

August 18, 2010
Donna Kenneally
Manager, Research Liaison
Nunavut Research Institute
Box 1720
Iqaluit, NU X0A 0H0

Project No. 09-1373-0010

RE: ANNUAL SUMMARY FOR SCIENTIFIC RESEARCH LICENCE 0301309N-M FOR 2009

Dear Ms. Kenneally,

Comaplex Minerals Corporation proposed to construct and operate a gold mine, known as the Meliadine Gold Project 30 km northwest of Rankin Inlet, and 80 km south of Chesterfield Inlet in the Kivalliq Region of Nunavut. The proposed Project is currently owned by Agnico-Eagle Mines Limited. The proposed Project site is located on a peninsula between the east, south, and west basins of Meliadine Lake on Inuit Owned Land. The 2009 baseline sampling program will be used to support permitting requirements for the Project.

1.0 WILDLIFE

The 2009 wildlife program was designed to collect data on caribou, songbirds, shore birds, raptor nests, and waterfowl. Data were collected in June and July, 2009. Aerial surveys for caribou were completed over an 8495 km² study area. Surveys for upland birds were completed adjacent to potential developments. Raptor nest surveys were conducted over suitable habitat within 10 km of the Project area as well as along the proposed road alignment to Rankin Inlet. Aerial surveys for waterfowl covered an area of 80 km² in the study area.

Observations from the 2009 field work include:

- four barren-ground caribou during spring surveys;
- twenty-seven bird species, including six upland bird species;
- Canada goose, pacific loon, tundra swan, peregrine falcon and rough-legged hawk nesting was confirmed within the study area;
- Arctic fox were present throughout the study area; and
- nine barren-ground caribou and 26 muskoxen were observed incidentally.

2.0 HYDROLOGY

The 2009 hydrology program consisted of lake water level and stream discharge monitoring at A1, B2, B7, D1, and Chickenhead lakes and outlets, as well as Meliadine Lake and River. Snow surveys were completed in Basins B7, A1, and D5. Rainfall was monitored at the Meliadine West Camp. Derived mean annual water yields for Lake A1, Lake B2, Lake B7, and Chickenhead Lake varied from 162 mm (at Lake B7) to 171 mm (at Chickenhead Lake). The mean snow water equivalent depth computed was 75.9 mm in Basin B7, 77.3 mm in

Basin B2, 75.8 mm in Basin A1, and 77.4 mm in Basin D5. The Meliadine West camp rain gauge recorded 149.1 mm of rainfall over the period June 10 to September 15. Accounting for undercatch, the total precipitation at Meliadine West for the hydrological year ending on September 30, 2009 is estimated to be 412 mm.

3.0 WATER AND SEDIMENT QUALITY

Water quality and sediment quality data were collected in June and July 2009 in Peninsulas A and B, Meliadine Lake, Atulik Lake, and Control Lake. In July 2009, a sediment sample was collected from one station in Basin A. The sediment sample was typical of samples in the study area, which consist primarily of the sandy or silty fraction with a wide range of moisture contents.

Streams and lakes of the Project area were clear, well-oxygenated freshwater systems. Lakes were generally characterized by low ionic strength, very soft to soft water hardness, low alkalinity, and neutral pH. Major ions in lakes waters were bicarbonate, calcium, chloride, sodium, and sulphate. Measured nutrient concentrations in all streams and most lakes were typical of waterbodies in subarctic regions with little nutrients.

Concentrations of total metals in the water samples were generally below the Canadian water quality guidelines; however, a few naturally occurring metals were elevated in some of the lakes and streams (i.e., cyanide, arsenic, cadmium, chromium, copper, lead, iron, manganese, zinc),

4.0 FISHERIES

Fish presence and species composition in lakes, ponds, and interconnecting streams in the Project area were assessed by capturing fish using backpack electrofishing, baited minnow traps, gill nets, and fyke. Potential road crossings in the Project area were also assessed through habitat assessments and fish capture.

In 2009, 567 fish were captured including 216 Ninespine Stickleback, 337 Arctic Grayling, 6 Slimy Sculpin, 5 Threespine Stickleback, 2 Lake Trout, and 1 Arctic Char.

Watercourses investigated along the proposed road corridors were diverse with respect to habitat potential for fish. Aquatic habitat at crossings along both road corridors was highly variable, with some streams supporting spawning and rearing, whereas others were dry or contained poor fish habitat. Within the Meliadine West road corridor, one site along the Meliadine River ((Site M2.1) was of particular importance. The presence of deep run and pool areas indicated high quality habitat for various life-stages of fish species known to inhabit the river. Within the Discovery road corridor, one site (Site D5.8) provided high quality spawning and rearing habitat for Arctic Grayling.

CLOSURE

If you require additional information, please contact either of the undersigned at (780) 483-3499 or email (lyoung@golder.com or gary_ash@golder.com).

Yours truly,

GOLDER ASSOCIATES LTD.



Lasha Young, M.Sc.
Wildlife Biologist



Gary Ash, M.Sc., P.Biol.
Principal, Project Director

Attachments: Inuktitut Translation

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