Added three haul trucks, increasing daily tonnes moved to 220,000
- Leach pad construction to benefit Q4 production



Notes: Cash costs are a non-GAAP financial measure. Please see "Cautionary Note Regarding Non-GAAP Measures" in this presentation.

Seabee Gold Operation: Q2 2016 Results

- Produced 17,524 oz of gold in Q2
- Focused on safe and successful integration
- Identifying Operational Excellence opportunities
- Provided production and cost guidance for H2 2016



Pirquitas Mine: Q2 2016 Results

- Achieved record low cash costs of $8.87/oz silver
- Produced 2.5M oz of silver
- Record average daily throughput due to Operational Excellence
- Improved 2016 production and cash costs guidance



Notes: Cash costs are a non-GAAP financial measure. Please see "Cautionary Note Regarding Non-GAAP Measures" in this presentation.

Exploration: Focus on Mine Life Extension

- Marigold
  - Updated, longer-term production and cost outlook expected in Q3
  - Increased exploration budget for H2 2016
- Seabee
  - Focused on adding and converting Mineral Resources at the Santoy mine complex
  - New mineralized area defined between 8A and Santoy Gap
- Pirquitas
  - Advancing Chinchillas evaluation



Seabee Gold Operation: Creating Value and Growth

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Combines operations with margin and scale

Accelerates production growth and exploration

Maintains strong financial position

Adds underground mining skillset

An immediately accretive transaction

Enhances credit quality and trading liquidity

Selected Financial Results

	Units	Q2 2016	Q1 2016	Q2 2015
Marigold: Gold Sales	oz	**47,124**	48,605	48,121
Seabee: Gold Sales	oz	**11,306**	n/a	n/a
Pirquitas: Silver Sales	Moz	**2.6**	3.2	2.6
Revenue	$M	**$118.8**	$101.5	$95.8
Income from Mine Operations	$M	**$44.1**	$23.3	$16.3
Adjusted Net Income (Loss)	$M	**$23.6**	$9.0	($2.0)
Cash Generated by Operating Activities before changes in Non-cash Working Capital	$M	**$35.7**	$18.9	$22.7
Cash Generated by Operating Activities	$M	**$30.2**	$12.7	$21.9

Notes: The data presented for the Seabee Gold Operation is for the period from May 31, 2016, to June 30, 2016, the period for which we were entitled to all economic benefits of the Seabee Gold Operation following our acquisition of Claude Resources. Adjusted net income (loss) is a non-GAAP financial measure. Please see "Cautionary Note Regarding Non-GAAP Measures" in this presentation.

Financial Strength and Growth

	Units	Q2 2016	Q1 2016	Q2 2015
Cash	$M	**$233**	$218	$218
Marketable Securities	$M	**$193**	$95	$98
Total Assets	$M	**$1,432**	$881	$997
Current Liabilities	$M	**$140**	$129	$124
Working Capital	$M	**$530**	$355	$380



Improved 2016 Guidance

	Units	Marigold	Seabee (H2 2016)	Pirquitas
Gold Production	oz	**200,000 – 210,000**	**32,000 – 35,000**	**–**
Silver production	Moz	**–**	**–**	**9.0 – 10.0**
Cash costs per payable ounce sold	$/oz	**$650 – $700**	**$610 – $640**	**$9.00 – $10.00**
Capital expenditures	$M	**$32**	**$2**	**$12**
Capitalized stripping / deferred development costs	$M	**$30**	**$6**	**–**



Notes: Please refer to our news release dated August 10, 2016 for discussion on our 2016 guidance. Cash costs are a non-GAAP financial measure. Please see "Cautionary Note Regarding Non-GAAP Measures" in this presentation.

Creating Value and Growth; Strong H2 Outlook

- Closed acquisition of Claude Resources
- Strong quarterly operating and financial performance
- Improved guidance at Marigold and Pirquitas
- Provided guidance at the Seabee Gold Operation
- Favorable CRA tax resolution
- Well-positioned to continue executing strategy





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