



# United States Geological Survey Certificate of Analysis

## Carbonatite, COQ-1

Material for this standard was collected in 1965 by Dr. David P. Gold at the St. Lawrence Columbian and Metals Corporation Ltd. Oka complex. The collection site is located approximately 20 miles west of Montreal, Canada on the north shore of the Lake of Two Mountains. The age of the Oka complex is indicated as 100±15 million years and is composed primarily of ultramafic alkaline and carbonate rocks. At the time of collection, the site was the world's largest single producer of niobium.

Analytical results reported here are for information purposes only. Reported values are based results from only one or two laboratories or independent techniques. The data has not been subjected to a rigorous statistical analysis, and therefore should be used with caution.

<b>Information values</b>					
Oxide	Wt %	±	Oxide	Wt %	±
Al <sub>2</sub> O <sub>3</sub>	0.37	0.04	Na <sub>2</sub> O	0.04	--
SiO <sub>2</sub>	3.47	0.11	K <sub>2</sub> O	0.16	0.02
Fe <sub>2</sub> O <sub>3</sub> T	2.94	0.09	TiO <sub>2</sub>	0.15	0.002
MgO	1.25	0.03	P <sub>2</sub> O <sub>5</sub>	2.6	0.12
CaO	48.3	0.38	MnO	0.43	0.002
Element	µg/g	±	Element	µg/g	±
Ba	1000	<100	Nb	3900	60
Be	1.2	0.6	Nd	480	15
Ce	1700	0	Ni	13	1
Co	<5	--	Pr	150	6
Cr	<10	--	Sc	3	0.1
Cs	0.2	0.01	Sm	56	2
Cu	<10	--	Sr	12000	<100
Dy	18	--	Tb	4	0.1
Er	7	0.06	Th	10	1
Eu	15	0.6	U	11	0.6
Ga	6	0.2	V	110	6
Gd	50	1	Y	81	5
Ho	3	0.1	Yb	6	0.5
La	750	10	Zn	87	1.5
			Zr	65	3

Denver, Colorado  
April 3, 1995

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U.S. Geological Survey  
Central Region Mineral Team

## Ordering Information

USGS reference materials (RMs) may be obtained directly from Dr. Stephen A. Wilson at the address or numbers listed below. The price for each bottle of RM is \$80.00 (U.S.) except DGPM-1 which is \$175.00 (U.S.). This cost includes all shipping and handling charges using normal mail delivery. Urgent requests for RMs should be initiated by FAX or e-mail. If required, overnight delivery is available with these charges added to the final bill.

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