

Rio Confirms Massive Sulphide Potential at KAN

41 High Grade Massive Sulphide Boulders average: 9.03% Zinc, 6.94% Lead, 270 g/t Silver, 0.65 g/t Gold

November 21, 2011, Toronto, Ontario, Canada- Rio Silver Inc. (TSX-V: RYO) (the "Company") is pleased to announce that the Company has sampled and expanded the number of massive sulphide boulders in three separate locations at the KAN project located in the northern part of the Labrador Trough, Nunavik Territory, Quebec.

Forty one massive sulphide boulders were sampled and the average grades reported were: 9.03 % Zn, 6.94% Pb, 270 g/t Ag and 0.65 g/t Au. The size and angularity of the boulders and the fact that they exist in three known clusters seems to point to various sources for the boulders. Some boulders exceed two metres in diametre which suggest a proximal source. Geotech Ltd. of Aurora, Ontario has completed a proprietary VTEM, Versatile Time-Domain Electromagnetic survey and the results will be used to identify structural trends and the potential for massive sulphide mineralization beyond the original KAN base metal showing.

On October 31, 2011 the Company reported the discovery of a new massive sulphide boulder approximately 5.4 km south of the original KAN showing. Two grab samples from this new massive sulphide boulder averaged

12.23% Zn, 2.29% Pb, 80 g/t Ag and 0.35 g/t Au. The distinct zinc/lead ratios and silver values compared to the KAN boulders suggest a different massive sulphide source and the Company staked an additional 2100 hectares to cover this new base metal exploration target.

The KAN project was originally discovered by Cominco Ltd. in 1965 with the discovery of a massive sulphide showing located under a sphalerite-galena boulder cluster. Noranda Exploration Ltd. and Kennecott Canada Inc. ("Kennecott") explored the area in the mid to late nineties and the Company earlier reported that Kennecott sampled 28 massive sulphide boulders and the average reported grade was 9.9% Zn, 7.7% Pb, 276 g/t Ag and 0.65 g/t Au.

The 13,000 hectare KAN project now represents a regional exploration district with numerous gold and base metal targets identified along 31km of favourable stratigraphy.

QA/QC protocols:

A strict quality assurance/quality control program was applied to all samples, which includes mineralized standards and blank samples for each batch of 30 samples. All samples were sent to ALS Chemex in Val d'Or, Quebec, an accredited commercial laboratory. The gold analyses were completed by fire assay with an atomic absorption finish on 30 grams of material.

T. John Magee, P.Geo., President and CEO of the Company is the Qualified Person who has reviewed and is responsible for the technical data contained in this news release.

ON BEHALF OF THE BOARD OF DIRECTORS OF

RIO SILVER INC.

John Magee Director

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