

RHYOLITE APPOINTS FRED STANFORD AS CEO AND DIRECTOR

COMPANY EXPANDS STRATEGY TO INCLUDE DEVELOPMENT OF MINING ASSETS USING THE INNOVATIVE MUCKAHI MINING SYSTEM

TORONTO, Ontario, September 7, 2021 – Rhyolite Resources Ltd. (the “Company” or “Rhyolite”) (TSXV: RYE) is pleased to announce the appointment of Fred Stanford as Chief Executive Officer and Director.

Mr. Stanford is a mining executive with 40 years of experience in the mining industry. Prior to joining Rhyolite, Mr. Stanford served as President and CEO of Torex Gold Resources Inc. (“Torex Gold”) from 2009 to 2020, and as Executive Chairman from mid-2020 to mid-2021.

Tony Chedraoui, the newly appointed Chairman of the Board of Rhyolite, and Founder, CEO and CIO of Tyrus Capital, stated: “Fred brings a long track record of success in company building, operations, and productive environmental, social and governance (ESG) relationships. This broad suite of skills is exactly what Rhyolite needs and the Board of Directors is very pleased to welcome Fred to the CEO role to lead the Company through a growth strategy.

“I personally met Fred over 10 years ago when Tyrus Capital was the lead investor in the creation of Torex Gold and was instrumental in providing \$150 million in financing for the acquisition of the Morelos Gold Property from Teck Resources.

“Tyrus Capital was the largest investor of Torex Gold for nearly 10 years, backing Fred as CEO. During that period, Fred was responsible for creating a growth-oriented intermediate gold miner with production costs in the lowest quartile while delivering industry-leading safety performance. He also led the implementation of a leading-edge ESG integration process, that has proven successful in a socially challenging region of Mexico.

“An innate innovator, Fred also led the development of the innovative Muckahi Mining System (“Muckahi”) for underground hard rock mines. Muckahi has the potential to reduce underground mining capital expenditures by up to 30%, mining operating expenses by up to 30%, time between investment and revenue by up to 80%, and greenhouse gas emissions from underground mines by up to 95%.

“Rhyolite’s current greenfield exploration strategy will be expanded to include the development of mining assets that are particularly amenable to the benefits of Muckahi. The Company will seek to acquire the assets that it develops. When ownership is not practical, other commercial arrangements will be made. With the advantages of Muckahi being equally applicable to the mining of any metal that is extracted from an underground hard rock mine, Rhyolite will be ‘metal agnostic’ as it seeks high-return mining assets for acquisition and development. This will include assets containing the much needed ‘battery metals’ required for future increased electrification as the world transitions away from fossil fuels. These are exciting times for Rhyolite, and we all look forward to a future of high ROI growth.”

Fred Stanford, incoming CEO, stated: “This is an excellent opportunity to build a mining company from the ground up. A company that leverages the technical advantages of the Muckahi Mining System to deliver potentially superior returns on investment. A company that also leverages an ESG advantage through the application of Systems Leadership Theory to build productive relationships with all stakeholders, including governments and communities in the vicinity of future mines. With our technical and ESG advantage, we have the potential to build a modern mining company that delivers on the key interests of shareholders and all other stakeholders; I look forward to getting started.”

Richard Graham has resigned as Director, President and Chief Executive Officer of the Company. The board and management team of Rhyolite thank him for his leadership and valuable contributions since 2015.

Rather than the conventional approach of using rubber-tired equipment that operates on the floor of tunnels, the Muckahi Mining System uses equipment that operates on an overhead monorail to excavate tunnels and perform all transport functions. The monorail network can be salvaged and reused as mining retreats from mined out areas. There are several advantages to the use of a monorail network. These benefits include the ability to operate in tunnels that are four times steeper than those used for rubber-tired equipment. A tunnel that is four times steep is only $\frac{1}{4}$ the length to achieve the same elevation change. This results in a significant cost saving and reduction in the length of time required to access mineral deposits. Other benefits include smaller tunnels, and two-way traffic in tunnels for efficient and predictable logistics. Up to a 95% reduction in underground greenhouse gas emissions is also possible since the Muckahi equipment is all electric. Automation is also relatively straightforward due to the monorail eliminating the need to steer, which adds significant complexity to automating underground rubber-tired equipment where GPS is not available because it does not penetrate through the rock, etc. The list of benefits goes on.

With the onset of the dry season, the Company has begun to advance exploration activities on the Brothers and Suku Passi properties in Suriname. At this early stage, the work on the ground is focused on establishing the needed infrastructure such as camps and associated services. Later in this dry season, field sample work and preparations for diamond drilling will get underway.

For more information about the Muckahi Mining System, including a descriptive video, visit the Rhyolite website at www.rhyoliteresources.com.

The Muckahi Mining System (including improvements) are currently owned by Torex Gold and are licensed to Muckahi Inc. ("Muckahi Co"), a company which is controlled by Mr. Stanford. Mr. Stanford has agreed to transfer all of the shares of Muckahi Co (the "Muckahi Shares") to the Company in consideration for 9.5 million common shares of the Company (the "Consideration Shares"), of which 1.0 million common shares will be delivered to Mr. Stanford as of the closing date of the transfer of the Muckahi Shares (the "Closing Date") and the remaining 8.5 million common shares will be deposited in escrow. The escrowed shares will be released from escrow to Mr. Stanford in tranches (1.0 million; 2.0 million; 2.0 million; and 3.5 million, respectively) over a four-year period, on each succeeding 12-month anniversary of the Closing Date, conditional upon Mr. Stanford remaining involved with the Company in any capacity other than as a shareholder as at each anniversary date. The transfer of the Muckahi Shares and the issuance of the Consideration Shares are subject to the prior approval of the TSX Venture Exchange.

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 release.

FOR FURTHER INFORMATION, PLEASE CONTACT:

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING INFORMATION

This news release includes certain "forward-looking statements" under applicable Canadian securities legislation. Forward-looking statements include, but are not limited to, statements with respect to the completion of the acquisition of Muckahi, the results of Rhyolite's growth strategy and return on investment, the benefits of the Muckahi Mining System, the development of mining assets that are particularly amenable to the benefits of the Muckahi Mining System, the acquisition and/or commercial arrangements of mining assets, and the application of Systems Leadership Theory. Forward-looking statements are necessarily based upon a number of estimates and assumptions that, while considered reasonable, are subject to known and unknown risks, uncertainties and other factors which may cause the actual results and future events to differ materially from those expressed or implied by such forward-looking statements. Such factors include, but are not limited to: general business, economic, competitive, political and social uncertainties; delay or failure to receive regulatory approvals; the ability to attract financing on these terms or at all; the price of commodities; and the results of current exploration. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements. The Company 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.