

Karelian Diamond Resources PLC ("Karelian Diamonds" or "the Company")

RESULTS OF ELECTRON MICROPROBE ANALYSIS OF KIMBERLITIC GARNETS

• Electron Microprobe Analysis of Kimberlitic Garnets from Till Samples

Results indicate very close proximity to source of the Green Diamond previously discovered by the Company •

Karelian Diamond Resources PLC ("Karelian Diamonds") (AIM: KDR) is pleased to announce results of Electron Microprobe Analysis of Kimberlitic gamets from till samples taken from sample locations up-ice of the location of the previous discovery of a green diamond by the Company. The results indicate the presence of a diamond stability field and, in turn, the presence of diamond bearing kimberlite likely to be the source of the diamond.

Discovery of the source of the green diamond could be particularly significant as coloured diamonds, including green diamonds, sell for prices which can be multiples of those for clear colourless diamonds.

Sixty gamets from a series of locations were submitted to Renaud Geological Consulting Ltd in Canada for detailed Electron Microprobe Analysis, having been picked from till samples by Overburden Drilling Management Limited ("ODM") (as announced by the Company on 19 December 2023).

The Microprobe analysis resulted in the identification of nineteen G10 (harzburgitic), nineteen G9 (lherzolitic), fifteen G5 (pyroxenitic) and seven G4 (eclogitic) garnets. The presence of diamond stability field gamets (G10D) and other diamond-facies gamets (G4D and G5D) is a clear indicator of the diamond potential of the Kuhmo target area. (See Table 1).

	Eclogitic	Peridotitic		Pyroxenitic	TOTAL	Diamond facies	
Sample number	G4 Low-Ca Eclogitic/ Pyroxenitic	G10 Harzburgitic	G9 Lherzolitic	G5 Pyroxenitic	Analysed gamets total	G10D (inside the Diamond Stability Field)	G4D (Na₂O ≥ 0,07 wt-%)
A5-23-01	1	9	3	4	17	2	1
A5-23-02			2	1	3		
A5-23-03	3	7	6	7	23	1	
A5-23-07		1	1		2		
A5-23-09	1	1	2	1	5		1
A5-23-09B		1			1		
A5-23-17			1		1		
A5-23-19			1		1		
A5-23-21	1				1		
A5-23-23	1		1		2		1
A5-23-25			1	1	2		
A5-23-29			1		1		
A5-23-32				1	1		
Total	7	19	19	15	60	3	3

Table 1: Classification of results of electron microprobe analysis.

The table shows the total numbers of gamets recovered from each of the locations tested and the related diamond facies.

Further confirmation that the sample material was derived from the diamond stability field of the Earth's mantle is shown in a conventional CaO versus Cr₂O₃ contents plot for the sixty garnets analysed. (See Figure 1).



Figure 1: Conventional diagram of CaO versus Cr₂O₃ contents (wt.%) of the 60 gamets recovered from Kuhmo Green Diamond Target sampling, with G-number classification (from Grütter et al, 2004).

The discovery of the green diamond down-ice, together with the abundance of G10 harzburgitic gamets, including G10D's, and the presence of eclogitic G4 gamets, including G4D's, and pyroxenitic G5D gamets, all indicate a deep-mantle source for kimberlite originating from the diamond stability field where diamonds are formed.

The results indicate that two of the sample locations (A5-23-01 and A5-23-03) are likely to be very close to the kimberlitic source of the green diamond.

This release has been approved by Andrew Murrells PGeo, who is a member of the Company's technical staff and holds a BSc in Geological and Earth Sciences/Geosciences[NA1], in accordance with the guidance note for Mining, Oil & Gas Companies issued by the London Stock Exchange in respect of AIM Companies, which outlines standards of disclosure for mineral projects.

Professor Richard Conroy, Chairman of Karelian Diamond Resources PLC commented:

"These results are a further and very important step forward in bringing to a successful conclusion the search for the origin of the green diamond discovered by the Company in the Kuhmo region of Finland.

Note: The microprobe used for the electron microprobe analysis was a JEOL JXA-733 Superprobe equipped with 5 wavelength dispersive spectrometers (WDS) and an Oxford Instruments X-act energy dispersive system (EDS). Samples were run at 15KV, beam current 15na, beam diameter of 5um. Count times for major elements were 20s on peak and 10s on each side of the peak for background measurements. For trace elements, both peak and background times were 40s. For calibration a set of microbeam standards of pure metals (from SPI) and natural minerals from the Smithsonian Institution were utilized (Jarosewich, 2002). Data reduction was performed using the ZAF correction.

Further Information:	
Professor Richard Conroy, Chairman	+353-1-479-6180
Allenby Capital Limited (Nomad)	
Nick Athanas / Nick Harriss	+44-20-3328-5656
Peterhouse Capital Limited (Broker)	
Lucy Williams / Duncan Vasey	+44-20-7469-0930
Lothbury Financial Services	
Michael Padley	+44-20-3290-0707
Hall Communications	
Don Hall	+353-1-660-9377

http://www.kareliandiamondresources.com



