

May 23, 2017

TSX-V: RRS

## Rogue Announces Optimized PEA: 75% Capex Reduction, Estimated Payback within One Year for Silicon Ridge Project

- **Updated Resource:** includes Measured & Indicated Resource of 7.7M tonnes grading 98.62% SiO<sub>2</sub>; Inferred Mineral Resource estimated at 2.1 Mt grading 98.66% SiO<sub>2</sub>
  - **Updated Mine Plan:** incorporating less overburden and more detailed waste delineation
  - **Updated Capex Plan:** shifting to Direct-Ship (“DSO”) drops pre-production capital requirements to \$3.5M (including \$806K contingency) and models an after-tax payback of less than one year<sup>1</sup>
  - **Optimized PEA:** indicates a base case pre-tax IRR of 157% and NPV (10% discount rate) of \$33.8M (after-tax NPV<sub>10%</sub> of \$23.4M and IRR of 132%)<sup>2</sup>
  - Rogue continues to advance its Plan for Silicon Ridge; focused on finalizing permitting and completing ongoing negotiations, including with potential material buyers and project financiers
  - Corporate Update Conference Call scheduled for Thursday May 25th, 2017
- (1) All monetary values are stated in Canadian Dollars unless otherwise noted.  
 (2) The PEA is preliminary in nature and includes inferred mineral resources that are too speculative geologically to have economic considerations applied to them that would enable them to be categorized as mineral reserves. There is no certainty that PEA results will be realized. Mineral resources are not mineral reserves and do not have demonstrated economic viability.

**TORONTO, ON – Rogue Resources Inc. (TSX-V: RRS)** (“Rogue” or the “Company”) is pleased to report the results of an optimized Preliminary Economic Assessment (“PEA”) on its 100% owned Silicon Ridge Project (the “Project”), located approximately 42 km north of Baie-Saint Paul, Québec, and 4 km northeast of Sitec’s operating silica quarry. The PEA, prepared by SNC-Lavalin (“SNC”), integrates optimization work completed over the past six months and plans for direct-shipping material from the contract operator’s crushing and screening. The updated PEA uses a new DSO pit constrained Measured resource of 2.5 million tonnes (“Mt”) grading 98.62% SiO<sub>2</sub>, Indicated resource of 5.3 Mt grading 98.62% SiO<sub>2</sub> and an Inferred mineral resource of 2.1 Mt grading 98.66% SiO<sub>2</sub> and was initially modeled with a 20-year mine life and 200,000 tonnes mined per year. The technical report supporting the PEA (the “PEA Technical Report”) will be filed on SEDAR within 45 days.

“This Optimized PEA calculates the excellent potential of the Silicon Ridge project as a near term, ultra-low capex production asset,” said Sean Samson, President and CEO of Rogue. “Shifting to DSO is expected to create a compelling return and with minimal dilution, the project has attractive potential economics. We are excited by these results and continue to move forward, advancing the permitting and importantly, working towards partnering with buyers. Rogue continues to execute our Plan, methodically de-risking and moving towards a Development Decision”

	Optimized PEA- Base Case		Q3 2016 PEA <i>(for comparison)</i>
Pre-production Capital	\$3.5M		\$13.1M
	<b>Pre-Tax</b>	<b>After-Tax</b>	After-Tax
Net Present Value <sub>10%</sub>	<b>\$33.8M</b>	<b>\$23.4M</b>	\$23.8M
Internal Rate of Return	<b>157%</b>	<b>132%</b>	33.9%
	Payback (After-Tax)	<b>&lt;1 year</b>	3.1 years

<b>Production Highlights</b>		
Total Resource Mined, from South West and North East Zones	4,000,000	Tonnes
Mining Rate	200,000	tonnes / year
Modeled Operating Life	20	Years
Total Saleable Product ( <i>across all end use products</i> )	3,420,000	tonnes sold
Average Stripping Ratio	2.0:1	

<b>Economic Model Highlights</b>	
Pre-production Capital Costs Including Directs, Indirects and Contingency	\$3.5M
Total Life of Mine Revenue	\$171M
Blended Average Revenue of Quartzite Sold (" <i>Commodity</i> " only- see below)	\$50 / tonne sold
Total Operating Costs Over Life of Mine	\$89M
Average Total Operating Cost ( <i>mining + processing + owners cost + royalty</i> )	\$26.02 / tonne sold
Operating Profit	\$82M
Free Cash Flow (Pre-Tax)	\$78.3M
Free Cash Flow (After-Tax)	\$51.8M

### **Resource Summary**

The mineral resource estimate, upon which the PEA is based, includes a pit constrained measured resource of 2.5 Mt grading 98.62% SiO<sub>2</sub>, indicated resource of 5.3 Mt grading 98.62% SiO<sub>2</sub> and an inferred resource of 2.1 Mt grading 98.66% SiO<sub>2</sub>. The resource estimate includes resources from three zones referred to as the South West, Centre North and North East zones. A significant portion of the estimate is derived from the South West Zone. All zones are open along strike and down dip and have potential for expansion.

### **Highlights of the Optimization**

Between the Q3 2016 PEA and this updated PEA, Rogue has refined the in-pit resource, including improved definition of the internal waste zones, reduction of the overburden cover on the South West Zone and reduced capital expenditure requirement by over 70% reflecting the transition from full processing on site, to focusing on a DSO model.

Reduction of the overburden covering the South West pit that was inferred by the ground penetrating radar survey and verified by the identification of quartzite outcrops resulted in the removal of 222 m<sup>3</sup> of overburden from the estimate on the South West Zone (see press release dated January 5, 2017). This reduction represents a potential savings of approximately \$1.3 million over the life of the project.

The shift to a DSO model, resulted in the elimination of the onsite processing facility and power line and reduced the estimated CAPEX costs from \$13.1 million to \$3.5 million. This represents a reduced amount of pre-development work

required and simplifies the process for generating salable products. It should be noted that if customers are developed for higher value materials that off-site processing options will be considered by the Company as markets are developed.

### End use markets- *Commodity* and *Specialized*

In its analysis, released on April 25 and July 13, 2016, Dorfner ANZAPLAN identified a number of potential end uses for the product from the Silicon Ridge deposit (see summary of the April 2016 metallurgical report, available on [www.rogueresources.com](http://www.rogueresources.com)). Rogue has targeted two broad groups of markets: “*Commodity*” and “*Specialized*”.

The *Commodity* group will be direct-shipped from Silicon Ridge as lump product, after selective quarrying (led by the on-site Rogue team), primary crushing and screening by the Contract Operator of the quarry to a size as required to meet the specification for ferrosilicon and metallurgical grade silicon producers (averages between 20mm to 120mm). Samples of this material prepared by Dorfner ANZAPLAN, after a primary crush and screen, has already been tested by both ferrosilicon and silicon metal producers.

The *Specialized* group will require secondary processing (now not included as part of the direct-ship model planned for Silicon Ridge), which the Company will look to arrange offsite with a partner. This material will target: quartz countertops, specialty glasses, specialty coatings, engineered stone, silicon carbide, fused silica and sodium/ potassium silicate.

It is anticipated that the *Commodity* group will be higher volume and lower priced than the *Specialized* group, which will represent less volume but garners a higher price for the material. This PEA draws on pricing for only the *Commodity* group, using a volume mix and target prices for both ferrosilicon and metallurgical grade silicon producers. Sales into the *Specialized* markets would represent upside to the Base Case and sales of material currently counted as waste.

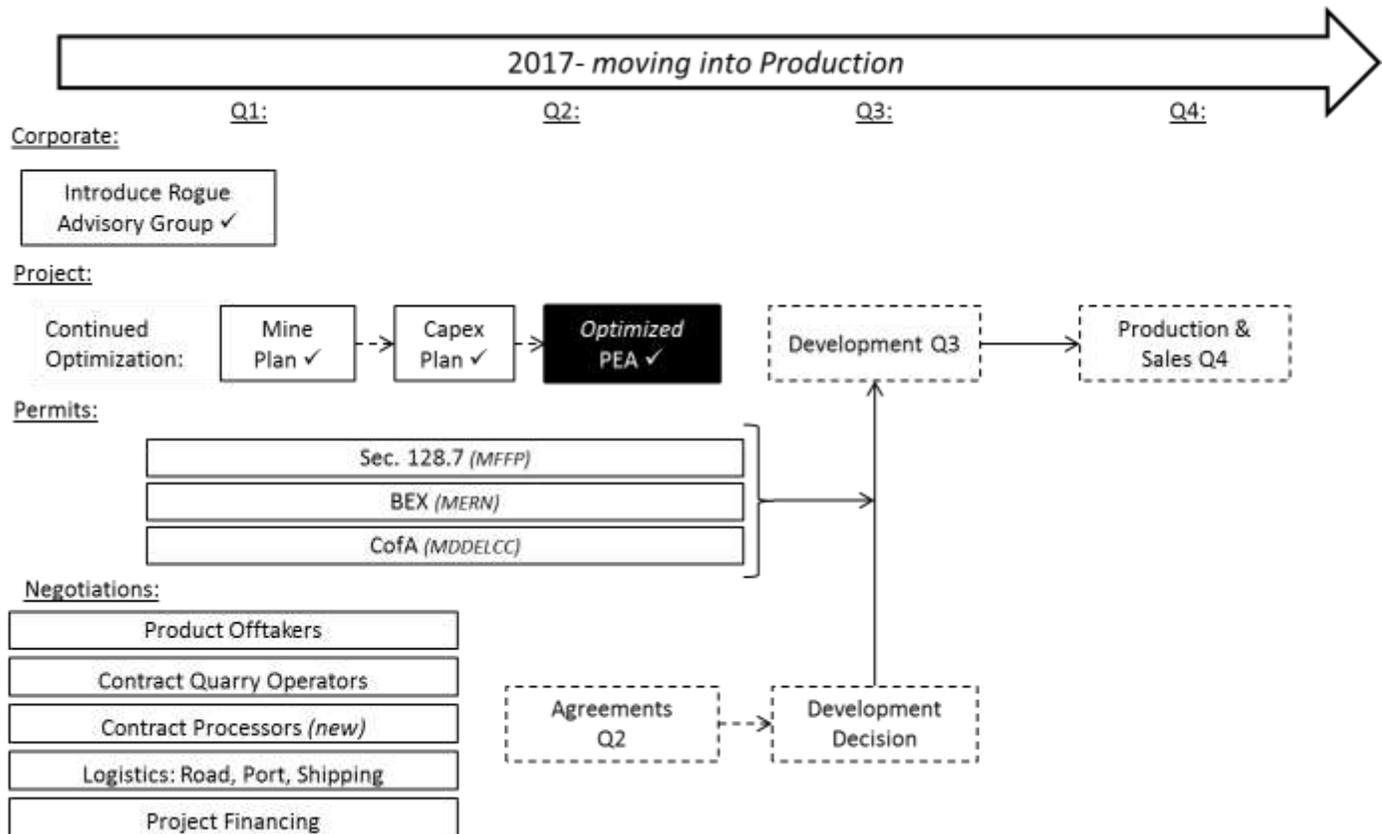
The Company is in discussions with end use buyers from across both the *Commodity* and *Specialized* groups, partner processors with whom Rogue could further process the material with a secondary crush and screen of its material and distributors with relationships across various *Specialized* markets.

### Economic Model Sensitivities (after-tax)

	NPV <sub>10%</sub>	IRR
Base Case	\$23.4M	132%

Key Driver:	Base Case	Worse		Better	
		NPV <sub>10%</sub>	IRR	NPV <sub>10%</sub>	IRR
Pre-production Capital	\$3.5M	\$4.5M		\$2.5M	
		\$22.4M	96%	\$24.4M	207%
Blended Average Revenue per Tonne Sold	\$50	\$40		\$60	
		\$13.4M	62%	\$32.8M	265%
Average Total Operating Cost	\$26	+20%		-20%	
		\$18.4M	85%	\$28.1M	212%
Discount Rate	10%	NPV using 15%		NPV using 5%	
		\$17.3 M		\$33.6M	

## The Rogue Plan for Silicon Ridge



### Corporate Update Conference Call

Rogue is pleased to announce a conference call with management to discuss the Optimized PEA and progress on the 2017 Plan. Rogue CEO Sean Samson and VP, Technical Paul Davis will give a corporate update followed by a brief question and answer period. Interested investors should forward questions to [questions@rogueresources.ca](mailto:questions@rogueresources.ca). The call is scheduled to take place on Thursday, May 25th at 12pm Eastern (9am Pacific, 6pm in Western Europe) and dial-in numbers to access the conference call as well as a corporate presentation will be provided on our webpage, [www.rogueresources.ca](http://www.rogueresources.ca), by 3pm Eastern on Wednesday, May 24th. A playback of the call will be available online.

### About Rogue Resources Inc.

Rogue is a mining company focused on generating positive cash flow. Not tied to any metal, it looks at rock value and good grade deposits that can withstand all stages of the metal price cycle. The current focus is Quebec's Silicon Ridge Project. For more information visit [www.rogueresources.ca](http://www.rogueresources.ca).

### About SNC-Lavalin

Founded in 1911, SNC-Lavalin is one of the leading engineering and construction groups in the world and a major player in the ownership of infrastructure. SNC-Lavalin provides engineering, procurement construction, completions and commissioning services together with a range of sustaining capital services to clients in four industry sectors, oil and gas, mining and metallurgy, infrastructure and power. For more information visit [www.snclavalin.com](http://www.snclavalin.com)

## Qualified Person

The technical information within this news release was approved by Henri Sangam, from SNC- Lavalin, and Philip Vicker P.Geo, all individuals that are Qualified Persons under NI 43-101 guidelines and independent of Rogue Resources within the meaning of NI 43-101 – Standards of Disclosure for Mineral Projects of the Canadian Securities Administrators.

The Silicon Ridge Project is under the direct supervision of Paul Davis, P.Geo., VP, Technical and Director of the Company and a QP as defined by National Instrument 43-101. The QP has approved the scientific and technical content of this release.

## On Behalf of Rogue Resources Inc.

Sean Samson  
**President & CEO, Director**

For additional information regarding this news release please contact:

Sean Samson  
sean@rogueresources.ca

*Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this news release.*

**Cautionary Note Regarding Forward-Looking Statements:** *Certain disclosures in this release may constitute forward-looking statements. In making the forward-looking statements in this release, the Company has applied certain factors and assumptions that are based on the Company's current beliefs as well as assumptions made by and information currently available to the Company, and that actual results are consistent with management's expectations. These statements include, among others, statements with respect to project economics and payback, development activities and decisions and the timing thereof, resource estimates and potential mineralization, the PEA, including estimates of capital costs, anticipated internal rates of return, mine production, processing recoveries, mine life, estimated payback periods and net present values, plans to decide if the project and resources to be quarried. Although the Company considers these assumptions to be reasonable based on information currently available to it, they may prove to be incorrect, and the forward-looking statements in this release are subject to numerous risks, uncertainties and other factors that may cause future results to differ materially from those expressed or implied in such forward-looking statements. Such risk factors include, among others, those matters identified in its continuous disclosure filings, including its most recently filed MD&A, changes in regulatory environments, environmental compliance, operating and capital cost escalation, ability to raise project financing and silica pricing. Additional factors include delays in obtaining or inability to obtain required regulatory approvals, permits or financing, risk of unexpected variation in mineral resources, grade or recovery rates, processing plant failure, equipment or processes to operate as anticipated, of accidents, labour disputes, the risk that estimated costs will be higher than anticipated, the risk that the proposed mine plan and recoveries will not be achieved, equipment breakdowns, bad weather timing and success of development activities, mineral resources are not as estimated, title matters, third party consents, operating hazards, product prices, political and economic factors, competitive factors and general economic conditions. Should any of such assumptions prove to be incorrect or such risks become actual events, than the value of the Company's securities may decline. Readers are cautioned not to place undue reliance on forward-looking statements. The Company does not intend, and expressly disclaims any intention or obligation to, update or revise any forward-looking statements whether as a result of new information, future events or otherwise, except as required by law.*