

## Kenorland Minerals Announces Preliminary Metallurgical Results at the Frotet Project

Vancouver, British Columbia, January 18, 2023 – **Kenorland Minerals Ltd. (TSXV: KLD) (OTCQX: KLDCF) (FSE: 3WQ0) (“Kenorland” or the “Company”)** is pleased to announce the results of preliminary metallurgical testing of the Regnault gold system (“**Regnault**”) on the Frotet Project (the “**Project**”), located in northern Quebec and held under joint venture (the “**Joint Venture**”) with Sumitomo Metal Mining Canada Ltd. (“**SMMCL**”).

### Results of the Preliminary Metallurgical Study

Preliminary metallurgical test work was initiated with the completion of hole 22RDD149 that twinned the Regnault discovery hole 20RDD007 (29.08m at 8.47 g/t Au including 11.13m at 18.43 g/t Au\*) and intersected **29.20m at 16.61 g/t Au including 9.85m at 44.89 g/t Au**. Objectives of this study included the analysis of mineralogical characteristics and the preliminary assessment of Au-Ag recovery through cyanide amenability of the Regnault ore. The study was carried out at the Engineering Dept., Mineral Resources Division of Sumitomo Metal Mining Co., Ltd.

Approximately 60kg of material from 27.1m of NQ half drill core from 22RDD149 was processed to make a representative sample of the R1 mineralised zone for characterization. Samples were crushed to under 1.7mm and thoroughly mixed. A 1kg sample was split for head assay, X-ray diffractometry (XRD) and mineralogical analysis by Mineral Liberation Analyzer (MLA). The composite head grade was 15.9 g/t Au and 24 g/t Ag, similar to the original composite analyzed by Bureau Veritas Commodities (Timmins, Ontario). MLA analysis identified gold-silver-telluride, electrum and native gold as the main gold and silver bearing mineral species. Sulphides identified include pyrite, chalcopyrite and galena totalling 2.3%. Approximately 84% of the Au bearing minerals was gold-silver-tellurium minerals, and the rest was composed from 5% native gold and 11% electrum (Figure 1). More than 90% of the gold and silver bearing minerals were classified as liberated or exposed in the leach feed (100µm in P80).

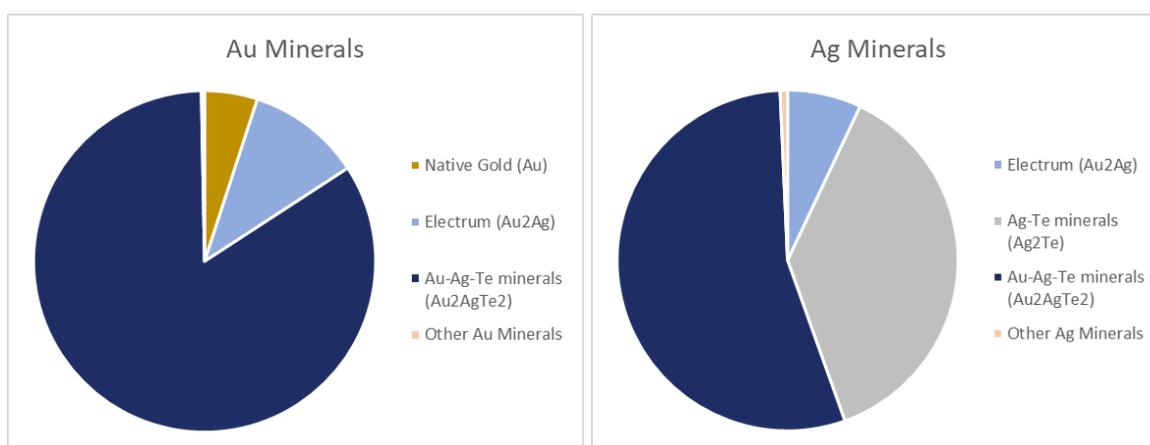


Figure 1: Proportion of gold and silver bearing minerals in the head sample.

Baseline test procedures were conducted by using four samples which were ground to 100µm in P80 and underwent oxygen purging for 24 hours, followed by cyanide leaching for 48hrs at 0.5g/L NaCN concentration. Dissolved oxygen concentration during cyanide leaching was 8-9 mg/L. Pregnant leach solutions were taken and analyzed at 2, 6, 24 and 48 hours, as well as analysis of the test residue. Baseline conditions indicated gold extraction of 86.9% and silver extraction of 68.2% in average (Table 1) with cyanide consumption rates between 1.1 and 1.5 kg/t.

Upon completion of the baseline tests the effect of extended leaching duration (increased to 72 hours), higher dissolved oxygen content (increased to 30-35 mg/L), higher NaCN concentration (increased to 1.0g/L), and finer feed size (75µm in P80) were investigated. Gold recoveries increased to 89.1-89.9% with extended leaching, finer grind size, and increased dissolved oxygen while the increased NaCN concentration only marginally improved recovery. Silver recoveries increased to 81.5-86.2%, with the increased dissolved oxygen and NaCN concentration while extended leaching marginally improved recoveries. These results indicate that gold extraction is best improved with finer grinding and extended leaching, likely due to an increase in liberated gold grains and complete dissolution of coarse gold. Silver extraction is best improved with extended leaching and higher dissolved oxygen content, likely due to the leaching kinetics of the Ag-bearing tellurides.

Test ID	Baseline				Extended Leaching		Finer Grind		Increased Oxygen Concentration		Increased NaCN Concentration	
	W01	W04	W08	W13	W08	W13	W03	W05	W10	W12	W09	W11
Grinding Size (P80, µm)	100	100	100	100	100	100	75	75	100	100	100	100
NaCN Concentration (g/L)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	1
Dissolved O <sub>2</sub> Concentration (mg/L)	8-9	8-9	8-9	8-9	8-9	8-9	8-9	8-9	30-35	30-35	8-9	8-9
Leaching Duration (hrs)	48	48	48	48	72	72	48	48	48	48	48	48
NaCN Consumption (kg/t)	1.1	1.5	-	-	2.1	1.7	1.5	1.7	1.5	1.4	2.8	2.8
Au Calc. Feed Assay (g/t)	14.7	14.7	16.3	15	16.3	15	14.9	14.3	15.2	14.7	13.2	13.5
Ag Calc. Feed Assay (g/t)	22	25	24	23	24	23	23	21	22	21	21	22
<b>Au Extraction (%)</b>	<b>85</b>	<b>86.4</b>	<b>87.6</b>	<b>88.7</b>	<b>89.5</b>	<b>89.3</b>	<b>89.9</b>	<b>88.1</b>	<b>89.5</b>	<b>89.1</b>	<b>87.9</b>	<b>86.7</b>
<b>Ag Extraction (%)</b>	<b>63.2</b>	<b>67.7</b>	<b>72.1</b>	<b>69.8</b>	<b>74.9</b>	<b>73.8</b>	<b>65.8</b>	<b>66.8</b>	<b>86.2</b>	<b>85.9</b>	<b>85.6</b>	<b>81.5</b>

Table 1: Summary of preliminary metallurgical testing conditions and results.

The initial metallurgical test work has demonstrated promising Au-Ag recoveries of the Regnault-style ore. Additional work has been planned to further maximize recovery, including the effects of gravity separation of coarse gold and electrum prior to cyanide leaching, the potential effect of flotation prior to cyanide leaching, and the use of an activator (ie. Pb(NO<sub>3</sub>)<sub>2</sub>, or citric acid) to increase extraction of precious metals from gold-silver-tellurium minerals during cyanide leaching.

(\* See press release July 29, 2020)

### About the Frotet Project

The Frotet Project was first identified by Kenorland in 2017 after completing a regional prospectivity study over the Abitibi and Frotet-Evans Greenstone Belts of Quebec. The initial 55,921 ha property was acquired through map staking in March 2017 and optioned to Sumitomo Metal Mining Canada Ltd. ("**SMMCL**"), a wholly owned subsidiary of Sumitomo Metal Mining Co., Ltd. in April 2018. Two years of property-wide systematic till sampling led to a maiden drill program in 2020 which resulted in a significant grassroots discovery at the prospect now named Regnault. The project is currently under a joint venture agreement between SMMCL and Kenorland Minerals Ltd., with interests being held at 80% and 20%, respectively. Under the joint venture, exploration is funded pro-rata and Kenorland is presently the operator of the

project. Any party which does not contribute and is diluted below a 10% interest, converts its interest to a 2% uncapped net smelter royalty

### **About Kenorland Minerals Ltd.**

Kenorland Minerals Ltd. (TSX.V: KLD) is a mineral exploration Company incorporated under the laws of the Province of British Columbia and based in Vancouver, British Columbia, Canada. Kenorland's focus is early to advanced stage exploration in North America. The Company currently holds five projects in Quebec where work is being completed under joint venture and earn-in agreements from third parties. The Frotet Project and Chicobi Project are held under joint venture with Sumitomo, the O'Sullivan Project is optioned to Sumitomo, the Chebistuan Project is optioned to Newmont Corporation and the Hunter Project is held under option to Centerra Gold Inc. In Ontario, the Company holds the South Uchi Project under an earn-in agreement with a wholly owned subsidiary of Barrick Gold Corporation. In Alaska, the Company holds the advanced stage Tanacross porphyry Cu-Au-Mo project, optioned to Antofagasta, as well as a 70% interest in the Healy Project, held under joint venture with Newmont Corporation.

Further information can be found on the Company's website [www.kenorlandminerals.com](http://www.kenorlandminerals.com)

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