

Rockhaven Announces Improved Metallurgical Test Work Results on its Klaza Project, Yukon

Optimized Flowsheet has Potential to Reduce Capital and Operating Costs, Power Needs and Permitting Timelines

May 6, 2024 - Rockhaven Resources Ltd. (TSX-V:RK) ("Rockhaven") is pleased to announce the results of recent extensive metallurgical and pre-concentration test work at its 100%-owned and road accessible Klaza property, located in southern Yukon. This test work was completed on composites from drill core representing zones that are the focus of an upcoming Mineral Resource estimation¹ update and planned future economic studies on the Klaza property.

Rockhaven's comprehensive multi-year metallurgical program focused on several key objectives which included: (1) designing a simpler and more cost-effective processing flowsheet, (2) maximizing precious and base metal recoveries to saleable concentrates, and (3) exploring ways to limit the production of fine tailings and hydrometallurgical products that need special management. The work has been largely executed at Blue Coast Research under the guidance of Chris Martin, Independent Consulting Metallurgist, and Rockhaven's Technical Committee.

Highlights from this news release include:

- Gold recoveries of 82% and silver recoveries of 85% were obtained using conventional flotation, producing three marketable concentrates for shipment to smelters, from the composite that is most representative of the majority of the current Klaza Mineral Resources;
- The lead concentrate, which has the highest value of the three concentrates, returned assay grades averaging 210 g/t gold, 4,997 g/t silver and 61.6% lead;
- The arsenopyrite concentrate returned average grades of 112 g/t gold and could be shipped off-site to a smelter; and,
- Dense media separation test work returned high metal recoveries to a 50% mass pull and is expected to be included in future mineral resource and economic studies.

"Flotation test work results, coupled with concentrate marketing analysis, has produced a streamlined, conventional flowsheet yielding three concentrates, eliminating the need for onsite pressure oxidation and its associated high capital and operating costs, electrical power needs and permitting challenges," stated Matt Turner, CEO of Rockhaven Resources. "Furthermore, pre-concentration results continue to offer options to positively impact mining and milling processes and tailings management. Positive dense media separation results could allow larger scale mining and reduce the processing cost of the run-of-mine mill feed, turning just below cut-off grade mineralization into potential mill feed. It also assists us in meeting our tailings goals, with the

¹ See Rockhaven news release dated June 21, 2018 for more information on the current mineral resource estimate for the Klaza deposit.

largest single product from the process now expected to be a crushed, benign coarse reject rather than fine tailings, which is expected to significantly reduce the surface tailings storage needs of the project."

Geometallurgy and Flotation Test Work

The project has adopted a geometallurgical framework utilizing almost all of its recent testing, where data has been gathered from 75 samples located throughout all the mineralized zones included in the current Klaza Property Mineral Resources. This work provided a fuller understanding of the metallurgical response of materials throughout the different mineralized zones and substantially reduces metallurgical risk to the project, allowing for better mine planning and more accurate production forecasting. It is also expected to yield a more robust financial model for the project.

Variability flotation test work was completed on 28 composites, built using the initial 75 samples collected, which were then grouped into three Master Composites (MC-1, MC-2, and MC-3) based on their metallurgical response. Master Composite-1 (MC-1) consists of the most representative material from the majority of the Klaza Mineral Resources, and includes the Western BRX, Central Klaza and Western Klaza zones. Table 1 shows the grades and recoveries to cleaned lead, zinc and arsenopyrite concentrates from batch testing.

		Aver	age Con	centrat		Average Recoveries						
	Mass	Au	Ag	Pb	Zn	As		Au	Ag	Pb	Zn	As
	%	g/t	g/t	%	%	%		%	%	%	%	%
Lead	0.9	210	4,997	61.6	2.9	2.3		32	57	83	-	-
Zinc	1.6	23	1,156	1.3	55.6	0.6		6	25	-	87	-
Arsenopyrite	2.2	112	112	0.5	0.7	30.0		44	3	-	-	79
							Project Wide Total:	82	85	83	87	79

Table 1: Cleaned Concentrate Average Grades and Recoveries from MC-1

Refractory Gold Flotation

Recent testing, combined with concentrate marketing efforts, has established that flotation would allow for the creation of a high-grade and marketable arsenopyrite concentrate containing most of the refractory gold. This arsenic-rich product attracts penalties and fees for processing the arsenic, but the gold grades are high enough to ensure these concentrates should return sufficient revenue after treatment charges to make them competitive economically with on-site processing. This would eliminate the need for on-site pressure oxidation and hydrometallurgy, greatly simplifying the metallurgical flowsheet, reducing permitting risk and power needs, and could potentially reduce capital costs as compared to the 2020 Preliminary Economic Assessment ("2020 PEA").

Pre-concentration and Tailings

Rockhaven announced pre-concentration results using XRT-Sorting technology on September 12, 2023. Further test work, using gravity pre-concentration via dense media separation ("DMS") as opposed to XRT-Sorting, has increased the recoveries at similar mass pulls from four of the five main zones, rejecting 50% or more of the run-of-mine feed material as a barren, coarse crushed product. Furthermore, flotation test work on the minor amounts of gold and silver which reported

to the DMS tails were shown to be unrecoverable to a potentially marketable product, so the net loss of recoverable metal from this pre-concentration step is negligible.

The potential benefits of these DMS results include potential for a reduction in cut-off grades, increased mill throughput and production rates, and a corresponding reduction in fine tailings as compared to the 2020 PEA.

DMS recovery numbers from the main mineralized zones at Klaza are shown in Table 2 below:

	Mill Feed in PEA		I	Feed G	rades		Average Recoveries				
	t	Au	Ag	Pb	Zn	Mass	Au	Ag	Pb	Zn	
	%	g/t	g/t	%	%	%	%	%	%	%	
Western BRX	32	7.9	92.2	0.60	0.68	50.0	99.0	98.4	97.4	94.7	
Central Klaza	38	5.0	53.8	0.37	0.63	50.0	97.7	97.5	95.8	94.6	
Western Klaza	11	1.7	99.1	0.24	0.19	32.8	78.9	89.3	92.2	81.6	
Central BRX	19	0.7	25.5	0.23	0.37	50.0	94.2	96.9	98.2	96.6	
Eastern BRX*	0	1.8	29.2	0.11	0.26	50.0	94.6	96.7	96.9	93.4	

 Table 2: Results of DMS Test Work from Klaza Mineralized Zones

*Eastern BRX was not included in the 2018 Klaza mineral resource estimation and the 2020 Klaza Property PEA.

Pyrite Flotation and Concentrate Cyanidation

Pyrite flotation from the arsenopyrite flotation tails, and cyanide leaching of this concentrate, offers potential to increase gold recoveries by a further 2-4%. However, the value of this added step varies widely with different mineralised materials in the current mineral resource, so further geometallurgical work is needed to confirm whether this step is warranted and, if so, for which mineralized zone.

Summary and Next Steps

The above work has been done through an iterative process of extensive metallurgical testing in conjunction with engineering, concentrate marketing and cost trade-off studies. The outcome has resulted in the potential for a much lower metallurgical processing costs on a per tonne basis (as compared to the 2020 PEA), driven primarily by the elimination of the on-site hydrometallurgical circuit to treat the high-grade gold arsenopyrite concentrate that was contemplated in the 2020 PEA. Finally, the geometallurgical model has significantly increased confidence in projected metallurgical recoveries throughout the Klaza Property Mineral Resources, allowing for another tier of project optimisation and de-risking that would hitherto have not been possible.

Next steps include locked-cycle test work and more in-depth geometallurgical analysis of the data to be done in conjunction with the resource model and mine planning.

Qualified Persons

Technical information related to the metallurgical test program were provided and approved by Chris Martin, C.Eng. an independent consultant and qualified person for the purpose of National Instrument 43-101. All other technical information related to this news release has been approved

by Matthew R. Dumala, P.Eng., a geological engineer with Archer, Cathro & Associates (1981) Limited and qualified person for the purpose of National Instrument 43-101.

About Rockhaven

Rockhaven Resources Ltd. is focused on advancing its 100%-owned, camp-scale Klaza Property, which hosts the Klaza Deposit and numerous lightly explored exploration targets. Rockhaven has completed a mineral resource estimate and a preliminary economic assessment on the Klaza deposit (see Klaza Property Technical Report with an effective date of July 10, 2020 and titled, "Technical Report and Preliminary Economic Assessment Update for the Klaza Property, Yukon, Canada." which can be viewed at <u>www.sedar.com</u> under the Rockhaven profile or on the Rockhaven website at <u>www.rockhavenresources.com</u>).

Matthew Turner President, CEO and Director **Rockhaven Resources Ltd.** T:604-687-2522 mturner@rockhavenresources.com

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