



KAN Project Gold Results Continue To Expand The Regional Potential For Iron Formation Hosted Gold Mineralization

February 17, 2012, Toronto, Ontario, Canada – Rio Silver Inc. (the "Company"), (TSX.V: RYO) is pleased to announce that it has finalized its interpretation of an initial 10 kilometre section of the Versatile Time-Domain Electromagnetic ("VTEM") survey flown by Geotech Ltd. The iron formation stratigraphy represents part of an emerging exploration district in excess of 31 kilometres at the KAN project located in the northern part of the Labrador Trough, Nunavik Territory, Québec. The preliminary survey results identified several untested VTEM conductors warranting follow-up diamond drill testing.

Mineralization at KAN is similar to both the Meadowbank and Meliadine gold projects in Nunavut, with gold being associated with intense quartz carbonate veining and stockwork within structurally complicated and folded carbonate facies iron formation. The 2011 exploration program discovered several new surface gold showings adding to the geological model of bulk mineable gold mineralization hosted in iron formation within the Labrador Trough. (see Figure 2)

NORANDA RIDGE

The first gold occurrences discovered at the KAN project were located during a Labrador Trough precious metals reconnaissance campaign implemented by Noranda Exploration Inc. ("Noranda") in 1987. A prominent topographic ridge located approximately 1.5 kilometres east of the original KAN base metal showing (the "Noranda Ridge") was sampled by Noranda during this limited reconnaissance campaign. Mineralization within the iron formation demonstrated that gold was associated with quartz carbonate veins and stockworks.

The northern portion of Noranda Ridge was prospected by Company geologists during the 2011 exploration campaign and several random grab samples were taken along a slightly folded iron formation zone in contact with a gabbro intrusive. Gold mineralization within the iron formation included grab samples with the following reported values: 4.42 g/t Au, 3.49 g/t Au, 2.63 g/t Au and 2.02 g/t Au. The Company's initial channel sample in this north zone, NTR1, returned 4.64 g/t Au over 1.3m. A separate grab sample 35 meters northwest of this channel sample assayed 5.5 g/t Au. The Company covered the northern portion of Noranda Ridge with a B-horizon soil survey and the results will be used to identify the potential extent of the gold mineralization in this zone. This soil grid will be expanded to the southern portion of the Noranda Ridge during the next field season.

Figure 1

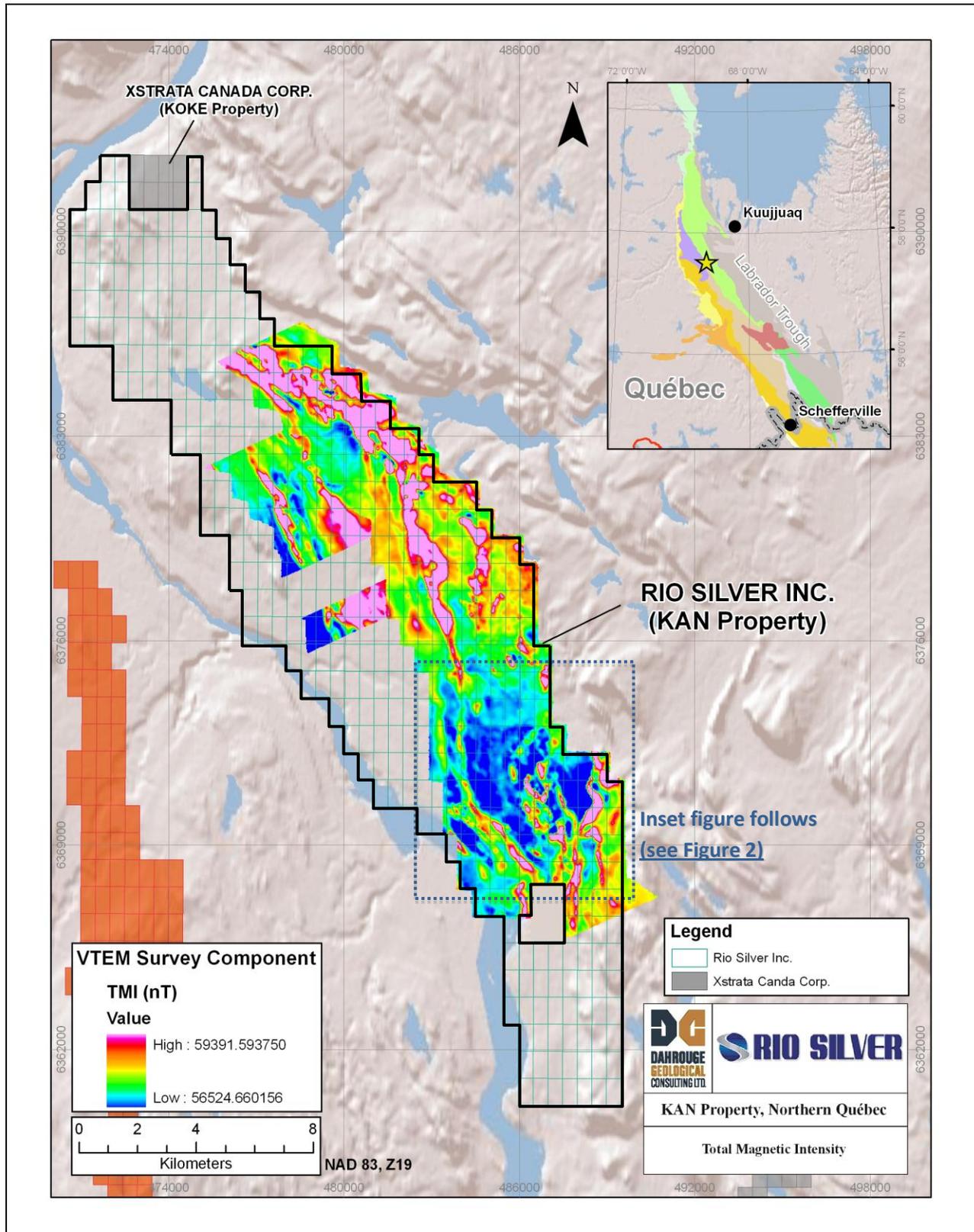
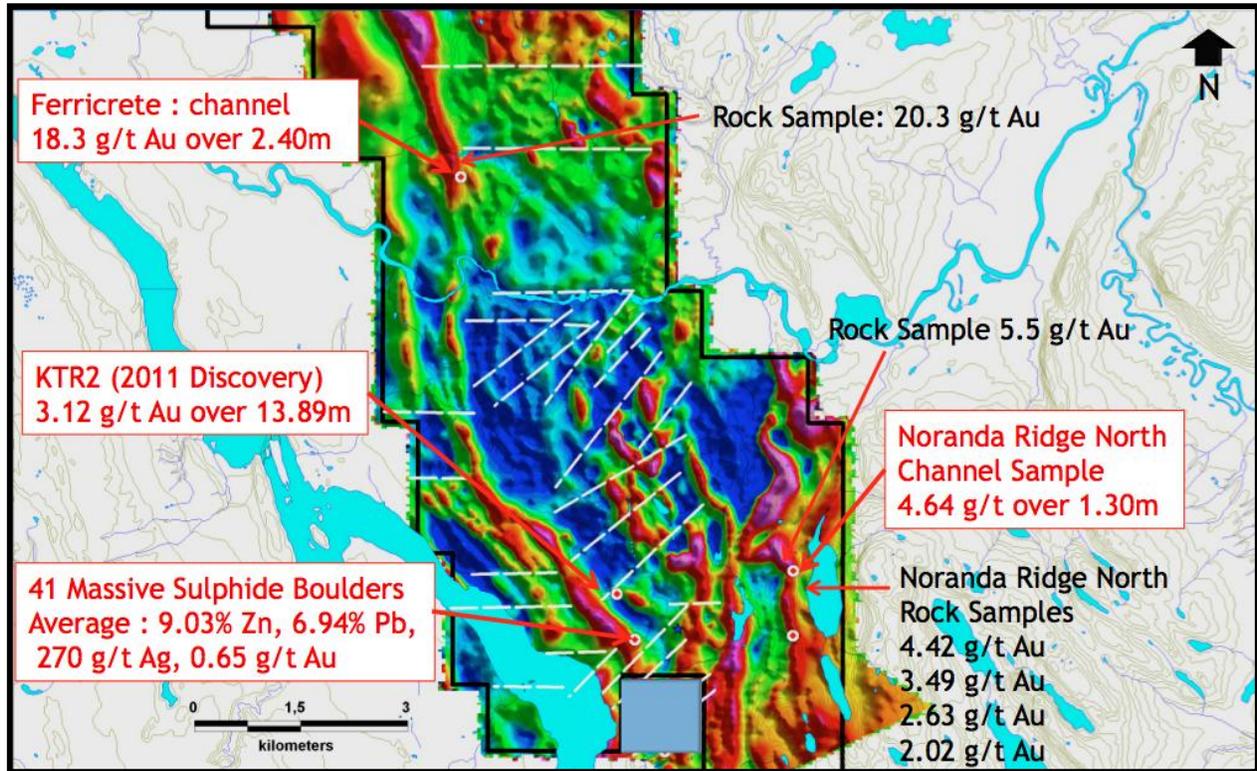


Figure 2

Iron Formation hosted gold mineralization within a cross cutting structural domain



2011 VTEM Survey: Gold mineralization highlights in the southern portion of the KAN property

The VTEM survey covered 1,290 line kilometres and shows a number of strong linear zones of magnetic highs corresponding to the iron formation. The geophysical survey identified several co-incident conductive responses with local structural features within a regional cross cutting structural domain. The gold mineralization appears to be related to this regional thrusting and compression event and the gold mineralization at surface compares favourably to the historical gold targets identified by Kennecott Canada Inc. (“Kennecott”)

Historical results from a limited diamond drill program by Kennecott in 1994-1995 are reported below:

K94-11	4.14g/t Au over 3.8m from 9.8m	K94-16	1.06g/t Au over 4m from 37m, 9.46g/t Au over 2m from 79m
K94-12	1.26g/t Au over 2m from 14m, 6.29g/t Au over 3m from 23m	K95-21	3.64g/t Au over 4m from 8m, 5.07g/t Au over 6m from 35m
K94-13	6.72g/t Au over 2m from 114m	K95-22	1.64g/t Au over 1m from 31m, 4.01g/t Au over 1m from 37m

*Source data notes: Assessment records filed with Québec MRN by Kennecott Canada Inc.
Historical technical data and not NI-43-101 compliant*

QA/QC protocols

A strict quality assurance/quality control program was applied to all samples taken by the Company, which includes mineralized standards and blank samples for each batch of 30 samples. All samples taken by the Company were sent to ALS Chemex in Val d'Or, Québec, 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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