Goose Lake Zn-Pb Summary

The Goose River area is prospective for both volcanogenic massive sulphide Cu-Zn style mineralization and magmatic Ni-Cu type mineralization. The area is about 40km south of Hudbay Minerals Inc Cu-Zn mine-mill complex at Flin Flon, and about 20km north of the Namew Lake Ni mine operated by Hudbay Minerals for several years in the 1980s and 90s.

In 1990, Granges Exploration Ltd undertook a large program of ground electromagnetic geophysics and drilling in the Goose River area. Granges Exploration drill hole TAZ-21 intersected 4% Zn over 0.4m at a drill hole depth of 59.04-59.44m within metasediments and sulphide horizons mineralized with pyrrhotite, pyrite and sphalerite. In 2006, Hudbay Minerals staked a number of claims in the Goose River area, presumably over airborne electromagnetic conductors, but did not stake the area of the previous Granges Exploration zinc intersection in hole TAZ-21. The author acquired Mineral Exploration Licence 980A, with an area of 5151 ha, in the area on June 21, 2011. The author then undertook a small program of orientation soil geochemistry in September, 2011, returning a clear MMI anomaly in zinc (Zn) and lead (Pb) across the location of the 1990 drill intersection.

This report describes the results of a small orientation magnetic survey completed March 7-12, 2012, across the area of the 1990 drill intersection and 2011 MMI geochemistry anomaly. The objective of these orientation surveys was to determine whether the combination of MMI geochemistry and magnetic geophysics could provide a technique to explore for base metal mineralization which might not form a strong electromagnetic conductor in this area. This total field magnetic survey totaled 2.4 line kilometers, with 12.5 meter station spacing on three 800 meter long lines, centered on the 1990 TAZ-21 drill hole and subsequent geochemistry anomalies. This work required four field days of flagged grid installation and magnetic surveying, plus two travel days.

From this magnetic survey, it was concluded that the drilled mineralization, and associated MMI geochemistry anomalies, are closely associated with a magnetic anomaly that is about 300 nT above background values. This is not surprising, since both magnetite and pyrrhotite were noted in the log of the TAZ-21 drill hole. This magnetic anomaly extends to the southwest, but not to the northeast, suggesting that follow up exploration be focused toward the southwest. The magnetic survey also indicated the possibility of a fold structure in this area.

Further work is recommended to explore the Goose River property for Zn-Pb mineralization, which may be a “sedex” (sedimentary exhalative) style or distal “vms” (volcanogenic massive sulphide) style of mineralization.